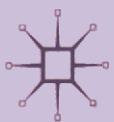
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STATE, MARKET AND CIVIL ORGANIZATIONS

NEW THEORIES, NEW PRACTICES AND THEIR IMPLICATIONS FOR RURAL DEVELOPMENT

THE MACMILLAN SERIES OF ILO STUDIES



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Through these overall activities, the ILO has been able to help national decision-makers to reshape their policies and plans with the aim of eradicating mass poverty and promoting productive employment.

This publication is the outcome of a WEP project.

State, Market and Civil Organizations

New Theories, New Practices and their Implications for Rural Development

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Preface

This volume presents the results of a fruitful cooperation between the International Labour Office, Cornell University and the University of California at Berkeley. The papers were presented at a Conference which took place in December 1991 at Cornell University. As the title suggests, the main objective of the Conference was to address a central question: what are the implications for rural development of the major changes in development theory as well as in development strategies in the world, particularly the shift from a state-sponsored to a market-oriented approach? The different papers attempted to answer this question, drawing on different disciplines and looking at different aspects. The result is a rich debate and equally rich insights into this problem.

The ILO was particularly honoured to share in this endeavour, given its history in support of rural development since its inception in 1919. This history reflects, to a large extent, the evolution of thought in the field of rural development in general.

Seen from a historical perspective, the ILO's work in the area of rural development has evolved in four broad stages: *(a) Standard setting* almost immediately after the establishment of the Office. This concerned primarily organized agriculture, especially plantation workers. *(b) Support to institution building* where the focus was on the creation of cooperatives and other institutions to help agricultural production. This phase coincided with the shift of emphasis in the ILO from standards to what was called 'services'. *(c) Employment and poverty*: during the 1970s, and mainly as a result of the Employment Strategy Missions, the focus shifted towards the problems of under-employment and poverty in developing countries, which were mainly concentrated in rural areas. The question then was why growth, that was taking place at a rate generally higher than that of population, did not create sufficient remunerative jobs, neither did it succeed in reducing poverty drastically. During this phase, the main determinant of rural poverty was thought to be land distribution, hence the focus on agrarian reform as a remedy, but perhaps ignoring the other equally important determinants of poverty especially skill endowments and access to technology and credit. *(d) Structural adjustment and rural*

development: this phase began with the 1980s, during which period more and more countries began to adopt structural adjustment programmes. Most work related either to providing a critical view of stabilization programmes, or, at best, to an assessment of the impact of macro-economic policies on agricultural growth and rural employment in specific countries. The ILO did not, however, succeed in coming up with a coherent policy package.

While this past work has highlighted the importance of certain policy interventions (such as land distribution, adoption of appropriate technology, reform of the labour and credit markets and the role of women in development) the ILO's work has fallen short of providing a coherent strategy for rural development.

Given this perspective, and taking into account recent developments in the world, the question is what future orientation should the work in the area of rural development have? There is now a consensus that with the globalization of the world economy, export-oriented growth based on exports of agricultural commodities can no longer play the role of 'the engine of growth'. *Thus any approach to rural development will have to be a sectoral one* where the major task is to design policies and programmes that increase the contribution of the rural economy, both agricultural and non-farm, to the national economy. This would imply that work should be concerned with the following areas: (*a*) The linkage between development strategies in general and the rural areas in particular. The issue here is to study the dual relationship between macro-economic policies and agriculture on the one hand, and the rate and pattern of transfer of agricultural surplus on the other. (*b*) How to increase job creation in the rural areas including the agricultural and non-agricultural economies. This should avoid the erroneous approach of the past which believed that non-farm activities could flourish through supply-side policies (such as the provision of credit or extension) alone. The main lesson of history (supported by the experience of both China and South Korea) is that effective demand is the crucial factor for the growth of the non-farm economy. The issue then is one of increasing internal demand in the rural areas. (*c*) Increasing the *voice* of the rural inhabitants in policy-making through a meaningful process of participation (as opposed to the outmoded paternalistic approach of trying to organize a handful of farmers). (*d*) Dealing with rural poverty through economically and socially viable policies rather than the traditional 'targeting approach' which has proved to be futile. The attack on rural poverty should be viewed as part and parcel of the strategy for development of the rural

areas. (*e*) Targeting should remain as an objective but limited to those groups that *cannot* be reached through economic policies. Social safety nets would then be required to cater for the needs of those vulnerable groups who cannot be reached by economic policies or who cannot benefit from the development process through participation in the markets.

In sum, what is required is a fresh approach to rural development, dealing with rural areas as a sector and focusing on job creation and increasing the bargaining power of the rural poor who remain a majority in developing countries. This can only be achieved through a coherent policy approach that combines stimulation of growth through higher productivity and built-in mechanisms for redistribution mainly through employment creation.

The challenge that is facing us all now is how to deal with the problems of low productivity and poverty in the rural areas of developing countries within the emerging global economy. It is hoped that this volume could provide a contribution towards answering this question.

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1 State, Market and Civil Organizations: New Theories, New Practices and their Implications for Rural Development

Alain de Janvry, Elisabeth Sadoulet and Erik Thorbecke

DEVELOPMENT ECONOMICS IN THE 1990s

During the heyday of development economics, spanning the 1940s to the 1970s, emphasis was shifted from the role of the market as it prevailed under pre-second World War liberalism, to the role of the state, with only minor attention being paid to the role of civil organizations. For development economics, as for economic development, the 1980s were a period of retrenchment: the debt crisis focused attention away from long-run development strategies to the resolution of short-run disequilibria in foreign and domestic accounts. The literature thus became dominated by issues of stabilization, relief and structural adjustment. The neoliberal response denounced the state for creating failures more devastating than the market failures it was supposed to overcome. The debate on alternative development strategies became largely irrelevant due to lack of investable funds, inflationary crises and external conditionalities. Falling living standards in Africa, Latin America and part of Asia focused attention on immediate survival and on the substitution possibilities which civil organizations could offer to what the state (public goods and welfare) and the market (jobs) were no longer able to deliver.

While development economics was losing its vision of the future, very significant theoretical advances were happening in economics at large and in certain aspects of development economics. In economics,

the main advance, which originated principally in the field of industrial organization, was to focus on strategic behaviour by individuals and organized groups in the context of incomplete markets. The theories of imperfect and asymmetrical information and, more broadly, transactions costs gave logic to the role of institutions as instruments to reduce transactions costs, with a Darwinian selection process among institutions leading to survival of those most effective in maximizing gains for the participants (local efficiency). The theories of collective action and of credibility in policy-makers' behaviour gave a new entry into the political economy of policy and the effectiveness of policies. Finally, greater ability to model general equilibrium effects enabled a more accurate assessment of inter-market, inter-household, inter-regional, and inter-temporal effects, with second round and indirect effects of policy interventions eventually proving to be quite large, particularly in the more structuralist models.

By the early 1990s, the context again changed markedly compared to what motivated development economics in the 1980s. Major transformations have occurred in geopolitics, economics, ideology and the environment. The end of the Cold War has both narrowed down the political spectrum in the less developed countries (LDCs), by delegitimizing and eliminating support for revolutionary alternatives, and broadened it in the more developed countries (MDCs) by cancelling the communist threat. A declining debt burden allows us to look beyond crisis management. Asia and Europe, the nation state and regionalism, and social movements have emerged as new forces. The market and competitive rules have been globalized. Environmental and health externalities have been internationalized and have created a new consciousness for the costs of development failures. Finally, a number of ideas present in past development debates have been made obsolete: central planning, an overarching welfare state, autarky and delinking, and unmitigated free markets as a development strategy.

At the beginning of the 1990s, development economics thus finds itself again in a position of looking beyond the resolution of short-run crises and of addressing the question of alternative development strategies. Clearly, due to theoretical advances and contextual shifts, the answers given to the problems of the 1960s and 1970s are no longer applicable. More specifically, the balance between state, market and civil organizations urgently needs, once more, to be redefined to fit the new context, the new theoretical background, and the new possibilities of successful practices. Within the broad search for alternative develop-

ment strategies fit for the 1990s and their implications for rural development, there are three key leads which were pursued at the conference:

1. How advances in the theory of agency behaviour and agrarian institutions (Bardhan, 1989) give normative guidelines for the definition of development strategies. This is particularly important if civil organizations are to be given a more important role in relation to the state and the market. A common thread through the conference was the search for complementary roles for civil organizations relative to state and market, as opposed to the relations of substitution that dominated this relationship in the 1980s. Additionally, cooperative behaviour and local schemes of authority are necessary if these organizations are to be effective, raising the question of the genesis, rescue and enhancement of intermediary and grassroot organizations (GROs) that can reconcile individual behaviour and social optima.
2. How the great variety of market and institutional configurations imply highly specific functions for markets as vehicles for transactions, in spite of globalization of the market at a world scale. Interventions in formal markets create spillovers onto informal markets, and agent-specific transactions costs imply that some transactions occur within organizations (household organized groups) and within institutions (two-way contracts between agents). The result is that observable transactions in one market may only be part-transactions that cannot be understood without grasping the totality of the transaction as it occurs over different markets, within organizations, within contractual institutions, and over time. In short, the causes and consequences of pervasive market fragmentation have to be explained.
3. How the new theories of the state and collective action can be applied to the context of the LDCs beyond the purpose of short-run stabilization policies. This implies questioning the mechanisms by which a truly developmental state can be made to emerge, the forms of organization of the state for maximum effectiveness, the strategies which the state can use to maintain credibility in policy-making and the regulatory limitations which civil society may impose on predatory behaviour by pressure groups, and the resource wastage which this implies, and on political leadership to ensure fairness and responsiveness to the preferences and abilities in civil society.

SOME KEY THEORETICAL ISSUES

State, Market, and Civil Institutions and Organizations: Some Definitions

Institutions are complexes of norms, rules and behaviours that serve a collective purpose. Organizations are a structure of roles. While many institutions are organizations (e.g. households, firms, cooperatives), many institutions are not organizations (e.g. money, the law, the African palaver, parallel markets), and many organizations are not institutions (e.g. an idiosyncratic contract between two individuals, a particular grassroot organization). The distinction is however a matter of degree (Uphoff, Chapter 7). A contract or a GRO may become institutions if they are extensively practised, standardized and recognized.

State, market and civil organizations can be contrasted by the type of incentive schemes and the type of compliance/cooperation mechanisms that each imply. The state enforces by regulation and threat, the market conveys price signals that give incentives to adjust, and civil organizations rely on agreements based on bargaining, cooperation and persuasion.

Many civil organizations have emerged as substitutes for the state and the market. When the state fails to deliver public goods, insurance, management of externalities, minimum basic needs, and democratic rights, civil organizations may develop to fill the vacuum. The same holds for the market, where market failures may lead to the emergence of institutions, many of which may take the form of organizations. Thus, transactions and mutual insurance may be achieved within the household or among members of the community through contractual arrangements (Fafchamps, Chapter 11). Parallel markets emerge in response to disequilibria induced by government regulation. Savings associations may emerge in response to exclusion from formal financial institutions, owing for instance, to lack of usable collateral or discrimination (Thorbecke, Chapter 6).

Endogeneity and Policy Instruments

As strategic agency behaviour is increasingly endogenized into models (resulting in endogenous policy, endogenous contracts and institutions, and endogenous technological innovations), policy instruments to affect the course of events are correspondingly being lost.

In policy analysis, for example, the traditional approach was to analyse the behaviour of individuals given an exogenous policy (positive analysis) and to choose the best policy to achieve a given social objective (normative analysis). In the new political economy, policy is the endogenous outcome of a strategic game between policy-makers and agents in civil society, all of whom have well-specified objectives and are incentive constrained. Positive analysis thus explains which policies are chosen given a context of political institutions and social norms; normative analysis identifies which institutions lead to the best outcome given social norms.

In practice, there is a time dimension, with contracts and policies more readily malleable than political institutions, and political institutions than social norms. With policy endogenous, there remains room for institutional advice and for interventions by agents external to the policy process. One entry point is the availability of new information about the expected outcome of the policy game (in particular knowledge of the relation between policy and economic outcomes made available to all players) and on how the institutional environment influences the policy outcome. The priority in targeting this information is to identify which agents have the incentive and the capacity of implementing institutional change and how well these agents are defined. The time consistency problem in policy-making, for example, is one where the state itself has the incentive and the capacity to reduce its own flexibility to gain credibility. The wastage of resources in predatory behaviour by interest groups is, by contrast, a situation where neither the state nor the lobbies have interest in limiting lobbying since they benefit from it, and where it is civil society that needs to limit its own actions. Institutional change could be introduced to limit lobbying, for instance by keeping in the same agency both the costs and the benefits from granting favours to lobbies (Roe, Chapter 5) or by increasing the difficulty of changing policy (Sadoulet, Chapter 3). The problem, in this case, is one of diffused interests and free riding which make the formation of broad coalitions difficult.

The same problem arises at the level of institutions such as two-party contracts between landlord/lender and tenant/worker/borrower. In a bargaining framework, power relations can be influenced by changes in the relative fall-back options, technical progress that changes differentially the relative scarcities of factors owned by the players and for which there is market failure, regulations that limit the power of one agent, and asymmetrical availability of information about the other's strategic responses and payoffs (Bell, Chapter 12; Bell and

Zusman, 1976; Bardhan, 1991). The policy entry points are thus interventions which condition these variables, not the imposition of a particular type of contract.

Endogeneity of Institutions and Social Norms

In the long-run, institutions and social norms are themselves endogenous. The interesting issue here is to determine which social filters apply to the emergence of new institutions and social norms. In particular, to be explained are why do dysfunctional institutions tend to remain in existence for such long periods of time and why do new social norms have such difficulty in imposing themselves? This is usually explained by either path dependency, the prisoner's dilemma, or imperfect information about future gains. In the first explanation, high sunken costs induced by past institutions make transition to what could be superior institutions socially unprofitable (Arthur, 1988). In the second explanation, without cooperation, the cost of breaking an existing rule may be too high on individuals, and it is thus individually rational for socially suboptimal institutions like castes to remain in existence (Akerlof, 1984). Finally, in the third explanation, a bias for the status quo emerges from uncertainty in the distribution of benefits from change (Fernandez and Rodrik, 1991). This does not explain, however, why a variety of norms tends to coexist for a long period of time without eliminating each other and why these norms are not invaded from the outside or overwhelmed by mutants from within.

Why is this an important question? One of the main lessons of the new institutional economics and the new political economy is that transactions costs matter enormously in explaining the likelihood of cooperation, the competitiveness of alternative forms of organization (from households to firms and associations), the effectiveness of collective action, and the role of a developmental state. Transactions costs are in turn importantly determined by social norms (shared ideology, altruism, trust, fellow feeling, etc.). Economic analysis of alternative development strategies, including the relative effectiveness of organizational options (the Japanese management system based on commitment, the mafia based on loyalty and fear, etc.), will require the ability of explaining social norms. While the theory of evolutionary processes applied to changes in social norms (Basu, Chapter 10) is still far removed from having the desired explanatory power, it is an important modest step in that direction.

Determinants of Cooperative Behaviour and Effectiveness of Intermediary Organizations

If civil organizations are to play an effective complementary role to the state and the market, these organizations must have the ability to define rules and to enforce them. Rules can be defined and enforced either through voluntary cooperative behaviour or through authoritarianism: voluntary cooperation has the advantage of low enforcement cost but high decision-making costs; coercive governance has low decision-making costs but high enforcement costs. For this reason, cooperation in intermediary organizations, like democracy at the level of government, should lead to the definition of an internal decision-making structure, the delegation of authority to a decision-making agent or body, and the definition of a set of rules to impose checks and balances on the decision-makers that minimize the sum of enforcement and decision-making costs. This raises the very important question of when do tribes give themselves chiefs and what are the rules under which these chiefs decide and enforce rules (Nugent, Chapter 8). These rules can either be specified in constitutions (Rausser and Johnson, Chapter 17), in which case perfecting the wording is important to maintain the necessary flexibility, or anchored in social norms with the right to renegotiate within the range of these norms, thus maintaining flexibility at the cost of repeated palavers (Fafchamps, Chapter 11).

Widespread observation of successful instances of cooperative intermediary organizations and better theoretical understanding of the determinants of cooperation have reduced pessimism about the pervasiveness of the prisoner's dilemma (Nugent, Chapter 8; Bardhan, Chapter 9). The determinants of successful cooperation include: (1) the characteristics of the group itself (small size, homogeneity, closeness, face-to-face relations, and lack of privacy, all of which make easier the monitoring of other members, but also punishment more difficult; charismatic leadership; enough members willing to play cooperatively at the start (assurance game) with observable defaulting); (2) the characteristics of the object of cooperation (club good as opposed to open access public good; Bardhan's 'cooperation Laffer curve' where the degree of mutual assistance first increases and then declines with structural variables such as the degree of market integration, the availability of a common resource, and the level of wealth of members); (3) the characteristics of the game set-up (low discount rates, extended duration, bounded rationality, high frequency and multiplicity of interactions, and an uncertain termination date; high cost of exit

through use of the market for migration, the sale of labour or products, or capital outflight); (4) credibility in the enforcement of rules and the sharing of benefits (delegation of the enforcement of rules to external agencies; high and credible (i.e. renegotiation proof) punishment, pleasure in or rewards for punishing, and social sanctions to punish those who fail to punish); (5) individual internalization of social norms (thus the role of shared ideology, religion, culture and nationalism) leading to trust, altruism, fellow concern, valuation of honorary rewards, and reliance on reputation; (6) learning by doing, where cooperation may initially be induced by crisis response as a result of aggression by nature, the state or the market, to be subsequently extended to new pursuits (Hirschman, 1984); (7) situations where cooperation will result from the fact that it is incentive compatible even if the others do not cooperate because the individual gains from doing so are sufficiently high (chicken game) (Bardhan, Chapter 9); and finally, (8) since cooperative solutions create net social gains, there is a public goods case for support of cooperative organizations through resource transfer (Lipton, Chapter 13), for instance under the form of assistance to leadership training, technological change and cultural revival.

Market and Community

The rural community is characterized by highly imperfect markets, with low transactions costs within the community but high with the outside, asymmetrical information, fragmented oligopolies, lack of formal collaterals, and highly covariant risks (Bardhan, 1989; Basu and Bell, 1991; Hoff, Braverman and Stiglitz, forthcoming). The result is that transactions within the community are highly complex: some transactions occur within the household itself without any visible price; some occur through contractual arrangements among independent parties such as interlinked transactions between labour and land and between credit and labour, or by sharecropping contracts; some occur among members of organizations such as cooperative groups, clubs and mutual insurance networks; and finally some occur via market exchange, with markets assuming a variety of configurations and transactions eventually spilling over across markets, from regulated to parallel. Market and non-market exchange configurations depend on the nature of the items traded, the actors and organizations involved, and the structure of the environment, including most particularly state intervention (Thorbecke, Chapter 6).

High transactions costs with the outside world imply that the households face wide price bands for any commodity which they produce and consume, and any factor which they own and use. The price bands that characterize the relation of a particular household to the market are affected by its specific transactions costs, its behaviour towards risk, and the specific credit constraints that apply. Behaviour towards risk and credit constraints add endogenous mark-ups to the farm-level effective prices. If the shadow price of a product which the household produces or a factor which the household owns falls within that price band, the good is a non-tradable and the household prefers self-sufficiency. With household specific price bands, participation in markets is highly uneven and supply response is affected by the specificity of market failures and the choices of non-tradability that apply to each household (de Janvry, Fafchamps and Sadoulet, 1991).

In many cases, an observed transaction is only an epiphenomenon that cannot be understood without grasping the totality of the transactions that occur within the household, through interlinked contracts among community members, within organized groups and networks, on other markets where spillover effects occur, and over time. Clearly, conceptualizing exchanges in the community 'as if' perfect markets existed can be grossly misleading. Prices, in particular, convey only limited information on the total value of a transaction, for example, if it occurs among members of a mutual insurance network (Fafchamps, Chapter 11). This is a sobering observation for the quantitative policy analysis of the rural economy, suggesting that much erroneous analysis has been conducted, for instance in the measurement of elasticities of supply response and consumer demand, and much erroneous policy advice dispensed. It also identifies an important policy dilemma: effective policy intervention would need to be tailored to the multiplicity of instances observed, but credibility and resilience to rent-seeking need to preserve simplicity and uniformity. The inevitable consequence is that government interventions will have highly differentiated effects across households and communities (Thorbecke, Chapter 6; de Janvry, Fafchamps, and Sadoulet, 1991).

Strategies for Leadership: Chiefs and States

The issue of leadership arises in all organizations where a division of labour is introduced to take decisions and enforce rules, from households to intermediary organizations and the nation state. While most of the analysis has been directed at the state, the same types of

issues and normative implications eventually emerge at the level of state-like organizations in civil society. There are three issues from the standpoint of the role of the state in development that deserve attention (Sadoulet, Chapter 3).

How to Make the State Act as a Developmental State

If this is not yet the case, there are three possible explanations: (1) Policy-makers do not have an objective of their own, and are simply motivated by staying in office, doing for that purpose whatever it takes. The pure voting models follow this approach where the median voter thus makes policy. (2) The state has a perverse objective, pursuing predation for its own benefit, a description used by Bates (1981) and by Sahn and Sarris (Chapter 15) for many of the hegemonic African post-colonial states. (3) The state has developmental goals, but it has lost leadership to organized pressure groups which distort to their advantage the state's initiatives.

Transforming the state into a developmental state by giving bureaucrats and elected officials, first and foremost, an objective function that values growth and basic needs has been the object of much recent analysis, particularly following a comparative historical approach (Evans, Rueschemeyer and Skocpol, 1985; Wade, 1990). Analysis of the Asian state has been the centre of attention. Specific features include the constitution of an elite bureaucratic corps (*haut fonctionnaires*, Indian Civil Service) and definition of its relations with civil society (Evans's 'embedded autonomy'). Improving public sector performance requires changing the rules and incentives under which government decisions are made, including the rules to amend the rules (Rausser and Johnson, Chapter 17).

How to Preserve the Leadership of the State when Civil Society Engages in Lobbying

Even a developmental state derives benefits from effective lobbying as this activity transfers to policy-makers resources which they can consume or use to remain in power. The cost, however, is that the developmental objective of the state becomes perverted by the lobbies' demands, unless lobbying conveys information which was not available to the state to carry its own developmental objectives. While lobbying

has a cost in terms of resource wastage, it is unavoidable since it is incentive compatible (i.e. consistent with constrained individual optimum) for both the lobbies and the state. The social cost of the resources wasted and who benefits through general equilibrium effects depends on the nature of the resources used to create influence over the state (Fafchamps, Sadoulet and de Janvry, 1991). The extent of the concessions granted by the state to the lobbies depends not only on the level of expenditures by lobbies to influence the state, but also on the bias in the state's response.

How to Achieve Efficiency in Policy-making in Spite of the Problem of Time Consistency and the Resulting Lack of Credibility

For the state, power is the ability to carry through its own objectives, thus requiring to both maintain leadership over the lobbies' demands and manage policy-making to achieve credibility. Lack of credibility can originate in the imperfect information that the private sector has on the true commitment of the state or in the flexibility which the state has in reversing policies, thus creating a time consistency problem. If the private sector anticipates that government will have an incentive to reverse policy after the private sector has adjusted, expectations of reversal result in third best policy outcomes (Persson and Tabellini, 1990). This has led to identification of a set of strategies which governments can pursue to overcome this problem: (1) commitment through definition of legal and administrative; (2) delegation to a specialized policy-making institution such as the central bank for monetary policy, the IMF for exchange rate policy, and GATT for trade policy; (3) putting one's reputation on line, for example through incumbency in elections, thus accepting to be thrown out of office if the policy commitment is not met. Dictatorships, with low decisional costs but no accountability, thus lack credibility and may be ineffective in sustained policy-making. Socialist-0 leadership with soft budget constraints also has low credibility since public enterprise deficits can be renegotiated. Charismatic and trusted leaders, by contrast, may both influence the lobbies' demands and achieve credibility (as illustrated by the Latin American uneven successes at stabilization: Nelson, 1984); (4) overshooting in policy-making to signal policy commitment; and (5) creating irreversibilities through state variables (lump sum investments, public reserves held in nominal bonds). Extensive descaling of the state and privatization of profitable enter-

prises in the context of changes in policy rules can be interpreted as necessary signalling and credibility-building to coax private investment.

Dynamic Sequences and Sustainability of Reform

The time scale needed for adjustment in economic variables (prices and public goods) tends to be less than the time needed for adjustment in the political structure. With endogenous policy-making, the political structure determines economic policy choices, and an alternative economic policy imposed exogenously would not be sustainable. There are, however, situations where an economic policy can be introduced by a powerful leader (Gorbachev, Salinas) or imposed from the outside (Bretton Woods Institution's conditionalities) and these will in turn slowly induce political changes. In the collective action framework, this would occur through the following sequence: an exogenous policy reform changes the residual rents to assets and induces intersectoral reallocation of resources and migration. The resulting changes in the distribution of income modify the distribution of political power and hence the demands for government policy. As a result, policy reforms may thus stick without exogenous political change, or they may not (Roe, Chapter 5; Rausser and Johnson, Chapter 17).

The stability of re-equilibrating policy reforms can be helped by a number of structural variables and complementary policy packaging (Roe, Chapter 5). They include: (1) increasing the flexibility of the economy in reallocating resources in response to the new set of price incentives, a typical objective of structural adjustment loans (and hence pessimism that reforms will stick in Africa without political change due to very low flexibility in supply response: Sahn and Sarris, Chapter 15); (2) changing the information structure, since policies which obscure costs are more easily implemented, information asymmetries give power to the more informed, and ignorance and ideology distort the political market; (3) choosing policy instruments with the least scope for rent-seeking (sector-wide tariffs are in principle less heavily lobbied than firm-level production subsidies due to the free-rider problem, but the rents from subsidies are more politically transparent, imposing checks on lobbyists' demands); (4) choosing governmental institutional arrangements which internalize in the same organization both the costs and the benefits of policy favours, e.g. larger-scope ministries as opposed to specialized commissions; (5) diversification of the assets owned in individual portfolios (the more diversified, the less resistance

to policy changes that affect relative prices); and (6) use of compensatory measures to bribe politically influential citizens into defecting from opposing coalitions and to enhance cooperative solutions.

From a development standpoint, the key issue is how to induce lobbying that creates net social gains as opposed to predation. There are indeed a number of situations where lobbying will create social gains: (1) if it voices demands for protectionism, and there are economies of scale and the power to remove protection once these have been achieved (Taylor, Chapter 4); (2) if it is directed at the demand for public goods which crowd-in private investment (Roe, Chapter 5); and (3) if it conveys information to policy-makers not otherwise available to them and signals commitment to follow up with private investment.

NORMATIVE IMPLICATIONS FOR DEVELOPMENT STRATEGIES

Market Globalization and Market Fragmentation

Improved transportation and communication on a world scale and extensive trade liberalization imply globalization of competitive rules, constraints on feasible development strategies and a redefinition of policy instruments. At the same time, the local specificity and heterogeneity of transactions costs imply a great diversity in institutional responses (range of functions assumed by the household, organization of the firm, role of the community) and keeps local markets fragmented (Thorbecke, Chapter 6). The result is increased homogenization and globalization, on the one hand, and increased recognition of the normative role of differentiation and specificity, on the other hand, an overarching characteristic of contemporary development economics.

Post neoliberal development economics stresses the necessary role of price incentives and hence of correct price signals, but also its insufficiency to achieve development (Streeten, 1991). Market successes may lead to famines (Ireland, Bengal), and market failures may result in allocative inefficiencies that are of secondary importance relative to productive efficiency gains (early import-substituting industrialization (ISI)). In the long-run, however, allocative efficiency is fundamental: distorted prices create fiscal and balance-of-payment

bottlenecks, aberrations in technological and institutional innovations, and urban biases. For that reason, ISI policies that did not rapidly evolve towards free trade created massive efficiency costs. Centrally planned economies were able to achieve high rates of investment in spite of low allocative efficiency, but the resulting cumulative distortions and disincentives made this unsustainable.

Distributional issues are also fundamental. In the short-run, stagnation with excess capacity requires increasing aggregate demand which can be achieved by income redistribution measures (Taylor, Chapter 4). In the longer run, the success of the Japanese model has demonstrated that inequality and lack of participation are inefficient: in the workplace, they demotivate and create the need to incur high transactions costs in supervision, monitoring, repeated recruitment and on-the-job training; in society, they create social tensions and criminality, diverting public investment to security and military expenditures. Under-investment in human capital is equally bad business: it leads to the need to sustain high welfare expenditures which are not productivity enhancing. Today, the market test of these ideas is amply clear: the protracted 1970s debate between growth and equity has been resolved in the direct observation that there is strong complementarity between growth and equity/participation over the longer run if the latter is effective in reducing transactions costs.

Redefinition of the Developmental State and its Leadership and Accountability

Between the state's Scylla (the neoliberal response of descaling the state as a response to government failure) and Charybdis (the populist ideology and fiscal cost of an extensive welfare state), the functions of the state need to be redefined. In that sense, the Washington Consensus (Williamson, 1990; Krueger, 1974) is already part of history, and extensive efforts have been directed at this redefinition (World Bank, 1990; Stiglitz, 1989). As we have seen it, key issues in this redefinition are: the conditions for the emergence of a developmental state; the determinants of state leadership in relation to civil society and the strategies which the state can use to overcome the credibility problem; the internal structure of the state and the conflicts which it contains; the rules of accountability on state behaviour; and the relative incentives for developmental as opposed to predatory demands originating in civil society.

Empirical estimations from historical data have demonstrated that public investment has, in general, had a crowding-in effect on private investment (Taylor, Chapter 4). This means that the real side-effect of public investment (complementarity between public and private investment) has dominated over the financial side (rising public expenditures crowding-out private investment, either through an inflation tax or through higher interest rates). When the savings constraint is binding, this may no longer be the case. In Africa, public investment in the form of project loans should have a potentially strong crowding-in effect because of the relatively poor state of infrastructure, technology and extension. As Latin America gradually emerges from the debt crisis, and thus relaxes the savings constraint, a decade of delayed public investment should make the crowding-in effect of public expenditures particularly strong and crucial to attracting private investment and inducing economic recovery. As a result, the role of the state will be fundamental to sustained economic recovery.

Development Strategies anchored on Indigenous, Grassroots and Intermediary Institutions

Indigenous organizations have been systematically undermined by the state (Africa, Eastern Europe) or neglected in development strategies (Latin America). Rapid emergence of new social movements, better understanding of the logic of cooperation, ability of a variety of organizational forms to reduce transactions costs in the context of particular social norms, and greater decentralization of governance and democratic rules, all give new space for experimenting with and building new dynamism in these civil organizations (Uphoff, Chapter 7). The dynamic interface between these organizations, households, the state and the market remains one of the important challenges to be addressed. Of particular importance to enhance the role of local organizations, is to understand how leadership can be induced and reproduced (Hirschman's conservation and preservation of social energy), how advice can be provided regarding organizational norms, and how information regarding opportunities offered by the market and the state can be used. While seeking to give a greater developmental role to civil organizations is logical, this is not without possible pitfalls. Grassroot and informal sector organizations are in potential conflict with formal sector organizations, e.g. the labour unions, particularly once industrial recovery is achieved.

Rural Development in the 1990s

At the outcome of the 1980s, poverty had been significantly displaced towards the urban areas, resulting in a new structure of poverty which is no longer principally defined by asset ownership and productivity differentials but also by external shocks and policy mistakes. In Latin America, the new poor were created by falling public sector and formal industrial employment and by falling real wages. The household and the informal sector have thus played key buffer roles in sheltering the urban poor. As a consequence of devaluation and other measures which turned the terms of trade in favour of agriculture, rural poverty increased less (or decreased more) than urban poverty. In spite of this, the rural sector remains the main reservoir of poverty, particularly in Africa since the bulk of the population resides in rural areas. In Latin America, economic recuperation will absorb first the new urban poor, maintaining structural poverty in the rural areas. For that reason, rural development remains a key priority for welfare. However, the structure of rural poverty has changed: the rural poor are increasingly dependent on incomes derived from the labour market and from value added in non-agricultural activities, stressing the need for a more diversified approach to rural development than the agricultural focus given to integrated rural development in the 1970s.

For the 1990s, there exists an unusual set of circumstances that favours a renewed effort on rural development. They include the descaling of anti-agriculture biases in price policy particularly through extensive real exchange rate depreciations and trade liberalizations, technological advances in peasant farming systems, better understanding of the heterogeneity of rural poverty and the multiplicity of solutions it requires, democratic advances and decentralization of governance in many countries, massive development of grassroot and nongovernmental organizations, concern for the environmental costs of rural development failures, and a geopolitical situation with, in general, fewer social tensions in rural areas. On the negative side, public investment in agriculture has fallen during the 1980s, seriously reducing the ability to respond to price incentives, state disengagement has been unevenly and often inadequately substituted for by private agents, and the international market for agricultural commodities remains depressed and turbulent because of the MDCs' protectionist policies, uncertain prospects for GATT negotiations, and potential entry of Eastern Europe into the international market. A key cause of the fall in public investment (particularly in Africa) is that bilateral and

multilateral lending in the 1980s has increasingly taken the form of programme lending rather than project (e.g. infrastructure) loans.

New departures towards a renewed approach to rural development include the following:

1. Focusing on the developmental role of indigenous, grassroot, intermediary and nongovernmental organizations as complements to state and market (Nugent, Chapter 8; Bardhan, Chapter 9; Fafchamps, Chapter 11; Uphoff, Chapter 7; Sahn and Sarris, Chapter 15, for Africa; de Janvry and Sadoulet, Chapter 16, for Latin America). In agriculture, these organizations can be effective in reducing transactions costs for peasant households and serving as mediating institutions in contracting with agro-industry.
2. Focusing on a broader approach to rural development beyond agriculture (de Janvry and Sadoulet, Chapter 16; Lipton, Chapter 13). Demand linkage effects through nontradables are integral components of rural development (Adelman and Ralston, Chapter 14), even though the possibility of an agricultural incomes demand pull is still largely premature for Africa as supply response is low. Promotion of industrial decentralization, a rural informal sector, microenterprises, subcontracting, rural flexible specialization and performing labour markets are part of this extended approach. Stress has to be first and foremost on the restoration of growth as the necessary condition for any sustainable alleviation of poverty, thus relinking poverty reduction to growth.
3. Focusing once more on the unresolved issue of access of assets for the rural poor (Lipton, Chapter 13; Platteau, 1990). This includes reopening the dossier of land reform through new approaches that include progressive land tax, improved land markets, titling and secure property rights, land settlement, relaxation of unwarranted constraints on contractual arrangements, and local deals for access to land with adequate compensations allowed by decentralization of governance. Land reform interventions have to be consistent with the new understanding of agrarian institutions, a body of knowledge which was not available for the land reform efforts of the 1960s and 1970s and helps to shed light on past land reform mistakes (collectivization, tenancy reforms, partial reforms in a context of interlinked transactions) and gives a new basis for more effective interventions. Access to assets for the poor also requires focusing massively on their human capital (education, skills, health, nutritional status), their access to institutions (credit, markets,

information, voting rights), their access to public goods (infrastructure, technology), and their basic human rights.

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2 Markets and States: Against Minimalism and Dichotomy

Paul Streeten[1]

INTRODUCTION

If we call the doctrine that the 'correct' prices and markets have an important role to play in allocating resources efficiently and equitably, in promoting choices, in enlarging freedom, and in decentralizing power, 'Pricism', and the doctrine that efficiency, equity and liberty call for minimum state intervention 'State Minimalism'[2] (or laissez-faire), the currently prevailing view is that the two go together: get the government off our backs and let there be markets! The thesis of this paper is the opposite: that, for the proper working of markets, strong – and in many cases expanded – state intervention (of the right kind, in the right areas) is necessary. It is possible to favour a strong state, with a limited agenda. It would confine itself to ensuring that individuals, and the social groups in which they associate, can pursue their own purposes with a minimum of frustration. This is not the thesis of this paper. It argues for a strong state, with an expanded agenda, though a different one, differently implemented, from that which the state has commonly adopted in many developing countries.

The expression 'getting prices right' has undergone a curious transformation. In the 1960s it was intended to point to the calculation of correct shadow or accounting prices in the face of 'distorted' market or actual prices. Because market prices reflected all sorts of 'distortions',[3] including those caused by the existing and, from an ethical point of view, arbitrary income and asset distribution, it was the task of government to intervene and allocate resources according to the 'right' shadow prices. The purpose of government intervention was to correct the distortions caused by the free play of market forces. More recently the recommendation has been reversed. It now is that developing countries should get rid of state interventions in order to permit market prices to reflect the correct opportunity costs and

benefits. Distortions are now regarded as caused mainly (or only) by governments.

Gunnar Myrdal (1898–1987) has made a substantial contribution to the analysis of these problems. Some relevant aspects of his work are discussed in the next section.

A subsidiary thesis of this paper is that many distinctions, important for an understanding of the role of markets and the state, have been blurred in the neoclassical resurgence. Various theories of the state and their bearing on the relation between government and markets will be discussed, and a realistic one will be proposed. The need for a fuller discussion of managing the transition from the wrong to the right type of state intervention, and for a normative political economy, to complement the positive theory, will be put forward. Finally, donor conditionality insisting on liberalization, deregulation, decentralization and privatization will be discussed.

GUNNAR MYRDAL'S CONTRIBUTION

The free, competitive market is a public good. My participation does not detract from yours, indeed it encourages yours. Like other public goods, it calls for public or collective action to maintain it. When I worked with the Myrdal team on *Asian Drama*,[4] in the 1960s, we emphasized the need to use pricing policy rather than direct controls long before the current fashion for getting prices right had swept the profession of economics. We thought it important for the government to organize markets so that they work efficiently, but we did not confuse price policy, measures to encourage competition and the creation of previously absent markets, with the unrestrained play of market forces. *Getting* the right prices is open to two different interpretations. In the words of Michael Lipton, *setting* prices right is quite different from *letting* prices come right from state inaction. Contemporary discussions frequently also confuse the question 'How large should the state be in relation to total economic activity?' with the quite different question 'What policy instruments should the state employ and how should they be used?'

In *Asian Drama* Myrdal criticized the kinds of government he called the 'soft state'. This critique has sometimes been misunderstood. It is plain that 'softness' in Myrdal's sense is quite compatible with a high degree of coercion, violence and cruelty. The Tamils in Sri Lanka, the Indians in Burma, the Chinese in Indonesia, the Hindus in Pakistan,

the Moslems in India, the Biharis in Bangladesh – to take six states he calls 'soft' – would not claim excessively soft treatment. 'Soft states' also go in for military violence, both internal and external. Their 'softness' lies in their unwillingness to coerce people in order to implement declared policy goals such as collecting taxes, punishing evaders (it is mainly in industrial countries that people are sent to jail for not paying taxes), implementing a land reform, and to resist the hard powers of caste, land ownership and cultural barriers. This lack of social discipline is not the result of gentleness or weakness but reflects the power structure and a gap between real and professed intentions.

Although Myrdal is often regarded (and nowadays castigated) as an advocate of central planning and heavy state controls of the economy, a reading of *Asian Drama* shows that he thought the Indian economy was over-regulated and ill-regulated, and that the number of discretionary measures should be greatly reduced. The book expounds what has since become the conventional wisdom of using prices and non-discretionary measures as policy instruments for the allocation of resources. This means including direct and indirect taxes and subsidies in the armory of policy instruments (as well as public services) rather than direct quantitative controls, but it does not mean surrendering to the free play of market forces if they reflect a highly unequal power, asset and income distribution. If these were given free reign, the process of circular and cumulative causation would ensure that those gain most who already have, and the have-nots would be deprived of what little they have.

Myrdal was not only prescient, and more discriminating and subtle than today's writers, in advocating the use of prices, but in an early article anticipated the public choice theory of political behaviour, including the role of pressure groups and deadweight losses arising from what came to be known as rent-seeking activities.[5] He advocated the institutional approach for the analysis of problems in the social sciences.[6] By this he did not mean an objection to abstractions and to rigorous theorizing or a turn to purely historical or purely empirical work. He meant the need to bring to bear all relevant knowledge and techniques on the analysis of a problem: economics, demography (of which he had an unduly high opinion), statistics, politics, sociology, anthropology, psychology, philosophy, history. He used to say that in an interdependent social system there are no economic, political or social problems: there are only problems. The narrow focus on economic formulations serves, according to Myrdal, the interests of those who oppose reform. The neglect of some relevant areas of

knowledge he called 'opportunistic ignorance'. The need for this multidisciplinary approach has been vindicated by the current concern with the environment and 'sustainable' development and the role of women, and the rising interest in cultural factors in development.

Myrdal applied his method also to the analysis of inflation, combined with widespread unemployment in the industrial countries of the North in the 1970s and 1980s, and either coined or was one of the first to use the term 'stagflation'. (He also invented the useful term 'underclass'.) He attributed the situation to the organization of producers as pressure groups, and to the dispersion and comparative weakness of consumers, to the tax system which encourages speculative expenditures, to the structure of markets and to the oligopolistic methods of administrative pricing. He condemned inflation as a socially highly divisive force.

The approach favoured by Myrdal is neither one of Soviet authority and force exercised for central state planning, nor of capitalist laissez-faire, but of a third way: that of combining the use of prices for economic and social purposes, with a direct attack on attitudes and institutions (and on overcoming obstacles and inhibitions). Prices are to be used as the instruments of reform, including the promotion of greater responsiveness of agents to prices. This approach has a greater affinity to that of those nineteenth-century socialists who were dismissed by Marx as utopian, who mapped out in detail what institutional and attitudinal reforms were necessary to improve society. Myrdal rejected both Marxism and neoclassical economics: the former because it believed that institutions (the superstructure) would be adaptable to the economic conditions (the base), the latter because it assumed institutions already fully adapted. Being neither adapted nor automatically adaptable, they have to be designed and planned. The difficulty, which Myrdal clearly saw, is that any instrument, even if used with the intention to reform, within a given power structure, tends to serve the powerful and to re-establish the old equilibrium. Even well-intentioned allocations – rationing, licensing and controls – often reinforce monopoly and big business. The Indian economist Raj Krishna used to call them 'first-round socialism'. In resolving this conflict Myrdal relied on the possibility of self-reform that arises from the tensions between preferred and proclaimed beliefs and actions, as well as the empowerment of the poor.

Myrdal was preoccupied in many of his works with the conflict between ideals and reality, and with the question of how, if the two conflict, one of them must give way. Much of conventional economic

theory is a rationalization whose purpose it is to conceal this conflict. But it is bound to reassert itself sooner or later. When this happens, either the ideals will be scaled down to conform to the reality, or the reality will be shaped by the ideals.

HOW TO MAKE MARKETS PEOPLE-FRIENDLY

The World Bank has promulgated the need for market-friendly government interventions.[7] But markets are neutral institutions, which can work for good or ill. The question (asked in the spirit of President Clinton's 'putting people first') should be whether markets are people-friendly. Certain conditions have to be met to make markets work efficiently, and to make them work for the benefit of people.

There are several ways in which government intervention can contribute to a more efficient functioning of markets. Not only should government provide a legal framework and maintain law and order, including the enforcement of contracts, property rights, etc., and pursue the correct macro-economic policies with respect to exchange rates, interest rates, wage rates and trade policy in order to ensure high levels of employment without inflation and economic growth. It must also encourage competition by anti-monopoly and anti-restrictive practices legislation or by setting up competitive enterprises in the public sector, or by trade liberalization or by takeover of natural monopolies. There is nothing in the nature of free markets that either establishes or maintains competition. On the contrary, free markets make for conspiracies against the public, as Adam Smith knew. Yet, the virtue of markets depends on the existence of competition.

In addition to safeguarding competition, the government can intervene in the processes of price formation, production and finance in ways that make markets work better for all. It can encourage the introduction of private markets for insurance. The government can make banks buy private insurance. The biggest risk-takers would then pay the highest premiums. It can tax activities it wishes to discourage, e.g. pollution (by issuing tradable permits to pollute below certain levels) or traffic congestion or certain types of short-term stock exchange speculation (putting a high capital gains tax on assets held for less than three months), or the consumption of cigarettes or drugs or gasoline, and subsidize those activities it wishes to encourage, e.g. the use of public transport, or education and health. It can intervene in

preventing the growth of extreme regional inequalities and in town planning.

Government has a special role in promoting the development of human resources. By agricultural extension services it can improve the skills of farmers. By providing unemployment assistance and retraining facilities it can help workers to accept more readily new labour-saving technologies. By providing information and conducting research it can help to reduce monopolistic practices. By investing in physical infrastructure (such as irrigation to raise agricultural price elasticities, rural feeder roads to bring products to markets, harbours and communications) it can provide the conditions for price incentives (such as devaluation) to work, and stimulate private investment. It has been widely documented that, by raising profitability, public investment can 'crowd in' private investment. By assisting in the design and strengthening of institutions (for land reform, information, credit or marketing), it can contribute to the effectiveness of price policy. And so on. Some of these activities will be accepted by even quite extreme marketeers. The two questions are, whether a shift from present, often very inefficient, state activities to these efficient ones can be achieved by a minimalist state, and what the functions of the state should be after the transition, once markets are working.

Perhaps the area of largest controversy is the state's involvement in the provision of social services and its fiscal implications, and in changing the income distribution brought about by free markets. The problem here is not one of the failure of markets, but of their successes, responding to the signals of unequal income and asset distributions. The neoliberals' view is that in any government's war on poverty, it is poverty that always wins. If we are concerned only with the need for government action to strengthen both the allocative and the creative functions of markets, such involvement would have to be justified not on grounds of social justice or human needs, but on grounds of human capital formation, of reducing barriers to income-earning opportunities, and of promoting social stability.

Progressive taxes and social services are often said to be limited by fiscal constraints. The limits are not, however, lack of resources. Military expenditures (often large in very poor countries), the large losses of public enterprises, and reallocation within the social sectors from low priority towards high priority areas (primary and secondary education and preventive rural health services in low-income countries) can provide ample resources. The constraints are neither technical nor economic but political.

It is important to distinguish between public and private production, provision and finance. Various combinations of private and public can be applied to these notions. Education or health services can be privately provided and publicly financed, through vouchers for private schools or hospitals, or subsidies. Charging for the cost of publicly provided services (like university education) means public provision and private finance. The production of some of the components of the service can be subcontracted by the government to a private producer. The optimum combination of producing, providing and financing depends on the particular circumstances of each case.

The proposition that pricism and state minimalism are incompatible is open to two interpretations. According to the strong interpretation, liberal markets require authoritarian regimes that prevent trade unions from pushing up wages, jeopardizing exports and foreign investment, and causing inflation, and special interest groups from grasping rents. 'A courageous, ruthless and perhaps undemocratic government is required to ride roughshod over these newly created special interest groups' writes Deepak Lal.[8] This interpretation points to the East Asian economies (and perhaps Pinochet's Chile), cited as the great success stories. But it is questionable whether these regimes are truly liberal in the economic sphere. Their *dirigisme* is to some extent, and with important exceptions, market oriented or market friendly. But if there is evidence of an invisible hand, it is surely guided by a strong visible arm.

According to the milder and more realistic interpretation, democracies and free markets can go together, although the ruthless efficiency of markets will then be tempered by the compassion of social provisions, as exemplified by the Scandinavian countries.[9] The current debate about the effects of the welfare state on incentives to work and save, on the swollen welfare bureaucracy and on inflation is, of course, provoked by this experience. But for the present purpose the focus is not on the state's welfare provisions but on its interventions in the areas of anti-monopoly legislation, research and development, information, marketing, physical and social infrastructure, and human resource development, all of which are conditions for the efficient functioning of markets.

The state minimalists are prone to argue asymmetrically. They have said, correctly, that market failure is not automatically an argument for state intervention, for this may produce even worse results. But they forget that government or bureaucratic or state failure is not necessarily an argument for private markets, at least not until much

more empirical evidence is produced that the outcomes of government action in a particular case are necessarily worse than those of markets.

Shapiro and Taylor have pointed to a peculiar asymmetry in these models, 'whereby individuals coalesce to force a political redistribution, but do not do the same in the market place. The political arena is depicted full of lobbyists and cartel builders, while the economy is presented as being more or less subject to competition. [10]

A related asymmetry is that rent-seeking has been indicted almost exclusively as resulting from public action.[11] It is, however, equally common in the private sector. Private allocation of contracts to subcontractors gives rise to rents in exactly the same way as import quotas. Adam Smith recognized businessmen's 'conspiracy against the public' and 'contrivance to raise prices', and landlords' and others' love 'to reap where they never sowed'. We would expect these observations by the father of market economics to encourage us to design strategies of state intervention to counteract these private rent-seeking activities. Instead, we are served today with two ideas: first, that rent-seeking is an entirely political phenomenon, and second, that the only way to reduce rent-seeking is to limit government. Both are wrong, or at least unproven without considerably more empirical evidence.[12]

Private and public action often have to go together. Prices have their impact on demand and supply only if complementary action is taken by the government. A factory may depend on a road, which is normally constructed by the government. Increases in agricultural output in response to higher prices may depend on irrigation or research into new varieties. The ability to make use of high profit opportunities may depend on the availability of information about inputs and markets, provided by the government. When the IMF recommended Tanzania to devalue the shilling, no attention was paid to the fact that the transport system had broken down and, however attractive the prices for farmers, their produce could not have been transported to the ports. In South Africa, the 'black' taxi trade is often upheld as a splendid example of the spirit of free enterprise. And so it is, if we accept the absence of an efficient and safe public transport system for the blacks. But with roads full of potholes and without public safety regulations, the accident rate is one of the highest in the world.

In Europe there is now talk of deregulating trucking (or lorry-driving). Now, lorries are prohibited from picking up return loads and often have to return empty. Two opposite tendencies will be at work. On the one hand, truck traffic may be reduced, because a given amount of traffic can be carried out by fewer journeys. On the other hand, the

lower costs will make it pay to increase road transport. If the net outcome were to lead to more road traffic, safety and the health of the drivers would suffer. There would be more road congestion, and reduced loads and higher losses for the underutilized railways.[13]

One example of the complementarity or symbiosis between public and private sectors is the 'crowding-in' effect (in contrast to the normally assumed crowding-out effect, resulting from higher interest rates), according to which public investment, often in infrastructure, stimulates private investment. Various authors have estimated these crowding-in coefficients to lie between one and two.[14] The fact of crowding-in is now well established. The task of government is to raise the productivity of the investment in both the public and the private sector. There are many other non-price, non-market measures, such as research, information, or the establishment of appropriate institutions, which the government must take in order to make the incentives of prices bite.

Some might say that, while the combination of price and non-price measures is best, to get prices right by itself is at least a step in the right direction. However, this is not so. I have shown elsewhere that the right prices by themselves, without the complementary public sector action, can be ineffective or counter-productive.[15]

Japan and South Korea are often cited as examples of successful private–public sector cooperation. It is sometimes said that the relation is supportive, not antagonistic. But looking more deeply into the nature of successful state interventions, we note that the state in Japan and South Korea, as Jagdish Bhagwati put it, issues prescriptions rather than proscriptions.[16] They intervene by encouraging and promoting selected activities, not by prohibiting and restricting. Of course, to be able to get credit for only one type of investment implies being prevented from doing another. Or to be prohibited from importing a good encourages domestic production. The distinction is not as clear-cut as it may seem.[17] The skill of these policies does not lie so much in the disputed art of 'picking winners' as in creating winners. Korean shipbuilding was created without the existence of the requisite skills or raw materials, and today competes successfully with the previously pre-eminent Swedish industry. The highly successful Korean steel industry was created without indigenous iron or coal. Modern comparative advantage can be created by good government policies.

Japan uses government intervention to promote industrial productivity, by export incentives, barriers to protect the domestic market,

low-cost credit to selected investments, and policies that favour business and education. In addition, there are numerous more covert policies to favour companies that move into government-approved types of production, such as commercial intelligence services, nationalistic patent policies, etc. The government practises an art despised and condemned by most US economists, who are minimalists, namely industrial policy.

The South Korean public sector Pohang Iron and Steel Company is one of the most efficient enterprises in the world (in spite of the complete absence of iron ore and coal in Korea), while the Steel Authority of India is a testimony to bureaucratic inefficiency. The Korean firm has financial autonomy, seeks to make profits, has clear objectives, has operating independence and is open to potential competition from domestic rivals and imports. It is not burdened with multiple social objectives and the incentive structure encourages it to export. The Indian Authority accepts losses, has confusing and multiple objectives, its finances overlap with the budget, it is subject to close political scrutiny and interference, its prices are politicized, and it is protected from competition through tariffs, import licensing and legal restrictions on domestic entry.

The East Asian success stories, moreover, illustrate that the same type of intervention, such as subsidized interest rates, that in Latin America have impeded growth, has been used by these governments to accelerate growth. The role of corruption and its control also contributes to explaining differential performance.[18] It is now generally acknowledged that 'getting prices right' has not been the principal, and certainty not a sufficient, recipe for the success of East Asian countries, although their government interventions have been 'market-friendly', and the markets have been 'people-friendly'.

Differences in the institutional arrangements of the relations between managers of public enterprises and the public authority are also important. Managers are given sufficient autonomy to get on with their jobs, while remaining accountable to the public. With all the current talk about incorporating political variables in economic analysis, and endogenizing political change, there is remarkably little work done on how specific political and economic institutions function.

In Europe too, new forms of cooperation between local authorities, central government and firms have been evolving. In the 'Third Italy' (the region extending between Milan, Florence and Venice), and in Baden-Württemberg in Germany, methods of production called by

some 'flexible specialization' and by others 'diversified quality production' have combined successfully markets, firms, local government and central government regulation.

There are different types of capitalism. One type, the Japanese and German, is characterized by close coordination between different firms, between firms and banks, between government and business, and between employers and workers; the other exhibits little coordination and conducts its relations at arm's length between firms, no involvement of banks in the management of firms, and on the basis of hiring and firing within firms. One commits its resources to long-term goals, the other is more concerned with short-run financial flexibility. One emphasizes 'flexible specialization' and product innovation, the other pre-set machinery whose performance does not depend on the skill of the workers, who are tightly controlled financially.[19]

Economists are trained in the study of the operation of economic forces within political, social and moral constraints.[20] This approach has to be supplemented (and in some cases replaced) by the study of the operation and manipulation of political, social and psychological forces within economic limits. More fundamentally, the distinction between economic and non-economic variables may not be tenable if the aim is to understand society.

THE CIVIL SOCIETY

States and markets do not exhaust the players in this game. Frequently, although they need each other, they also weaken and undermine each other. States damage markets by regulations, licensing and bureaucratic red tape. Markets tend to corrupt governments. Therefore there is a need for the civil society. It can contribute to more constructive relationships between the two.

Private voluntary organizations have come to play an increasing role, next to governments and profit-seeking companies. They comprise the most diverse organizations: religious, political, professional, educational and cooperative organizations; pressure groups, interest groups and lobbies; institutions that are project-oriented, give technical assistance, provide disaster relief, or are concerned with disaster prevention, etc. Although they often claim to work without or even against governments, their contributions can sometimes best be mobilized by working jointly with governments. The most successful

NGOs in the Third World, such as the Self-Employed Women's Organisation based in Ahmedabad, India, or the Grameen Bank or BRAC of Bangladesh, depend for their continuing and expanding (though not for their initial) operations on access to, and support and replication by, governments. Of course, in some situations their function is to criticize and exhort governments, or to fill gaps in government activities, or to do things at lower costs, with better results, and with more popular participation than governments. In other situations, when they promote their selfish interests, irrespective of the wider interests of the community, or when they reflect the dominant power of particular groups, government may be justified in trimming their influence.

The relationship between nongovernmental organizations (NGOs) and governments can be understood as one of cooperative conflict[21] (or creative tensions), in which the challenge of the voluntary agencies and their innovative activities can improve both government services and the working of markets, and help to resolve tensions between them.

In some situations the state plays a passive role, only responding to the pressures of interest groups. The outcomes will then be determined by the power of these groups, which in turn depends on their size, age, motivation and enforcement mechanisms. In other cases the state is more active, imposing regulations and restrictions that can give rise to competitive rent-seeking by private interest groups. In yet other situations, both the private groups and the state work together for common objectives.

Functions are divided between the state and civil society. The institutions of civil society – churches, trade unions, interest groups, action groups, the media and many others – are often quite undemocratic, in spite of their rhetoric. There is then a need for the empowerment of weak and neglected groups within them: women, the unemployed, ethnic minorities. There can be undesirable concentration not only of economic and political, but also of social power.[22]

Though there is in the early stages of development a need to strengthen both states and markets, in fact they often tend to weaken and undermine each other. It is the institutions of the civil society that can intervene and inhibit such weakening and undermining.[23] Interactions between the state, markets and civil society are complex. Both too weak and too strong a state can discourage the growth of civil society. And too strong private organizations can undermine the power of the state, as in Sri Lanka or in Lebanon, or in the ex-Soviet Union, or in Yugoslavia, and lead to the dissolution of society.

THE LOSS OF SOME DISTINCTIONS

Some important distinctions, drawn in the 1950s and earlier, have been swamped by the neoclassical resurgence. There is the already mentioned distinction between price policy, in which prices (including indirect taxes and subsidies) are used as instruments of policy, and laissez-faire, the free play of market forces without intervention to maintain competition, to supply an infrastructure, information and research, to provide the formation of human capital, and to look after the victims of the competitive struggle.

There is the distinction between markets and the private sector. Privatization of a public enterprise without the managerial and technical personnel, without competition, and without the provision of infrastructure and information can only raise false expectations, while markets can exist where public enterprises compete with each other or with private ones, as Renault in France has done so successfully, or the previously mentioned Pohang Steel Company in South Korea, or public enterprises in Singapore.

There is the important distinction between motivations in the private and in the public sector. Of course, self-seeking occurs in the public sector as it does in the private. What is so absurd is to maintain that this is the only motivation to be found there. Each of us behaves differently in different settings: as buyers and sellers in markets; as citizens voting in elections; as supporters or critics of government policies; as moral agents when our conscience is aroused. Sometimes we exercise the option of exit, at others of voice. To level these distinctions down to a uniform selfishness, and to equate rational with selfish behaviour is not helpful to understanding or policy-making.

Even behaviour in the market has been grossly oversimplified. Rational behaviour has been equated with selfish behaviour. All that it is necessary to assume for economic man to produce stable equilibrium outcomes is rationality in the sense of constancy and consistency of behaviour. Selfishness can manifest itself in impulsiveness, inconsistency, inconstancy and irrationality. On the other hand, the perfect model of the rational person is the disinterested trustee, who administers funds completely unselfishly on behalf of others.

Finally, there is the distinction between centralized and decentralized government decision-making. Some of the criticisms made of a central bureaucracy do not apply to decentralized authorities (though others do apply). They can enhance participation, especially of small entrepreneurs and farmers, be more responsive to needs, gather more

information, be more transparent and accountable, and improve the quality of government activities. They can also raise more resources, because the benefits are more visible. On the other hand, decentralized control can reinforce local power elites which are less responsive to the needs of the poor than central groups. Decentralization can also aggravate inter-regional disparities. The task is to design a structure of decision-making that combines the informational and motivational merits of decentralization and participation with central control.

AGAINST DICHOTOMY: THE UNIMPORTANCE OF THE PRIVATE–PUBLIC DISTINCTION

Going one step further, it can be doubted whether the very distinction between private and public ownership or management is relevant. Much of the discussion is conducted in binary terms: central planning versus free markets (which is not the same as private versus public ownership). Sometimes a spectrum between these two poles is considered, but the ideological values attached vary with the position on this spectrum. For example, Soviet-type planning is bad; therefore the nearer we are to free markets the better. But an intermediate position between the two ends of the spectrum may be preferable to either. It is also possible to add dimensions to the linear spectrum that render the value choices more complex: the degree of democratic accountability, freedom versus compulsion, centralized versus decentralized decision-making, the degree of involvement of voluntary organizations. A regime combining certain features of intervention with others of a free market may then avoid the failures of the two poles and be preferable to either extreme.

Hybrid institutions that encourage initiative and enterprise and are subject to covering their costs, but are at the same time accountable to the public, can harness the best of both sectors. The British Commonwealth Development Corporation, for example, is run autonomously on commercial lines, in the sense that it has to cover its costs (and to that extent is subjected to market discipline) and that its board consists of bankers and industrialists. It draws its funds mainly from the Exchequer (Treasury), and its objective is to maximize development, not profits. It does not only lend funds, withdrawing once a project is completed and participation becomes most important, like all other development agencies, but also manages firms and

projects. In this respect it is unique. At the same time it trains local counterparts, and hands over control, management and ownership as soon as the local people are ready, freeing its capital for new ventures.

There is also the large third sector briefly discussed above, neither private nor public, that consists of nongovernmental, non-profit organizations, that draws on the voluntary energies of its members, briefly discussed above. Churches, colleges, universities, Oxfam, Bread for the World, orchestras, hospitals, museums, the Red Cross, Friends of the Earth, Amnesty International, charities, cooperatives, the Grameen Bank, neighbourhood organizations, local action committees, and many others draw on people's voluntary efforts and contribute often highly efficiently not only to the gross national product but to a flourishing civil society, essential for a democracy. Some libertarians (such as Margaret Thatcher) were eager to destroy this civil society, while reformers in societies in which it has been destroyed (such as Mikhail Gorbachev) had tried to build it up. But here again, as in the case of the complementarity of private and public activities, the strength of the civil society and of NGOs in particular often lies not in opposing the public sector, but in cooperating with it, whether for finance, or for replication of successful ventures, or for support in opposing exploitative local power elites. In other circumstances, for example when faced with a predatory state, their function is to combat it.

When I taught at the Oxford Business Summer School many years ago I came across a truly self-made tycoon. His parents had been immigrants from Central Europe. He had started penniless and had amassed a fortune, some of which he donated to the Oxford Centre for Management Studies. In the common room after his talk he told us that the important distinction in business is that between what he called 'the institutions' and 'private enterprise'. By 'the institutions' he meant the large firms, whether privately owned and managed or in the public sector. In those ownership is divorced from control and management, and is anonymous. 'Private enterprise' stood for the small firm, owned and run by the head of a family and a few employees. The principles of running a large private sector company and a public enterprise are very similar. The spirit of truly free enterprise is best exemplified in the small enterprises of the informal sector. To bracket these with the large corporations under the heading 'private enterprise' can be very misleading.

THEORIES OF THE STATE

We now have a menu of theories of the state to choose from. According to the one I was taught when an undergraduate, an idealistic, competent and well-informed government, like Platonic guardians, or perhaps more like Fabian bureaucrats, reigns above the interest conflicts and promotes the common good. It is implicit in the writings of A.C. Pigou, Abba Lerner, Jan Tinbergen and James Meade. According to this old romantic theory the government can do no wrong.

The opposite theory, represented by the new classical Chicago economists, neoclassical political economists and the public choice school (better named the self-interest school), holds that the government can do no right. Citizens, politicians, bureaucrats and states use the authority of government to distort economic transactions for their benefit. Citizens use political influence and pressures to get access to benefits allocated by government; politicians use government resources to increase their hold on power; public officials trade access to government benefits for personal reward; and states use their power to get access to the property of citizens.[24] The result is an inefficient and inequitable allocation of resources, general impoverishment and reduced freedom.

A narrow interpretation of selfish political man (and woman), pursuing ruthlessly his/her interests, can lead to mutual impoverishment. According to one version the predatory officials and bureaucrats or politicians promote actively their selfish quest for money or power, according to another they respond passively to powerful pressure groups so as to stay in power. 'The model of government motivations' has been simplified 'into a single-track form, supplying the public sector with a brain transplant straight out of the marketplace'.[25] Any intervention by this 'predatory state' with the 'magic of the market place' is bound to make matters worse. Government action is not the solution (as it is in the first theory), it is the problem – 'invisible feet [of rent-seeking] stomping on invisible hands'.[26] As has been said above, while according to the Platonic theory the government intervenes in order to correct 'distortions', according to the public choice theory all distortions are due to government interventions. But according to both these apparently opposite views the state is an optimizing agency. According to the Platonic view it optimizes the welfare of the people as a whole, according to the public choice view that of special interest

groups: those on whose support the politicians rely, the bureaucrats, the army, the politicians themselves. The Platonic view is normative (or naive); the public choice view crudely cynical.[27]

Even if it were true that politicians, bureaucrats and interest groups pursue always only their self-interest, this is open to different interpretations: some of these may be in conflict with one another and with the interests of others, others may be in harmony. There may, for instance, be a conflict between smaller present and larger future gains; or between 'hot', impulsive and 'cool', deliberated interests; or between concentrated smaller and more widely dispersed larger gains; or between certain smaller and uncertain larger gains; or, perhaps as important as interest conflicts between groups, the conflict between perceived smaller and actual but non-perceived larger gains.

A third theory, propounded by Anthony Downs and applicable only to democracies, holds that politicians maximize their own welfare by selling policies for votes.[28] Since not many (though a growing number of) developing countries are democracies, this theory would not have wide application among them, even if it applied to democracies.

Then there are social contract theorists, from Hobbes, Locke, and Rousseau to John Rawls and Mancur Olson. They say that citizens surrender some of their rights or liberties in return for protection against aggression, provision of collective goods, benefits from externalities, and other services from the state.[29] A limited sacrifice of individual autonomy – by increasing the prospects of avoiding related ills such as prisoners' dilemmas, the isolation paradox, the free rider (and, worse, the sucker) outcome, and the tragedy of the commons – gives each citizen greater freedom and more benefits. The undersupply of public goods and the oversupply of public bads can be avoided by some enforced action by the central government.

Marxist theory says that the government is the executive committee of the ruling class and always serves the economic interest of that class. But this is open to different interpretations. Some Marxists regard the state as acting in the interest of international, metropolitan capital, extracting surpluses from the periphery for the benefit of the centre. This is the view of neo-Marxist[30] dependency theorists and was Marx's view of the relation of Ireland to England. Others regard the state as acting in the interest of an indigenous capitalist class, sometimes against the interest of the capitalists at the centre. According to both these views the state acts in the interest of a ruling class. A more sophisticated version of this theory holds that it is the function of the state to reconcile differences of interest within the ruling class, so as to

maintain its power and the capitalist mode of production. According to this version it is possible for the government to impose measures in the interest of the exploited workers and small peasants, in spite of the loss of profit that this involves, if these measures save the system from revolt or revolution. It can also be that higher wages or a land redistribution, while reducing the profits of particular groups, raise total savings and/or lower capital: output ratios so as to increase the volume of the total surplus, though not the ratio of surplus to GNP. Others again regard the state as the agent of a 'state class' or a bureaucracy.

Palaeo-Marxists like Bill Warren[31] hold that peripheral capitalism is a progressive, revolutionary force, making for productivity growth and economic progress. They make Dudley Seers's remark about the convergence of 'Marxism and other neoclassical doctrines' comprehensible.[32] And it is ironical that both neoclassical political economy and Marxism, two largely hostile and non-communicating groups, conclude that thinking and research about government policy for poverty reduction or income redistribution are futile. According to both, the predatory state inevitably acts in its own interest and that of powerful pressure groups; there is no place for disinterested, benign, altruistic government policies; only the forces of the free market are capable of advancing the good of society.

It is worth remembering, in the debate over market versus state, that real states fall under neither extreme. Dogmatism here leads to error even more than usual. A more commonsense view, borne out by overwhelming evidence, holds that many governments are neither monolithic nor impervious to pressures for rational and altruistic policies. Moreover, if there is scope for a positive-sum game (as there is bound to be in the reversal of rent-seeking movements away from the Pareto frontier), and if the government can hold on long enough to tax the sum, the possibility of rational policies is opened up, even on the narrow assumption about predatoriness of the public choice school.

The structure of government decision-making consists of many departments, ministries and agencies, and many layers from central government via provinces (or states in a federation) to village or town councils.[33] Power in some countries is divided between the legislature, the judiciary and the executive. Each of these pulls in a different direction. The obstacle to 'correct' policy-making is neither solely stupidity nor solely cupidity, neither just ignorance nor simply political constraints or monolithic selfishness. On occasion, governments, like charitable foundations, universities or voluntary associations, do act

disinterestedly and in the public interest, particularly, but not only, if there are pressure groups behind them. It is the existence of these pressure groups with some power or influence that constitutes the 'trustees for the poor', and the 'guardians of rationality'.[34] Count Oxenstierna may not have had the whole explanation, but knavery has no monopoly either.[35]

At the same time, there are areas in which a better analysis and a clearer sense of direction would help, just as there are areas where it is fairly clear what should be done, but vested interests, whether those of the policy-makers or of pressure groups on whose support they depend, prevent it from happening. Governments sometimes create rents and encourage rent-seeking; at other times they destroy rents and reduce wasteful competition in their pursuit. The private sector also creates and seeks rents. Some government officials act sometimes in their selfish interest; the same ones and others are, or want to be seen as, at other times, moral agents, acting in the common interest. Some pressure groups, individual or collective, domestic or foreign, are motivated by reason, solidarity and morality.

According to this commonsense theory, for which there is overwhelming evidence, the state does not optimize anything, neither public welfare nor self-interest. It compromises, attempts to resolve conflicts, manages bargaining between groups, and occasionally leads. Gunnar Myrdal's notion of the South Asian 'soft state', in which declared policies are not implemented or not enforced, fits into this picture. But so does that of the East Asian hard state, which pursues successfully both growth and equity.

AN ALTERNATIVE WINDOW

Some of the neoclassical theories regard the private sector as the source of wealth creation and the public sector as the domain of authority, exercised either benevolently or as a wasteful drain on resources. The distinguishing features of the state, according to this view, are that its membership is *universal*, and that it has powers of *compulsion* not given to other organizations.[36] According to some adherents of this view, many governments in developing countries have usurped the sphere of production, which should be left to the private sector. The remedy lies in the state withdrawing from this area, and confining itself to the protection of its citizens against external and domestic threats.

But it is equally possible to look at the same situation in a different way, with a different division of responsibilities. We may regard each sector, or rather each sphere of responsibility as creating different forms of wealth, and exercising different forms of authority and compulsion. According to this view, the private sector creates forms of wealth that can be sold for profit, the public sector those that, while also useful, cannot, because powerful externalities and inappropriabilities exist. Public goods are goods characterized by non-rivalrous consumption, so that one person's use does not detract from another's, and occasionally, though not always, non-excludability from the benefits whose costs are incurred by some. The classic example, given by John Stuart Mill, is a lighthouse (though its construction can, of course, be subcontracted to private firms, and though it benefits not all sailors but only ships in the region). Armed protection, monetary and employment stability, an efficient market, the administration of justice, mass education are other examples of public goods, or rather services. Certain types of infrastructure, such as underutilized roads, bridges and subways, or harbours, dams and irrigation, are non-rivalrous but not non-excludable, for the provider can charge tolls or fees and exclude non-payers. But this means excluding some people the benefits to whom would exceed the costs of supplying them. When price discrimination is impossible, the alternative is for the government to provide these goods and services free, and finance them by taxation.

Not all public goods should be produced, provided or financed by the central government. Some can be supplied by local government, or by cooperatives, clubs or other interested private parties, such as a group of farmers who jointly provide common control over common grazing rights. Others, like a common currency, some observers would take away from government control and put under the control of an independent central bank. Some need no institution or organization, like a common language, or trust, loyalty and truth-telling in transactions. But given the two characteristics of public goods of non-rivalry in consumption and, normally, non-excludability in charging for their use, the government (central and local) is one of the institutions (among others) that is particularly fit to produce, provide or finance some of these goods and services, particularly if no other institution can or will do so.

On the other hand, there are other reasons for public sector production than the public nature of goods. They include natural monopolies, if their regulation is less efficient, and merit goods, to which a high value is attached by the community, but which cannot be

afforded by those who need them.[37] Or goods and services, such as the arts or museums or theatres, which are regarded as important, but would not exist if they had to rely wholly on private finance.[38] (There are also merit bads, or demerit goods, such as dangerous drugs, tobacco, alcohol and weapons, whose production or sale the government may wish to restrict or prohibit).

Production is thus not confined to the private sector. Production of different things can and should therefore occur in both the public and the private sector. And the same is true of authority. The private sector exercises authority through work discipline (and hiring and firing, giving and withholding payments), the public sector through the army and the police. And the authority of the state depends on widespread voluntary acceptance by the citizens. A worker can, of course, leave the firm and go to another, but citizens in many countries can also leave and move to another country. States are also constrained by both super-national bodies, like the European Community, and sub-national bodies, like provinces and municipalities.

The question as to whether the private and the public sector use their authority for the benefit of the public or wastefully or predatorily or exploitatively remains to be answered. Such shifts between the two perceptions about the role of the private and the public sector, however give, rise to very different evaluations.[39] They reflect different ideologies, different ways of organizing, filing and evaluating the same observations. The role of profit, of moral and aesthetic considerations, and of the use of force, will appear quite different according to which of these two perceptions one accepts.

RHETORIC AND PRACTICE

The academic and political rhetoric about the virtues of the market and the vices of the state is far removed from the actual behaviour of libertarian governments that profess to follow this rhetoric. While both the Reagan and the Thatcher administrations decried the role of the state, the role of public expenditure relative to GNP increased under both leaders. In 1990 the public sector in the USA spent 43 per cent of the national income. It was 40 per cent in 1980 and 38 per cent in 1970. This represents an increase of over 13 per cent over twenty years. It was the result of growing expenditure on defence, on state security and on social security, on research and development and, above all, on growing interest payments on the rising public debt in an economy

without a sense of direction. These expenditures, and particularly those on research, reflect three powerful collective sentiments to which libertarians succumb just as much as interventionists: collective fear (defence and, more recently, environmental protection), collective greed (the desire to be competitive in international trade that leads to subsidies such as those to Sematech, the Pentagon-aided corporation consortium for improving the manufacture of semiconductors) and collective pride (the desire for international prestige reflected in the award of Nobel Prizes).

There are two important areas in this debate. One is concerned with the problems of the transition from excessively interventionist to more market-oriented and people-friendly policies; the other is normative political economy.

PROBLEMS OF THE TRANSITION

Much of the writing is concerned with determining how much state intervention there should be and by what means it should be implemented, but much less with the important question as to how to manage the transition (1) from excessive to reduced state intervention, (2) from interventions in the wrong areas to those in previously neglected important ones, and (3) from one form (say reliance on quantitative controls) to another (reliance on prices as instruments of policy). This is a problem with which many countries are faced today, not only in Eastern Europe and Russia, and for whose solution guidelines are needed. If, for example, reducing public sector employment is implemented by not replacing people who leave, the best will leave and only the deadwood remain. If salaries in the public sector are kept too low, demoralization and added temptation to corruption and the search for additional outside jobs are created. What Robert Klitgaard calls incentive myopia[40] can be more damaging than an overstaffed public sector. If staff are just sacked without the provision of alternative jobs, unemployment and poverty are created, or the burden of maintaining them is thrown on others. The examples of Sri Lanka and China have shown that liberalization that raises output and average incomes has been combined with rising infant mortality rates and falling life expectancy. It may be that demobilization, the change from a war to a peace-time economy, has lessons to teach. In many respects the experience of the British economy, in both mobilization for the war and demobilization after it, has been wrongly

transferred to developing countries. But some aspects of it may be relevant. *More* transitional intervention may be needed in order to reduce, or – more important – change the form of, past intervention.

NEOCLASSICAL POLITICAL ECONOMY

I have already mentioned the two basic ideas of neoclassical political economy: that rent-seeking is an exclusively political phenomenon (and does not occur in the private sector),[41] and that the only way to reduce rent-seeking is to limit government action. There are several criticisms that can be made of this position.

First, as already pointed out by Adam Smith, rent-seeking is just as common in the private sector, and government action may then be necessary to reduce or eliminate it. Anti-monopoly and anti-cartel legislation, import liberalization, and the creation of competing public enterprises are examples.

Second, as Jagdish Bhagwati has shown, in a situation where there are already many rent-seeking activities going on, the creation of additional rent-seeking opportunities by government intervention can be productive.[42] The alternative use of these resources might be even more damaging. It is an application of the Theory of the Second Best. The creation of new rents can reduce or altogether destroy existing rents and existing competitive rent-seeking activities, both in the public and private sector.

Third, as Michael Lipton has argued, it is odd that the objection is not to the creation of rents (and thereby to reducing the share available for wages and profits, and with it the creation of incentives to generate surpluses), but to the creation of rents in forms that give rise to competitive rent-seeking. Efforts and resources are diverted from productive to non-productive activities, e.g. to acquiring an import licence. Had the import licence been handed to the brother of the bureaucrat, or had it been sold corruptly to a merchant, and had no competition for it occurred, there would have been no social cost according to this theory. The theory does not seem to envisage any social gains (compared with the nepotistic or corrupt awards) from the fact that the rents are competed for rather than monopolized. In fact, the social costs of rent-seeking seem to arise only from competition for them, whereas corruption and nepotism appear to involve none!

Fourth, the theory assumes that all resources diverted to rent-seeking from productive activities, if rent-seeking were to end, could be

returned to these activities.[43] It is quite obscure what these resources, released from lobbying and log-rolling are, how they can be transferred to productive activities, what the costs of transfer might be, and how their productivity might be affected by the transfer. Mrinal Datta-Chaudhuri has argued that '[p]erhaps more important than the resource cost of rent-seeking are the effects of the policy environment on the perception of economic agents. In such an environment, producers tend to become obsessed with the short run gains associated with cornering the licenses at the cost of the long run benefits connected with technological and managerial improvements'.[44] But are the same people capable of pursuing these alternative activities?

Fifth, Michael Lipton again points out that the theory ignores the likelihood of rent-avoiding transactions (black or parallel markets, smuggling and other illegal activities, abbreviated by Lipton to RATS) as a response to rent-seeking opportunities. Such substitution is normally assumed in neoclassical economics, but appears to be excluded here. According to neoclassical political economy, invisible feet trample on the beautiful work of the invisible hand. But smuggling is one way in which the invisible hand can defeat, or at least reduce, the destructive efforts of rent-creating and rent-competition-creating invisible feet. Of course, illegal markets are wasteful compared with open and free trade. But they may be regarded as less wasteful than distorted, regulated and restricted markets without these subterranean outlets.

The case for state minimalism is, of course, not based solely on rent-seeking. It is widely believed that in most developing countries the public sector and public expenditure are 'over-extended', hampering economic growth. The evidence does not confirm this. A recent econometric study, based on more than one hundred time-series and cross-country regressions, shows that government size and public expenditure are *positively* associated with economic growth, especially for developing countries.[45] Obviously, there is enormous scope for more efficient reallocation and restructuring of public expenditure, in particular (1) to make it complementary to private expenditure, (2) to reallocate it from low to high-priority areas, and to (3) to fill gaps left by private activity. But there is no evidence that the state is over-extended.

NORMATIVE POLITICAL ECONOMY

Much of the recent criticisms of governments and states by the state minimalists, the neoclassical political economists, the theorists of rent-

seeking and of directly unproductive profit-seeking activities, and of public choice, have been concerned with explaining why and how inefficiency, inequity and deprivation of freedom arose; with the *positive* political economy, partly of government failures, and, more importantly, of government successes in pursuing its selfish interests at the expense of the public. They have been useful in explaining bad policies and the absence of reforms, and have thrown light on regimes such as those of Amin, the Duvaliers, Marcos, Somoza, Trujillo and Mobutu. It has been truly said that in many developing countries the invisible hand is nowhere to be seen.

But in explaining the evils of predatory governments, and by advocating free markets, they have once again reasoned the state away, and re-established the division between economics and politics. The task of integrating the two would consist in showing how the government, and pressures on it, can be used for the objectives of development. This would also help to explain the successes of development, from Japan to South Korea, Botswana and Costa Rica.

On the other hand, there are examples of political regimes that represent and promote the interests of the poor. In Malaysia, political power lies with the poorer Malays, while economic power lies with the Chinese and Indian communities. As a result, Malaysia has implemented policies that benefited the poor Malay community. In Zimbabwe, after power had shifted from a white to a black government, numerous measures were taken that favoured human and social objectives. For example, the share of primary education in total educational expenditure rose from 32 per cent in 1980 to 58 per cent in 1984 and real expenditure per head on primary education doubled.[46] In Malaysia and Zimbabwe influence does not go with affluence.

Much less interest has been shown in this *normative* aspect of the subject. James Buchanan, one of the founders of the public choice school, has indeed written on the processes by which efficiency is achieved, on voluntary contracts, institutions, decision-rules and constitution-making as guides to reform.[47] But there has been little interest in how to build up political pressures against the pressures for the destructive policies so well analysed by him and his disciples.

Frequently authors from different schools attribute poor policies to 'lack of political will'. But it is futile (or tautological) to say that the political will is lacking. It is an expression that should be banned from political discourse. One does not have to be a behaviourist to think that behaviour is the manifestation of will. If the will to action is lacking,

there is no point in asking for the will to have the will to action. This only leads either to an infinite regress or to the charge of hypocrisy. It is a case of *ignotum per ignotius*. Political will itself should be subjected to analysis, and, for purposes of action, to pressures and to mobilization. It is more fruitful to think of how to create a political base for efficiency, equity and liberty, how to build up pressure groups, how to mobilize the poor, how to shape reformist alliances, how to recruit coalitions for progress, how to strike bargains, achieve compromises, forge compacts, resolve conflicts, or permit their tolerance, how to use persuasion, when to offer compensation to losers when total gains exceed total losses, etc. Amartya Sen has used the expression 'cooperative conflict' for the relations within a family.[48] Similar relations exist both within the state and between it and pressure groups.

It might be thought that if such a normative theory had to be built on pure self-interest, no research would be needed, for people are very good at discovering and pursuing their interest. But we know from parables such as those of the prisoners' dilemma, the isolation paradox, the tragedy of the commons, social traps, and the free rider, that the pursuit of self-interest in society can be mutually destructive, and that there are ways of cooperation, apparent sacrifice and coercion that advance it. Moreover, there is no need to stick to the assumption of self-interested bureaucrats and politicians. Mobilizing the guardians for the poor and the trustees of rationality to put pressure on governments can produce good results even if governments were correctly analysed by the public choice school. Governments can also themselves initiate reforms either in their enlightened self-interest or from motives of public interest.

In analysing the sources of pressures on governments for reform directed at improving the lot of poor people, for example, six areas are worth exploring:

1. Common or shared interests between rich and poor.
2. Mutual interests and bargains between rich and poor, including the payment of compensation.
3. Interest conflicts within the ruling groups that can result in benefits for the poor.
4. Empowerment of the poor and participatory forms of organization.
5. Organization of distinct 'trustees for the poor' and 'guardians of rationality'.
6. International pressures and support.

DONOR CONDITIONALITY, PRICISM AND STATE MINIMALISM

Structural adjustment loans have been given by the World Bank on the condition that recipients *liberalize*, *decentralize*, *privatize* and *deregulate*. Pricism and market orientation have been combined with state minimalism, both in domestic and foreign policies. The change from exclusive project lending to programme lending with its macropolicy conditionality is the result of projects having gone sour because of the wrong macro-economic policies. The policy conditionality was further supported by the belief that it would support like-minded domestic political coalitions in recipient countries.

Apart from the (superficial) double paradox that foreign donors are in a better position to know what is in the country's best interest, and that the country does not have to pay a fee for accepting this good advice, but gets rewarded with extra funds, there are five problems with this type of conditionality.[49]

First, adjustment aid to mostly Latin American and Southeast Asian debtor countries is aid not to the countries but to the banks in the USA and other advanced countries, if the creditors are private banks and the alternative is default. This, of course, may have contributed to the conversion of the multilateral banks and a Republican US Administration to programme lending.

Second, policies, like projects, are substitutable and avoidable. The donor imposes a condition, which is met, but other policies circumvent the intended result of the condition. This is the macro-economic equivalent of fungibility, which was regarded as an objection to project aid. In both cases the donor's intentions are frustrated. For example, the donor imposes as a condition devaluation, but subsequent inflation renders it nugatory. This happened in several African countries.

Third, donors' embrace of political groups advocating 'correct' policies can be the kiss of death. An example was the pressure for devaluation on India in 1966.[50] It may be wiser to refrain from seeking such allies and to encourage correct policies by signalling quietly approval through the unconditional support of good governments.

Fourth, in view of our ignorance of the impact of these conditions, both in the transition period and ultimately, the premature crystallization of flawed orthodoxies should be avoided. The neoclassical doctrines are not scientific truths, and the ability of governments to implement them, even if they were such truths, and even if the governments were willing, is often in doubt.

Fifth, our confidence in the ability of the developing countries to implement the required macro-economic policy reforms has declined.

In the light of this, at least as much attention as to macro-economic policies should be paid in the aid dialogue to project design and implementation, to institution- and capacity-building, and to narrowly defined human rights.

CONCLUDING REMARKS

The theoretical case for free, unregulated markets depends on many conditions, which rarely exist in reality. Adam Smith is often cited as the authority for advocating laissez-faire and state minimalism. 'Shakespeare did not say it, but it is true that some men are born small, some achieve smallness, and some have smallness thrust upon them. Adam Smith, the father of modern economics, has had to cope with a good deal of such thrusting.'[51] Adam Smith defended particular liberties, not liberty in general, and he objected to particular government interventions (especially in foreign trade), not to government intervention in general. One person's 'freedom from' and 'freedom to' implies restrictions on other people's freedom.

Adam Smith thought that the state should undertake three main tasks: defending its citizens from the 'violence and invasion of other independent societies'; protecting every member of society from the 'injustice or oppression of every other member of it'; and 'erecting and maintaining certain public works and public institutions, which it can never be in the interest of any individual, or small number of individuals, to erect and maintain, because the profit would never repay the expense, though it may frequently do much more than repay it to a great society'.

Adam Smith also discussed extensively the importance of social interdependence and the communal advantages of following 'rules of conduct', even when they go against what he called 'self-love'.[52]

This essay is entirely in the spirit of Adam Smith. Collective defence and the administration of justice are generally agreed goods for which the state is responsible. The provision of certain public works and certain public institutions permits a wide range of public interventions. Infrastructure, public education and help for the poor were certainly in Adam Smith's mind. Arguments from free riders and externalities are used today to justify them. Modern theory and events have added other justifications for state intervention. The theory of the second best has

shown that if one price is not competitive, intervention with all other competitively determined prices may be justified. The world of small producers has given place to one of large corporations and trade unions. Modern industry has polluted the environment. At the same time, Adam Smith saw that market failure is not necessarily an argument for government intervention. There are, it is hardly necessary to say nowadays, also government failures. But equally, though less widely noticed, government failure is not necessarily an argument for the market. Only pragmatic experiments can show when and where intervention is the lesser evil. For we have to act in this least bad of all feasible worlds, in which everything is for the *n*th best. The challenge consists in designing institutions that combine an appeal to private initiative and enterprise with social objectives and public accountability.

Perhaps the most serious problems arise, as Michael Lipton has reminded us, not from market failure but from market success, not from government failure, but from government success. If it were just a matter of correcting failures, the task would be relatively easy. But if the signals propagated by the market are based on a very unequal distribution of land, other assets, and income, it is *market success* in responding to these signals that causes the trouble. Amartya Sen has analysed famines and shown that often total food supply was adequate, but that the purchasing power (or, more generally, the entitlements) of a particular group of poor people had declined. In those conditions the market is all too successful in its signals, incentives and allocations, while people starve. Similarly, it is not government failure but *government success* (in pursuing the self-interested objectives of its officials) that produces the destructive results rightly deplored by the self-interest school and the state minimalists. What is needed then is fundamental structural change, a redistribution of assets and of access to power.

Notes

1. An early version of this work appeared in *State and Market in Development; Synergy or Rivalry?*, edited by Louis Putterman and Dietrich Rueschemeyer. Copyright © 1992 by Lynne Rienner Publishers, Inc. Printed with permission of the Publisher.
2. The terms are due to Michael Lipton.
3. The widely used notion of price 'distortions' is not as clear as it may seem. Distortion is the deviation of the actual from some natural, proper,

legitimate, norm. But there is no reason to believe that prices determined in free markets under laissez-faire reflect such a norm. Any one of an infinite number of income distributions would produce a different set of relative prices. Free market prices also reflect monopoly power, and do not reflect externalities in consumption (such as my wearing a tie only because you wear one) or in production (such as pollution). In conditions of widespread unemployment and underemployment wage rates do not reflect the opportunity cost of labour. In an economy already 'distorted', an additional distortion may move it toward an improvement. For reasons such as these, the notion that government interventions 'distort' an otherwise correct set of signals and incentives is highly misleading. In the presence of such 'private distortions', the addition of 'public distortions' can be a beneficial corrective.

4. Gunnar Myrdal, *Asian Drama, An Inquiry into the Poverty of Nations*, Pelican Books, Harmondsworth, 1968.
5. 'The Trend Towards Economic Planning', *Manchester School of Economic and Social Studies*, 19 (1951), pp. 1–42.
6. He was awarded the Nobel Prize in economics (together with Friedrich von Hayek) in 1974 and the Veblen-Commons Award, bestowed by the Association for Evolutionary Economics, in 1975.
7. *World Development Report 1991: The Challenge of Development*, Oxford University Press, 1991.
8. Deepak Lal, *The Poverty of Development Economics*, Harvard University Press, Cambridge, MA, 1985, p. 33. See also Robert Wade, *Governing the Market*, Princeton University Press, Princeton, NJ., 1990. Lance Taylor distinguishes between the four possible combinations of weak/strong states and competitive/cartellized or rigged markets. The weak state combined with competitive markets is James Buchanan's heaven. The strong state combined with atomistic markets is Deepak Lal's heaven. The weak state combined with monopolistic markets is Mancur Olson's hell. And the strong state combined with monopolistic markets is Douglass North's hell.
9. Contrasted with Lance Taylor's heavens and hells, this might be considered earth, or the real world.
10. Helen Shapiro and Lance Taylor, 'The State and Industrial Strategy', *World Development*, vol. 18 No. 6 (June 1990), p. 867. There are some exceptions, such as Deepak Lal quoted above and Mancur Olson. Another asymmetry has been identified by Shapiro and Taylor. While it is pointed out that bureaucrats have no special talent for running an economy, they are called upon to do so in the authoritarian state that dismantles the controls.
11. See Anne O. Krueger, 'The Political Economy of the Rent-Seeking Society', *American Economic Review*, 64 (June 1974), pp. 291–303.
12. For additional criticisms of the theory of rent-seeking see the section on neoclassical political economy below.
13. See Wolfgang Streeck, 'The Social Dimensions of the European Community', a paper prepared for the 1989 meeting of the Andrew Shonfield Association, Florence (14–15 September 1989), footnote 27 on p. 51.

14. Mario Blejer and Mohsin Khan, 'Government Policy and Private Investment in Developing Countries', *IMF Staff Papers*, vol. 31 (1984) pp. 379–403; Sukhamoy Chakravarty, *Development Planning: The Indian Experience*, Clarendon Press, Oxford, 1987; Guillermo Ortiz and Carlos Noriega, 'Investment and Growth in Latin America', Washington, DC, International Monetary Fund, 1988; Robert Barro, 'A Cross-Country Study of Growth, Saving and Government', NBER Working Paper No. 2885, Cambridge, MA, National Bureau of Economic Research, 1989.
15. Paul Streeten, *What Price Food?* Macmillan, Basingstoke, 1987, and Cornell University Press, NY, 1987.
16. Jagdish Bhagwati, *Protectionism*, the MIT Press, Cambridge, Massachusetts, 1988, p. 98.
17. Again, Gunnar Myrdal anticipated the emphasis on encouragement or what he called 'positive controls'. The term is unfortunate, for controls suggest prevention.
18. See Gunnar Myrdal, *Asian Drama*, Penguin Books, Harmondsworth, 1968, vol. II, part 4, ch. 20 and Robert Klitgaard, *Controlling Corruption*, University of California Press, Berkeley and London, 1988.
19. See Michel Albert, *Capitalism against Capitalism*, Whurr Publishers, London, 1993.
20. A recent book, whose contributors are mainly political scientists and historians, is entitled *The Economic Limits to Modern Politics*, ed. by John Dunn, Cambridge University Press, Cambridge, 1990. But this is not quite the needed companion volume to the political limits to modern economics.
21. See Note 42.
22. Usually participation and democratization are discussed only in the political domain. But the other three sectors, the private sector, the civil society and the familial society also need democratization. While the world has found unworkable and has rejected the centralized process of decision-making in centrally-planned economies, the same process governs relations between management and labour within capitalist and socialist firms. The same is true of the churches and the trade unions, and inside some families. We know that people do not give their best under regimentation.
23. Michael Lipton, 'The State-Market Dilemma, Civil Society, and Structural Adjustment', *The Round Table*, 317 (1991) pp. 21–31.
24. Merilee S. Grindle and John W. Thomas, *Public Choices and Policy Change; The Political Economy of Reform in Developing Countries*, Johns Hopkins University Press, Baltimore, 1991.
25. John P. Lewis, 'Government and National Economic Development', in Francis X. Sutton (ed.) *A World to Make: Development in Perspective*, Transaction Publishers, New Brunswick and London, 1990, p. 77. It should be noted that, even in the market place, individuals do not always behave selfishly.
26. David Colander (ed.) *Neoclassical Political Economy*, Ballinger, Cambridge, MA, 1985.
27. In advocating maximum delegation to markets as morally neutral systems of coordination, the self-interest school also ignores the fact, pointed out by many authors, that markets presuppose generalized moral norms, and

particularly trust. See, for example, Kenneth Arrow, 'Political and Economic Evaluation of Social Effects and Externalities', in M. Intriligator (ed). *Frontiers of Quantitative Economics,* North-Holland, Amsterdam, 1971, and *Information and Economic Behavior*, Federation of Swedish Industries, Stockholm, 1973; Jean-Philippe Platteau, 'The Free Market is Not Readily Transferable: Reflections on the Links between Market, Social Relations, and Moral Norms', paper prepared for the 25th Jubilee of the Institute of Development Studies, Sussex, 1991, Cahiers de la faculté des sciences economiques et sociales, facultés universitaires Notre-Dame de la Paix, Namur, Belgium, November 1991. See also Michael S. McPherson, 'Limits on Self-Seeking: The Role of Morality in Economic Life', ch. 5 in *Neoclassical Political Economy: The Analysis of Rent-Seeking and DUP Activities*, ed. David Colander, Ballinger Publishing Company, Cambridge, MA, pp. 71–85, and Daniel M. Hausman and Michael S. McPherson, 'Taking Ethics Seriously', *Journal of Economic Literature*, vol. 31, no. 2, June 1993, pp. 671–731.

28. Anthony Downs, *An Economic Theory of Democracy,* Harper and Row, New York, 1957.
29. Some countries, like Italy, give the impression that their citizens have entered with their governments into an *anti*-social contract: we shall not pay taxes, and in return we do not expect any public services.
30. As so often, the prefix 'neo' is a euphemism for old hat.
31. See Bill Warren, 'The Postwar Economic Experience of the Third World' in *Toward a New Strategy for Development*, a Rothko Chapel Colloquium, Pergamon New York and Oxford, 1979, pp. 144–68. Marx himself, of course, originated this view in his writings on India.
32. See Dudley Seers, 'Introduction: The Congruence of Marxism and Other Neoclassical Doctrines' in *Toward a New Strategy of Development*, a Rothko Chapel Colloquium, Pergamon New York, Oxford, 1979, pp. 1–17.
33. See Michael Lipton, 'Agriculture, Rural People, the State and the Surplus in Some Asian Countries: Thoughts on Some Implications of Three Recent Approaches in Social Science', *World Development*, vol. 17 no. 10 October 1989, pp. 1553–71.
34. See Gerald M. Meier, *Emerging from Poverty, The Economics that Really Matters*, Oxford University Press, Oxford, 1984. 'The guardian of rationality' is Kenneth Arrow's phrase for the economist; 'trustees for the poor' is Gerald Meier's. Without these two groups there is no Archimedean point from which any political economy that endogenizes politicians can lift itself out of full determinism and make room for the possibility of reform. If we accept determinism, we have no choice.
35. Thomas Balogh dedicated his book *The Dollar Crisis* to Lord Lindsay of Birker, the Master of Balliol College, Oxford, 'who never quite could convince me that Oxenstierna had the whole explanation. . .' Count Oxenstierna had written to his son in 1648 'An nescis, mi fili, quantilla prudentia regitur orbis?' ('Dost thou not know, my son, with how little wisdom the world is governed. . .?'). Balogh, disagreeing with Lindsay, believed that it was knavery more than foolishness that was responsible for the world's troubles.

36. See Joseph E. Stiglitz et al., *The Economic Role of the State*, Basil Blackwell, Oxford, 1989, p. 21. Max Weber's classical definition of the state is that of a territorially defined organization 'that successfully upholds a claim to the monopoly of the legitimate use of physical force in the enforcement of its orders'. Max Weber, *The Theory of Social and Economic Organization*, A. M. Henderson and Talcott Parsons trs., New York, Free Press, 1947, p. 154.
37. I am indebted to Michael Lipton for clarifying the distinction between the private and public sector on the one hand, and private and public goods on the other. But he must not be held responsible for what I say here, for I suspect there is still disagreement between us.
38. Arts subsidies are often an elitist form of public spending. The most popular art forms (rock music, jazz, cinema, disco dancing, pantomime, country and western, visiting old houses and reading books) are the least subsidized. Most of those attending plays, ballet, concerts and galleries – the most subsidized – are relatively well off.
39. See Robert L. Heilbroner, 'The Murky Economists', *The New York Review of Books*, 24 April 1986, pp. 46–8.
40. Robert Klitgaard 'Incentive Myopia', *World Development*, Pergamon, Oxford, vol. 17, no. 4, April 1989, pp. 447–59.
41. Michael Lipton has pointed out that this belief depends on the view that private firms operate in 'contestable markets', in which rents are constrained or eliminated by *potential* entry. Lipton's reply, with which I agree, is that this proposition is itself highly contestable (monopolies do exist), and that it applies to the public sector also, often indirectly. Private producers cannot compete directly with issuing an import licence, but they can substitute other goods for the import, which amounts to contestability.
42. See Jagdish Bhagwati, 'Directly Unproductive Profit-Seeking Activities', *Journal of Political Economy*, 90, October 1982.
43. See Michael Lipton, 'Agriculture, Rural People, the State and the Surplus', *World Development*, vol. 17, no. 10, October 1989, pp. 1561–65.
44. Mrinal Datta-Chaudhuri, 'Market Failure and Government Failure', *Journal of Economic Perspectives*, vol. 4 no. 3, Summer 1990, p. 30.
45. Rati Ram, 'Government Size and Economic Growth: A New Framework and Some Evidence from Cross-Section and Time-Series Data', *American Economic Review*, vol. 76, no. 1, March 1986, pp. 191–203. See also Christopher Colclough, 'Are African Governments as Unproductive as the Accelerated Development Report Implies?' *IDS Bulletin*, vol. 14, no. 1, January 1983, Sussex, pp. 24–9, and Christopher Colclough, 'Structuralism versus Neo-Liberalism: An Introduction', ch. 1 of *States and Markets: Neo-Liberalism and the Development Policy Debate;* ed. by Christopher Colclough and James Manor, Oxford University Press, 1992.
46. Giovanni Andrea Cornia, Richard Jolly and Frances Stewart (eds), *Adjustment with a Human Face*, Clarendon, Oxford, 1987, pp. 292–3.
47. James M. Buchanan, *Economics: Between Predictive Science and Moral Philosophy*, compiled by Robert D. Tollison and Victor D. Vanberg, Texas A & M University Press, College Station, 1987, and *Liberty, Market and State: Political Economy in the 1980s*, New York University

Press, New York, 1986. See also Agnar Sandmo, 'Buchanan on Political Economy: A Review Article', *Journal of Economic Literature*, vol. 28, no. 1, March 1990, pp. 50–65.

48. Amartya Sen, 'Gender and Cooperative Conflicts', Working Paper No. 18, WIDER, Helsinki, 1987, and published in I. Tinker (ed.) *Persistent Inequalities*, New York, Oxford University Press, 1990.
49. On several reasons why this conflict may arise, see Paul Streeten, 'Structural Adjustment: A Survey of Issues and Options', in World *Development*, vol. 15, no. 2, December 1987, pp. 1469–82, and 'A Survey of the Issues and Options', in *Structural Adjustment and Agriculture: Theory and Practice in Africa and Latin America*, ed. Simon Commander, London Overseas Development Institute; Heinemann, Portsmouth, New Hampshire: 1989, and Paul Streeten, 'Program versus Project Aid: a Role Reversal', in *Methodus*, Bulletin of the International Network for Economic Method, December 1989, pp. 14–15.
50. India *did*, of course, devalue, but the domestic groups that supported devaluation lost credibility. There are, of course, examples illustrating the opposite, such as Belaunde and the Alliance for Progress in the 1960s. Belaunde escaped political opposition to land reform, which he advocated, by blaming the Americans, who made essential aid conditional on it. The Peruvian Congress acceded eventually.
51. Amartya Sen, 'Adam Smith's Prudence', in *Theory and Reality in Development: Essays in Honour of Paul Streeten*, ed. by Sanjaya Lall and Frances Stewart, Macmillan, Basingstoke, 1986, p. 28.
52. Amartya Sen, 'Economic Methodology: Heterogeneity and Relevance', *Methodus*, Hong Kong, vol. 3, no. 1, June 1991, p. 7

3 Political Constraints on the Developmental State: Alternative Theoretical Explanations

Elisabeth Sadoulet[1]

3.1 ROLE OF THE STATE IN DEVELOPMENT: CATCHING-UP AND WELFARE

Since the very beginnings of development economics as both a body of thought and a practice – directed at helping late comers catch up with more advanced nations and/or at modifying the developmental implications of growth – the state has been given a prominent role in development strategies. At the same time, development failures in an excessively large number of countries reveal the rarity of instances where the state has been able to effectively fulfil its developmental functions. Indeed, much of development economics could be summarized as the positive analysis of why governments sometimes do, but generally fail to, satisfactorily assume their developmental functions, and the normative analysis of what could be done for these functions to be more effectively assumed. It is the purpose of this paper to assess the relevance of the recent theoretical contributions to this understanding made by the 'new' political economy of the state.

Before emergence of this body of thought, the fundamental role attributed to the state in development economics had not been anchored on a theory of the political economy of state intervention that could satisfactorily endogenize state behaviour. As a result, much of these efforts ended up with voluntaristic policy prescriptions as to what the state should do from a normative standpoint, either for catching-up or for welfare, but without providing effective guidelines as to how the state could be made to fulfil these desired functions given the strategic response emanating from civil society. Not that development theories did not suggest strategic behaviour as the essence of government intervention (e.g. Hirschman's *Strategy of*

Economic Development), but that the proposed interventions did not adequately take into account strategic response by agents in civil society. This view of the state and policy-making has been challenged by the 'new' political economy from several perspectives. It is useful to separate two distinct elements in the process of policy-making: One is the mechanism of policy decision-making itself; the other is the impact that a policy decision has on society, which includes, in particular, strategic response by agents in civil society. The actual policy decision will depend on both. For example, the traditional view of policy-making *à la* Tinbergen assumes that the policy decision is taken by a state which is a benevolent social maximizer, that the private sector makes its decisions after the policy decision is made, and that the state can fully anticipate the private sector's actions. This gives an extremely powerful role to the state. While criticisms of the benevolent autonomous state assumption, by Buchanan and public choice theory in particular, were almost contemporaneous to the development of this traditional policy analysis, questioning of the impact of policy on the private sector's actions and its formalization only date from the early 1980s, when tools of game theory developed, and it has become a very active field of research. We review this literature in Section 3.2.

We select two lines of thought which each pertain to one of the elements above: The theories of government behaviour under lobbying by interest groups, and the theories of time consistency and credibility in policy-making. We review these two bodies of theory in Sections 3.3 and 3.4, respectively, and extract each time both the positive explanations as to why the developmental state may fail in its functions and the normative implications as to what can be done, either by the state itself or by civil society, to enhance the possibility that the state will effectively perform as a developmental state. We conclude, in Section 3.5, that while these theories certainly improve our understanding of the policy process, they do not yet sufficiently incorporate the policy bargaining process itself that only can explain the common observation of opposition to policy reforms and eventual policy reversals.

3.2 DECOMPOSING THE PROCESS OF POLICY-MAKING

Why does the state so frequently fail in its developmental functions and what influence does its own organization and the private sector have in inflecting the state's performance away from the social optimum? We

consider successively the policy decision-making mechanism, and the relationship between the policy decision and the private sector's economic decisions.

The Policy Decision-Making Mechanism

The main issue is to establish who has the power to decide the policy and, if several actors within and outside the state participate in this decision-making process, how their individual objectives aggregate. The policy decision-making mechanism is characterized by the actors (politicians, bureaucrats and civil society), the instruments of influence they each control (vote, lobbying and power to make or block the decision), and the actual process that leads to the decision (information available to each agent, procedure and sequence of actions).

Who are the public and private actors, and what do they control? Economists commonly think of the state as a single actor, representing an aggregate of the politicians and bureaucrats involved. As such, it has a well defined objective function, and it is usually considered as the agent which actually makes the decision, whether this be with full autonomy, under the influence of other agents, or after agreement with other bargaining parties. Alternatively, political scientists and public administration specialists tend to conceptualize the state as a complex organization of numerous bureaucrats and politicians, with each their own objective, information and instruments which they control. As for civil society, it is seen under the two aspects of individual voters or organized groups. The power of civil society as voters resides in its capacity to choose or to revoke a policy-maker on a policy proposal, and, as organized groups, it can put pressure on the state by lobbying activities or directly participate to the decision-making process through bargaining.

How do these agents interact to obtain the policy decision? There is evidently no single answer to this question, as different policy measures are taken under different institutional rules. Theories that ascribe the decision-making power to the bureaucracy acknowledge that bureaucrats have their own agendas and that their objectives include power, income, promotion of careers and loyalty (Downs, 1957; Tullock, 1965; Jackson, 1983). All of these have sometimes been summarized in the size of the budget that they control (Niskanen, 1971), which brings us back to a single objective. Alternatively, understanding the decision-making process and its performance when the multiplicity of agents is maintained calls upon the theory of organization, best developed by

economists in relation with the firm rather than the state (Williamson, 1971). In the game-theoretic framework, such analysis would rest on strategic behaviour by the different agents of the state.

Another type of decision-making proceeds through a bargaining process, where no agreement may be imposed on any agent without his approval. This characterizes some decisions taken by a small number of governmental agencies (e.g. trade policies decided jointly by the ministries of finance, foreign trade, and industry), or between one agency and a few representatives of the private sector (e.g. fixation of the minimum wage by the ministry of labour and representatives of the employers and the labour unions). Even when there is no explicit negotiation, this model applies whenever the partners have the possibility of blocking the actual decision, e.g. when unions can go on strike to block implementation of a unilateral decision on wages. While an axiomatic theory of bargaining was developed early by Nash, recent developments take a different approach, the strategic approach, in which the outcome is an equilibrium of an explicit model of the bargaining process. Since any bargaining procedure encompasses a bewildering number of characteristics, models become very quickly intractable. Simple models with only two actors, however, show that important issues that drastically condition the outcome of the bargaining are the exact procedure which defines the sequence and frequency of offers, the costs incurred by the different parties until an agreement is reached, and the existence of private information (Osborne and Rubinstein, 1990; Kennan and Wilson, 1993). In the area of policy, a similar theory has been applied to explain delays in adjustment as a consequence of a war of attrition among two interest groups (Alesina and Drazen, 1991). As for multilateral bargaining, which is really what most policy is about, the theory is still in its infancy.

Finally, a very large literature considers the interaction between a one-actor state and the private sector which has the power to vote and/or to lobby. We classify these models in Table 3.1. They cover the whole spectrum of possibilities, ranging from complete state autonomy to complete subordination of the state to civil society.

At one extreme, the state is seen as autonomous, and the eventual perversion of policies into neglecting developmental functions originates from within the state itself. Politicians or bureaucrats balance their 'social' and 'predatory' behaviours to maximize their own objective which can be, for example, the surplus that they can extract from civil society or their budgetary resources (Bates, 1981; Findlay,

Table 3.1 *State's objective function in political economy models*

Political institutions	Authors	State's own utility for policy	Governance function	Leader
Autonomous state	Findlay	$u_0(x_0)$	$u_0(x_0)$	State
State and lobbies	Zusman	$u_0(x_0)$	$u_0(x_0) + \sum_i s_i(c_i) =$ $u_0(x_0) + \sum_i \lambda_i u_i(x_0)$	Cooperative between state and lobbies
	Ball, Lohman			Lobbies
	Fafchamps, Sadoulet & de Janvry	$\sum_i \lambda_i(0) u_i(x_0, 0)$	$\sum_i \lambda_i(c_i) u_i(x_0, c_i)$	Lobbies
State, lobbies, and voting	Appelbaum & Katz	None	$p(x_0)[\bar{u}_0 + \sum_i s_i(c_i)] + [1 - p(x_0)]]\bar{\bar{u}}$	Cooperative or state
Lobbies and voting	Baron	None	$p(\sum_i s_i(c_i))(\bar{u}_0 - f(x_0))$	State
	Magee, Brock & Young	None	$p(-x_0, +\sum_i s_i(c_i))$	State
Voting	Mayer	None	$u_m(x_0)$	Median voter

Notations:

x_0 = optimal policy (tariff, subsidy, transfer).
c_i = interest group i's contributions (lobbying expenditures).
s_i = subsidies (political contributions) by lobbies to government. Benefit of lobbying for government.
u_0, u_i = utility functions of government (0) and interest groups (i).
λ_i = influence weights (marginal efficiency of lobbying on the state).
$p(\cdot)$ = consumers (voters) probability of support to government.
$f(x_0)$ = cost to government of policy x_0 promised to the private sector.
$\bar{u}_0$ = policy maker's revenue in office.
$\bar{\bar{u}}_0$ = policy maker's opportunity cost in an alternative occupation.

1990). Clearly, these states can be devoid of developmental functions by the very nature of their own behaviour, in spite of being leaders in policy-making.

At the other extreme, the state is conceptualized as having no autonomous view on desirable societal welfare (state's own utility for policy in Table 3.1) and only making policy choices in an attempt to remain in power. This approach includes all the pure voting models. If civil society is atomistic and democratic, policy is determined by voting rules and the participation of eligible voters where the median voter is the leader. It is conceivable that, even with majority rule, a small minority with a very high mobilization rate can succeed in gaining control over policy despite the costs that it implies for the less mobilized majority (Mayer, 1984). In other models, the election process is influenced by the level of campaign contributions that the competing parties can raise. Purely 'office motivated' candidates thus grant favours to interest groups in return for their contributions. The policy outcome which maximizes the probability of being elected calls for the candidates to balance satisfying their constituencies and satisfying the general public (Baron, 1989; Magee, Brock and Young, 1989). The state thus becomes leader, but with no developmental vision of its own.

Between these two extreme conceptualizations of autonomous and submissive states are models in which the state has a developmental objective of its own but is influenced by interest groups which can assume leadership in policy-making. The theory of rent-seeking originated in the early work of Tullock (1965) who first noted that governments generally have to be lobbied or pressured into imposing protecting tariffs, and that producers thus invest resources into lobbying. A vast literature has since developed, which, however, mostly focused on the activities of the lobbies themselves, decisions by their members on resource allocation between productive and lobbying activities, and the determinants of their effectiveness, rather than on the attitude of the government *vis-à-vis* these pressures. The classical arguments on lobbying effectiveness focused on free riding and group size (Olson, 1965), selective incentives created by differential gains from successful lobbying within the group thus inducing leadership (Olson, 1965), difficulty of exit as opposed to voice (Hirschman, 1970), and other determinants of perceived costs and benefits of collective action both by the members of the group and by the rest of society.

For our purpose, the distinction between what Bhagwati has called rent-seeking and rent-creating activities is crucial. Analysis of the former, made notorious by Krueger, takes the distortions created by

government as given and typically concentrates on measurement of the deadweight costs due to rent-seeking. By contrast, underlying the rent-creating activities, i.e. when private groups can influence the creation of rents, is a model of policy formation that is based on a theory of the state, even if often only implicit. In the approach taken by Becker, for example, the state is only a black box, and policy decisions are directly formalized as function of the lobbying activities. Other studies explicitly consider the state as an agent and formalize its interactions with the interest groups. We will illustrate the rent-creating approach and attempt to summarize its main conclusions in Section 3.3. The main critique that can be addressed to much of this literature is its poor representation of the actual political institutions, and its focus on the equilibrium solutions, at the neglect of the actual policy-making process which may involve a succession of steps in a protracted negotiation process.

Impact of the Policy on the Private Sector's Economic Decision

Given the mechanism of policy decision, and assuming that the decision-makers have the power to actually introduce the policy, how will the private sector react or adapt to the policy, and, in turn, how will this indirectly affect the actual policy choice? To simplify the matter, consider that we are dealing with only one policy-maker and many private agents. This can be conceptualized in a game-theoretic framework. The traditional policy analysis assumes that this is a game of perfect information, with only two moves, the state first and the private agents second. This assigns the position of Stackelberg leader to the state, which takes into account, in its policy decision, the reaction functions of the private agents. This representation can be challenged from two sides: first, the assumption that the game is over after only two moves, which says that the government cannot revise its policy; and, second, that there is perfect information. Were the first assumption not correct, the policy introduced may lack credibility in the eyes of private economic agents, and lack of credibility may be damaging for the policy (Rodrik, 1989). Furthermore, the presence of imperfect information on either side, the policy-maker or the private agents, and the impossibility to credibly communicate this information without taking costly action, modify the agents' decisions.

Lack of credibility influences the private sector in the sense that it will make its own economic decisions in function of both the chosen

policy and its expectations over the future. If a policy attempt is perceived as temporary, rational private agents will not undertake any adjustment to the new conditions that either entails costs or will put them in a weaker position after the expected policy reversal. At best, thus, a non-credible policy has no real effect on the economic structure. At worst, the private agents may speculate on the temporariness of the conditions. Policy attempts lacking credibility therefore end up being more damaging than no reform. Reasons for lack of credibility fall under two broad categories: faulty decisions and genuine dynamic phenomena. In the first category, politically infeasible policies clearly suffer from lack of credibility. It may take time before the negatively affected groups realize the impact of the policy and mobilize to oppose it, but perspicacious agents can anticipate the opposition and the induced reversal. Inconsistent policies, which, as we have seen above, may result from the complex decentralized process of policy decision-making are also bound to reveal their nature in time and to induce revisions. Anticipated reversal and lack of credibility emerging in these two cases are linked to a problem in the decision-making process. The reaction constraint due to lack of credibility thus acts as a useful check on government's error, and it should be appreciated as such.

Lack of credibility can also be related to the genuine dynamic nature of economic phenomena but, in this case, as we will see later, it detrimentally constrains the government. A broad category of such credibility problems has been studied under the label of dynamic inconsistency in policy. The essence of the issue is that the optimum policy for government may be different before and after the private sector has responded. This suggests that, whatever its genuine commitment to a policy is, the government will have an incentive to revert its policy after the private sector has acted. Anticipating this to happen, the private sector right away acts accordingly, i.e. disregarding the policy announced by the government and solely considering what will be its ex-post optimum policy. For our purpose, the crucial point is that this forces a government with rational anticipation to only announce time-consistent policies, which are usually suboptimal compared to what could be achieved if the government could commit itself to not respond to its own changing incentive.

When there is imperfect information, the opponents' decisions cannot be fully anticipated. And, in fact, part of the policy strategy includes signalling this information by the informed agent and screening by the uninformed agent to try to uncover it. If, for example, there is imperfect information on the side of the private sector

as to the government's real motive, this pushes government to deviate from its otherwise optimum policy in order to transmit information to the private sector. Such circumstances typically exhibit overshooting in early phases of policy cycles and readjustment to the optimum policy afterwards. Note, however, that this readjustment is not induced by any reaction of the private sector. It is fully predictable and part of a multi-period optimization process. This theory is reviewed in the context of macro-economic policy by Driffill (1988) and of regulatory policy by Baron (1990).

Credibility problems due to dynamic phenomena and imperfect information thus induce a deviation from what would otherwise be the optimum policy. We review the theory underlying these two cases and the normative implications that it suggests in Section 3.4.

3.3 STATE LEADERSHIP AND RENT-SEEKING

In illustration of the rent-seeking approach, we will briefly present the models used by Zusman, by Fafchamps, Sadoulet and de Janvry, and by Appelbaum and Katz before attempting to draw some general conclusions. These three models differ in their assumptions about the objective of the state (in Appelbaum and Katz, the state is partly 'office motivated' and maximizes its expected income, while it has a well-defined preference over the state of the economy in the other two papers), in the formulation of the game (Zusman characterized the resolution of conflicts with a cooperative equilibrium, we use a non-cooperative framework, and Appelbaum and Katz use both concepts), and in the completeness of the economic system that is considered (we place our analysis in a general equilibrium framework while the other two consider partial equilibrium models).

Three Examples

The organizational structure used in Zusman (1976) is a simple wheel network with a centre (the state) linked to peripheral agents (the interest groups). The centre and each of the interest groups have objectives u_i (with $i = 0$ for the centre and $i = 1, \ldots, n$ for the interest groups), function of the policy x_0 set by the centre. The interest groups can engage in actions that either reward or penalize the centre. Denote these rewards or penalties, evaluated in terms of the numéraire used for

x_0, by $s_i(c_i, \delta_i)$, where c_i is the cost incurred by the interest group and δ_i is an indicator of whether it is a reward or a penalty strategy that is pursued. Assuming an additive structure leads to definition of extended utility functions $U_0 = u_0 + \sum_i s_i(c_i, \delta_i)$ for the state, and $U_i = u_i - c_i$ for the interest groups. The solution to the bargaining process entails the double resolution of the non-cooperative equilibrium that will set the threat point and of the cooperative equilibrium that will be adopted. Zusman then shows that the cooperative solution has a very interesting property: The policy x_0 is also the solution of the optimization of $W = u_0(x_0) + \sum_i \lambda_i u_i(x_0)$, where λ_i is the marginal efficiency of the reward action at the equilibrium level c_i. This means that the state behaves as if it were maximizing a welfare function. In this 'governance' function, the weights λ_i, and the derived $1/(1 + \sum_i \lambda_i)$ which characterizes the degree of state autonomy, are endogenous variables and not parameters. They ultimately depend on the political power of the interest groups embedded in the parameters of the functions s_i. Policy is thus a compromise between the state's own developmental goals and the demands from interest groups. The main contribution of Zusman is the rigorous establishment of this governance function which takes the same analytical form that had been used, without explicit theoretical justification, in many empirical analyses directed at estimating the weights attributed to private interests in a government's policy preference function (Rausser and Freebairn, 1974, and recently Oehmke and Yao, 1990). Empirical analyses, directly applying the Zusman framework, have been performed by Zusman and Amiad for the Israeli dairy market and by Beghin and Karp for the agricultural sector of Senegal, allowing to estimate, from observed policies, parameters defining the power of the different interest groups.

In Fafchamps, Sadoulet and de Janvry (forthcoming) we cast the problem of tariff settings in a general equilibrium context. There are three sectors – two tradables and one non-tradable – and two factors of production – fixed capital in each sector and mobile labour with a market-clearing wage. There are also three interest groups with specialized capital portfolios, i.e. with profit income from one sector only, and labour income earned on the labour market. This income structure implies that their interests essentially correspond to the sectors' interests. The government's policy instrument is the relative tariff on the tradables. To isolate the central issue of the policy process that generates trade taxes from the related but independent issue of how government uses its revenues, we impose a balanced budget

constraint on government and use lump-sum transfers to dissipate all net revenues from the trade tax policy. The equilibria of the balance of trade, the market for non-tradables, and the labour market determine the real exchange rate and the real wage. We assume that the state's objective function is a weighted average of the utility of the different interest groups, $W = \sum_i \lambda_i(c_i)u_i(x_0, c_i)$, where the weights λ_i are function of the lobbying efforts c_i exerted by the different groups. The state's own objective, $u_0(x_0) = \sum_i \lambda_i(0)u_i(x_0, 0)$, is obtained by setting lobbying to zero. Lobbying appears as a waste, since there is no direct utility for the policy-makers generated by the expenses c_i. The interest groups choose the level of lobbying that maximizes their utility. They act rationally, with the full understanding of how their lobbying activities influence the government's decision. Therefore, they are Stackelberg leaders *vis-à-vis* the state, but engage in a non-cooperative Nash game among themselves. This framework sheds light on a certain number of well-known characteristics of the behaviour of interest groups, the response of government and the resulting structure of protection. In particular we show that: (*i*) When allowed to do so, lobbies will always engage into lobbying activities, even when, under conditions of perfect symmetry between the two sectors, neither one of them will end up obtaining any real protection. Lobbying activities are thus unavoidable. (*ii*) While the non-tradable sector chooses not to engage in lobbying, it often benefits from the activities of the other two lobbies, particularly when they use its products and services for lobbying. This can explain the silent support of a large share of the population toward lobbying activities, despite the global waste which they impose on civil society. (*iii*) Several results show the role of government as the guardian of overall welfare, however biased by lobbying pressures its definition of overall welfare may be. When lobbying is done through the waste of commodities produced by one of the tradables, the government then becomes reluctant to grant an increase in price of these commodities, as this would increase the wastage cost. Similarly, in trying to minimize the welfare cost of the distortions, the government will more easily grant protection to sectors with lower shares in the consumption budget. Finally, as the loss incurred by a sector due to an unfavourable change in its relative terms of trade increases with its rigidity in production, the government will tend to protect the more rigid sector, and the more so the more averse to inequity the government is. This bias which the government thus has in favour of commodities that are not wasted in lobbying, luxury goods, and produced by rigid sectors, in turn makes lobbying by the

corresponding sectors easier and more profitable. Thus, there exists a self-re-enforcing mechanism whereby any initial sectoral bias originating in the government's preoccupation with minimizing the welfare costs and inequities of lobbying induces an even greater level of lobbying from these sectors, and greater protection than the autonomous developmental state would have granted them.

Appelbaum and Katz (1987) present a model which is at the juncture of the previous two models and the voting models. They consider a game between the state, the firms and consumers. The policy defined by the state consists in a transfer x_0 from consumers to firms. The consumers' participation is captured by their probability of support to government, i.e. their voting behaviour. This probability $p(x_0)$ is function of their perception of policy x_0. The firms actively engage into rent-seeking to capture the rent derived from policy x_0, and determine levels of rent-seeking c_i which maximize their utility $u_i(x_0, c_i)$. Waste of resources occurs in the rent-seeking process as the benefits $s_i(c_i)$ received by government are inferior to their cost c_i to the firms. The state has no developmental objective of its own: it only derives utility from policy x_0 in as much as that policy increases its probability of being voted in office. Its own self-interested objective function is thus $p(x_0)(\bar{u}_0)[1 - p(x_0)]\bar{\bar{u}}_0$ and the governance function, under lobbying, is $U_0 = p(x_0)[u_0 + \sum_i s_i(c_i)] + [1 - p(x_0)]\bar{\bar{u}}_0$ where $\bar{u}_0$ represents the policy-maker's revenue in office and $\bar{\bar{u}}_0$ his opportunity cost in an alternative occupation. The focus of the Appelbaum and Katz analysis is to show how the equilibrium total level of rent-seeking $\sum c_i$ and transfer x_0 depend on the competitive structure of industry and the strength of firms *vis-à-vis* the state. Their results show, in particular, that: (*i*) When the state acts as a leader and industry is composed of a fixed number of firms competing for the rent (a characterization of short-term equilibrium), the rent decreases with higher independent income of the policy-maker and with higher consumer awareness and sensitivity to its cost on them. (*ii*) With free entry and exit for firms (long-term equilibrium), their net benefit is driven to zero by competitiveness, and government's action can be interpreted as using the firms to extract rents from consumers. (*iii*) By contrast, when firms get organized, they can enter in a bargaining game with the policy-maker, and the two parties share the proceeds of the transfer extracted from the consumers. Lobbying and transfer always occur, but the level of transfer depends on the relative power of the two parties. (*iv*) Disagreement between government and firms is the best outcome for consumers.

Positive Analysis and Normative Lessons

In trying to characterize the relative autonomy of the state and the power structure underlying these different theories, three crucial elements are the definition of the policy-maker's objective function, the timing of the decisions, and the solution concept used in the game. The state's developmental concern is represented by its own utility $u_0(x_0)$ for the policy choice x_0 with the distortions and inefficiency costs that it implies. As seen in Table 3.1, an interesting contrast appears between the first two categories of models (autonomous state and lobbying models) where the policy enters directly in the state's own objective, as opposed to the voting and lobbying-voting models where the welfare impact of policy acts as a constraint on government through its influence on the support it receives from voters. A difference also appears in the role of the organized interest groups, which either directly modify the policy-maker's utility or contribute to his probability of being elected, although this formal distinction is conceptually less significant. More important is the power relationship between interest groups and the state. There is a fundamental difference between cases where the state has the leadership, and uses the existence of interest groups to support its own objective, and cases where the state has to accommodate the interest groups' demands, either in a bargained solution or in the even weaker position of follower. These last cases best characterize diversion of the government from its developmental objective by the organized private sector. For comparative purpose, we note in Table 3.1 the objective function used in voting models where the state's decision is solely based on the median voter's preference (Mayer, 1984).

Most of this literature has had a positive purpose and, despite the diversity of frameworks and assumptions, several common points emerge from these analyses. First, lobbying is shown to be unavoidable as it is incentive compatible for both lobbies and government. The government consents to rent-seeking activities because it receives transfers, avoids penalties, or is directly influenced in its social objective.

A second issue concerns the deviation that the interest groups' activities bring to the state's original objective. In all the analyses reported above, the government is pulled down from its own developmental objective u_0, with the direction in which the government is deviated strongly depending on the economic structure and the power structure in civil society. A few interesting models of lobbying

under asymmetric information arrive, however, at the opposite result (Ball, 1991; Lohmann, 1993). In that case, the government is uncertain about the true effect that its policy has on the interest groups' welfare which enters into u_0. In absence of better information, it can only maximize an expected outcome, based on the probable distribution of gains. Pressure groups, which are better informed on how they will be affected by the policy, lobby to signal this information to the government, and the costs that the lobbies incur are viewed as necessary to make this information credible. In this context, the information conveyed by lobbying has a social value and it increases the government's own objective.

A different issue is the question of the social cost (in terms of resource wastage as opposed to policy distortion) of lobbying activities. These costs vary with the particular form that lobbying takes and with the general economic context. In one extreme case, considered by Krueger, the total value of the rent is dissipated in resource waste. The other polar case is where rent-seeking is done by transfer, with only redistributive effects but no waste. However, most models consider that some resource wastage occurs in the process of transfers. Varian's theoretical model and our empirical simulations show that, in a general equilibrium context, the correct calculation of waste has to take into account the spillover effects on the other markets. As we have shown, which resources are wasted in lobbying has its own efficiency and distributional implications additional to the rent-seeking outcome.

Yet another issue in terms of social costs is whether the lobbying activities increase or decrease efficiency in the economy. This question is well discussed in Bhagwati (1982) who convincingly argues that, while distortions always bring efficiency losses when one starts from a first best situation, there is no general result when dealing with an economy in a second best position. A particularly interesting case occurs when lobbying is done to induce governments to produce public goods (see Chapter 5). Note, importantly, that this efficiency effect is not resisted by the state in spite of the fact that it is led to deviate from its own agenda defined by u_0. This does not say that it is not a legitimate question, but that it can only be seen as an issue for civil society which, as such, may wish to consider institutions that will protect it from its own government and activism by private interest groups.

Normative implications have more often been implicit than explicit. Let us repeat that normative issues are here a question for society at large, not for government. The more pessimistic analysts view the

effects of rent-seeking as so pervasive as to push the political system into a vicious circle of ever increasing rents and waste (Krueger, 1974; Olson, 1982). Only restrictions on rent-seeking activities, or outright decrease in the size of the state, could limit this pitfall. Optimists, like Zusman and Rausser (1990), see that collective action could gain effectiveness by giving itself an organizational structure of the wheel type, with a coordinating centre and peripheral participants, and by achieving a cooperative solution rather than engaging in non-cooperative wars of influence. However, this last result is true only if all members of society are participating and can make binding commitments. Cooperation that excludes a negatively affected group, as is typical for instance in corporatist society, clearly hurts that group's constituency. A society concerned with limiting lobbying activities can also legislate to select policy instruments that are less prone to lobbying than others. Tariffs, as opposed to firm-specific production subsidies, for example, have the character of a public good for individual firms which entails an underprovision of tariff-seeking behaviour from the perspective of industry as a whole. When this overcompensates for the larger distortionary effects of tariffs, society would find it beneficial to limit its incentive policies to tariffs (Rodrik, 1986).

Insufficient Institutional Representation in Rent-Seeking Theory

A major weakness of the rent-seeking models is their poor representation of political institutions. The transformation of lobbying into influence is generally modelled as a continuous function converting dollars of lobbying into utility for the policy-maker (Zusman, 1976) or even directly into influence weights in a governance function (Becker, 1983). What process of influence can these models typify, except an outright bribery scheme in the former? This formulation cannot, for example, represent the common case of influence implied by the threat of a strike, an event which is both discontinuous and probabilistic. At the second stage of the model, the aggregation of private interests into a governance function equal to a weighted average of groups' utilities is also quite restrictive. It does correspond, as shown by Zusman, to the outcome of one specific institutional context, a cooperative bargaining solution in a wheel-shape negotiating structure. Many alternative institutional frameworks exist that cannot be reduced to this scheme, for example the US Congress's decision-making process which includes

at least two stages with a voting procedure to designate representatives and log-rolling in aggregating the representatives' preferences.

A second critique that can be made to these models is their exclusive focus on equilibrium solutions. Observation of the policy-making process should convincingly persuade the analysts that, in many developing countries, active policy opposition and policy reversals are the rule rather than the exception. To the extent that opposition to a policy is strong enough to force revision of the policy, it reveals that the choice made upfront was politically infeasible. Why would a government have chosen a politically infeasible policy? Unpredictable events, errors and misjudgments cannot be discarded from the real world. The latter two cases take us back to the decision stage, and the damage caused by opposition is the cost of error. More interesting to our purpose is when the original government decision, the opposition, and the future policy revision are completely integrated rational choices of the optimal strategy, i.e. part of strategic behaviour. Conceptually, the private sector's influence on government through the observed ex-post adjustments is not different from the ex-ante compromises that we discussed above. The effect of the private sector's action is still to participate into the policy decision-making process or to oppose the policy until an acceptable compromise can be found. However, the implied economic and political costs cannot be neglected, and such intermediary phases cannot be ignored as neutral intermediate steps toward an equilibrium as if they were not more than their verbal equivalent around a negotiation table. The fact that negotiation happens by policy being concretely made and opposed to rather than by discussion is due to strategic considerations. The proper modelization of such decision-making should be cast in an explicit negotiating model which should replicate delays, stalemates, and choice of ex-post opposition and accommodation rather than ex-ante resolution. This is the direction taken by a growing literature in game theory, and it usually requires imperfect information, at least on one side, to explain why the equilibrium cannot be reached at the first move (Kennan and Wilson, 1993). Unfortunately, game theory with private information becomes quickly very difficult, even with only two actors.

3.4 TIME CONSISTENCY AND CREDIBILITY OF POLICY

A policy is said to be time inconsistent if the policy-maker has an incentive to change it in a later period when the policy is no longer

optimum for him. Therefore, the time-consistency issue originates in the fact that policy and economic processes emerge from decisions that take place sequentially. This is not only an obvious characteristic of dynamic models where decisions are made over several time periods, but also a feature of static models – often used in policy analysis – where the decomposition of time within the period of analysis may reveal some structural characteristics leading to time-consistency issues. The thrust of the literature that we now review is that time-inconsistent policies lack credibility. Rational agents anticipate that government will revise its policies and act accordingly. This, in turn, constrains the government to define only policies that are time consistent, which, on average, produce worse outcomes than what could be achieved by a government able to reduce its own flexibility willingly.

The problem has been the subject of a rapidly growing body of literature since the pioneering works of Kydland and Prescott (1977) and Calvo (1978) on the credibility of macro-economic policies. Broad reviews are given in Persson (1988); Alesina and Tabellini (1988); and very thoroughly in Persson and Tabellini (1990), from which we have taken the examples that follow. This theory of endogenous economic policy has most often been developed with industrialized countries' institutions in mind, in particular with respect to the political context. Analyses cover monetary and fiscal policy, and important issues addressed in this context are business and electoral cycles. We believe, however, that the basic underlying elements of the theory apply as well to problems of the developmental state, and that a promising area of research lies in the adaptation of this theory to the institutional set-up of developing economies. Credibility and time-consistency problems arise importantly, for instance, in the conduct of stabilization programmes, in long-term projects that require flows of fund over several years, and in fiscal and trade policy reforms in which many countries are engaged. The consequences of many of these policies go beyond business and electoral cycles as they ultimately affect investment and growth (Rodrik, 1991; Persson and Tabellini, 1992).

The policy-maker is considered to have a well defined preference function over the states of the economy. He may also be partly office-motivated, which would give rise to what is called, henceforth, a political constraint (Alesina and Tabellini, 1988). The private sector is composed of unorganized individuals who decide rationally, disregarding the effects that their own actions have on the policy-maker. Since the objective functions of either the public sector or the private agents

are not the focus of these studies, they are usually chosen to simplify as much as possible the analytical derivations and tend to be similar in all models. In contrast, the different models are rich in their exploration of alternative institutional frameworks by varying the time horizon, the informational set, the decision-making procedures, and the political constraints.

In the following sections, we analyse the issues raised when there is full information and dynamic changes arise from predictable phenomena, like economic rigidities or evolution of state variables, and when the games evolve because the information set changes, e.g. when the private sector only discovers over time the true nature of the state.

Dynamic Time Inconsistency due to Economic Rigidities

Credibility issues due to time-consistency arise in static models, in repeated games, and in truly dynamic models. While there is no doubt that the real world is dynamic, and that policy questions should be raised in that context, static models and repeated game models are technically much simpler and they can fruitfully be used to introduce some of the important features of the full model.

In traditional policy analysis *à la* Tinbergen, policy-makers are modelled as choosing policies with perfect knowledge of the private sector's reaction function, thus making them Stackelberg leaders. Setting the game in extensive form, this implies that policy-makers are making or announcing their decisions before the private sector takes action. The 'new' political economy approach questions this position, linking credibility issues to the differential flexibility that agents have in revising their decisions. The agent with the highest flexibility is considered to move last. Policy-makers thus lose their leadership position whenever they can revise policy decisions more easily than the private sector can adjust its actions. This leads to the paradoxical result that the very power of flexibility in decision-making creates a credibility problem for the policy-maker and sets him in a weaker position *vis-à-vis* the private sector. Long-term, enforceable contracts, when they can be designed, would clearly eliminate the problem, but many decisions taken by a sovereign government cannot be submitted to enforceable constraints. For time-consistency problems to arise, there must also be an imperfection in the economy, or lack of a sufficient number of instruments for optimum policy-making, that

make the originally announced policy less than optimal and give incentive to the policy-maker to subsequently change it.

Consider the classical monetary policy–inflation–employment problem to illustrate this point (Kydland and Prescott, 1977; Barro and Gordon, 1983). The policy-maker has his own objective function $u_0(L, \pi; \lambda)$ over employment L and inflation π, which would reach a maximum for $L = L^*$ and $\pi = \pi^*$. To simplify the reasoning, u_0 is assumed to be additive in employment and inflation, and λ is an indicator of the weight the policy-maker attributes to the employment objective relative to the inflation objective. The policy-maker controls monetary policy which indirectly sets the inflation rate. The private sector has an objective function $u_p(w/\pi)$ defined over the real wage, which attains a maximum for $w/\pi = \bar{w}^\circ$, and it controls the nominal wage w. Employment and the real wage are linked through the labour market, $L = L(w/\pi)$. Let $L^\circ = L(\bar{w}^\circ)$, and assume that $L^\circ < L^*$, which says that the government would prefer a higher level of employment than what the protected real wage sought by the private sector entails. The policy process sequence is the following: the government announces its monetary policy π^a, the private sector forms expectation π^e on the policy that will effectively be implemented based on the announcement and other elements that we will specify later and fixes the nominal wage, and then the monetary policy π^i is implemented. The private sector always sets the wage to meet its objective $\bar{w}^\circ$, i.e. $w = \pi^e \bar{w}^\circ$.

The credibility problem appears as follows: (1) If the government has the leadership and can commit to implement the announced policy ($\pi^a = \pi^e = \pi^i$), it cannot influence the employment level, and thus chooses π^c ($= \pi^*$, from the additivity assumption) which maximizes $u_0(L^\circ, \pi; \lambda)$. (2) However, once the wage is set at the value $w = \pi^a \bar{w}^\circ$, sticking to the announced policy is no longer optimum. The policy-maker can improve his objective function by increasing inflation, to induce a level of employment closer to its own objective L^*. This optimal discretionary level π^d maximizes $u_0(L(\bar{w}^\circ \pi^a/\pi), \pi; \lambda)$. In that case $\pi^a = \pi^e \neq \pi^i = \pi^d$. (3) The third step in the reasoning is that, anticipating this to happen, the private sector disregards the early announcement, and directly sets the wage on the expected level of the discretionary policy ($\pi^e = \pi^i$). The solution of this game is the Nash non-cooperative solution, such that $\pi^\circ = \pi(w)$ maximizes $u_0(L(w^\circ/\pi), \pi; \lambda)$, $w^\circ = w(\pi^e)$ maximizes the private sector objective, and $\pi^\circ = \pi^e$.

Seen from the policy-maker's point of view, the first best situation would be to be able to set both employment and inflation at these

optimal values π^* and L^* by fooling the private sector with a pre-announced inflation level which differs from π^*. The second best is the solution with commitment π^* and L°. The third best to which he is forced is the policy under discretion π° and L°. In this particular example, the second best is also socially preferred to the third best, since the private sector is indifferent between π° and π^*, but this is not the case with a more general preference function. The social planner would always benefit from being able to commit himself to a given level of inflation. Direct commitment is, however, institutionally difficult for a sovereign actor like government. The situation is further complicated if we consider that the economy may be subject to supply shocks (Persson and Tabellini, 1990). Say, for example, that employment $L = L(w/\pi) + \epsilon$, where ϵ is a stochastic element. The optimal commitment solution for the policy-maker is now a contingent rule $\pi(\epsilon)$ that would leave him the flexibility of adjusting employment to external shocks. Commitment to a contingent rule may however prove to be impossible, as it would require the simultaneous observability of ϵ by the policy-maker and the private sector, and the inferior solution of commitment to a fixed average value may be too costly in forgone flexibility. The policy under discretion may then dominate. Similar analyses have been made in different policy areas such as trade policy (Staiger and Tabellini, 1989).

The credibility problem in dynamic models is fundamentally similar to that in static games. It comes from the possibility for policy-makers of redefining policies at every period, while rigidities prevent the private sector from revising its own decisions. Rigidities are the very nature of state variables, like capital or debt, which reflect the consequence of past decisions. The private sector's decision in each period must therefore depend on its expectations over future periods' policies. But rigidities in dynamic models are potentially more symmetric, as the government can also use state variables to affect the incentive structure in future periods.

The credibility issue in dynamic settings can be illustrated with the wealth-taxation problem (Persson and Tabellini, 1990). The idea is quite simple. Suppose that the government has two instruments of taxation: tax on a flow variable, labour, and on a state variable, wealth, both inputs to welfare. Prior to the decision made by the private sector, both have distortionary effects, and the optimal taxation scheme is defined to balance the efficiency cost of the marginal dollar from both sources of revenue. Ex-post, however, when the savings decision has been taken, wealth taxation is no longer distortionary, and the optimal

taxation scheme is to get as much income as possible from this tax. Rational agents, expecting this to happen, reduce their accumulation of wealth. Several equilibria can emerge: The worst equilibrium is when the government fully expropriates wealth, and the private sector, expecting this outcome, does not save at all, leaving all tax income to be collected from labour. However, when government budget requirements are low, an equilibrium emerges with partial taxation of wealth and no taxation on labour. In all cases, there is excessive taxation of wealth, under-savings, and losses in welfare.

This scheme is directly applicable to capital taxation (Fisher, 1980; Alesina and Tabellini, 1989). A similar reasoning applies to taxation via inflation of nominal wealth held under the form of money (Calvo, 1978). In the second period, the government's budget requirement can be met with either labour taxation or the printing of money. Money creation indirectly determines the level of inflation through the money market and therefore acts as a tax on money holdings. Since the private sector anticipates this incentive, it will reduce its money holdings, and the government ends up overinflating, compared to the second best equilibrium, without the benefits of any surprise inflation.

Normative Implications

The normative question raised by the above examples is how to define institutions that could push the discretionary equilibrium closer to the commitment equilibrium. Four approaches can be taken: *(i)* to find a commitment technique, *(ii)* to delegate to a decider with a different objective, *(iii)* in a truly dynamic game, to alter the policy-maker's future incentives with state variables, and *(iv)* to use sanctions and/or reputation.

A commitment technique entails observability of the government's action and possible retaliation if the government defaults on its commitment. The observability problem is more stringent with contingent rules, which often rely on information that may be private to the government, or on stochastic events that are difficult to assess exactly. Yet, as we have seen above, simple contingency rules may be very costly as they imply abandoning all flexibility of adjustment to external shocks. Combining a simple rule with a certain level of discretion is achieved by rules with escape clauses (Flood and Isard, 1988). Under such regulation, the policy follows a simple rule under normal times, when the supply shock for example is not too large, but is discretionary in abnormal times when the shock is large. Examples of

rules with escape clauses are the fixed exchange rates under the Bretton Woods Agreement and the European Monetary System. The observability problem still applies and, therefore, the decision on when to apply the escape clause may have to be left to government. However, the mere fact that the escape rule will not always be advocated decreases the expected distortion. Take, for example, the monetary policy discussed above. If q is the probability of invoking the escape clause, and π^{ec} the optimum value of inflation in that case, then the expected inflation would be $\pi^e = q\pi^{ec} + (1 - q)\pi^*$, which is lower than π^{ec} whenever $q < 1$. With lower expected inflation, and consequently lower nominal wages, the policy-maker does not need to inflate as much as he would under complete discretionary policy, and $\pi^{ec} < \pi^\circ$. The second condition is the existence of a retaliation procedure for defaulting on the commitment, i.e. the creation of large costs to breaking the agreement. We will see later that, in repeated games, political constraints can serve that purpose, with the threat of overthrowing the government. Other domestic institutions are legal and administrative rules that make any revision of policy very difficult. Resorting to foreign institutions may also secure this condition on a sovereign government. The enforcement mechanism is provided by the international sanctions that would be imposed on a country breaking the agreement, like the European Monetary System or Bretton Woods Agreement for the exchange rate policy, and membership of GATT or participation in a regional integration agreement for trade policy. This framework gives an interesting perspective on these international agreements which are seen as institutions giving to governments the necessary commitment technique to make it possible for them to pursue the policy that they would choose to follow, and not as a means of imposing policies deemed to be superior by foreign agents on refractory governments.

Alternatively, policy choices closer to the commitment equilibrium can be reached by changing the decision-maker's incentive via delegation (Rogoff, 1985). Returning to the monetary example, the optimal policy under commitment π^* is function of the weight λ that the decision-maker attributes to the employment objective versus the inflation objective. In that particular case, $\pi^*(\lambda)$ is an increasing function of λ. The credibility constraint, however, pushes equilibrium inflation to a higher level π°. This suggests that delegating the policy decision to another agent, say the chairman of a central bank with a lower value of λ, would bring inflation closer to the desired level π^*. Therefore, delegation can correct the bias created by credibility while

maintaining discretion. However, it can be shown that delegation never brings back the policy exactly to the commitment equilibrium although it does improve on the discretionary policy. The interesting point here is to note that while the government cannot carry out directly the policy of its own choice, it can better achieve its goal through delegation to a central banker with an objective function at odds with its own. Similarly in the capital taxation policy, delegation to a decision-maker who cares more about capital income, investment and growth than the government could correct the bias coming from credibility (Rogers, 1986).

A new instrument is brought about in truly dynamic process. In certain circumstances, the government can use state variables to bind itself in a position such that policy changes are no longer desirable. Even if this binding entails some costs, it may still be optimal for the government to do it if it allows it to implement the second best commitment policy. An example for the inflation tax problem is management of the government's debt (Persson, Persson and Svensson, 1987). If the government has bought nominal (non-indexed) bonds from the private sector for a value exactly equal to money holdings, it loses all incentive to create inflation. For the same reason, any government debt should be set in real terms, leaving nominal net liabilities be zero. For this to be credible, government may have to secure a system by which debt repudiation is not possible. However, this should be easier to formalize legally than a commitment to monetary policy. The point here is to relax credibility problems by shifting to policies for which it is easier to be committed.[2]

Credibility problems are obviously most acute in one-shot decision-making in which opportunistic behaviours are very difficult to control. With policy-making an on-going process, sanctions and/or reputation can provide a commitment technique. Let us first consider how repetition can create a commitment technique. The underlying idea comes from the classical theory of repeated games. Both parties can be induced to abide by the cooperative equilibrium – here the low inflation equilibrium – so long as the cost of breaking the contract is higher than the short-term benefit of opportunistic behaviour. In our example, the government can be induced to keep low inflation π^*, and forgo the short-term benefit of surprising the private sector with π°, if this action influences the private sector's expectation formation for the next period. We also know from a classical result in game theory that finite games which possess a single equilibrium in their static stage, no matter how long they last, unfortunately cannot sustain this equilibrium. It

takes an infinite horizon, or at least uncertainty about the game's ending time, to trigger the cooperative solution.

This suggests that the political process can set such a trigger strategy (Alesina and Tabellini, 1988; Persson and Tabellini, 1990). Suppose now that the probability for the government to be overthrown depends on its past policy. This creates a new cost to the opportunistic behaviour of high inflation, and one can imagine that sufficiently high political costs could induce the policy-maker to stick to the low inflation strategy. To rigorously establish this result, the previous model needs to be modified in several aspects:[3] (1) Policy-makers attribute value to being in office, $U_0 = u_0(L, \pi; \lambda) + p\bar{u}_0$, where p is the probability and $\bar{u}_0$ the value to the policy-maker of being in office. (2) The timeline of the model is now as follows: monetary policy announced, wage setting, monetary policy implemented, voting, wage setting, and so on. (3) Inflation expectation is updated with observation of the policy: In the first term of any policy-maker, and so long as he abides to the announced low level π^{ν}, expectations are made at that level; but if the policy-maker inflates at π^{o}, the private sector also sets its expectation at π^{o}, and the process reverses to the discretionary equilibrium. (4) A model establishes the dependence between policy actions and probability of being voted out. Although a simple reduced form approach, like those used in the models described in the previous section, could probably be used, most authors are serious about specifying a rigorously explicit structural voting model, and these are most often based on the median voter approach. The result is a probability $p = p(\pi, \pi^{\nu})$ of being re-elected which is function of the policy implemented π, and the trigger level π^{ν}. The complete model solves for the trigger level of inflation, if there is one, that would be such that the government would find it less costly to abide by its announcement. Such a level is more likely to exist the higher the value $\bar{u}_0$ of holding office, and the more sensitive is p to π. This indicates that when the government has a very low probability of being re-elected, or in a highly polarized environment where voting outcomes are not sensitive to policies, the enforcement mechanism cannot work.

In summary, we have seen that political constraints may provide an enforcement mechanism by setting a threat on policy-makers who do not respect their commitments. Let us repeat that it is in the advantage of the policy-maker to be able to commit credibly. The political 'constraint' should thus be sought by the policy-maker himself. And while the mechanism works better with a strongly office-motivated policy-maker, it can be re-enforced by an information campaign that

sensitizes voters to policy-making. Let us note, in finishing with this example, that the voting set-up should not be seen in a narrow sense. Even without a formal regular vote, the threat of being overthrown by popular discontent may be quite effective as a commitment device.

Credibility and Imperfect Information

A second aspect of dynamic games is the additional time-inconsistency problem that may stem from evolution of the information set. We assume in this section that the policy process repeats itself over time with no changes in economic variables, i.e. we deal with a repeated game, not a truly dynamic game. Changes, however, occur in the structure of the game when there is imperfect information at the onset of the game and information is gradually revealed over the course of the game. We consider the case of one-sided imperfect information only.

Suppose that private agents have incomplete information about some critical characteristics of the policy-maker, for example his true objective function or his competence. At the onset of the policy process, expectation formation is based on the *a priori* distribution of the policy-maker's characteristics. But, as policies are observed, the private sector updates its information and revises its appreciation of the policy-maker. This suggests that the policy-maker can influence the private sector's expectations and actions through his policy conduct. Depending on whether he gains or loses from this imperfect information, a government will try to fool the private agents on its true nature or competence, or try to be identified with a position more extreme than his. This leads to the theory of mimicking and signalling (Rogoff, 1990; Driffill, 1988; Rodrik, 1989; Engel and Kletzer, 1991).

Take, for example, a two-period game of monetary policy. Suppose that the private sector does not know how much the government effectively cares about employment. Assume, for simplicity, that the policy-maker could be of two kinds: either tough with a low value $\underline{\lambda}$ or weak with a higher value $\overline{\lambda}$, to which correspond low and high values of inflation under discretionary policy, $\underline{\pi}^\circ$ and $\overline{\pi}^\circ$. Recall that the optimal value under commitment is at a yet lower value $\pi^* < \underline{\pi}^\circ < \overline{\pi}^\circ$, and that policy-makers would always benefit from having the private sector expect low inflation. Rational private agents form their expectation on the basis of the probability that the policy-maker is of either type: $\pi^e = p\underline{\pi}^\circ + (1-p)\overline{\pi}^\circ$. At the start of the policy process, or with a new

government in place, the *a priori* probability that the government is tough is $p = p_1$. Thus, imperfect information benefits the weak government, while it penalizes the tough government. This suggests that the weak government has an incentive to maintain doubt by mimicking the tough government, while the tough government will try to identify itself with explicit signalling. What is the equilibrium policy outcome under such incentive effects? In the second period, each government will choose its optimal value under discretion. To determine the first period solution, we need to solve the incentive problem for each of the policy-makers.

Take the case of the weak government. In the first period, it can either choose its own optimum value $\bar{\pi}$ for inflation, immediately reaping the benefits from surprising the private sector, or mimic a tough government with a lower value π. Knowing this incentive, the private sector will update its probability p as follows: $p_2 = p_1/[p_1 + (1 - p_1)q]$, where q is the probability that the weak government has cheated (itself to be determined consistently with resolution of the incentive problem). Mimicking a tough government reduces the expected inflation, which increases the benefit of surprise in the second period. There is, consequently, a trade-off between short-run and long-run benefits and, hence, a minimum value π^s that the weak government can consider for deceiving the private sector. Take now the tough government. It loses whenever the private sector cannot distinguish it from the weak government. Therefore, in order to signal its identity to the private sector, it has to choose a value just below π^s, incurring by this the short-term cost of a recession. Whether it will choose to signal or not depends, in particular, on the parameter values of the problem, the discount rates, and the no-information p_1. We see two alternative equilibrium solutions arising: A separating equilibrium, in which the tough government would choose a value just below π^s, and the weak government, which cannot mimic it and maintain confusion of identity, would then choose its preferred value $\bar{\pi}^\circ$ and a pooling equilibrium when signalling is too costly for the tough government, which then opts for its short-term optimal value $\underline{\pi}^\circ$, the value also chosen by the weak government to hide its identity. This equilibrium, therefore, conveys no information to the private sector, and expected inflation stays constant. Note that, while in this particular model the equilibrium is unique, in more general models, pooling and separating equilibria may coexist and, like in all these cases of multiple equilibria, theory does not help in predicting one over the others.

In the presence of asymmetric information, signalling thus emerges as the only credible way for an agent, here the policy-maker, to convey trustworthy information to the other agents. The costs incurred in having to exaggerate its restrictive monetary policy are made necessary by the fact that other policy-makers would have the incentive to convey the same information when it is not true, and that this potential falsification is known to the rational private sector. This is the same logic as that which induced signalling by lobbying groups in Ball's model. Compared to our original classification of first, second and third best, the tough government is now pushed even further away from its desired policy.

This analysis has several interesting implications. In terms of positive analysis, it may explain why a government which is serious about its adjustment policy may have to exaggerate its policy to credibly convince the private sector of its commitment. Seen from that perspective, the observed hard line policy should not be mistaken for a new trend to expect from a tough government, but recognized as intended overshooting. This does not decrease for that much the social cost that overshooting imposes on the country, and remedies should be sought to shelter the government from this necessity of posturing.

3.5 POLITICAL CONSTRAINTS ON THE DEVELOPMENTAL STATE

We started by observing the central role attributed to the state in most development theories and played by the state in the successful practice of development, and yet the frequency with which the state fails to assume this role. We also observed that much of development economics did not provide a satisfactory theoretical foundation for the determinants of government behaviour, largely assuming that this developmental behaviour would come forth if its logic were established. In search of an explanation to this puzzle, we turned to two recent bodies of theory on state behaviour: the theories of government behaviour under lobbying by interest groups, and the theories of time-consistency and credibility in policy-making. We saw that these theories differ from earlier theories of the state by incorporating strategic response by agents in civil society, leading to loss of leadership for the state in policy-making. They offer both positive interpretations of state behaviour and a set of normative

options to enhance the possibility for the state to resume its leadership position.

The results are paradoxical in that both civil society and the state should want to limit their political freedoms. In lobbying, the interest groups are the leaders, and the state consents to lobbying since it gains from it. However, since lobbying creates social waste, but the state and individual lobbies all benefit from lobbying, it is civil society at large, or the groups excluded from this game, that should want to limit lobbying. This can be done by choosing policy instruments which are less prone to lobbying even though they may be more distortional, and by imposing institutional limitations to lobbying. There is, however, a serious agency problem in doing this since neither the state nor the lobbies will want to take the initiative, explaining why it is seldom done, with global crises eventually acting as the necessary triggering mechanism to induce the necessary reforms.

With problems of time consistency in policy-making, private agents can seize leadership away from the state or at least be equally strong as the state. There however exists, in this case, an incentive for the state to fight back and to attempt to resume some leadership, or compensate for policy distortions, using a wide array of strategies such as delegation, commitment by making difficult the revision of rules, establishing retaliation procedures and legal constraints, signalling and mimicking, overshooting in policy-making, and creating irreversibility through affecting state variables. Whether the state will do this or not depends on the time horizon in policy-making and on potential agency problems within the state apparatus itself.

These two bodies of thought have developed surprisingly separately, with little cross-referencing. In real life, both problems occur: the private sector organizes to become a 'big' player in rent seeking; and asymmetry in the reversibility of decisions and in acquisition of information as the economic and political process unravels over time creates problems of time consistency and thus credibility constraints on the state. When these two approaches are combined, additional difficulties emerge for the state in fulfilling its developmental roles. For example, credibility through delegation to specialized agencies effectively decreases flexibility for the state, as desired, but increases the temptation for the lobbies to influence these specialized agencies. The outcomes may be scandals such as those that plagued the Environmental Protection Agency (EPA) and the Department of Housing and Urban Development (HUD) in the United States or massive policy disequilibria in farm policy. Another technique for creating credibility

consists in reducing state autonomy by instituting credible political threats on its own existence. This also enhances the possibility of lobbying and waste, particularly if society is unevenly organized with little countervailing power to some of the dominant interest groups, as typical in the less developed countries (LDCs). Furthermore, we argued that the theory should explicitly model the actual bargaining processes in order to explain the observed delays, stalemates, oppositions and ex-post accommodations that are so frequent along the path of economic policy-making.

We thus conclude by observing that, in accordance with the long tradition of theory and practice in development economics, an effective developmental state is indeed a key actor for successful development. The new advances in strategic development economics show that this role is difficult to play. The developmental state needs not only define strategic policies to achieve its objectives (*à la* Hirschman), but also anticipate strategic response from civil society. Policies made in this perspective, not surprisingly, may not resemble much the traditional policy prescriptions of development economics. For development economics, the normative implication is to search for institutions that can both limit the wasteful aspects of lobbying and allow the state to make credible policy commitments, thus restoring the leadership role of the developmental state.

Notes

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2. The reverse of the coin of this new capability of modifying future incentives is that government may use it as well to try to influence the policies of future governments that could have a different welfare function.
3. Note that all these repeated games have many cooperative equilibria, and all we can do is to describe one such equilibrium involving a particular trigger strategy.

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4 The Rocky Road to Reform: Trade, Industrial, Financial and Agricultural Strategies

Lance Taylor

4.1 SAVING, INVESTMENT AND TRADE RELATIONSHIPS

Based on the World Institute for Development Economics Research (WIDER) studies, patterns of saving and capital formation in the less developed countries (LDCs) are illustrated in Table 4.1. Five points stand out:

(1) The public sector plays an important role in capital formation in all the countries. Beyond public investment in infrastructure and resource extraction, additional considerations are involved.

One key point is that collaboration and division of branches of industry among the state, foreign enterprise, and local private capital have for decades been standard practice in developing economies. Proportions vary, but in all cases the public sector historically has controlled up to a third or more of the productive capital stock, with external owners often having a visible presence as well.

Indeed, if there is any developing country rule, it is that state and/or foreign assistance are needed to get new industrial activities under way. Production facilities in technically advanced branches may be publicly owned (the model in Turkey, India, Brazil, etc.) or just publicly supported (as were the *chaebol* in South Korea), but historically have not been the product of private initiative alone (Shapiro and Taylor, 1990). When new capacity creation relies on inputs from transnational corporations (or TNCs), the state has to be active as well, in regulating and bargaining with these powerful economic actors. Otherwise, it has to help local producers search aggressively for new technology along Japanese and Korean lines (Amsden, 1989; Katz, 1991). In a poor

country, private entities lack the economic sophistication and clout to undertake these tasks alone.

An important aspect of this complementarity is that public capital formation facilitates or 'crowds in' private investment. This linkage was found in most of the country studies underlying Table 4.1 (Taylor, 1993). For macro programmeming, public capital formation may be the only vehicle for stimulating investment after adverse shocks.

(2) Table 4.1 also illustrates that the public sector is typically a strong net saver. The only exceptions are macro-economically distressed Nicaragua, Uganda and Zambia, along with Zimbabwe where for historical reasons the private saving rate is abnormally high. Saving by the public sector reflects its activity in capital formation, as well as the unique ability of the state to gather resources.

(3) Private savings flows in Table 4.1 are also large, and their intermediation into capital formation and/or loans to the state to cover the public sector borrowing requirement (or PSBR) poses financial questions and problems for privatization, discussed in Sections 4.6 and 4.7.

(4) Most economies in Table 4.1 have negative trade deficits, i.e. surpluses. In many cases, these reflect foreign shocks suffered in the 1980s. Latin American and some other countries had to run surpluses to meet foreign interest obligations at the same time as their governments needed fiscal surpluses (apart from interest obligations) to meet overseas payments since they had nationalized foreign debt. This 'double transfer' problem has crippled stabilization efforts and fiscal rectitude, as discussed below.

Poor primary product exporters in Africa and elsewhere were hit by steady declines in their terms of trade and lagging export volumes. Uganda, Tanzania, Sri Lanka, etc. became highly dependent on foreign donors to make up the difference; their support produced trade deficits which will not be sustainable in the long run.

Finally, economies such as Malaysia and South Korea enjoy surpluses due to strong exports. Malaysia's position may erode as exploitable resources such as timber and oil are depleted, while Korea's results from decades of export-led growth which are virtually unparalleled in the modern era.

(5) The last point to be noted in connection with Table 4.1 is the extreme import-dependence of developing economies: shares of both intermediate and capital goods imports in GDP are large, especially in East Asian economies such as Korea, Malaysia, Thailand and the Philippines.

Table 4.1 *Developing country trade, investment, and savings flows (percentages of GDP)*

	Imports		*Investment*				*Saving*		
	Intermediate imports	*Imports capital goods*	*Domestic capital goods*	*Public sector*	*Private sector*	*Total*	*Public sector*	*Private sector*	*Trade deficit*
Argentina (1988)	6.0	1.8	12.6	7.6	6.8	14.4	0.8	15.6	−2.0
Brazil (1987)	3.8	2.1	17.9	6.2	13.8	20.0	6.2	18.3	−4.5
Chile (1988)	14.9	6.8	11.6	7.9	10.5	18.4	5.7	15.6	−2.9
Colombia (1988)	5.4	3.5	14.6	7.1	11.0	18.1	4.0	16.7	−2.6
India (1987–88)	4.5	2.4	20.8	12.7	10.5	23.2	2.4	18.9	1.9
S. Korea (1987)	24.7	15.7	13.9	6.2	23.4	29.6	11.1	28.5	−10.0
Malaysia (1988)	22.1	11.5	11.7	9.3	13.9	23.2	5.9	27.5	−10.0
Mexico (1988)	7.9	2.5	18.1	6.4	14.2	20.6	4.2	20.1	−3.7
Nicaragua (1989)	17.5	12.1	12.1	2.1	22.1	24.2	−2.0	9.5	16.7
Nigeria (1986)	1.7	3.8	8.1	7.6	4.3	11.9	3.1	8.9	−0.1
Philippines (1988)	11.4	4.4	13.8	3.0	15.2	18.2	0.0	19.2	−1.0
Sri Lanka (1987)	11.5	6.5	19.9	14.9	11.5	26.4	4.4	18.0	4.0
Tanzania (1986)	5.7	11.9	15.0	8.3	18.6	26.9	5.6	11.8	9.5
Thailand (1987)	9.8	8.6	15.0	6.7	16.9	23.6	5.4	19.7	−1.5
Turkey (1987)	13.5	1.0	24.4	13.3	12.1	25.4	8.2	19.5	−2.3
Uganda (1987)	5.6	8.6	8.4	3.9	13.1	17.0	−5.6	16.0	6.6
Zambia (1987)	30.7	8.0	2.7	7.7	3.0	10.7	−16.7	32.5	−5.1
Zimbabwe (1986)	11.1	7.1	15.4	11.9	10.6	22.5	−5.1	30.9	−3.3

4.2 A THREE-GAP MODEL

The foregoing discussion suggests that at least a third gap should be added to the traditional foreign exchange and saving constraints (Chenery and Bruno, 1962), to take into account the linked fiscal and foreign transfer limitations on policy choice that have become crucial in the Third World. Further effects of fiscal deficits on inflation and/or the public debt: output ratio are taken up in the following section; to ease cross-country comparisons, the PSBR is at the focus of attention here. It is defined by the accounting equation, PSBR = government current spending − revenue from national sources

$$+ \text{ public investment } + \text{foreign interest payments} \qquad (1)$$
$$- \text{ net transfers to the government from abroad.}$$

Following Taylor (1991, 1993) and other authors, a minimally adequate country model has to incorporate five features:

1. Capacity utilization and growth rates are not closely linked: the experience of the 1980s amply demonstrates that output can fall below its potential when the economy is subject to shocks. A traditional incremental output: capital ratio (or IOCR) equation can be used to determine the growth rate g of potential output (or capacity) as a function of new investment. But the utilization rate (say u, defined as output/capacity) should also be an endogenous variable which can take values well less than 100 per cent.
2. As noted above, the possibility that private investment is crowded in by public capital formation has to be included in realistic models, and raises interesting questions about the fiscal role of the state.
3. Indeed, fiscal revenue from national sources net of current expenditure (say Z) is usually a positive function of the rate of capacity use – taxes and other receipts increase more rapidly than real spending when economic activity goes up. In equation (1) above, for given values of the ratio of the PSBR to output and the responsiveness of Z to u, public capital formation can rise with higher capacity utilization and foreign transfers to the government, and lower interest payments to abroad. Both directly and via crowding-in, the outcome is more total investment and a faster rate of capacity growth g. We thus arrive at an upward-sloping relationship via which a higher u can push up g by generating more net fiscal revenue which is channelled to capital formation, as in schedule *GG* in Figure 4.1.

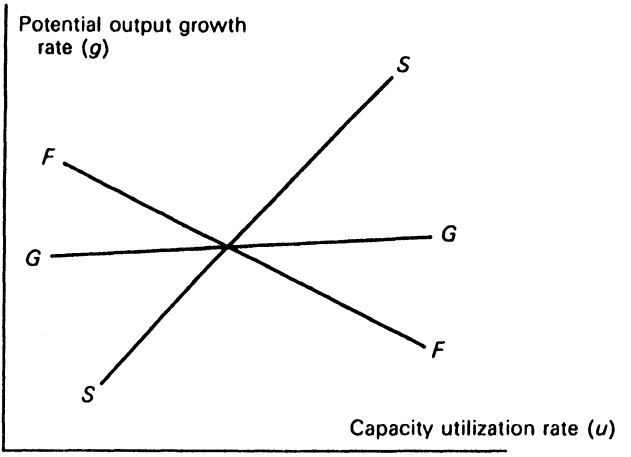


Figure 4.1 *A three-gap model*

4. Available saving also puts a limit on investment and potential output growth. Three sources can be considered: net government saving or the PSBR minus public investment, net foreign transfers from abroad, and national saving by the private sector. We assume that private saving increases with the rate of capacity utilization in standard fashion. Together with the effect of u on Z, this private saving function underlies another positive relationship between u and g, shown as SS in Figure 4.1. Depending on parameter values, the saving limit on growth may rise more or less steeply than the fiscal constraint as a function of u. A steeper saving schedule as in Figure 4.1 means that raising public investment to stimulate overall capital formation will land the government in fiscal difficulties, even though total saving in principle would be large enough to finance the additional investment demand.
5. The last important linkage is the foreign exchange constraint. As noted above, production and capital formation depend crucially on imports of intermediate and investment goods. Especially for the small, open economies in the sample, these requirements at the margin can be large.

Higher output pulls in intermediate imports and (in some of the WIDER countries) may also reduce export sales – a higher u requires more foreign exchange. Since faster capacity growth g also depends

upon imports, an increase in one variable forces the other down: we get the negatively sloped (Figure 4.1) relationship *FF* between u and g.

This trade-off is central to macro-economic decision-making in the medium run. In Africa, for example, policy-makers targeted measures such as import quotas and credit restrictions explicitly towards sustaining either capital formation or current production when external strangulation became acute. At the same time, aid donors imposed pressures to keep ongoing investment projects under way. The outcome in Tanzania, for example, was continued investment, while capacity utilization fell by 20 per cent between 1976 and 1986. Other countries subject to import compression such as Zimbabwe (which had fewer donor obligations) reacted the other way.

On the basis of these building blocks, the last issue to be raised is how a model should hang together. Which variables adjust to make *GG*, *SS*, and *FF* cross at one point in the (u, g) plane? How should they be deployed in simulations to illuminate problems of policy choice? The answers for any economy depend on its institutions and adjustment mechanisms. The possibilities are discussed in the following section, but to wind up this discussion it makes sense to walk through one rather mechanical – although interesting – 'closure' of the basic model.

Following Johansen (1960), the saving, foreign and fiscal balances can be solved in a 'planning' fashion to give cross-country comparisons of resource needs for faster growth. For a given potential growth target, the foreign and saving gaps give corresponding values of capacity use u (or a required tax rate if u equals 100 per cent) and foreign transfers to the government. The fiscal gap then gives the required PSBR. In other words, simultaneous changes in u and t allow *FF* and *SS* to meet the target growth rate at a common level of capacity use, while the PSBR adjusts to let *GG* also pass through the resulting equilibrium. When such computations are extrapolated to all the developing world from the WIDER sample, the estimate of foreign resources required to restore minimal socially adequate growth rates is very large: \$40 to \$60 billion per year in the early 1990s and rising steadily over the decade (Taylor, 1993). Such an increased transfer can usefully be contrasted to the current net resource flow from developing to developed countries of some tens of billions of dollars annually. The industrial world seems unlikely to generate an equal net payment stream in the opposite direction, although it certainly had no qualms in coming up with foreign transfers of this magnitude during the 1991 war of the rest of the world against Iraq. In summary, scarce external

resources go a long way towards explaining the poor LDC growth rates mentioned at the outset. The interacting distributional and policy responses that mediated the slowdown are what we review next.

4.3 DISTRIBUTION AND MODEL CLOSURE

Three-gap models emphasize how an economy adjusts to shocks in the range of five per cent of GDP via variations in output and capital formation. Other channels are opened by changes in the national distributions of income and wealth induced by price and quantity fluctuations. For its own ends, the state also may seek to alter distribution. The change may be a primary goal, e.g. an attempt to raise real wages on the part of a government with strong working class support such as Salvador Allende's in Chile in the early 1970s. Later in that decade, the successor Pinochet regime undertook massive wealth redistribution favouring its own bourgeois 'Chicago Boy' clients by selling them the enterprises nationalized under Allende at knock-down prices. Their subsequent financial speculation cost the country dearly in the medium term.

Alternatively, distributional changes may result from other policies. An import-substituting industrialization (ISI) programme typically switches relative prices against agriculture by a variety of methods (import tariffs or quotas, an 'overvalued' exchange rate,[1] etc.); pro-farmer strategies move sectoral prices and incomes the other way. As already mentioned, in the wake of the debt crisis most governments nationalized private external obligations – a wealth transfer deemed essential to save local financial systems. Distributional shifts – both endogenous and policy-induced – thus emerge as the keys to changes in capacity utilization, capital inflows, the PSBR, and capital formation. Along lines set out in Taylor (1991), at least eight sets of linkages recur in developing economies, and are summarized here:

1. If output is not limited by available capacity or other constraints, it may well be stimulated from the side of aggregate demand by progressive income redistribution in general and higher real wages in particular: 'wage-led growth' appears to be the rule in much of the developing world.

   A positive wage–output linkage also complicates adjustments to rising labour productivity. If surplus labour is present, a prod-

uctivity gain (or a fall in the labour: output ratio) is not likely to be accompanied by a higher real wage. At the initial level of output, total wage payments will decline, reducing consumption demand and ultimately investment and potential output growth via the accelerator. On the other hand, if exports are sensitive to local production costs which are reduced by the productivity increase, they may jump up enough to raise total output. The price elasticity of 'our' exports becomes a crucial parameter, via which productivity and wage changes can feed into dynamic growth processes as described below.

2. In the short run, currency devaluation can easily drive up prices from the side of intermediate import costs. If money wages are not fully indexed to rising prices, real wages will fall and output contract. This effect is reinforced if there is an initial trade deficit, for then devaluation raises exporters' incomes less than importers' costs, again reducing local spending power.

   An offsetting possibility is that devaluation along with other moves to 'get prices right' may boost exports enough to create net aggregate demand – this happened in the mid-1980s in Malaysia and Thailand where devaluation in effect ratified a shift in comparative advantage in low-wage manufactures in their direction from countries like South Korea and Taiwan and encouraged their transformations into export platforms.

   A third contingency is that depreciation may be accompanied by large incoming transfers from foreign donors, making it look expansionary and anti-inflationary as the foreign exchange constraint is lifted. Ghana early and Tanzania late in the 1980s are examples.

   The obverse scenario takes over when, with a truly binding external constraint, a decrease in capital inflows accelerates inflation (for reasons to be discussed shortly), leading to exchange appreciation and further deterioration in the balance of payments. This potential instability applied in Ghana in the 1960s and 1970s and Tanzania in the 1970s and 1980s before they got Fund/Bank religion and reaped the forex rewards.

3. These sub-Saharan Africa (SSA) examples suggest that getting the real exchange rate badly 'wrong' can be self-destructive. A common temptation is to let the local currency/dollar rate increase markedly less rapidly than inflation, since real appreciation may well hold down price increases and stimulate local demand.

The resulting overvaluation or income redistribution from foreigners towards nationals is a step down a primrose path: as in the classic Argentine and Chilean cases of the late 1970s (where freezing the exchange rate was advertised as an anti-inflation policy of genius), it leads ultimately to an unsustainable trade deficit and capital flight in anticipation of a maxi-devaluation that will surely follow.

4. Another exchange rate related problem can show up when there is a foreign exchange bonanza, from oil discoveries, ample foreign aid or other sources. Some of the extra forex will flow towards imports or a reduced export effort, but the balance is likely to spill over into demand for non-traded goods. As their prices rise, the real exchange rate will appreciate, leading to a further loss in export/industrial diversification in an example of 'Dutch disease'. Mexico and Nigeria had severe cases after their oil discoveries, and the Philippines under Marcos with foreign aid.

   In a variant scenario, Colombia always finds it difficult to sterilize foreign reserve increases from its recurrent coffee price bonanzas. The alternatives are for either the state or the private sector to save the inflows abroad. Capital flight was a frequent final voyage for the resources flowing towards developing countries in the 1970s when they accumulated huge stocks of foreign debt.

5. Output may suddenly be bounded from above, often by foreign exchange shortfalls as discussed in Section 4.2. Another contingency is that progressive redistribution may drive production up against capacity limits. How can aggregate demand then be limited to available supply? One mechanism is via prices rising more rapidly than nominal wages, thereby cutting real wages and demand. This is the simplest example of inflation-induced 'forced saving', which may also occur via shifts in prices favouring or harming groups with differential saving propensities from current incomes, e.g. workers, capitalists, farmers, foreigners or the state. Via such channels, real wage reductions during the 1980s have proved to be surprisingly large, ranging up to 50 per cent and more in some Latin American and African economies.

6. Changes in the distribution of wealth may also influence aggregate demand. The most widely cited example is the 'inflation tax' on money balances – transfers from firms or people with cash (or unindexed deposits) to the state or other borrowers through the banking system which printed the paper in the first place. The

value of money erodes with rising prices, usually leading to reductions in real producer and consumer purchases.

7. When inflation settles in, different social groups learn to protect themselves against its adverse distributional effects by continually bidding up the prices over which they have control, e.g firms via mark-ups, labour via money wage increases, or wealth-holders via higher nominal interest rates. As such informal or formal contract 'indexation' spreads, eliminating inflation becomes correspondingly more difficult. Shortening the waiting periods between indexation steps makes the problem worse. These 'inertial' responses to ongoing price increases immensely complicated attempts to reduce inflation in places like Argentina and Brazil. By deindexing wages, Chile effectively braked inflation in the 1980s with wage-earners bearing the social cost.

   So-called heterodox shock stabilizations were tried in the mid-1980s in Argentina and Brazil to attack inertial inflation where the orthodox approaches just described had failed. They involved price freezes and deindexing contracts, and stopped inflation in the short run. But when the inflation tax and forced saving disappeared, the real wage and aggregate demand rose. Internally, pressures for additional wage increases appeared, feeding in turn back into more demand. Externally, as imports rose the foreign resource constraint began to bind, reintroducing forced saving, the inflation tax, and indexation. A few years later, Israel and Mexico made heterodox stabilizations stick, via social compacts to hold wages in line and the use of foreign resources (from capital inflows and international reserves, respectively) to relax the foreign constraint.

8. Especially when low capacity utilization and slow potential output growth are accompanied by regressive redistribution and high interest rates, *ex ante* saving by the wealthy tends to exceed investment demand. Often in such circumstances, speculation in real estate, local financial paper, and foreign currency (especially if the exchange rate is overvalued) increases, since higher savings flows have no natural outlet into capital formation. The stage is set for a speculative boom and crash, which can be worsened by the fetish of financial market deregulation.

Chile in the late 1970s is a classic example: financial conglomerates organized themselves around the denationalized industrial firms mentioned above plus internally controlled banks. In a stock market boom, each one started borrowing from its bank to bid up its own

share prices, until the banks became so extended that the whole scam fell apart. Interest on the public sector bonds used to restructure the financial system will cost Chilean taxpayers a couple of per cent of GDP for the foreseeable future.

Finally, questions about the causal structure of a macro model appropriate to the economy at hand always recur. Structuralist economists emphasize the causal primacy of demand injections such as exports and investment, the importance of distributional processes of the sort just discussed, and frequently binding foreign exchange restrictions on capacity utilization and growth.

More orthodox analysts – including many from the Bretton Woods institutions (or BWIs) – often postulate supply-side determination of output with ample price responsiveness. They typically state (with straight faces!) that monetary and fiscal austerity will just reduce inflation but not the level of economic activity, and that the primary impact of relative price changes will be on the relevant output levels but not the functional and sectoral income distributions.

The problem with this view is that it assumes away all the problems discussed in connection with Table 4.1 – the output losses, regressive redistributions and inflations that have plagued poor countries in the 1980s cannot occur in orthodox models by hypothesis. Nor does mainstream theory address transitions from austerity and price reform to renewed growth, since it does not permit exports to be unresponsive to price signals or investment to be stagnant in the face of lagging domestic demand – prices are supposed to be flexible enough to assure that there are no unemployed resources in a neoclassical world.

The unreality of these notions is beginning to be recognized (Dornbusch, 1990), but has yet to be corrected in standard practice. The BWIs remain impervious to the fact that the invisible hand plus a minimal government (especially in its fiscal, regulatory and investment roles) do *not* necessarily act together to support sustained economic growth. Examples in trade, industrial and agricultural policy are discussed in Sections 4.4 – 4.9.

4.4 ALLOCATIVE VERSUS PRODUCTIVE EFFICIENCY

Recent mainstream ideas about market reform are codified in what Williamson (1990) calls a 'Washington consensus' (or WC). The main problem with the consensus is that its central dogma – that price

liberalization and laissez faire market reform will stimulate output growth – is not empirically robust. Cases in which it has not been true have already been mentioned, and others are explored in the following discussion.

One reason why liberalization can prove irrelevant or counter-productive in practice is pointed out by Hjalmarsson (1991) and UNCTAD (1991). With regard to industry and finance respectively, they distinguish between 'allocative' and 'productive' efficiency. The latter is by no means assured by removing price distortions to put allocative efficiency into place. Many factors – market and capital stock structures, forms of financial intermediation, resource 'endowments' and their creation or destruction by changes in technology and tastes, the size of the economy, historical fetters from colonialism, access to geopolitically determined capital inflows and penetrable markets, etc., affect productive efficiency in ways the neoliberal world view cannot comprehend.

If productive efficiency is not assured by liberalization, then how can it be enhanced? There are no foolproof stimulants, but intriguing possibilities can be read from historical experiences. One example is the model of accumulation followed by the Nordic economies after 1930 and South Korea two decades later. It emphasized the advantages of workers' productivity growth when they were employed by firms big enough to benefit from best practice technology and economies of scale. Such enterprises were consciously sanctioned by Nordic and Korean authorities as monopolies or oligopolistic participants in export trade. After relatively short learning periods, governments sought allocative efficiency by supporting their local champions in competition with counterparts abroad (the Nordics, though not the Koreans, also opened national markets to foreign competition). They learned to meet world prices of commodities and services with elastic export demands, so that labour productivity increases could be absorbed into foreign sales.

Pressures towards productive efficiency came not from capital markets, but from Scandinavian trade unions and the South Korean state. The Nordic workers promoted higher productivity on the understanding that it would be translated rapidly into real wages; without underwriting wage growth, the South Korean economic bureaucracy followed their Japanese mentors in adopting a pro-productivity line. Given the tightly held nature of (say) the Swedish Wallenberg bank-centred 'group' of companies and the *chaebol*, stock market discipline did not figure in production or investment decisions.

Industrial subsidies and targeted, cheap credit in restricted national capital markets certainly did (Amsden, 1989).

4.5 TRADE POLICY REFORM

Neoliberals advocate trade liberalization on the basis of textbook theorems about how interventions should be designed. If an economy is initially very distorted (say from an extended period of ISI with a high and complicated tariff structure and/or strict import quotas), most economists agree that steps should be taken to rectify the situation. There *is* professional consensus in this regard; the problem is that different authors' policy remedies diverge. Evans (1991) suggests that the neoliberal pharmacopoeia can be listed as follows:

1. The mainstream does recognize arguments for intervention, e.g. nurturing infant industries, attempts to repel foreign dumping (however defined), and optimal export taxes. However, in terms of complexity, red tape, and inflexibility, quotas and tariffs aimed at correcting these problems may well proliferate beyond reason under ISI.
2. When there is a market imperfection, the corrective policy should be applied as 'closely' to it as possible, e.g. a subsidy for an infant industry makes more sense than a tariff, since the latter will induce a by-product consumption distortion.
3. Under competition in the standard Heckscher-Ohlin model, an import quota has an 'equivalent' tariff, which will let the same quantity of foreign goods come in. Since the government gets the tariff's proceeds while producers benefit from quota rents, the tariff may be preferable.
4. If producers have market power, they can squeeze extra rents from a quota. If they go in for rent-seeking (or 'directly unproductive profit seeking' or DUP activity) by devoting productive resources to lobby for more quotas, this form of protection looks even less desirable.
5. All this leads to a standard WC sequence of recommended policies: First, there should be macro-economic stabilization; thereafter, quotas should be 'tariffized', and then the tariff schedule simplified to two or three rates in the 10–50 per cent range, sufficient to provide some protection and generate revenue.

6. As part of the exercise, the real exchange rate will probably have to depreciate to hold the trade deficit constant as quota/tariff protection is cut back. For this reason, capital market liberalization which may lead to appreciation should be postponed.

It is impossible to refute these arguments on their own terms. Their deficiencies lie in incompatibilities between their underlying hypotheses and the world as it really functions. For example, all DUP activity is assumed to focus on state interventions, although the private sector readily generates its own distortions and rents: the nation state has to deal with external agents with significant market power such as TNCs, local monopolies, and the divide-and-rule tactics of indigenous capitalists when confronting labour, in just a few important cases.

Secondly, the WC model treats its 'distortions' as small perturbations to an economy assumed to be at full employment with investment determined by available saving (perhaps mediated by a variable interest rate) and all actors satisfying the familiar 'marginal this equals marginal that' behavioural conditions. When these hypotheses are relaxed in investment-driven growth models, protection to a given sector can easily lead to faster overall expansion if it leads to a spurt in investment demand and/or endogenous technical advance (Buffie, 1991; Taylor, 1991).

Finally, the WC model does not incorporate the LDC trade patterns pointed out in connection with Table 4.1. Yet programmeming the level and composition of non-competitive intermediate and capital goods imports has been key to the success of developmentalist states. In South Korea, for example, authors as diverse as Amsden (1989) and Pack and Westphal (1986) agree that instruments such as quotas, directed credits and targeting were used to promote import substitution which led to export growth. Brazil used protection and licensing to build an automobile sector which flourished until the economy was derailed by macro-economic forces in the 1980s (Shapiro, 1991). In a large domestic market, small-scale producers of bicycles and machine parts were helped by local authorities and cross-firm cooperation/competition in Ludiana and other cities in the Punjab – they now sell throughout India and are expanding abroad (Tewari, 1990).

Pack and Westphal (1986) emphasize that interlinked factors underlie these examples. Technology is imperfectly tradable, since local producers and workers have to gain know-how to operate physical capital goods which are not produced at home. There are economies of scale in both production and technology acquisition, and

externalities among output levels, prices and technical choice. Evans (1991) underlines the following implications:

1. Protection is justified, and may be programmemed more effectively if it is based on quotas. Quota rents on strategic, technology-bearing imports can help subsidize export activity. Quotas on competitive imports (which in effect persist in Japan and South Korea to this day) turn the national market into a place for profitable learning. Costs can be held down if firms are exposed to foreign competition on the export side; real wage increases force the cost reductions to come from productivity advance.
2. Rent-seeking may characterize the process of allocating quotas, but ultimately they can be tied to export and output performance. Ideology and public pressure can help keep directly unproductive activities within 'reasonable' bounds.
3. Two-way information flows are essential, whether top-down as with Korean bureaucrats dealing with the vertically integrated, conglomerate *chaebol*, or among small producers and local authorities as in the Punjab.

If a reformed quota allocation system under this second line of policy action leads firms to use strategic inputs to acquire technology and expand non-traditional exports, it may well expand potential output faster than WC trade reform (especially if investment responds). Moreover, it does not suffer from coordination problems such as guessing tariff equivalents of quotas, phasing the liberalization to avoid bankrupting viable domestic producers by taking away effective protection, and getting the exchange rate 'right'. In other words, policy-makers are not forced to solve a realistically dynamic computable general equilibrium model to reprogrammeme the price system for the economy at hand – a Herculean labour if there ever was one.

One example of sensible intervention is provided by Chile's rhetorically laissez faire government under Pinochet. Its public investments in copper mines and promotion policies for fruits, forestry products and fisheries laid the base for an export boom after 1985. These interventionist steps were taken while the economy reeled through a 12-year sequence of disastrous stabilization experiments amply supported by the BWIs. The WC's recommended stabilize-then-adjust sequence was exactly reversed (Meller, 1991).

Of course, there have been interventionist failures as well. The implication for both structuralist and neoliberal economists is that there is room for debate about such questions, unacknowledged by the WC and one of its major pronouncements, the World Bank's 1991 *World Development Report* (or *WDR*). The *Report* ignores the conclusions of mainstream observers such as Pack (1988) and Rodrik (1991) that *no* convincing support exists for 'a general statistical association between less intervention and lower price distortions on the one hand and higher productivity growth on the other' (page 99).

Rodrik's contrasting summary of the evidence is that 'if truth-in-advertising were to apply to policy advice, each prescription for trade liberalization would be accompanied with a disclaimer: "Warning! Trade liberalization cannot be shown to enhance technical efficiency; nor has it been empirically demonstrated to do so."'

4.6 FINANCIAL REFORM

Financial restructuring is another broad plank in the WC programmeme, although neither Williamson's (1990) version of the consensus nor the 1991 *WDR* goes into much detail about the means by which savings flows are intermediated into capital formation through financial markets. Their basic policy suggestions are just to increase interest rates and deregulate the system. As observed by UNCTAD (1991), the goal is to enhance allocative efficiency, in the sense that returns on savings instruments and investment projects should tend towards equality, perhaps with 'the' marginal product of physical capital.

The WC model of finance has the same basic shortcoming as its counterpart for trade and industrial policy: it ignores existing market structures. In most developing economies, the 'formal' financial sector comprises public institutions, large private enterprises, and banks. Financial claims typically have short maturities, and the ratio of the outstanding value of either assets or liabilities to GDP is a fraction (well less than ratios in the 1.0–1.5 range observed in industrialized economies). Although their size is difficult to judge, informal markets may account for half of total credit outstanding.

The typical initial conditions for a high interest rate/deregulation package include ceilings on nominal interest rates, and directed formal

sector credit allocations by sector and form of use. Immediately imposing a reform gives the following sorts of results:

1. Getting rid of ceilings on bank deposit rates removes a nominal anchor on the pricing system. Particularly if the external capital account has been deregulated, the alternative to a bank deposit in a citizen's portfolio is a foreign holding, with a domestic return equal to the foreign interest rate + the expected rate of exchange depreciation + a premium for lower risk. Such an alternative puts a floor under the local deposit rate which is usually strongly positive in real terms. Deposit institutions have to pass along their higher costs into interest rates on their loans.
2. Eliminating credit targets in the absence of effective prudential regulation leads banks towards high risk/high return loans (a moral hazard made more acute if the government implicitly promises that failing banks will be rescued). The proportion of non-performing loans in bank portfolios rises; the implicit cost has to carried by debtors still meeting their obligations.
3. Higher interest rates on loans for working capital tend to be passed along by firms into higher prices (especially if they have market power, common enough under ISI). Since production costs rise, supply may also be reduced, giving stagflation. Higher lending rates and lower output will constrict investment demand.
4. More attractive deposit rates can also pull funds from the informal market, reducing its credit flows and raising curb or bazaar borrowing costs with unfavourable effects on output and prices.
5. Although banks can (up to a point) protect themselves from these developments by raising the spread between borrowing and lending rates, the same is not true of their borrowers. The financial position of the private productive sector becomes more precarious, while a higher proportion of the government's fiscal receipts must be dedicated to interest payments on its internal liabilities outstanding. Refinancing these flows can reach manic dimensions as in the 'overnight' market in Brazil during the 1980s. Profits on turning over the federal debt made bankers partisans of inflation in that country, a peculiar and risky situation.
6. The Brazil example suggests that with high rates and low investment, speculative holdings become attractive. Turkey had Ponzi schemes around bank certificates of deposit, Chile a stock market boom for shares of prematurely privatized public firms already discussed in Section 4.3, and Argentina destabilizing flows

of foreign exchange. In all cases, speculation went together with deteriorating enterprise balance sheets to pave the way for a crash. The taxpayers ended up with bills totalling tens of per cent of GDP to put the financial system back together.

These and other cases add up to a substantial list of neoliberal 'mistakes' to be added to those involving trade policy. A more gradual reform in nearly industrialized South Korea avoided a débâcle, while after presiding over its stock market boom and crash around 1980, the Chilean government later took advantage of ample support from the BWIs to privatize once again, restructure its internal debt, and set up a compulsory pension fund programmeme to capture savings flows. From these experiences and those of now developed economies, can anything sensible be said about productively efficient directions for LDC (less developed country) financial evolution?

UNCTAD (1991) points out that two broad forms of financial organization present themselves. In one, since the last century, banks in Germany and Scandinavia have been closely associated with productive firms, owning stock and holding seats on boards of directors. With insider knowledge and their own incomes in mind, bankers can impose discipline on managers while at the same time providing credit (often rolling over short-term loans) cheaply. Similar market structures have also emerged in Japan. Insider speculation along Chilean lines is a risk with this form of market organization, but it can be avoided with adequate regulation and a financial ideology of prudence.

In an alternative Anglo-American model, firms pay for investment by borrowing from banks (or, more recently, by entering the money market), and then refinance short-term debt from internal saving and by issuing long-term liabilities in the capital market. One implication is that the final cost of funds tends to be higher in the US, since German and Japanese shareholder banks can internalize information flows and exploit scale economies in credit provision. The American cost disadvantage widened in the 1980s as financial deregulation removed nominal anchors on interest rates. A broad, liberalized capital market may help equalize returns to different sorts of holdings, but it can also be productively inefficient, creating high costs of finance and shortening economic horizons.

The implication is that developing countries might consider German bank-type institutions to provide long-term finance, instead of trying to underwrite capital markets (which in many cases have proved to be heavily subsidized playgrounds for ruling oligarchs and generals).

Indeed, credit provision by the state – either directly or through development banks – has functioned successfully on all three poor continents.

Modernizing the development bank institution with due care to avoid rent-seeking and inflationary finance for the benefit of chronically derelict parastatals is at least as appealing an option as the high interest rates, stagflation, deregulation and financial crashes that orthodox financial reforms have provided. Since (especially after fiscal restructuring) development banks can tap public savings flows, they fit naturally with the public/private patterns of saving and capital formation set out in Table 4.1.

4.7 PRIVATIZATION

The practical implications of the privatization component of the WC package are difficult to judge. As observed in Section 4.2, across nations different historical divisions among public, local private, and foreign ownership of productive enterprises have emerged. There is no solid evidence that firms of one stripe are consistently more efficient in static terms than those of another. Dynamically, scholars such as Amsden (1989) argue that Korea's home-owned but publicly subsidized private conglomerates are more adept at indigenizing technology than TNC affiliates, while in Brazil before the last decade public enterprises were effective motors for capital accumulation and technical change (Shapiro, 1991).

In economic terms, the effects of privatization on savings and investment flows will be the only means of evaluation available for years. Improvements in productive efficiency will be difficult to trace, and in any case do not seem likely in the absence of financial market reforms and joint public sector/labour/management efforts to raise productivity growth along the lines discussed above. Moreover, outside Chile, Mexico and Turkey, not much privatization has in fact taken place.

Even savings-investment calculations are tricky, when discounting is taken into account. Marcel (1989) argues, for example, that in Chile's 1985–88 second go at privatization, firms were sold below present value and half the receipts were allocated to uses such as tax reduction. In other words, there were probably no positive impacts on capital formation, along with a flow portfolio shift from public liabilities towards enterprise equity on the part of the private and external sectors.

More generally, local private sectors can finance acquisitions of public firms in just four ways: (1) an increase in private saving; (2) a fall in private investment; (3) a decrease in private sector flow demand for financial assets; and (4) an increase in private sector flow demand for credit.

Alternative (1) could be helpful for growth if accompanied by a jump in investment. The public sector would probably have to be the motor, taking into account the crowding-in effects discussed above. In other words, privatizing governments should reinvest the proceeds instead of following Chile's example of cutting the current fiscal deficit. This observation becomes doubly relevant if the private sector cuts its own capital formation to take over public firms.

Alternative (3) is more likely than (4), especially in countries where financial markets have contracted in the wake of adverse shocks. But then the government will find it increasingly difficult to place its own liabilities, provoking it to emit money or bear higher interest burdens or both. As in the Chilean paradigm case, there will be strong pressures to use the proceeds of privatization just to cover the PSBR with no spillover to capital formation.

Finally, if public firms are sold to foreigners, is their direct foreign investment 'additional' to what would have arrived, in any case? What about remittance obligations in the future? It *is* true that TNCs which are doing more than simple sourcing do not readily leave a country once they have entered and built up sunk capital, and that they can serve as vehicles for technology acquisition. But can the same be said of debt-swapping banks? Even in terms of current financial flows, privatization need not produce great benefits.

4.8 DEREGULATION

Quite a bit has already been said about deregulation in the context of trade reform. Here, we can just add a few observations regarding wages and labour markets. The WC perception is that protective labour legislation is at best an impediment to adequate market functioning and that lower real wages can go a long way towards improving a country's export competitiveness. As usual, Washington fails to see crucial elements of market structure. For example, in his classic study of the industrial revolution, Polanyi (1944) observed that economic modernization necessarily involves a 'double movement' towards creation of markets for commodities and production inputs (such as

labour), together with their regulation by the state for social and productive ends. Such changes are as necessary for long-run socio-economic development as for human capital accumulation of the sort that the 1991 *WDR* insistently singles out.

As noted in Section 4.2, regressive income redistribution of the sort likely to accompany labour market deregulation stifles aggregate demand (Taylor, 1988). Compositional shifts may also occur, although country-level evidence suggests that the new commodity basket may be either more or less labour-intensive (i.e. wealthier segments of the population who gain in the redistribution may bias their consumption towards either labour-intensive services or capital-intensive commodities, depending on context). There is also likely to be an increase in the import-intensity of demand.

These compositional shifts are all relatively weak, so that the short-run effect of real wage changes on the sectoral breakdown of output can probably be ignored. But beyond the conjuncture, dynamic feedbacks become important. Real wages are central to the distributional process, and their secular growth appears essential for industrialization in the long run. Now-popular efficiency wage arguments emphasize how worker motivation and efficiency depend on good pay. The bulk of demand for advanced products must come from exports or wage income. These linkages mean that the question of which classes gain from productivity increases is an important one.

On the one hand, worker motivation and internal demand require real wage increases; on the other, if real wages rise more slowly than productivity, unit labour costs fall, which can help trade. But it is clear that aiming for low wages alone is *not* a viable or sustainable strategy. South Korea would never have shifted its exports from human hair and cheap garments to automobiles and electronics had its wages stayed at the levels of 1955. It has combined steady real wage increases with even more rapid productivity growth to underwrite industrial expansion. Small European economies did the same thing while creating the welfare state. The WC's comparative static exercises ignore all these dynamic processes.

4.9 THE AGRARIAN QUESTION

Far more strongly than exports – the WC's favourite explanatory variable for growth – a good agricultural performance is correlated

with sustained output expansion. Although the sector's product rarely expands more rapidly than the population growth rate plus 2 or 3 per cent per year, falling short of this pace can hold down development overall. Moreover, land and labour productivity rates in many developing countries are low (and indeed have been falling in sub-Saharan Africa since the mid-1970s): they are at levels one-half or less of those in the industrialized nations when they had similar per capita incomes. Especially since in many places agriculture's share of total investment is a great deal less than a 'reasonable' 20 per cent, there is room for expansion. As posed by Timmer (1988) and Rao and Caballero (1990), the question is how it is to be organized.

Unsurprisingly, the WC/BWI view is that agriculture has been handicapped by policy-induced distortions, e.g. currency overvaluation, negative effective protection, etc., which are supposedly caused by 'urban bias', excessive pursuit of ISI, and populist pressures to subsidize urban consumers. Offsetting factors such as low or non-existent agricultural taxes and input subsidies are ignored from this perspective, as well as the fact that total crop and livestock supplies are price-inelastic in the short- to medium-run.[2] As usual, simply eliminating distortions provides no royal road to productive efficiency.

Many factors can raise inequality in the countryside and/or force agricultural output to grow slowly:

1. Inequality itself as well as market structures and institutions can adversely affect adoption of new technologies, employment, and income distribution.
2. Rural poverty is not just due to low-level technology *à la* Schultz (1964); there is also exploitation in both the neoclassical (monopoly positions) and Marxist (extraction of surplus labour value) senses of the word.
3. Especially with tight fiscal constraints, higher public investment in agriculture (with likely crowding-in effects) is going to have to be financed by higher taxes. For example, raising taxes on agricultural exports or tariffs on non-agricultural imports could worsen allocative distortions of the sort that WC partisans emphasize. Presumably a push in capital formation would outweigh mere incentive losses, but a trade-off is involved which merits investigation in specific cases.
4. Hunger is not just due to lagging agricultural supply; effective demand limitations have to be overcome as well. One key question is whether shifts in the terms of trade towards agriculture will

inhibit or stimulate aggregate demand. Farmers would presumably spend more since their real incomes go up, but non-farmers whose real spending power is reduced by the price shift would have to cut back on real consumption in a form of forced saving.

5. The WIDER country studies for Malaysia and Chile suggest that agroexports can in some circumstances support a growth spurt, but rapid expansion of primary product sales abroad is always at risk of falling foul of low income and price elasticities of demand. The international terms of trade were not favourable in the 1980s on average, and show no clear signs of improving.
6. Similar dangers arise, of course, for 'agriculture first' strategies aimed at expanding food and other farm outputs for national consumption, of the sort proposed by Chakravarty (1987). A supply increase is not helpful to farmers if the price falls more than in proportion to permit the extra output to be sold. The outcome will depend on demand compositional effects of the form just discussed: if falling prices strongly stimulate food consumption by non-farmers while higher output benefits the rural poor, agricultural real income losses may be avoided.

The possibility of adverse price shifts can be characterized in terms of a simple growth model permitting two potential equilibria for agriculture in the macro-economic system (Rao and Caballero, 1990; Taylor, 1991). In the 'low' position a shift in resources towards the sector reduces its terms of trade enough to cut its real income; slow growth follows from induced low investment demand. In the 'high' equilibrium, the terms of trade are stable enough to raise agricultural incomes after the resource reallocation; they spill over into higher demand and investment in non-agriculture, and the economy overall. How can the system be shifted from one equilibrium to the other?

1. Demand for agricultural products can be enhanced (and strong adverse shifts in the terms of trade forestalled) by progressive redistribution within the sector; such an income shift is also likely to reduce population pressure by accelerating the demographic transition. Both labour absorption and rural distribution can be improved by directed policies, e.g. land reforms in Chile in the past and perhaps the Philippines in the future. Where a peasantry persists, its rapid transformation to a capitalist mode of produc-

tion can be socially catastrophic as well as cutting back on rural incomes. Will this be the case for Mexico's *ejidos* as a consequence of that country's drive towards liberalization?

2. Macro policies also have to be designed with present institutional features in mind. Turkey's peasantry, for example, is not likely to continue self-exploitation to raise yields in the face of publicly orchestrated farmgate price reductions, as in the 1980s. Chances are that further shifts in the terms of trade towards agriculture (for food, exports or both?) will be needed in Africa, while Indian landlords are socially (but not politically) ripe to be taxed. They would also resist redistribution within rural India, to the detriment of agriculture first.
3. Fiscal and foreign exchange limitations continue to apply. But it is fair to recognize that public investment in agriculture may well have stronger crowding-in effects than in other sectors. Infrastructural improvements may be essential for both producing and marketing higher outputs, e.g. in Africa, or else for upward jumps in productivity as in Sri Lanka's Mahaveli project, Turkey's Central Anatolia scheme, and perhaps in Argentina and Brazil during the 1990s. Agriculture's input structure may also be less foreign-exchange intensive than the economy's on average, and import substitution of inputs (not to mention some capital goods for the sector) may be 'easy'. Pursuing such possibilities is one way to make higher rural incomes feed back into demand for products of other sectors.
4. Bringing new lands into cultivation may be feasible in a few places, e.g. Nicaragua and Brazil, but elsewhere new technologies are required, e.g. dryland crop improvements, livestock disease control, and small-scale irrigation projects.
5. Incentives besides prices may be crucial, e.g. access to incentive consumer goods (a key issue in import-compressed Africa) and needed inputs, as well as a satisfactory lifestyle in rural towns and on the farm. These can be important possibilities for intersectoral complementarity.
6. Transition towards a high-level agriculture/non-agriculture equilibrium is likely to be a lengthy process, requiring extensive investment and technical innovation and diffusion. The road is not likely to be easy, and the journey will require public action much more extensive than endless WC exhortations to get farmers' prices right.

Notes

1. Exchange rate 'overvaluation' has at least two partially overlapping meanings: (1) Nominal peso/dollar rate increases can lag inflation for a time, increasing costs of national exports to the rest of the world and cheapening imports at home. Overvaluation in this sense has ranged from a few to a few thousand per cent in developing economies worldwide. (2) The current rate – interpreted as a relative price between traded and non-traded goods – can be compared to a 'shadow' rate that would lead to trade balance (or the current level of the trade deficit) if all import protection were removed. Calculations of shadow rates usually suggest that the actual rate is overvalued in the double digit percentage range. The text reference invokes the latter definition; the former is taken up in the observations about distributional adjustment channels below.
2. Supply elasticities in the 0.1 to 0.3 range are statistically typical; agricultural investment is usually a more robust explanatory variable for yield or output. These results are of course consistent with the observation that substitution elasticities among different crops (especially in multi-crop, irrigated agriculture) can be bigger than one.

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5 Political Economy of Structural Adjustment: A General Equilibrium–Interest Group Perspective

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I. INTRODUCTION

Numerous country studies and their syntheses[1] have essentially reaffirmed the generally accepted neoclassical paradigm that amelioration of market failures, technological change and capital accumulation, broadly defined, combined with the efficient allocation of resources to meet final demand, are the keys to economic growth. Trade policy is important because it influences the degree to which international markets for final goods and services, information, and technology interact to yield a growth path along which patterns of production, investment and capacity creation are determined.

However, few countries have pursued reform on their own volition, i.e. without facing or experiencing an economic collapse, except those (such as Korea) that have tended to generally pursue outward oriented policies. Many, e.g. Turkey during the 1970s and Mexico during the 1980s, have undergone policy reform and structural adjustment programmes a number of times.[2] Reform in many countries included in the Corden study (1990) and in the Krueger *et al.* study (1991) was forestalled when rising world prices for exportables increased liquidity.

Experiences with inward oriented policies and attempts at reform reinforces the notion that there are forces for both economic and political equilibria. An extraordinarily large economic adjustment to bring an economy into balance with world markets may so threaten or

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realign the balance of political influence that individuals, including those holding entitlements granted by policy instruments, perceive increased risks to their income streams and to political stability. These perceptions induce them to allocate time and other resources to resist policy change. Both the Lal and Myint (Lal, 1990) and the Krueger *et al.* (1991) syntheses found strong evidence to suggest that constituencies supporting the inward oriented policies become entrenched. When adjustment of domestic policies to external shocks was needed to avert a crisis, negotiations between various groups either proceeded slowly or did not occur in time to alleviate a liquidity crises. The result for many countries was an externally devised liberalization programme that probably would not have come about from a realignment of interest groups alone.[3]

While the accumulated evidence over recent decades appears to reinforce the neoclassical paradigm as a characteristic of economic growth, far less insight has been provided into the motivation for governments to intervene in their economies and how to induce and sustain policy reform. The amelioration of market failure typically entails some form of collective action by groups of individuals, producer and community organizations, to induce government support for the provision of agricultural technology, rural infrastructure, education, information, basic health and other public goods including protection of individual property rights and privately negotiated contracts, all of which serve to lower market transactions costs. However, the socially desirable process of collective action to redress market failure often becomes directed towards interventions in areas where markets are typically efficient in the allocation of resources.

Hence, what is the nature of economic endowments, institutional structures, and access to political and public authority that assures collective action yields interventions that are directed towards areas where markets fail as opposed to intervention in markets that otherwise are efficient in allocating resources? What mechanism assures that collective action directed to redistribute income utilizes policy instruments that minimally distort markets in contrast to the control of market prices, or quantitative restrictions on trade and payment regimes? What mechanism assures that after countries have undergone structural adjustment and stabilization programmes to resolve an economic crisis, that collective action does not, once again, induce policy that drives a country to another economic collapse?

Insights into these questions are provided by drawing upon the central themes of the fairly recent but burgeoning body of literature

referred to by some as the New Political Economy (Meier, 1991). Rather than reviewing the contributions from the various schools[4] for the insights they provide to the questions posed, the approach employed here is to provide an overview of a simple model of rent seeking that encompasses many of the key themes that are otherwise found in disparate parts of the literature.

The main body of the paper is divided into five parts. The structure of the economy and the government is posited in the first part. The government–economy linkage provides the scope for rent seeking and embodies, in a 'black box', the institutions, rules, regulations and norms of behaviour by which households seek to obtain from the state that which they cannot obtain from the market alone. Implications to government choice of policy instruments, and incentives for households to rent seek, are presented in the next two parts. Then, the nature and policy implications of a political–economic equilibrium, if it exists, is discussed. The last major section focuses on the insights provided by this approach to questions of obtaining and sustaining policy reform. Summary, qualifications and a discussion of future directions conclude the paper.

CONCEPTUAL FRAMEWORK: AN OVERVIEW

The essential features include a depiction of the economy, how households in the economy differ, and the linkage of the government to the choices of households. Fundamental to this approach is the assumption that households act rationally by lobbying[5] government to choose the level of policy instruments to alter income streams in their favour. Details of this approach are provided in Roe (1992).

The Economy

The key features of the economy can be described by a Ricardo-Viner type of model that contains three sectors, index $i = r$(rural), h(home), u(urban). Households consume the three goods $q_r{}^i$, $q_h{}^i$ and $q_u{}^i$. Sectors r and u produce traded goods y_i and the other a home good y_h. Each sector employs a factor (L_i) that is mobile across the economy (labour), a sector specific factor x_i that can only be traded within the sector, and a sector specific public factor G_i.[6] Technology is assumed to be homogeneous in L_i and x_i. The public factor is produced by the government using only labour, l_i^g.

Sector specific factors of production are used to capture the effects of distortions on household income since the effects of policy often become embodied in the value of sector specific assets. These effects on income motivate households to lobby on their behalf. Public goods are included for the same reason, but also to illustrate the beneficial nature of lobbying behaviour since the market process fails to optimally allocate them. Home goods are included to depict the situation described by Bates (1983) and others where, in some low income countries, a coalition may form among households that earn income from the production of home and urban goods for purposes of lobbying for disprotection of rural goods. This situation is more likely to arise when rural goods account for a large share of total household expenditures.

Assuming a solution within the economy's cone of diversification, market clearing conditions are given by:

$$f_i(w, c_i; G_i^0) = p_i, \tag{1.a}$$

$$\sum_i \partial\pi^i/\partial w = -\sum_i (L_i - l_i^0 - l_i^{g^0}) \tag{1.b}$$

$$\sum_i q_h{}^i - \partial\pi^i/\partial\pi_h = 0, \tag{1.c}$$

where each sector's total cost function, $f_i(w, c_i; G_i)y_i$, is separable in y_i due to the homogeneity of the sector's technology. Variable c_i is the rental rate to the i-th sector's specific factor, x_i. l_i^0 denotes the quantity of labour allocated to lobbying by the i-th household, π^i denotes the indirect profit function for the i-th sector and $q_h{}^i$ is the i-th household's demand for the home good. The '0' notation indicates that these variables, for the time being, are held fixed. Equation (1.a) sets marginal cost equal to price p_i, (1.b) is the labour market clearing condition, and (1.c) is the demand–supply balance for home goods. This is a system of five equations in the unknowns (w, c_i, c_h, c_u, p_h).

The comparative statics of this model depart only slightly from the traditional Ricardo-Viner framework and hence are not repeated here.

The Government

While various approaches depict government behaviour differently, their common feature is the derivation of policy decision rules that depict how policy instrument levels respond to lobbying and/or voting

behaviour. One approach is to posit a political authority that acts as though it forms preferences over the utility of households in the economy, and then chooses policy instruments to maximize the weighted sum of these utilities subject to the condition that it cannot incur a fiscal, and hence a trade deficit[7]. Given the policy instruments p_r and l_i^g, the government is assumed to solve

$$\text{Max} U^g = \sum_i I_i(l_r, l_h, l_u) V^i(p_r, p_h; \Pi^i) \tag{2}$$

where the maximization procedure is done over the set $\mathbf{C} = \{(p_r, l_r^g, l_h^g, l_u^g) \in \mathbf{R}_+ | G_i = G_i(l_i^g), T = C\}$. The i-th household's indirect utility function, $V^i(W)$ depends on prices and total household income Π^i. The $G_i(l_i^g)$ are technologies for producing the public goods. The functions $I_i(\cdot)$ define the government's preference structure. Maximization requires that fiscal expenditures equal the lump sum income transfers to households,[8] i.e. $T = C$,

$$C = -w \sum_i l_i^g + (p_r - p_r^w) E_r \tag{3}$$

where excess demand is $E_r = \sum^i q_r{}^i - \partial \pi^i / \partial p_r$ and $p_r{}^w$ is the world price of the rural good in terms of the urban good. Direct taxes on income are not treated as a policy instrument; focus is on the level of the price and public good instruments. Equation (3) is used to close the model.

The values I_i are weights that define the government's preference ordering. They are conceptualized as the influence functions initially posited by Becker (1983). As suggested by Becker, the influence functions represent the end product of pressure generated by interest groups. Institutional, cultural and other differences among countries give rise to different ways in which the interests of the policy are reflected in the policy choices of the state. A fundamental characteristic of virtually all political systems is that some groups have more influence than others. Hence, households lobby for purposes of generating influence I_i; i.e. they lobby in order to alter the parameters I_i of the government preference function, and hence the choice of instrument levels in X_g.

This structure is very much a political black box or 'reduced form' approach. Details of the institutions for establishing laws, politicians, political parties, mechanisms for enacting and administering laws and defining policy instruments from a set of possible instruments receive

no particular attention. The basic result is that policy instruments p_r and G_i can be used to raise the welfare of the more influential groups.

THE GOVERNMENT'S DECISION RULES

Roe (1992) shows that the model does not preclude, by construction, a free market-Samuelsonian efficiency result. He shows that if the Negishi condition holds, i.e. $I_i = 1/(\partial V^i/\partial \Pi^i)$ and if dE_r/dp_r is non zero, then a maximum to (2) is characterized by $p_r = p_r^w$ and $(\partial \pi^i/\partial G_i)\partial G_i/\partial l_i^g = w$.

Under these conditions, the government chooses a price that would also prevail under free trade. As well, labour is allocated to the production of public goods to the point where the product of the marginal physical product of labour in producing the public good for the i-th sector, $\partial G_i/\partial l_i^g$, and the marginal value product of the public good, $\partial \pi^i/\partial G_i$, equals the wage. If each sector has several agents, G_i is a pure public good in the sector. In this case, under the conditions of proposition 1, public goods supply satisfies the Sammuelsonian efficiency condition in each sector (sum of marginal values of the public good equals marginal cost) as well as being efficiently allocated between sectors. While it is not necessarily true that (2) is concave for any positive value of I_i, concavity is assumed to hold in the neighbourhood of the Negishi weights.

Thus, for the case of an interior solution to (2), let the government's policy decision rules be denoted by:

$$p_r = p(l_r, l_h, l_u, e^{\rightarrow}) \tag{4.a}$$

and

$$l_i^g = l_i^g(l_r, l_n, l_u, e^{\rightarrow}) \tag{4.b}$$

where exogenous variables, denoted by $e^{\rightarrow} = (p_r^w, L_r, L_h, L_u, x_r, x_h, x_u)$, are world market price, labour and sector specific endowments, respectively. Equation (4.a) is the government's price policy rule and (4.b) are its public good rules. Of course, these rules are not independent.

By analogy to an economic market, the decision rules (4) can be viewed as the 'supply functions' of the instrument levels provided by

the state. In this context, important questions relate to the circumstances under which the instruments p_r and l_i^g are positively related to an increase in lobby levels l_i, e.g. the sign of $\partial p_r/\partial l_i$, and the importance of labour and sector specific endowments on increasing the 'efficiency' with which an incremental change in the level of lobbying will impact on the governments choice of instrument levels, e.g. $\partial^2 p_r/\partial l_i \partial x_i$. In other words, will the government be more responsive to a given level of lobbying if the sector is relatively well endowed with sector specific resources? An overview of these relationships are provided here (see Roe, 1992, for the details of their derivation).

In general, the government's choice of instrument levels can be shown to depend on household's level of production y_i, consumption q_r^i, q_h^i and q_u^i, and its net labour market position, i.e. whether households hire labour or earn income from working outside the household, and changes in expenditures to incremental changes in instrument levels, e.g. $\partial p_h/\partial p_r$, $\partial w/\partial p_r$.

Consider first the price policy, equation (4.a). It is shown in Roe (1992) that for the case where relative influence favours the rural household,[9] protection is likely to be larger if the increase in expenditures on home goods, $q_h^r \partial p_h/\partial p_r$, is small, market surplus $(y_r - q_r^r)$ is large and the household earns wage income. This result seems consistent with the stylized facts of US and European farm programmes. However, even in this case, the result does not follow in all circumstances. At another though unlikely extreme, disprotection $(p_r < p_r^w)$ is possible if the market surplus of the rural household is small, the proportion of their income spent on home goods is relatively high, and the household hires labour. Since it is unlikely that a household with a small market surplus would also hire labour, this is an extreme and unlikely outcome.

Another result is that, all else constant, protection tends to be proportional to the household's endowment of the sector specific factor x_r, i.e. $\partial^2 p_r/\partial l_r \partial x_r > 0$. It follows from the technology assumed that supply can be expressed as $y_r = y_r(p_r, w; G_r)x_r$. A large endowment x_r causes an increase in y_r and in market surplus. Effectively, the government is motivated to 'supply' an incremental increase in protection for a given lobbying level since a higher return to the household's welfare is earned per unit change in p_r if, all else constant, it is relatively endowed with the sector specific factor x_r.[10] Since $\partial y_r/\partial G_r > 0$, this same result applies to the provision of public goods. This rather strong prediction appears consistent with the empirical evidence provided by Persson and Tabellini in their time series–cross

section study of nine countries. They find that more inequality leads to policies which tend to favour those endowed with relatively more resources. It may also partially explain why farmers in wealthy countries tend to receive protection relative to farmers in low income countries. Fewer farmers per unit of productive land implies that an incremental unit of protection may yield more welfare gain per farm than the manipulation of other policy instruments.

Price policy is less clear for households producing home goods. When influence favours these households, disprotection of the rural sector is likely if the home good households spend a larger portion of their income on the rural good, if the gain in income from the sales (market surplus) of the home good is small and if a relatively small amount of income is earned in the labour market. Otherwise, the home good household is less affected by price policy, as would likely be the case if it were wealthy with a larger portion of income spent on the urban as opposed to rural goods.

The results are more clear for urban households. When influence favours urban-good producing households, the model suggests that government policy will tend to disprotect the rural good. The only disincentive against disprotection is the increase in the urban household's wage bill from altering the relative price in favour of urban goods, and the increase in expenditures on home goods. However, the direct effects on income from the implicit protection of urban goods outweighs these costs. Again, disprotection of the rural good tends to increase with the proportion of income spent on the rural good.

Next, consider policy for the provision of public goods, equations (4.b). Bias in the provision of the public good is measured by the extent to which marginal value product of the public good, $(\partial\pi^i/\partial G_i)\partial G_i/\partial l_i^g$, departs from equality between sectors. There is both a level and a bias affect. Bias can be shown to depend on many of the same variables as price policy. These include changes in the level of expenditures on home goods, on wage income (or expenditure), and on the level of price bias, $(p_r - p_r^w) < (>)0$. Price base also affects the total production of the public good.

Another interesting result is that price and public good policy are substitutes within certain ranges of these variables.[11] For example, the government can trade off the level of disprotection of the rural good by increasing the provision of the public good to the urban household. However, production and provision of the public good causes an increase in wages. The price of home goods can also rise depending on

the price and income effects on the demand for home goods. Thus, a situation where price and public good instruments are employed at positive levels would seem to be a common result.

Since the welfare of the *traded* good households can increase from the provision of their public good, government has an incentive to produce the good for these sectors. However, this is not necessarily the case for the home good household. Expanding its production capacity can be immiserizing if the price of the home good falls.

All else constant, there is a tendency to bias the provision of public goods to urban households when rural households are labour surplus and urban households are labour deficit. More specifically, the circumstances are as follows. The provision of public goods tends to raise wages, due to an increase in the productivity of labour and because more labour is employed in the production of the public good. Further, provision of the public good increases rents to the urban household's sector-specific factor and decreases rents to the rural household because wages rise. If rural households earn wage income from outside the sector, then rural households benefit from the provision of urban public goods if the increase in their wage income exceeds the decline in rents to the rural sector specific factor. Urban households benefit if the increase in rents to their sector specific factor exceed their increase in wage expenditures.

Finally, for a given level of influence, the sector relatively more endowed with the sector-specific factor tends to be favoured in the allocation of the public good since $\partial^2\pi^i/\partial G\partial x_i \geq 0$.

THE HOUSEHOLD'S DECISION RULES

Households are assumed to know the government's decision rules (4) and, taking other household lobbying levels as given, to behave as though they solve the problem:[12]

$$\text{Max } V^i(p_r, p_h; \Pi^i) \tag{5}$$

where the maximization procedure is done over the set $\ell_i \in \mathbf{R}_+$. Substituting rules (4) into (5), the FOC for an interior solution suggests the following proposition: behaving as Nash, households equate the marginal cost to marginal return from an incremental change in the labour allocated to lobbying;[13] for the rural good producing household,

$$((y_r - q_r{}^r)\partial p_r/\partial l_r - q_h{}^r[dp_h/dl_r]) + (\partial \pi^r/\partial G_r)(\partial G_r/\partial l_r^g)\partial l_r^g/\partial l_r + (L_r - l_r - L_r)[dw/dl_i^r] + \gamma_r[dT/dl_r] = w \quad (6.a)$$

the home good producing household,

$$((y_h - q_h{}^h)[dp_h/dl_h] - q_r{}^h\partial p_r/\partial l_h) + (\partial \pi^h/\partial G_h)(\partial G_h/\partial l_h{}^g)\partial l_h{}^g/\partial l_h + (L_h - l_h - L_h)[dw/dl_h] + [\gamma_h[dT/dl_h] = w \quad (6.b)$$

and the urban good-producing household,

$$(-q_r{}^u\partial p_r/\partial l_u - q_h{}^u[dp_h/dl_u]) + (\partial \pi^u/\partial G_u)(\partial G_u/\partial l_u{}^g)\partial l_u{}^g/\partial l_u + (L_u - l_u - L_u)[dw/dl_u] + \gamma_u[dT/dl_u] = w \quad (6.c)$$

where γ_i is the share of taxes paid, and $d_h d/dl_i$, dw/dl_i and dT/dl_i are changes in home good prices, wages and taxes to changes in lobby levels l_i, respectively. These terms are lengthy, see Roe, 1992, for details.

These result suggests that households are concerned with the optimal allocation of their lobbying resources so that, at the margin, they do not necessarily prefer the provision of public goods over policies that distort prices. In other words, the marginal cost-return to the household's lobbying resources can favour price distortions as opposed to the provision of public goods depending on which policy instrument yields the highest returns to the household's resources. This marginal cost-return calculus is the typical rent seeking result (Bhagwati, 1982; Srinivasan, 1991) that the allocation of resources to influence prices (or tariffs) can decrease a country's production possibilities.

The results reinforce many of the findings in the synthesis studies mentioned, particularly Krueger *et al.* (1988). They are also supportive of the now familiar explanations by Bates (1983), Honma and Hayami (1986) and others[14] of low (resp. high) income countries' tendency to tax (resp. subsidize) agriculture relative to the non agricultural sector of the economy.

Starting with Equation (6.a), consider only the terms in $\{\cdot\}$; they show changes in income and expenditures from production y_r and consumption $q_r{}^r$, $q_h{}^r$ due to lobbying. If, for reasons mentioned $\partial p_r/\partial l_r > 0$, and the sum in $\{\cdot\}$ is positive, (i.e. the increase in the value of market surplus exceeds the increase in expenditures on home goods)

then the household will anticipate a gain from lobbying. Under these circumstances, the larger is the scale of production, G_r and x_r large, all else constant, the greater is the household's incentive to increasing its lobbying activities to influence the government's choice of p_r. The household may incur some cost in addition to the opportunity cost of labour; this depends on the sign of dp_h/dl_r and the level of home goods it consumes. Thus, this result alone suggests that, all else constant, rural households in low income countries have less incentive to seek protection than do rural households in wealthy countries where market surplus tends to be large.

What is the effect on other households from the lobbying activity of the rural household? Ignoring tax effects, the cost to other households is given by $\partial V^i/\partial p_r$. The effect on the home good household is indeterminate since $\partial p_h/\partial p_r$ cannot be signed without additional structure, although increased expenditures on rural goods, and an increase in wages result. If $\partial p_h/\partial p_r < 0$, the value of the home good household's market surplus falls and expenditures on rural goods rise. For the household to be better off, these losses would need to be exceeded by gains in wage income from working outside of the home good sector. The situation is much more clear for urban households.

For low income households, where rural goods tend to account for a larger share of consumption expenditures than home goods (services), the urban-good producing households have incentives to lobby for a decrease in the price of p_r, i.e. to counteract the lobbying activities of rural households. Holding all else constant, it can be shown that the larger is q relative to q_r^i, for $i = h, u$, the greater is the incentive to disprotect agriculture. If $\partial p_h/\partial p_r > 0$, then urban households experience an increase in expenditures on rural and home goods as well as an increase in hiring cost if they are labour deficit. Thus, it is possible for the home and urban good producing households to hold common interests in the disprotection of the rural good.

The level of sector-specific factors also effects incentives for the home and urban good households. If G_i and x_i, for $i = h, u$, are large (while remaining within the country's cone of diversification), then $(y_h - q)$ and q and q_i^h will tend to be larger than otherwise. If preferences are homothetic or if households are poor so that consumption of the rural good accounts for a large proportion of income, then these households can suffer a greater decrease in utility for a given level of protection of the rural good. In this situation, incentives for the home and urban household to disprotect the rural good will tend to be in proportion to their level of public goods G_i and

sector-specific factors x_i. However, Engle effects are not likely to be linear. Instead, wealthier households are likely to decrease the proportion of income spent on the rural good. Hence, in developed countries, the rural good tends to account for a small proportion of total income. In this case, both the home and urban good producing households can have less incentive to lobby for disprotection of the rural good.

Next, consider the households' position in the labour market. In low-income economies, production in the rural sector tends to be labour intensive, and capital intensive in developed economies. In this case, the Ricardo-Viner model predicts that an increase in p_r would yield a larger increase in wages in a low-income economy than in a high-income economy.[15] If, for low-income economies, urban good producing households are labour deficit, higher rural good prices would appear to increase their wage bill to a greater extent than will higher urban good prices.[16] If home good producing households are labour surplus, the net effect of rising wages depends on the sign of $\partial p_h/\partial p_r$. Thus, it is possible for home and urban good households to have an additional incentive, due to the labour market, to form a coalition (though not necessarily explicit and formally organized) to lobby for lower rural good prices. In advanced stages of development the production of the rural good tends to be capital intensive, and hence this incentive declines.

Thus, inferences drawn from this simple framework can be consistent with the observation that in countries where food accounts for a relatively large share of disposable income, political pressures tend to favour cheap food policies because urban and possibly home good households experience welfare gains from cheap food. Typically, in the process of development, the market surplus of rural households increases as scale and specialization occur while the proportion of income spent on food decreases. Then, rural households are more willing to influence policy that favours the rural good.[17] At the same time, urban households tend to be less willing to influence rural good policy since less of their income will be affected by the lobby resources allocated for this purpose. Since a greater proportion of a country's GNP is accounted for by foreign trade as development occurs, it is no longer profitable for the home good producing households to counteract the lobbying efforts of the rural households for higher priced food. Consequently, in developed countries, where food is a small component of expenditures and y_r is large, pressures tend to favour policies that subsidize food production.

Consider the social good side of the lobbying process, i.e., the provision of public goods and its effect on income through the marginal value product, $(\partial\pi^I/\partial G_i)(\partial G_i/\partial l_i^g)$. The more efficient the government is in producing the public good, $(\partial G_i/\partial l_i^g)$ large, and the more important is the public good to increasing the production of y_i, $(\partial\pi_i/\partial G_i)$ large, for $i = r, u$, all else constant, the more willing is the rural and urban household to lobby on its behalf. Although, since $\partial w/\partial l_i^g > 0$, for $i = r, u$, the incentive to lobby is conditioned by whether the household is labour surplus or deficit. Since the sign of $\partial p_h/\partial l_h^g$ is indeterminate, the result is less clear for the home good producing households. Note that the marginal product of the public good also depends on the household's endowment of the sector specific factor x_i. Thus, the value of economic policy gets built into the value of these factors. Had the model accounted for a skewed distribution of the sector specific factors among households within a sector, then the willingness to lobby for policies that increase the rents to these factors would depend, in part, on whether a household is a surplus or deficit user of the factor.

Now, let us go a bit beyond the bounds of this simple model. Policies that have an adverse impact on the rental value of the sector specific resources also have an adverse impact on the sector's capacity to invest when these factors meet collateral requirements. Policies that discriminate against agriculture can implicitly decrease its capacity to obtain credit relative to protected sectors, and hence its capacity for capital deepening, wealth creation and, in turn, its incentives to lobby. Further, just as protection gets built into the value of sector specific assets, so too do the effects on sectoral rental rates attributable to capital market distortions of the nature mentioned. If x_i were plant and equipment of a sector protected using capital market controls (e.g. overvalued exchange rates for imported intermediate goods, subsidized credit), then liberalization can imply a decline in wealth of large magnitudes. If the household correctly perceives this possibility, then, as Equation (6) suggests, it may be willing to significantly increase its lobbying commitment to preclude such an eventuality, thus providing insights into why a crises may be required to induce change, and why reform may become incomplete or blocked.

Finally, an important question is whether households behave atomistically towards the effects of their lobbying on the terms in $[\cdot]$, i.e. the price of home goods, wages and taxes. The premise here is that households can influence the price and production of public goods,

but, as pointed out by Mancur Olson, they may perceive themselves to be such a small component of the national economy that they do not take into account the effects of their actions on the price of these endogenous, economy-determined variables. If these effects are not taken into account, their perception of the marginal cost-return calculus would only include the direct effects of lobbying as depicted by $\partial p_i/\partial l_i$ and $\partial l_i^g/\partial l_i$. In this case, households can overestimate the returns to their lobbying activities and hence, commit resources to lobbying activity than would otherwise not appear to be in their self interest.

The efficiency with which lobbying activity is converted into influence is revealed by the partial derivatives $\partial p/\partial l_i$ and $\partial l_i^g/\partial l_i$ in Equation (6). Changes in ideology (North, 1981, p. 49), changes in the formal rules as in passage of new statutes, judicial changes as a result of court decisions altering the common law, property rights and changes in social norms, education, and personal standards of honesty, and so on, alter the parameters of Equation (4) and hence of these derivatives.[18] Households are probably aware that these changes can alter their relative political influence. An analysis of these issues is left to another paper.

THE ECONOMIC-POLITICAL EQUILIBRIUM

In the previous discussion, the i-th household chose its lobbying level given choices of other households. In this section, we discuss the nature of a political equilibrium and its implications for a country's response to economic shocks. The simplest approach at this level is to posit a one-shot game with Nash behaviour. Even with this simple set-up, the existence of a Nash equilibrium is not trivial, although it is shown to exist in a simpler model by Coggins *et al* (1991).

Assuming strict concavity of Equation (5) in l_i, let

$$l_i = l_i(l_j^0, l_k^0, e^{\rightarrow}), i \neq j, j, k = r, h, u \tag{7}$$

denote the household's lobbying rule obtained as a solution to Equations (6.a), (6.b) and (6.c), respectively. Equation (7) is the i-th household's best response to the other households' action (l_j^0, l_k^0). Then l_j^0 are a Nash solution if, and only if, Equations (6) hold simultaneously, i.e.

$$\partial V^i/\partial l_i = 0, i \neq j, k = r, h, u \tag{8}$$

where the argument $l_i \in l_j(l_i^0, l_k^0, e^{\rightarrow})$.

Suppose, a solution exists, although it may not be unique. Then, the 'economic market' is described by Equation (1) where the endogenous variables of key interest are (w, p_h) and the rental returns (c_r, c_h, c_u) to sector specific factors. The 'political market', is defined by Equation (7).[19] Hence, in this framework, forces for both an economic and a political equilibrium exist. While a equilibrium may be possible in the economic market, a political equilibrium may not not exist, however.

Changes in exogenous variables (elements of $e^{\rightarrow}$) could then force a change in both the economic and the political market. Or, put another way, within this framework, an extraordinarily large shock could force changes in instrument levels (as in the case of IMF and IBRD (International Bank for Reconstruction and Development) negotiations with economies facing an eminent collapse) that may so threaten or realign the balance of political influence that a political equilibria may not exist within the confines of existing institutions embodied in the government's policy decision rules (Equation (4)). Moreover, once the crises is resolved, what prevents the interest groups from once again lobbying to induce policy that precipitates yet another collapse?

At the very least, p_r, l_i^g, w, Pp_h will be subject to variation and, while outside the confines of this simple model, a country may need the capacity to accumulate debt in the short run in order to limit extra ordinarily large adjustments if political stability is to be attained.[20] More realistically, it is likely that the economic variables will tend to adjust more rapidly, while the political variables, namely the l_i, will adjust more slowly. In the Krueger *et al.* (1988) synthesis, it was noted that when adjustment was needed to accommodate exogenous shocks, negotiations between various interest groups either preceded slowly or did not occur in time to alleviate a liquidity crises. The result for many countries was an externally devised liberalization programme that probably would not have come about from a realignment of interest groups alone. Along the same lines, reform in many countries included in the synthesis was forestalled when rising world prices for exportables increased liquidity, and in some case led to spending sprees that delayed and worsened the country's eventual adjustment process.[21]

In the next section, the line of reasoning suggested by this framework is used to infer how reform might be sustained without intervention in a country's political process.

ELEMENTS TO OBTAINING AND SUSTAINING POLICY REFORM

Attention is focused first on limiting the direct and adverse effects of a country's institutions on sustaining reform, and then on individual incentives. Discussion proceeds in the spirit of the framework presented above.

Institutional Components of Reform

Clearly, institutions are important since they are a component of the political technology available to respective households, the black box behind Equations (2) and (4). Institutions 'consist of the structure that humans impose on their dealing with each other', (North, 1991, p. 4). They influence access to information and the process, rules and constraints that permit the policy to access political authority. Note the knowledge and information requirements of the household, the prerequisites for informed-rational choice that knowledge of Equations (4) imply. A competitive market model with no government is informationally efficient since households only need to respond to the information provided by price signals. However, in the 'political market', the household's decision-making problem is more complex since it is dependent on (*a*) knowledge of the political process (Equations (4)), (*b*) the effects of lobbying on market determined variables, w, p_h and by implication, c_r, c_h, c_u, and taxes T, and (*c*) the counteracting lobbying of adversely affected households.

As noted by others, e.g. Krueger (1990b, p. 21), when the costs of a policy are obscure, government can manipulate instruments to the advantage of special interests without incurring the wrath of other interests and their political supporters.[22] Unequal access to public authority, and informational asymmetries regarding the effects of policy instruments on income streams, allows the advantaged groups to obtain preferential benefits from the state at lower resource (lobbying) cost. Drawing heavily on North (1991, pp. 12–13) in the context here, an efficient political market, like an economic market, is one in which households accurately evaluate the policies pursued by competing households in terms of the net effect on their well-being. Ignorance, incomplete information and the prevalence of ideological stereotypes that individuals develop to explain their environment and make choices result in political markets that can perpetuate an economic policy of interventions in areas where markets function well in resource

allocation and at the cost of not intervening in areas where markets fail.[23]

Clearly, political markets are far more obscure in revealing information than are economic markets. Political markets tend to allow information to be privately held and signals privately received more easily than in the case of economic markets. If lobbying levels of other households are not observable, then some information is privately held. Further, the provision of public goods G_i may not be of a form that is publicly observable. Presumably, the government knows the lobby levels l_i. Revealing of this information to some and not other households can change the nature of the game posited (Equation (8)) and hence the nature of equilibrium in the political market. Education and a free and informed press should assist to inform rational agents of the consequences of their lobbying activity. This information assists individuals in performing the imputations implied by the derivatives dp_h/dl_i, dw/dl_i and dT/dl_i in Equations (6), and in discerning the nature of the political market, Equations (8).

However, this source of information supply may not be sufficient. Since information markets typically fail to supply the optimal amount of information, information supply would seem to fall into the government domain. But this may be a trap. To the extent that the simple model posited above depicts elements of reality, it can be shown that Equations (4.b) predicts that the government does not have the incentive to optimally allocate information as a public good.[24] Given preference weights, government behaviour that optimizes (Equation (2)) may allocate more of the public good information to those with the highest relative influence or withhold information that would otherwise permit less influential groups to compete better in the political market. The bias in the provision of information may only be resolved by the presence of an international agency or some other institution outside the control of interest groups that can make available this type of information to all groups.

Four additional implications follow from this discussion. First, policy reform should re-orient government so that policies and instruments are chosen that provide the least scope for rent seeking. As mentioned, this involves excluding from government control instruments associated with direct intervention in markets that are efficient in allocating resources. The government also may need to signal its credibility to resist retuning to instruments over which agents are motivated to rent seek. A clear example of this was Salinas' strategy of leading Mexico's membership in the GATT (Shane, forthcoming).

Effectively, membership signals to special interests that they will face increased costs to rent seek over market instruments covered by the treaty.

The scope for rent seeking should also be lowered in the provision of public services or the regulation of natural monopolies. The intent is to force the decision on trade-offs over the consumption of government services and regulated activities to be made at the household level. Mechanisms for direct income transfers to impoverished households that have minimal effects on economic incentives and the provision of education, training and other means of increasing their productivity are probably preferred alternatives to the direct subsidization of service.

Second, if due to inadequate public infrastructure, market intervention is required to generate public revenues, the scope for rent seeking can still be lowered by the choice of policy instruments. For example, while tariffs invite rent seeking, they are probably less open to rent seeking than are quantitative restrictions, such as licences which allocate rent from the policy instrument directly to the holder of the licence. Another example is income taxes. A schedule of tax rates that apply universally to income categories regardless of household location, status or other distinguishing characteristics is likely more rent and distortion free than are market instruments. The level of the income transfer is more transparent and the tax incidence is clear to all lobby groups. Sales and value added taxes are another example of an instrument that is reasonably free from the differential effects of rent seeking. A market determined currency exchange rate is not only efficient at allocating foreign exchange to its most profitable alternative, it also prevents the rent seeking that comes about under fixed exchange regimes when ministries and committees must administratively allocate exchange.

Third, rent seeking can be reduced by the choice of public agency participating in the design and implementation of policy. If units of government having discretion over policy have a constituency, then their actions are likely to favour this group, effectively altering the political technology embodied in the policy decision rules (Equations (4)), in the group's favour. Krueger (1990.b) suggests choosing institutional arrangements that will force trade-offs to be faced in the administration and execution of policy. For example, a tariff commission would tend to be more protectionist than would a ministry of trade. A ministry of agriculture may be more concerned with rural households than a ministry of supply (the case of Egypt). Along the same lines of reasoning, requiring that programmes be funded out of

government revenue rather than off budget tends to lower the information requirements regarding the gains and losses to various interest groups.[25]

Finally, suppose the political equilibrium (Equation (8)) depicts a prisoner's dilemma or multiple equilibria. Institutional mechanisms need to be invented to resolve the problems this dilemma presents to policy reform, other than waiting and trusting in the political entrepreneur championed by political scientists.[26] Granted, some mechanisms are currently in use. For instance, the conditionality of World Bank and IMF programmes designed to lower the cost and period of time required to redirect resources to more productive alternatives are much like compensatory payments. In the case of Egypt, 'compensatory like' payments have been used to induce price policy reform in agriculture (Holt and Roe, 1991). A component of the country's 1991 structural adjustment loan is to make resources available for a Social Fund. This fund will provide income support to deal with the adverse social impact and hardships that low-income segments of the population are likely to experience in the process of reform, and hence lower the perceived risks of social disturbances. Clearly, social inventions in this area are desperately needed.

If policy reform does not address these types of inequities, is it likely that a post crisis policy will once again steer a country towards an inward orientation? Is political reform a likely necessary condition, as appears to be happening in many of the centrally planned economies, to prevent a return to an inward orientation? I conjecture, for reasons below, a qualified negative answer to both of these questions.

Inducing Disadvantaged Households to Lobby in their Self-Interest

The lobbying behaviour described by Equation (6) suggests that an economic shock, crisis, or the mentioned changes in the scope of rent seeking, can induce the household to alter its lobbying levels, that is, to re-equilibrate their marginal return–marginal cost to lobbying conditions. In inward oriented economies, policy reform typically provides incentives to households associated with the traded sector to expand production and, for reasons mentioned, to induce them also to increase their lobbying efforts. At the same time, households associated with protected industries and home goods typically experience a decreased incentive to produce, and to lobby for policy to increase their income streams from these sources. Thus, policy reform alone can potentially alter the political equilibria implied by Equation (8) in a manner that

produces political resistance to returning to the previous state once the crisis that precipitated reform is resolved.

Second, as mentioned, the provision of public goods (education, information, health services, roads and infrastructure, agricultural research, etc) increases the productivity of private sector resources, $-\partial^2\pi^i/\partial w_i \partial G_i > 0$, and the willingness of households to invest in quasi-fixed factors of production.[27] Effectively, this increases profitability and, all else constant, condition (6) suggests that it should also motivate the traded goods households to allocate more lobbing resources on their behalf. Thus, policy reform that focuses on areas where markets fail will tend to induce an additional source of counteracting 'political will' to redress the disprotection commonly imposed on the rural sector.

This argument could be taken to an additional extreme. In environments where political influence strongly favours the urban sector, it may be socially profitable for an international agency to induce a rural bias in public good provision. This bias will tend to motivate the rural sector to allocate more resources to counteract the lobbying of other sectors and lead to a more competitive balance of political influence between the sectors, thus reducing pressures for a return to inward oriented policies.

A third point relates to the functioning of capital markets and the diversification of household assets. Even though capital markets do not appear in the model, it can be seen that current and capital account linkages that affect relative prices of commodities or factors, can induce households to alter their lobbying levels depending on their preferences, distribution of endowments and the competitiveness of one sector relative to the other. Since capital market distortions in inward oriented economies almost always decrease the rural sector's capacity to collateralize its sector specific assets, reform of these markets can be expected to increase also incentives for rural households to lobby in their behalf. Further, since these markets are prone to failure, interventions that lower the cost of transacting rural sector loans, and costs associated with problems of moral hazard and adverse selection, establishment of property rights and so on should, through profit effects, provide an additional lobbying stimulus for rural households.

Furthermore, it can be seen from Equation (6) that if households hold shares in both sector's sector-specific assets, then the household would have less incentive to seek its differential advantage, since lobbying that benefited one sector at some cost to the other would be

borne by both households. Households would have a greater incentive to cooperate, i.e. to lobby in ways that benefit both. Hence, capital market reform will not only ease capital deepening and the associated willingness of the rural sector to lobby on its behalf, it will also induce a household to diversify its asset portfolio. Then, lobbying focused on market interventions is likely to be less rewarding than lobbying focused on increasing the provision of public goods. Effectively, coalitions would tend to become broader-based.[28] This point is merely an elaboration of Mancur Olson's suggestion that broad based coalitions tend to take into account the macro-economic effects of their lobbying efforts so that the adverse effects of the differential advantage they seek tend to be less than those of narrow-based coalitions.

For households (urban, and possibly home) that suffer losses associated with reform,[29] compensatory payments in lieu of current policy may be used to alleviate their tendency to resist reform and the tendency to become entrenched. For example, since income is partially dependent on sector specific factors, structural adjustment programmemes that lower the cost of reallocating sector specific factors to more productive activities within a sector should lower the resistance to reform. Resistance to reform posed by home good households, many of which tend to be employed in government activities that are typically targets for retrenchment, may be lowered by special arrangements that entail redirecting their activities to areas where markets fail, training to ease their entry into the labour market and expansion of employment opportunities by encouraging the entry of foreign firms into the domestic economy. Generally speaking, activities that create income alternatives to a distorted policy regime should serve to lower the lobbying incentives of those opposed to reform. Hence, education, training and other assistance to broaden participation in markets would seem to be reasonable measures of reform programmemes.

These adjustments may so alter the nature of the equilibria implied by Equation (6) for inward oriented economies that incentives are created to prevent the return to the old policy regime without meddling in a country's political process.

SUMMARY REMARKS

The central theme is that economic policy, policy reform and sustaining policies to obtain economic growth in the longer term is a political process. Collective action of some form exists in all countries; the

challenge is to design structures that channel this action in ways that yields an efficient allocation of a country's resources and prevents it from returning to the old policy regime once a crises is resolved. The approach employed was to posit a simple model of rent seeking from which insights could be obtained into the factors that induce collective action to be misdirected, and into how policy reform might be induced and sustained.

Models of this type have a large number of shortcomings. For example, voting was not explicitly considered, as it is in Young and Magee (1986). However, the addition of voting to the model only alters the insights provided in the marginal sense that a majority voting process can constrain the power of lobbyists to influence public authority. But, voting models suggest that in the absence of single peaked preferences, the outcome of a voting process is heavily dependent on the conditions and rules under which voting takes place, i.e., the outcome is likely to be unique to each country.[30] Hence, these approaches are perhaps best viewed in the spirit of Aumanns (1985, p. 37) when, in his discussion of game theory, he remarks that 'we cannot ask, is it right or is it wrong? Rather, we must ask, how often has it been useful? how useful has it been?'

The point is made that the linkages between collective action and the market need to be considered in a general equilibrium context, and particularly so since recent economic history has clearly shown that the major effects of interventions tend to be indirect. That is, a subsidy to one sector has been used to extract resources from another, while at the same time biasing and under-investing in areas where markets fail to optimally allocate society's resources.

The view expressed here is that it is unlikely that political reform is a prerequisite for economic reform. However, this entails using policy instruments that decrease the scope for rent seeking, provide resources – in the form of public goods – to the less influential so that they are more willing to participate in the political process on their behalf, possible compensatory payments to those disadvantaged by reform, and reorienting government intervention so that focus is placed on areas where markets fail. This is not to conclude that modest institutional reform may not be required to redress those institutional structures that in developing countries tend to lower the costs of urban-based relative to rural-based coalitions to influence public authority. Nevertheless, reforms of the nature discussed in this paper would probably set in motion those forces that would seek to redress these institutional biases in any case.

Notes

1. Since the studies of Balassa (1986) and Mitra (1986) these include a 17-country study discussed in Corden (1990) and 21-country study directed by Lal and Myint and discussed by Lal (1990) and another synthesis by Krueger *et al.* (1988) of an 18 country study of the political economy of agricultural price policy. (See Krueger *et al.* (1988) for the synthesis of that Latin American component.)
2. Turan (1991) provides an interesting account of the policies of Turkish reform efforts.
3. The case studies of the Dominican Republic (Greene and Roe, 1991) and Egypt (Holt and Roe, 1991) found that when pressures on foreign exchange requirements eased, even temporarily, their commitment to policy reform also slackened.
4. See Rowley *et al.* (1988) for a review of the contributions from public choice, Ruttan (1991) for a review of some of the key views from political science, and Srinivasan (1991) and Bhagwati (1991) for recent contributions from international trade.
5. Lobbying can be viewed as a st...ate for household resources allocated to influence public authority. Others, for example Young and Magee (1986), permit both lobbying and voting.
6. Public factors are henceforth referred to as public goods. The precedent for sector-specific factors appear in Jones (1971).
7. This structure is surely a gross simplification of the political process. Still, owing to the paucity of models of the political process and the need to posit special voter preferences or institutional structures in order to obtain predictive power, the specification used should suit our purposes here. An alternative would be to simply choose a policy rule, as in Mayer and Riezman (1989) and in Coggins *et al.* (1991), and avoid this step entirely.
8. The price of the urban good is the numeraire. In this case, fiscal effects of trade are $(p_r - p_r^w)E_r = (p_r/p_u - p_r^w/p_u^w)E_r$.
9. For example, $I_r > I_h = I_u$.
10. The actual outcome depends on the reaction of other households to the rural households' increased lobbying activity, and hence the nature of the solution to the lobbying game discussed in the next section.
11. De Gorter *et al.* (1992) discuss similar linkages for the case of US agricultural policy.
12. The choice of I_i can be viewed as being simultaneous with production and consumption choices.
13. The coalition free-rider problem is partially dealt with due to the presence of the sector-specific factors. See Mohtadi and Roe (1991) for an alternative specification.
14. See for example Roe and Pardey (1991).
15. See Dixit and Norman (1980, p. 102).
16. A two or more mobile factor model would enrich this analysis since appeal could then be made to the Stopler Samuelson theorem.
17. Omitted from this analysis is Mancur Olson's view that the costs of forming and managing a coalition decrease as specialization occurs. Hirschman suggests that the least-cost alternative for many is to evade

taxes and engage in capital flight rather than participating in collective action. Drawing on Hirschman, Roe (1991) suggests that the recent integration of world capital markets lessens the influence of groups to distort an economy in their favour.

18. See North (1991) for a recent paper on institutional innovation and its implication for development. Surely, lobbying also occurs to alter institutions. Except in the case of revolution or perhaps an economic collapse, the change in institutions is likely to occur over a longer period of time than the concerns addresseed here. A dynamic framework may best address this dimension of the economy.
19. Alternatively, Equations (4) can be viewed as the supply of political services (in terms of instrument levels) and (8) can be viewed as the demand for services where wl_i are expenditures. For a single household–rest of the economy model, supply and demand schedules can be obtained.
20. A similar point has been made by Dornbusch (1990).
21. See Corden (1990) for a discussion of specific countries.
22. Magee *et al.* (1989) refer to obscurity as the 'optimal obsfucation principle'.
23. These beliefs are captured in part by the parameters of the influence functions $I_i(\cdot)$ in (2).
24. Moreover, the government may be motivated to make policy pronouncements that appear credible to the uninformed if the relatively more influential and informed groups gain from such 'negative' public goods. An example is the case of Egypt's failed attempt at reform in 1987. Like many other countries, special interests, and some with government support, supplied information discrediting the motivation for the reform packages advanced by the international agencies (see Holt and Roe, 1991).
25. US sugar and dairy are examples of off-budget programmes.
26. See North (1991) for a discussion of the role of the political entrepreneur.
27. Binswanger (1990) provides empirical evidence of this linkage in agriculture.
28. Along the same lines, if sector-specific factors x_i can be freely traded and labour is permitted to freely migrate between countries at low cost, much as in the case of countries within the European community, then models of the type posited here indicate that returns to lobbying in a particular country that taxes some resources relative to others tends to decline.
29. Losses accrue from the decline in the values of their sector-specific factors of production, increases in wage expenditures and in expenditures on goods.
30. See Mueller (1989, pp. 179–226) for a review of voting models.

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6 Impact of State and Civil Institutions on the Operation of Rural Market and Non-Market Configurations

Erik Thorbecke

6.1 MARKET AND NON-MARKET CONFIGURATIONS AND TRANSACTIONS

Economic activity is based and relies on transactions. Transactions can take any number of forms. They can occur within or outside markets. Parties to a transaction must enter into it voluntarily and agree to its terms. The freedom to decide for, or against, a transaction is, of course, of special importance in those cases where one party has little opportunity to influence the terms of the exchange. Transactions occur and are endogenously determined within distinct configurations. Each configuration is shaped by a unique combination of specific elements. The elements constituting the building blocks of configurations are the characteristics of (1) the item transacted; (2) the actors; (3) the physical, spatial and locational environment; (4) the technological and organizational environment; (5) the cultural environment; (6) the policy, institutional and legal environment; and finally (7) the socio-economic structure.[1]

Configurations can be market or non-market configurations. First, a necessary step in understanding the process of exchange in developing countries is to identify the most important specific characteristics of elements that influence the items transacted, the behaviour of the actors and the environment and, thereby, the form of the transactions. Different exchange configurations and corresponding transactions obtain depending on such characteristics of (1) the item transacted, as the degree of variability and uncertainty in the pattern of production and whether the good is perishable and storable; (2) the attributes of

the actors as they relate, for example, to their endowment of land and labour, their access to information, their attitude *vis-à-vis* risk, their access to assets that can be used as collaterals and the nature of the interrelationships among actors; and (3) the environment, e.g. the structure of production and of production relationships, the prevailing conventions and norms, the system of property rights, the underlying legal and institutional framework, current government policies and the phase of development.

Configurations can be thought of as channels through which specific transactions are effectuated. Actors, given their own attributes, the properties of the item transacted and the environment they face, will choose to operate within (or invent) *that* configuration and corresponding transaction that minimizes the sum of production and transaction costs. Surrogate (non-market) transactions are created and evolve in response to 'missing markets', or existing market configurations characterized by high transaction costs.

Generally, only a small number of key and discriminating elements determine the specific nature of a given configuration and corresponding transaction. Because the characteristics of these key elements tend to be bimodally distributed and interrelated with the characteristics of other elements, robust typologies of market configurations have been formulated for given items (products, credit, land and labour) by using these dominant elements as proxies for sets of related elements.[2] The discriminating characteristics of key elements defining these typologies tend to be very similar across many different settings so that the typologies themselves appear to be robust in yielding a number of distinct prototypical rural and agricultural market configurations and explaining the performance of the corresponding market structures. As shown in Thorbecke and Cornelisse (1991) market configurations can be distinguished according to whether the market is regulated or unregulated, and organized or unorganized. Furthermore, when the market is regulated, it often yields two very distinct configurations, an official one and a parallel one.

Likewise, some prototypical non-market configurations (i.e. what Bardhan (1989) refers to as agrarian institutions) such as those resulting in transactions within the farm household, two-party contracts (e.g. sharecropping and interlinked transactions), farmers' cooperatives and group organizations, mutual insurance networks, and the nuclear estate system can be identified and evaluated. Each of these configurations is shaped by a distinct combination of specific characteristics of elements. It can be argued that these non-market

configurations are somewhat less robust among different national and regional settings than market configurations because the impact of cultural elements, norms, conventions and modes of behaviour, often influenced by historical path dependence, is more critical in defining these configurations. For example, the prototypical configuration giving rise to sharecropping contracts may show more variability across South Asia and African settings than might be the case with the forms of loans obtaining in the rural, unorganized credit market configuration.

The difference between market and non-market configurations (and their corresponding transactions) is not entirely clear-cut.[3] Some configurations are clearly market ones such as the market for a given food crop (say, wheat or rice in a given setting) or the market for a cash crop (say, cocoa, coffee, rubber). In contrast, other configurations lead to transactions that occur essentially outside markets such as mutual insurance networks. In between these extremes lies a continuum of configurations that are more or less market-oriented or influenced by the forces of the market as they affect other configurations. The family farm's decisions regarding whether and how much of its output to sell in the food crop market configuration depends on the ruling price in that market. In turn, non-market (internal) transactions (i.e. the provision of old age and state contingent insurance within the household, barter type exchanges of labour effort for food among household members) are influenced by such variables as the price of output and the wage rate for casual labour determined in the food crop market and rural labour market configurations, respectively. Likewise, a number of two-party contracts such as sharecropping and interlinked transactions, while not market transactions *per se*, are influenced by the extent of competition that prevails in the environment in which they occur. One landlord facing many tenants may be able, within a limited range, to obtain better sharecropping terms than a number of landlords facing the same tenants. As Bell (1989) pointed out, if a principal (landlord) does not face a perfectly elastic supply of agents (tenants) it is surely arbitrary to assume that the terms of the contract are decided unilaterally by the principal. It is more reasonable to assume that the terms are arrived at through bilateral negotiations with each side having some bargaining power.

Generally speaking, market transactions entail the use of money and tend to be impersonalized (taking the limiting form of arms' length trading) while non-market transactions more often than not are of a barter type, interlinked and highly personalized. In traditional societies,

maintain its power and the capitalist mode of production. According to this version it is possible for the government to impose measures in the interest of the exploited workers and small peasants, in spite of the loss of profit that this involves, if these measures save the system from revolt or revolution. It can also be that higher wages or a land redistribution, while reducing the profits of particular groups, raise total savings and/or lower capital: output ratios so as to increase the volume of the total surplus, though not the ratio of surplus to GNP. Others again regard the state as the agent of a 'state class' or a bureaucracy.

Palaeo-Marxists like Bill Warren[31] hold that peripheral capitalism is a progressive, revolutionary force, making for productivity growth and economic progress. They make Dudley Seers's remark about the convergence of 'Marxism and other neoclassical doctrines' comprehensible.[32] And it is ironical that both neoclassical political economy and Marxism, two largely hostile and non-communicating groups, conclude that thinking and research about government policy for poverty reduction or income redistribution are futile. According to both, the predatory state inevitably acts in its own interest and that of powerful pressure groups; there is no place for disinterested, benign, altruistic government policies; only the forces of the free market are capable of advancing the good of society.

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market configurations are likely to respond even more variably to shocks across settings than market configurations.

Government intervention or institutional changes affecting a given market (or non-market) configuration are likely to modify at least some of the elements constituting other configurations. Changing elements affecting the functioning of a given configuration (e.g. by altering the response of actors) may result in a new equilibrium transaction (e.g. a new price and quantity) that, in turn, will feed back to influence and alter some of the key elements shaping other configurations. In addition to understanding the interaction of elements within a configuration, it is also important to understand the interaction of configurations within an economy. Market and non-market configurations do not operate independently of one another. This type of interaction is most obvious in the case of the interrelationship between official and parallel markets. Official markets (transactions) breed parallel markets (transactions). This means that government or institutional actions occurring in one configuration may spill over to influence and affect other configurations. Thus, financial liberalization in the official market may increase interest rates in the unorganized market because savings are diverted to the formal sector. Similarly, artificially low food prices in the official market normally encourage farmers to sell on the parallel market. Many such spillovers between and among different configurations can be thought of. In some cases the spillover is between a market and a non-market configuration. Perhaps the prime example of the latter is that when the price of the food crop falls within the food crop market configuration, a farm household that was previously selling some of its food output may revert to pure subsistence and consume the totality of its food output. In this case food becomes a nontradable within the household farm configuration and its internal shadow price is determined within the farm household configuration.[4]

Certainly the task of capturing all the possible feedback effects of a given change is daunting. It may not be possible to model a general equilibrium approach to market configurations; however within obvious limits, use of general equilibrium tools such as social accounting matrices (SAMs) and computable general equilibriums (CGEs) could help to identify areas of impact on the economy stemming from a given policy or institutional change, at least on different market configurations.

Where the market configuration is a parallel one, i.e. was initially generated by government interventions that created a situation of

excess supply or demand in a particular product or factor market, then the removal of interventions can unify an otherwise parallel market with its counterpart official market. In contrast, if the underlying causes of the 'segmented' configurations are structural, liberalization policies will have much less impact on the behaviour and performance of those market configurations.

The high degree of interaction among market configurations leads to the tentative conclusion that it may be useful to approach reform that is not radical in scope on a gradual basis so as to be able to assess the direction of effects on the host of configurations constituting the economy. This view rejoins Robin Matthews (1986), warning against the dangers of institutional experimentation.

In some configurations transactions are complex. A given transaction may involve the exchange of different factors and products over time (interlinked transactions and mutual insurance transactions). In some instances one observes only a partial incomplete transaction at one point in time (apparent gift within a mutual insurance configuration) when, in fact, the *quid pro quo* occurs later in the form of, for example, labour services by the recipient to the donor at less than equilibrium wage rates. In this sense, one could say that market transactions (e.g. a wage (hired) labour transaction) were 'polluted' by the 'implicit' mutual assistance contract (see Chapter 11). In the present approach it is possible to capture the major discriminatory elements shaping a 'mutual insurance' configuration generating the above type of transaction. In contrast, an altogether different rural labour market configuration would yield the equilibrium wage rates applying to hired agricultural workers not covered by the above type of mutual insurance contract.

In some instances the state may 'pollute' traditional non-market transactions, such as when the government through regulations limits the powers exerted by rich landlords over the poor landless, thereby undermining the incentive of the former to insure the latter. Regulations may cause the system to unravel altogether (see Chapter 8). As Bardhan (1989) pointed out 'If, in our reformist zeal, we do not pay enough attention to the underlying economic rationale of pre-existing institutions and their interconnections, and hack away parts of them, we may not always improve (and may even worsen) the lot of the poor tenant-labourer-borrower, the intended beneficiaries of our programme.' (p. 238)

Thus to summarize: changes in any elements, such as the implementation of structural adjustment policies and reforms by governments, are

maintain its power and the capitalist mode of production. According to this version it is possible for the government to impose measures in the interest of the exploited workers and small peasants, in spite of the loss of profit that this involves, if these measures save the system from revolt or revolution. It can also be that higher wages or a land redistribution, while reducing the profits of particular groups, raise total savings and/or lower capital: output ratios so as to increase the volume of the total surplus, though not the ratio of surplus to GNP. Others again regard the state as the agent of a 'state class' or a bureaucracy.

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The structure of government decision-making consists of many departments, ministries and agencies, and many layers from central government via provinces (or states in a federation) to village or town councils.[33] Power in some countries is divided between the legislature, the judiciary and the executive. Each of these pulls in a different direction. The obstacle to 'correct' policy-making is neither solely stupidity nor solely cupidity, neither just ignorance nor simply political constraints or monolithic selfishness. On occasion, governments, like charitable foundations, universities or voluntary associations, do act

Efficiency and equity are two such criteria. A third criterion is the adaptability of the structure to adjust to short-run changes (as a consequence, for example, of external shocks originating abroad, or new policies and institutional reforms) or more long-term changes in the nature of elements during the structural transformation which characterizes the development process.

Clearly some elements are more flexible and manoeuvrable than others. Also, the time required to alter 'structural' elements that impede the performance of given markets can differ markedly. The provision of crucial infrastructure projects, such as building large-scale irrigation, required to relax a binding bottleneck can be a long, expensive and arduous process. In contrast, certain administrative changes in rules, regulations and sometimes even property rights can be implemented quickly. If the goal is to improve the performance of markets on the basis of the above three criteria, the key issue is not just to identify those elements which most constrain the successful behaviour of markets, but even more importantly, to identify and concentrate on those elements over which some influence can be exerted.

Before analysing the impact of interventions by the government and NGOs, respectively, on rural markets, it seems appropriate to ask what are legitimate reasons for these interventions. Stiglitz (1987) proposes five legitimate reasons for government interventions in agricultural markets, the first four reasons are related to efficiency and the fifth one to equity, i.e. (1) incomplete markets in insurance futures and credit; (2) public goods and increasing returns; (3) imperfect information; (4) externalities; and (5) income distribution. Thompson (1991) suggests a sixth one which is related to the first and third reasons above, namely, the existence of oligopoly or monopoly powers at a level of market trader.[5]

In turn, nongovernmental organizations (NGOs) have innumerable reasons and motives for being involved in rural areas with most of them related either directly or indirectly to the alleviation of poverty, popular participation and the promotion of local control. These last two objectives are often viewed as means towards poverty alleviation but, in a number of instances, have become ends in themselves. Increasingly NGOs are assuming a larger role in economic activities and particularly in agriculture. Historically, community development types of activities, health, nutrition, water, and family planning have been traditional areas for NGOs. Dichter (1990, p. 9) writes: 'More recently newer specialties have been added in direct production, agri-

culture, and the kinds of technical assistance which bear directly on economic activities. The direction of specialization has been, broadly speaking, from social activities to economic activities'.

In what follows, an attempt is made at identifying the principal types of interventions used by governments, and to a much more limited extent, by NGOs, that have affected rural markets. More specifically, three key questions are addressed: (1) under what conditions (i.e. specific values and characteristics of elements) is a transaction channelled through a market or a non-market configuration?; (2) what policies, institutional changes and programmes appear to have contributed, positively or negatively, to the performance of the previously mentioned market configurations – historically and, more particularly, during the structural adjustment phase?; and (3) are there some relatively robust recommendations that can be made about the transferability of successful interventions based on historical experiences or on analytical grounds?

6.3 FOOD AND CASH CROP CONFIGURATIONS

6.3.1 Market Configurations

This heading covers, in fact, four distinct market configurations (1) domestic food (official); (2) domestic food (parallel); (3) cash crops (official); and (4) cash crops (parallel). The main reason for treating these configurations under one heading is that they are often subjected to the same range of interventions – although the impact of these interventions, as will be seen, may be quite different. Furthermore, the strong interconnections that exist between the official and the parallel markets, for both food crops and cash crops, make it convenient to analyse these configurations jointly.

Traditionally, marketing boards, or their equivalent, have been the principal form of government intervention in cash crop markets and, to a somewhat lesser extent, in staple food markets. Commodity boards fulfil two main objectives: (1) price stabilization and (2) revenue raising and surplus extraction. However, in the great majority of the cases, the real objective of commodity boards is not price stabilization *per se* but the extraction of the agricultural surplus (Bates, 1981; Lecaillon, Morrisson, Schneider and Thorbecke, 1987). There is much evidence that artificially low prices for cash crops and foodstuffs have discouraged

maintain its power and the capitalist mode of production. According to this version it is possible for the government to impose measures in the interest of the exploited workers and small peasants, in spite of the loss of profit that this involves, if these measures save the system from revolt or revolution. It can also be that higher wages or a land redistribution, while reducing the profits of particular groups, raise total savings and/or lower capital: output ratios so as to increase the volume of the total surplus, though not the ratio of surplus to GNP. Others again regard the state as the agent of a 'state class' or a bureaucracy.

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technological packages, significant aggregate output response seemed quite unlikely. (World Bank, 1989, pp. 40–1)

Two rather obvious lessons emerge from the above discussion. First, a comprehensive and joint package of policy measures, institutions and other initial conditions, to relax the constraining effects of binding elements – is a *sine qua non* to the successful performance (according to our three criteria: efficiency, equity and adaptability) of cash crops as well as staple food markets. Pushing the price button in a setting where one, or more, complementary measures or conditions are absent is fruitless. This is a lesson which had previously been learned in the context of the diffusion of the Green Revolution technology but, strangely enough, appears to have sometimes been overlooked in the context of the formulation of structural adjustment policies applied to the agricultural sector. Thus, a devaluation, the major instrument under a stabilization and structural adjustment regime, raises the prices of tradables (i.e. cash crops and many foodstuffs, among others) versus non-tradables. However, it may only have a negligible impact on output – when other key elements are missing. Conversely, a devaluation may result in highly differentiated effects under different sets of initial conditions obtaining in the cash crops relative to the domestic food configurations. Furthermore, by definition, farmers producing non-tradable foodstuffs will not be helped directly by any devaluation.

A second lesson is that certain types of infrastructure projects, such as rural roads, irrigation schemes and research are examples of activities that have strong public goods aspects – with high potential payoffs – falling largely within the public domain. Therefore these activities are highly unlikely to be undertaken on any significant scale by the private sector.

A natural consequence of government interventions that affect either the price or quantity of the item traded is to encourage the development of parallel markets. Official markets breed parallel markets. The greater the degree of intervention, the greater the scope for parallel markets. The differential between the parallel price and official price for staple foodstuffs can be enormous (in Tanzania the ratio between these two prices reached eleven-fold, in the 1970s (Lecaillon *et al.*, 1987)). The official and parallel market configurations are intrinsically linked. Nguyen and Whalley (1986) have shown that in a parallel market consumers will compete for the rationed good until transactions costs equal the difference between the official and the

parallel prices (they labelled these costs 'endogenous transactions costs').

Another interesting study of the interaction between these two configurations, within a partial and general equilibrium framework, is that of Devarajan, Jones and Roemer (1989). They identified two aspects of the actors' behaviour in the face of price controls and parallel markets that influence crucially market outcomes:

1. The nature of the risk function, and
2. The nature of consumers' access to rationed commodities.

First,

> When the risk of being caught depends only on illegal sales, the official price alone determines total output while the unofficial price determines the share of output sold in the parallel market. In contrast, if the seller can reduce the risk by selling larger quantities in the official market, the parallel market price plays a role in determining both total output and the parallel market share. (Devarajan, Jones and Roemer, 1989, p. 1892)

Secondly, if consumers can be given access to controlled commodities without incurring any kind of transactions costs, such as queuing, they gain an income transfer which leads to a greater demand for that good than if transactions costs had been incurred. It is shown, somewhat paradoxically, that this type of 'costless rationing', if it could be achieved, might lead to more output of the controlled good than in a control-free market. Perhaps the main conclusion that is reached is that 'parallel markets ameliorate some but not all of the misallocations caused by price and other controls and reduce somewhat the net gains from market liberalization' (Devarajan, Jones and Roemer, 1989, p. 1892).

6.3.2 Non-Market Configurations in the Production, Processing and Marketing of Food and Cash Crops

We can now turn to a brief examination of group responses to market failure. What are some of the more appropriate areas where voluntary organizations can help overcome market failure better than the state?

Smith and Thompson (1991) analyse this question by referring back to the major sources of market failure which have been previously identified, i.e. public goods, externalities, increasing returns, imperfect information, and risk and incomplete markets. They argue that the first three above sources can be analysed jointly since they reflect differing aspects of collective-goods problem, whereas the last two require a different type of response. In what follows, we draw on their analysis and expand on it by asking what are the key characteristics of specific elements in terms of the socio-economic attributes of actors and characteristics of the item transacted and the environment that gave rise to non-market configurations and corresponding transactions. In other words, why did actors select a non-market channel and institution for their transaction rather than a market channel?

Farmer Cooperatives and Other Types of Group Organizations

The provision of collective goods by groups is most effective where the public good is linked to types of desirable private good that can, in fact, be supplied collectively. Two such types of private good appear to fall in this category: those that exhibit marked economies of size and others such as insurance. Food and cash crops processing facilities and overseas marketing distribution channels are given as examples of group organizations exhibiting scale economies and from which, under certain circumstances, free riders can be excluded. In turn, wholesalers' market associations are given as a prime example of the private provision of insurance facilities. Smith and Thompson (1991, pp. 34–5) refer to and describe in some detail Armah's (1989) study of maize marketing in Ghana which they consider to be a classic example of Olson's by-product approach (1965). Over 90 per cent of wholesalers surveyed contributed a subscription to belong to a market association. These associations had four main functions: mainly, settling disputes among members, representing members when dealing with local councils and other government institutions, guaranteeing credit and assisting in bereavement. Smith and Thompson (1991) make it clear that the first function is an example of a partially non-rivalrous collective good, as is the second function consisting, namely, of lobbying and pressure group activities. The third function (guaranteeing credit) provides insurance. The association protects wholesalers against retailers defaulting on credit. Finally, the fourth function is also an insurance substitute, supplying a useful secondary inducement that is likely to increase members' loyalty to the association.

Groups such as cooperatives can also play a role in helping to overcome the last two sources of market failure mentioned above, imperfect information and risk and incomplete markets. Thus, in Taiwan, multipurpose farmers' associations have been extremely successful, from the mid-1950s on to the early 1970s, in providing not only collective goods but also in the sharing and dissemination of information. They were an important arm of the Joint Commission for Rural Reconstruction (JCRR) (a kind of super-ministry of agriculture). The fruits of research on new varieties and improved farm practices undertaken under the auspices of the JCRR were conveyed to these farmers' associations by extension agents, often combined with supervised credit. Joint buying of inputs and selling of outputs by these associations reduced monopolistic or oligopolistic powers on the other side of the market. In short, Taiwanese farmers' associations constitute a good example of a successful GONGO (a hybrid organization blending together characteristics of a *GO*vernment institution and a *NGO*). The transferability and replicability of this model to other settings appears somewhat limited.

Finally, within the context of sub-Saharan Africa one can agree with the conclusion reached by Wade (1988) as cited in Platteau (1990, p. 245):

> A first lesson to be drawn from the African experiences is the following: pooling arrangements and various kinds of cooperative enterprises (including collective production) can succeed when the individuals involved are united by strong clan, family or social ties and when traditional norms of communal solidarity are still very much in force. In the circumstances, rural deviance is usually tightly monitored by an authority structure in charge of insuring the predominance of cooperative values over individualistic aspirations or tendencies.

The Farm Household Configuration

Of the various causes of market failure spelled out previously, the lack, or incomplete nature, of markets in insurance futures and in credit is the primary *raison d'être* of the farm household configuration. Two types of insurance are provided within this configuration.[8] First, an intergenerational form of 'old-age', or 'social security' insurance, with older generations receiving support from younger generations in exchange for care received when young. Secondly, by linking together

food production and consumption of staple foodstuffs, the family can insure itself to some extent against state-contingent uncertainty. Family members are guaranteed first priority in the use of the produced food.

The family farm combines a whole set of market transactions (such as selling the marketed surplus, off-own farm wage employment by family members and the purchase of manufactured inputs and consumption goods) with virtual, implicit and internal (non-market) transactions occurring among members. It is the hybrid nature of this configuration which makes it such a fascinating organization to study.

This configuration is closely connected, on the product supply side, with the domestic food market and, to a lesser extent, with the cash crops market (e.g. smallholders producing tea and coffee). On the labour side, it is also linked to the rural labour market. Through their marketed surplus small farmers contribute significantly to the supply side of the domestic food market. Where the underlying production structure and land distribution is unimodal they are the dominant, and at the limit, the sole actors. Even where the structure is bimodal, they can play a significant role. In short, in their external transactions, family farms are key actors in a number of market configurations, while in their internal transactions, they interact in a non-market configuration.

A key question relates to the behaviour of peasant households in terms of their reliance on internal (non-market) transactions versus market transactions. In other words, how do farm households decide on the extent to which they engage in intra-farm household transactions such as production for own consumption, and family farm labour applied to own farm production, as opposed to participating in transactions in existing *market* configurations for the same items? Recently de Janvry, Fafchamps and Sadoulet (1991) have provided a formal framework within which this question can be answered. They start by offering an interpretation of market failure for labour and food that is *specific* to the household and not to the commodity. They proceed to derive within an integrated farm household model (acting as a producing and a consuming unit) the household response to changes in the price and productivity of cash crops, changes in the price of manufactured and consumption goods, the levying of the monetary tax, and availability of new technological opportunities in the production of food. Translating their model into the framework developed in this study, it could be said that they formalized the behaviour of the farm household configuration.

A market fails

> when the cost of the transaction through market exchange creates disutility greater than the utility gain that it produces, with the result that the market is not used for the transaction. Either surrogate institution will emerge to allow the transaction to take place or the transaction simply does not occur. Non-existence of the market is thus the extreme case of market failure. In a more general sense, the market exists, but the gains for a particular household may be below or above costs, with the result that some households will use the market while others will not. (de Janvry *et al.*, 1991, p. 1401)

De Janvry *et al.* postulate that for commodities such as labour and food that can be sold and bought by peasant households, their sales price is a fraction of the purchase price. In turn, the width of this band depends on a whole set of transactions costs (such as transportation costs and marketing margins). 'The poorer the infrastructure, the less competitive the marketing systems, the less information is available, and the more risky the transactions, the greater the size of this band.' (de Janvry *et al.*, 1991, p. 1402) Thus we see that the width of this price band is directly affected and constrained by the elements constituting this configuration. In turn, the width of this price band is a crucial determinant of the household behaviour. When the shadow price of a product, or of labour produced and used by a farm household falls within this price band, no trade takes place and the household reverts to self-sufficiency (subsistence) and relies on internal transactions.

The novelty of this approach is that the model yields shadow prices for intra-household transactions (which the authors call non-tradables). Thus, for example, if food is a tradable and labour is a non-tradable, then any exogenous change in the price of food will influence the shadow price of labour. The key finding is that the chronic inelasticity of supply response – particularly within the context of sub-Saharan Africa may be explained 'as a structural feature associated with missing markets and not as an inherent behavioural trait of peasants' (p. 1410). Again, within the much more general and fluid analytical framework used in the present study, this implies that a number of specific characteristics of elements operate as binding constraints on the behaviour of actors within the farm household configuration. In turn, the more inelastic supply response in the African context, relative to, say, Southeast Asia, can be attributed to

the fact that most, if not all, elements are less structurally rigid in the latter case – illustrating, once more, the key importance of context-specificity in evaluating behaviour.

The key policy implication that flows from the above analysis is how to relax the structural constraints (i.e. yielding an upward shift and narrowing of the price band) so as to elicit greater market responsiveness on the part of peasant actors in this configuration. De Janvry *et al.* mention a number of desirable interventions that have already been discussed in the context of the food and cash crops configuration, such as infrastructure investments, increased competitiveness among local merchants, better access for peasants to credit markets, technology transfer and a more elastic and low-price supply of manufactured consumption goods such as textiles, footwear, processed foods and some inputs.

The Nucleus Estate Smallholders Configuration

One interesting specific organization which, in principle, could go far in fulfilling the above list of desirable interventions and thereby contribute to the greater integration of the farm household configuration with either the cash crops or domestic food configurations is the so-called Nucleus Estate Smallholders Projects (NES). Such projects have been attempted in Southeast Asia, particularly in Indonesia, where the government is actively trying to establish production organizations based on the principle of horizontal and vertical integration, by tying small-scale producers, called the 'plasma', to higher-level large scale enterprises, called 'nucleus'. The integration is horizontal in the sense that very different producers of the same product are grouped together in one unit. The underlying philosophy is that the plasma can benefit from economies of scale enjoyed by the nucleus (say a large coffee or tea estate, or rubber plantation) in the provision of inputs, extension of services, and in processing and marketing the product.

Hence, vertical integration consists, upwardly, of smallholders selling their output and labour at fixed prices to the central nuclear organization (i.e. the state or private enterprise running the estate) which, in turn, processes the output and markets it. The downward vertical integration takes the form of the nucleus providing a combination of land plots, inputs, credit and the transfer of technological know-how to the smallholders on given terms. It should

be noted that this form of vertical-cum-horizontal integration internalizes a number of otherwise market transactions. The governance structure becomes a large firm embracing the nucleus and the plasma. Transfers and transactions within this 'firm' can be executed at accounting prices not necessarily reflecting shadow market prices. The distinct possibility exists that under a NES a larger non-market configuration supersedes and absorbs the farm household configuration. In that case, the latter would engage in even fewer *market* transactions than before vertical integration. The selling of the product, the hiring out of family labour to work on the estate, and the buying of manufactured inputs would all become transactions within the NES, leaving the purchase of manufactured consumption goods and services as the only strictly market transaction smallholders would engage in.[9]

In order for this type of scheme to succeed, a symbiotic relationship must exist between the nucleus and the plasma. Given the uneven bargaining power between the two 'partners' there is scope for exploitation. Whether the government can be trusted to and is capable of insuring that appropriate shadow prices are used for internal transactions corresponding to unfettered market prices remains an open question.

Sharecropping vs Fixed Rent and Wage Contracts

Landlords and workers in an agrarian setting can enter into a variety of contracts: sharecropping, fixed rent and wage labour, or a combination of the latter. Under what set of circumstances do these actors select sharecropping as opposed to other forms? This question can be answered by identifying the characteristics of the main elements shaping the share tenancy configuration and explaining how these characteristics differ from those resulting in fixed rent or wage contracts, respectively. First, each of these configurations requires that participating actors differ significantly in their endowment of land, labour and perhaps other assets (such as agricultural equipment and draft animals). One class of actors, the landlords, are well endowed with land but not with labour and vice versa for the workers. Actors differ also in their attitudes *vis-à-vis* risk and in their capacity to bear risk (landlords have assets and collaterals in contrast with workers). Some workers/tenants possess a greater capacity to work and better managerial abilities than others. This information is known to each of the workers but not to the landlords/employers.

The physical environment under which agricultural production occurs is intrinsically subject to high output variability, and markets for insurance and credit are missing, while rural labour markets operate imperfectly. The technology in use tends to be highly labour-intensive and the costs of supervising and monitoring labour are accordingly high. The social environment is characterized by strongly shared social conventions and norms that actors have to respect.

Given this general set of characteristics of elements, what subset of more specific characteristics of the actors and the environment will result in sharecropping or, alternatively, other contract forms? Less productive and risk-averse workers prefer wage contracts. In contrast, more productive and less risk-averse workers will opt for fixed-rent tenancy which has the advantage for them of linking effort to reward – although at the cost of carrying the full burden of the risk associated with the stochastic nature of agricultural production. Finally, more productive but perhaps somewhat more risk-averse workers would prefer a share tenancy contract.

In turn, land owners, although possessing a far greater capacity to bear risk than workers/tenants, differ in their subjective approach to risk – an attribute likely to be correlated with their wealth (land) endowment. This is one element that influences the choice of contracts. Those land owners reluctant to bear the full burden of the risk associated with output variability, will prefer a share tenancy contract where risk is shared between landlords and tenants. In this case, the parties will have to weigh the higher negotiating and enforcement costs of a share tenancy contract entailing typically the settlement of (1) the share distribution, (2) which crops to grow, and (3) the ratio of non-land inputs to land, compared to the simpler fixed rent and wage contracts.

Since, in principle, a mix of wage and fixed rent contracts appropriately combined can do as well in spreading risks as sharecropping (Stiglitz, 1974), what additional conditions have to prevail (in terms of specific characteristics of our elements) for sharecropping to dominate the alternative of a wage-cum-fixed-rent contract? It has been suggested that workers/tenants are not sure to find employment as wage labourers so that sharecropping derives its attractiveness from imperfections in the rural labour market. An additional element favouring sharecropping is that the costs of supervising wage labourers (under wage contract) can be at least partly avoided under sharecropping – a clear advantage to landlords. Furthermore, an appropriate sharecropping contract (including decis-

ions about the distribution of inputs) can improve tenants' incentives. Some theories have attempted to explain sharecropping based on screening of potential tenants with heterogeneous abilities that cannot be observed by landlords. Singh (1989) considers the screening explanations, by themselves, to be unsatisfactory but more convincing when combined with imperfect credit markets and default possibilities.

The social environment may significantly restrict the parameters of the sharecropping contracts that are negotiated. It is no coincidence that one observes typical shares of one-half or one-third. These are based on norms and conventions. Individual tenants in a given setting are concerned that in their dealing they be treated fairly. Hence it does not pay for the landlords to treat workers unfairly as this will reduce their work effort. Deviation from social conventions by landlords – even in the presence of excess supply of tenants – could lead to lower expected return for them (Stiglitz, 1989). However, 'The fact that markets do not adapt easily does not mean. . . that they do not adapt at all to market conditions. If conditions change so that, say, at the going 'conventional' contract there has been persistent excess supply of tenants, eventually conventions may change.' (Stiglitz, 1989, pp. 22–3)

In summary, one can agree with Singh's conclusions, reached after having conducted a thorough critical review of alternative explanations of sharecropping:

> 'Having gone through the various models . . . I do not 'pick a winner'. This is because I do not think that there is a single explanation, no matter how ingenious or complicated, of the existence of share contracts or sharecropping. Sharecropping has existed in various times and places in various forms. It has disappeared over time and reappeared. Sometimes the tenant's share is one-half; sometimes it is not. Sometimes the output share equals the cost share; sometimes it does not. . . . Sometimes sharecroppers are poor; sometimes they are prosperous. . . . I do not think a single theory can capture all of these aspects of sharecropping!' (Singh, 1989, p. 34)

Again this quote reinforces a recurring theme of this paper, i.e. the importance of the context-specific nature of the elements shaping given

configurations and the dependence of observed transactions on these configurations.

6.4 RURAL CREDIT CONFIGURATIONS

6.4.1 Rural Official and Unofficial Markets

Two distinct rural credit market configurations have been identified, i.e. the rural unofficial and the rural official configurations.[10] It was argued that the main discriminatory elements responsible for the above segmentation, and defining these configurations, are the borrowers' availability or non-availability of collateral, and whether the loan is made through official, financial intermediaries (registered) or other unregistered actors engaged in direct lending.

A number of key issues affecting directly the operation of these two configurations is related to the nature of collateral. First, borrowers lacking collateral are typically excluded from the official rural market configuration. In *that* configuration, higher interest rates cannot automatically compensate fully for the absence of collateral as the cost of obtaining the necessary information regarding credit-worthiness of (informal) borrowers by official lenders may be prohibitive. Furthermore, high interest rates charged to a relatively poor credit risk may increase the chance of default. Secondly, not all forms of assets are suitable as collateral. Thirdly, the scarcity, or absence, of collateral pushes a whole class of potential borrowers into the rural unofficial credit configuration where they may enter into a variety of contracts including interlinked transactions.

What is the proper role of the government under these circumstances? The main fruitful intervention which suggests itself is the provision and recognition of unambiguous property rights to land. In the many settings where land titles and land tenure rights are clouded, the state should assume the burden of developing and designing a cadastral system. Clear and officially protected land titles would, at least, make some farmers who were previously sealed off the official credit market eligible to enter that market.

The next question which needs to be addressed is how do rural credit markets respond to structural adjustment policies and financial liberalization? Before attempting to answer this question, it has to be made emphatically clear that regimes of subsidized credit (often accom-

panied by negative real interest rates that prevailed in many parts of the developing world until the early 1980s) had at least two fundamental flaws. First, they discouraged rural savings and the mobilization of rural funds into financial intermediaries and, secondly, they tended to discriminate strongly in favour of the official market and thereby led to an even more pronounced fragmentation of the official and unofficial configurations. The lesson which was learned was that some form of financial liberalization, although a necessary condition for improving the performance of credit markets, may, under certain circumstances, affect the unofficial market negatively. There is some evidence that the removal of interest rate ceilings and credit controls for official financial institutions is not likely to replace or absorb the unofficial market. In the context of the Philippines, Yotopoulos and Floro (1991) conclude that an expansion of credit to the formal sector may not filter down to the riskiest groups of borrowers, typically poor farmers without or with little collateral. The traders, in fact, are likely to receive much of the additional credit and to lend it to their own clientele of better-off farmers. Alternatively, if new credit is directed to poor farmers who pledge land as collateral, the rate of land consolidation is likely to increase.[11]

Taiwan offers another example of the differential effects of credit liberalization on the official and unofficial markets. Biggs (1991) after describing an environment characterized by heterogeneous firms, high information costs and strong segmentation between the official and unofficial credit markets, reaches the following conclusions. First, abolishing interest rate controls may not be enough to reduce the discrimination and quantity rationing of banks. Secondly, if liberalization results in higher real deposit rates, attracting investable funds into banks and away from the curb market, 'the fact that banks have reserve requirements (and curb lenders do not) can reduce the total supply of loanable funds to business. This contractionary impact on credit can reduce economic growth' (Biggs, 1991, p. 196).

Thirdly, linkages between 'curb market financial transactions and production transactions in a "transactions-based" economy like Taiwan's reduce costs on both sides of the market . . . facilitating production contracts' (p. 197). The most important policy implication, which flows from the preceding analysis and conclusions reached by the above studies, is that it may be futile, in certain settings, to integrate two or more distinct market configurations. Rather, it may be preferable to recognize and accept the parallel existence of distinct unofficial and official credit configurations and have the government

use different sets of instruments to improve performance in each one of these markets.

6.4.2 Non-Market Credit Configurations and Mutual Insurance Networks

A potentially desirable group response to incomplete credit markets is the setting-up of voluntary organizations that assume joint liability for the debts incurred by members. The joint liability group is supposed to substitute for the absence of a collateral, as each of the group members would be responsible for the other members' loans. In principle, joint liability groups could use the mechanism of mutual social control to ensure that borrowers meet their obligations. Although, it is doubtful whether it makes sense to organize groups on a negative basis only (i.e. the institution of mutual social control), the group character can be strengthened by including, besides credit delivery schemes, additional collective activities such as training and transfer of technology. This is the principle underlying the Grameen Bank in Bangladesh that has been successfully copied in a number of other developing countries.

A mutual insurance network is a prototypical non-market configuration shaped by (*a*) missing insurance and credit markets, (*b*) actors usually linked by closed family, clan and community ties, and (*c*) possessing either somewhat different endowments or relying on incomes generated by activities that are not covariant from a risk standpoint. If everyone is similarly endowed in such a community and grows the same crop on land affected by the same climatic elements, then a mutual insurance network is hardly sustainable. All agents face similar risks and nobody has sufficient means to insure the whole community against, say, the risk of a drought. This suggests that the composition of the network be sufficiently diversified and large in terms of portfolios of endowments and complementary activities from a risk standpoint so that, at any time, some agents are in a position to help other agents. In a traditional community where specialization is not pushed too far, individuals tend to be engaged in such complementary activities.

Transactions in this configuration can be quite complex and consist of a whole set of partial transactions completed over an extended period. In fact, there are many instances of more or less open-ended contracts among members. Thus, the apparent 'gift' by a better-off member of the group to a needy is just the tip of the iceberg. The 'repayment', as was mentioned previously, can take a variety of forms

such as a commitment by the recipient to work at harvest time for the 'donor' at a wage rate below the going rate. In this sense, this institution may pollute the rural labour market.

6.5 CONCLUSIONS

The approach undertaken in this study defines market segmentation rigorously and in an operationally useful way. This approach allows the identification of distinct market and non-market configurations, as combinations of specific elements. These elements consist of the characteristics of (1) the item transacted, (2) the actors and (3) the underlying physical, technological, cultural and policy environment. A major objective of this chapter was to identify those specific elements that affect the functioning of markets and agrarian institutions in a number of distinct prototypical agricultural and rural configurations, i.e. (*a*) food and cash crops (official and parallel market configurations); (*b*) non-market configurations in the production, processing and marketing of food and cash crops, i.e. farmers' cooperatives and other types of group organizations, the farm household, the Nucleus Estate Smallholder scheme, and sharecropping; (*c*) rural official and unofficial credit configuration; and finally (*d*) non-market credit configurations and mutual insurance networks. In each instance above, three questions were raised: (1) under what conditions (i.e. specific values and characteristics of key elements) is a transaction channelled through a market or a non-market configuration?; (2) what characteristics of elements constituting such configurations constrained the responsiveness of the market to policy changes and, at the limit, become binding leading to market failure; and (3) what policies, institutional changes and programmes by civil institutions appear to have contributed, positively or negatively, to the performance of the above rural market configurations, historically, and, more particularly, during the structural adjustment phase?; and what is the extent of transferability of successful interventions?

With regard to domestic foodstuffs and cash crop configurations, it is observed that price incentives are a necessary although hardly a sufficient condition for successful market performance. The implementation of a comprehensive and joint package of policy measures, institutions and other initial conditions, to relax the constraining effects of different binding elements – is a *sine qua non* to the successful performance of these markets. A natural consequence of government

interventions in these markets is to breed parallel markets. Parallel markets generally ameliorate some of the misallocations caused by controls and, conversely, reduce somewhat the gains from market liberalization. Much more efficient targeting schemes to provide food to poor people minimizing on transaction costs (than the more typical two-price policy followed by many governments), such as ration stores in poor neighbourhoods, can be designed.

Successful examples of group response to market failure were reviewed, such as processing facilities, overseas marketing distribution channels and different forms of cooperatives. It was seen that the farm household configuration faces a number of potentially binding structural constraints. The essentially sluggish response of peasants to external price and other signals can be explained largely in terms of the binding nature of these elements. A number of desirable interventions were suggested, including a possible integration of farm households into Nucleus Estates Smallholders Projects (NES). In order for this type of scheme to succeed, a symbiotic relationship must exist between the nucleus (central enterprise) and the plasma (the smallholders). Crucial to the success of this organizational form is the government's willingness and capacity to ensure that appropriate shadow prices are used for internal transactions within the NES.

Two key elements, i.e. the availability or non-availability of collateral and the extent of financial intermediation, account for the segmentation between rural official and unofficial market configurations. One fruitful government intervention is the provision of unambiguous property rights to land. A voluntary organization assuming joint liability for the debts incurred by members can play a role in reducing the extent of market failure in the rural unofficial configuration. An interesting observation is that some form of financial liberalization, although a necessary condition for improving the performance of credit markets may, under certain circumstances, affect the unofficial market perversely. Rather than trying to integrate these two market configurations, it may be preferable to recognize and accept the parallel existence of these two configurations and have the government use different instruments to improve their respective performances.

A first conclusion which follows from our approach to the study of markets is that the scope for generalizations and blanket policy recommendations is limited by the context-specific nature of the particular characteristics of the elements shaping given market configurations. The myriad of different conditions and historical paths having led to current circumstances must be taken into consider-

ation. The present framework – emphasizing combinations of elements as determining specific market configurations – provides a consistent approach to the analysis of markets and limits the possibility that important elements will be missed or ignored in the market performance evaluation.

A second main conclusion is that government interventions (and removal of interventions) is likely to have strong differential effects on distinct configurations for a given product or factor. This means that where different configurations face different structural constraints, liberalization policies are unlikely to achieve the integration of these configurations into one unified market. Rather, the state might want to recognize the existence of these distinct configurations and design different appropriate policies tailored to each of them.

Notes

1. For an extended discussion of these elements, see ch. 2 of Thorbecke and Cornelisse, 1991.
2. See ch. 3 of Thorbecke and Cornelisse, 1991.
3. The distinction between what is referred to as market and non-market configurations comes out clearly in the following quote from Newbery, 1989: 'Elementary economics argues that free exchange between informed individuals is mutually beneficial – there are gains from trade. Organized markets emerge to facilitate exchange, and it is a basic proposition that if agents are individually insignificant, the market structure is complete, and its operation is costless, then the resulting competitive equilibrium is one in which there are no remaining unexploited gains from trade. The equilibrium will be Pareto-efficient, meaning that there is no alternative allocation in which some agents are better off and none worse off. An organized market is a particular type of institution for facilitating the exchange of goods and services via a medium of exchange (money), with the distinguishing features that the terms of exchange (prices) are public knowledge, and access is open to anyone wishing to trade. In reality, markets are not costless to organize and operate, and the potential gains from trade on a particular market may not be large enough to justify the emergence of an organized market. Even when the gains are sufficient, it may not be possible for the marketing agent to capture a sufficient fraction to cover his operating costs, and again the market will fail to emerge. In such cases, alternative institutional arrangements may be able to provide similar services at lower cost. A restaurant is a market for meals, but a family may be able to provide similar services with lower transactions costs.'
4. This issue is discussed in more detail in Section 6.3.
5. Thompson (1991) contains an interesting discussion of the impact of the six above imperfections on the operation of agricultural markets and the possible role of the government in mediating their effects.

6. A recent World Bank and UNDP (1989) study of the adjustment process in Africa indicated that countries with strong reform programmes improved price incentives, both for export crops and food crops, more than countries with weak reform programmes, and had higher growth rates of agricultural production between 1985 and 1987. See also the discussion of this whole issue in Thompson (1991, pp. 27–8).
7. The author of this chapter was a major contributor to this evaluation.
8. This configuration is analysed in detail in Cornelisse and Thorbecke (1991, section 3.4.2).
9. At the limit, if the nucleus includes a 'company store', even this type of transaction would become internalized.
10. For a detailed description of these two configurations, see Cornelisse and Thorbecke (1991, section 3.6).
11. Roemer and Jones (1991, p. 9) stress this point emphatically in their conclusions.

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7 Grassroots Organizations and NGOs in Rural Development: Opportunities with Diminishing States and Expanding Markets

Norman Uphoff

The 1960s were dubbed the first 'Development Decade', and the 1970s managed to qualify as the second, though less confidently. The 1980s might better have been called the 'debt and disillusionment decade'. How will the 1990s be characterized? As the deregulation, democratization and decentralization decade? Or will a drearier designation be appropriate – the decade of disorder, disinvestment and decline?

Avoiding these latter outcomes will depend in large part on creating positive synergy among the state, the market and civil institutions. We need to understand how these three alternative channels for raising economic, social and political productivity can be made to function better, respectively and collectively. All three sets of institutions are human rather than divine creations. Their scope and operations evolve in response to our ideas and our aspirations, reflecting also our apprehensions and our limited imagination.

Certainly, state and market institutions are not today what they were 10 or 20 or 50 or 100 years ago. The same is true of grassroots organizations (GROs) and non-governmental organizations (NGOs), which are the focus of this paper. They are shaped more by what people expect of them and will accept than by material investments and constraints. So what we think about institutions is itself important.

While other chapters examine the state *vis-à-vis* market institutions, this one focuses on so-called civil institutions, particularly those that are closest to rural people, at the metaphoric grassroots. These institutions and the opportunities they present for rural development

need always to be assessed in relation to both state and market institutions, since the strengths and weaknesses of all *three* sets of institutions are complementary and interrelated. Unfortunately, the term 'nongovernmental organizations' treats NGOs as a *residual* category (Uphoff, 1987), one which should include market (private, for-profit) enterprises if taken literally. One of the tasks of this chapter is to delineate for NGOs a place within the overall scheme of a country's institutional capabilities such that these organizations are seen as more than a residual set.

Considering GROs together with NGOs can best be justified by noting that both have been overlooked in most state vs. market debates, which ignore self-help collective action. Otherwise, these two sets of institutions are differently conceived, GROs being defined in terms of *levels* while NGOs are designated according to some conception of *sectors*. These criteria for distinguishing institutions are elaborated in Sections 7.1 and 7.2 below. They enable us to work with analytical rather than simply descriptive categories.

After presenting in Section 7.3 a carefully drawn distinction between institutions and organizations, commonly treated as interchangeable terms, we look in Section 7.4 at how grassroots and nongovernmental organizational channels offer opportunities for accelerating rural development. Section 7.5 takes a comparative look at development efforts from below at a time when 'the long arm of the state' is shortening and when the reach of market forces is being extended but unevenly.

To suggest that GROs and NGOs can make important contributions to rural development in the 1990s and beyond does not mean that they are inherently or invariably superior to state or market alternatives. The 'populist' fallacy is as mistaken as the 'paternalist' fallacy when it comes to assessing the virtues of grassroots or nongovernmental organizations (Uphoff and Esman, 1974). GROs/NGOs are limited, often flawed channels for promoting development. Yet they deserve more attention than they have received.

7.1 CLARIFYING THE CONCEPT OF 'GRASSROOTS' – WHAT IS 'LOCAL'?

References to 'grassroots organizations' are usually more rhetorical than rigorous. GROs are certainly different from national or regional organizations, which are relatively remote from the people who are

supposed to be involved in and benefited by development. We associate GROs with 'bottom-up' development rather than with the 'top-down' style of decision-making and implementation that is undertaken at national or regional levels.

GROs are better designated as *local organizations*, provided that the term 'local' is used rigorously. Too often one hears expatriates referring casually to the Government of Bangladesh or to the Government of India as 'the local government', when such references should be to the national government. This is quite different from the *panchayat* councils which are forms of local government in those countries.

The term 'local' is defined quite simply in the *Oxford Pocket Dictionary* (1988) as meaning 'of or affecting a particular place or small area'. There should be no mistaking a local government or organization with one operating at the national level. But there is little consensus about what constitutes the local level. Perhaps this is because there are, analytically speaking, *three* local levels, not just one. This was the conclusion of the Rural Development Committee at Cornell when it was commissioned by the US Agency for International Development (USAID) to do a study of local institutional development (Uphoff, 1986: 10–14).

We asked: *What are the commonly understood* levels *at which decision-making and activity affecting development take place?* Ten such levels were identified, ranging from the *international* to the *individual* level. These are shown in Figure 7.1, with the three that are commonly regarded as 'local' grouped together by a dotted line. The first subdivision of a nation can be designated by different names – region, state, province – but these are functionally similar. The next subdivision, usually called a district, has cross-national similarities, as does the subdistrict. Both the district and subdistrict are essentially administrative entities, defined by political superiors rather than by the people themselves.

This ten-tier model of organization for development planning and implementation encompasses the levels that Streeten (1991) has described as 'the structure of government decision-making [which] consists of many departments, ministries and agencies, and many layers from central government via provinces (or states in a federation) to village or town councils'. The theoretical basis for this model is what regional scientists have called 'central place theory' as applied by Johnson (1970), Mosher (1969) and Owens and Shaw (1972).

The uppermost limit of what is 'local' is likely to be the area served by a rural market town, commonly referred to as a *locality*. It includes

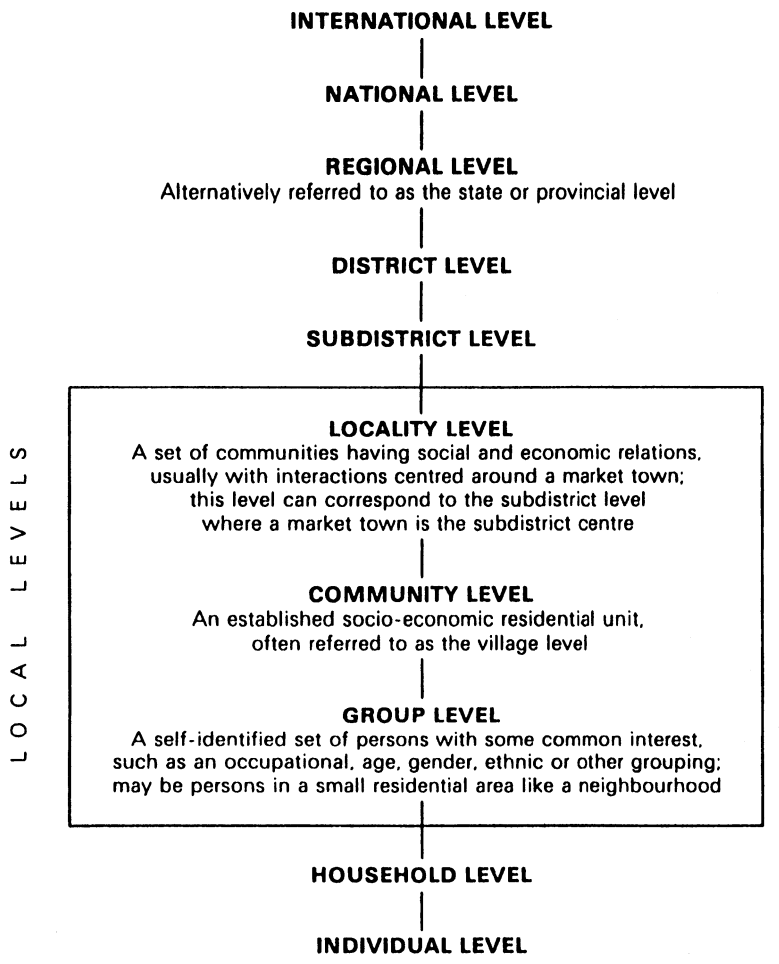


Figure 7.1 *Levels for decision-making and activity for development (from Uphoff, 1986: 11)*

a set of communities that have trading, intermarriage and other cooperative links with one another, where people have some possibility of personal acquaintance and usually some experience of working together. It is the area that rural people refer to when asked where they come from if they think their questioner will not know the village where they reside.

The *community* or village level corresponds what is most often thought of as 'local'. There is less distance and distinction between this and the locality level above it than between the locality and the subdistrict level above it (unless the latter is small and headquartered in a market town, in which case the locality and subdistrict levels coincide). *Groups* are at a lower level than a community, being more elementary in terms of social organization. If groups become larger than communities and cross village boundaries, e.g. regional cooperatives or provincial associations, they need some formal organization and legal recognition and are supralocal parts of the 'middle' sector discussed below.

The basic characteristic of what is 'local' from a socio-economic perspective is that most people within a locality, community or group have *face-to-face* relationships with one another and are likely to have multi-stranded connections – as members of a common church, as buyers at the same market, as relatives through extended families, etc. This provides a better basis for collective action than found above or outside these levels, say at district or subdistrict levels. People operating at higher levels have been grouped mostly for administrative purposes (convenience). They have little acquaintance with one another and little sense of common interest or fate. While *households* and *individuals* are found *at* local levels, they are not considered to *be* local levels since they do not present the same problematic issues of 'collective' action found with groups, communities and localities.

What are the 'grassroots' then? This expression applies to all three *local* levels identified here. Grassroots organizations are any and all organizations at the group, community or locality level, though usually one is referring to membership or voluntary organizations as will be discussed below. Technically speaking, a village-level bank branch or an administrative office of the central government is a 'grassroots organization', since 'grassroots' refers to the organization's *level*, not to any other characteristics. Other features need to be specified to refine our understanding of GROs. One generalization is that grassroots (local) organizations have more relatively *social* content and function compared to administrative or political orientation of higher levels.[1]

Policy analysts and planners should distinguish among levels because different kinds of economic and social development activity are better undertaken at one level or another. We find primary schools usually at community level, secondary schools at locality level, and post-secondary schools at subdistrict or district level. Savings clubs are

most effective at the group or community level, while bank branches are located in market towns (which function as centres of localities), and bank offices in subdistrict towns. It is important to think spatially and in terms of levels, considering the implications of how different functional socio-economic areas, hierarchically organized, create different behavioural settings (Fox, 1990). Development promotion thus needs to have a deliberate spatial dimension.

7.2 DISTINGUISHING AMONG SECTORS ACCORDING TO ALTERNATIVE INCENTIVE SYSTEMS

There is growing recognition of what is being called 'the third sector', operating between what we refer to as the *public* and the *private* sectors.[2] But this concept, without refinement, puts self-help membership associations in the same category with paternalistic, philanthropic organizations. Such heterogeneity lumps together a village savings club in Peru with the Rockefeller Foundation which might study or subsidize this association.

Rather than simply consider a third sector as a compromise between the other two sectors, it is possible to delineate it in qualitatively distinct terms with theoretical justifications. This third sector has some characteristics in common with each of the other two sectors but it is also different from each in meaningful ways. Various designations can be proposed for this sector: the voluntary sector, the membership sector, the self-help sector, the participatory sector, or the collective action sector. For our purposes here, the latter term is most appropriate to use as it is the most theoretically interesting.

The main thing distinguishing the three sectors is the *incentives* used to get cooperation or compliance (Hunter, 1969). The first sector relies on bureaucratic mechanisms and seeks enforced compliance with government decisions, made by experts according to technical principles and criteria following policy objectives set by top officials. The second sector uses market mechanisms to promote desired behaviour, such as investment or increased labour effort, using price incentives. Decisions are left to individuals to calculate private advantage without reference to broader interests or the public good. The third sector depends mostly on voluntarism, involving processes of bargaining, discussion, accommodation and persuasion. Decisions are taken with reference both to group and individual interests. Neither

state authority nor profit maximization determine choices, though both regulatory and price inducements may be invoked through members' decisions. These three approaches are presented summarily in Table 7.1.

These are obviously ideal types, and they are not mutually exclusive. They are alternatives only with respect to a particular activity and a certain set of persons whose compliance is sought. These different methods of seeking and gaining compliance can be, and indeed should be, combined to compose an overall strategy of rural development. Each has limitations as well as advantages, and each is better suited for certain kinds of development tasks than for others. Each also can be seen as having diminishing returns.

To take a concrete example, if one were trying to stop overgrazing of common pastures, to prevent 'the tragedy of the commons' that Hardin was concerned about (1968):

- With the first approach, one would determine by technocratic calculations the carrying capacity of the pasture. Some maximum herd size would be set for herders; quotas or licenses would be issued, and herders would be fined or jailed for any infractions. 'Excess' cattle would be confiscated or shot if compliance were still not forthcoming. This approach has the advantage of producing fairly quick and certain results, but it could be costly in terms of personnel and resentment.

Table 7.1 *Alternative approaches to rural development* (adapted from Esman and Uphoff, 1984: 20)

	I	*II*	*III*
Principal mechanisms	Bureaucratic organization	Market processes	Voluntary associations
Decision-makers	Administrators and experts	Individual producers, consumers, savers and investors	Leaders and members
Guides for behaviour	Regulations	Price signals and quantity adjustments	Agreements
Criteria for decisions	Policy – and best means to implement it	Efficiency - maximization of profit and/or utility	Interests of members
Sanctions	State authority backed by coercion	Financial loss	Social pressure
Mode of operation	Top-down	Individualistic	Bottom-up

- With the second approach, a price would be set that should induce herders to sell off 'excess' cattle. This method would require few personnel, but it could be expensive to maintain a subsidized price. (This would interfere with current equilibrium market prices and thus constitute a violation of market principles at a higher level.) In addition, a market approach could have the perverse effect of encouraging herders to increase their overstocking, so it might simply be unsuitable for this task.
- With the third approach, one would try to organize and educate herders about environmental impacts to get them to control herd size, sharing quotas among themselves and enforcing limits upon their members. This would spare the government from using coercion, but it could be slow and possibly unreliable. Normatively it is attractive but practically it might not be acceptable if there were urgent need to reduce herd size.[3]

These three approaches – respectively identified with the public sector, the private sector, and the third sector, whatever it is called – rest on different theoretical bases for compliance or cooperation. As seen below, a number of leading contributors to social science over the last 30 years have arrived independently at essentially the same three-fold distinction discussed here. These parallel conceptualizations are presented here, and summarized in Table 7.2, because they put the so-called third sector on an equal theoretical footing with the public and private sectors.

The third sector should not be seen as a residual sector, and it is more than a sub-division of the private sector, being non-profit rather than for-profit. An expanded conceptualization and classification of sectors helps us think more creatively about a role for this sector in the 1990s and beyond, overcoming what Streeten (1991: 8) calls 'the poverty of our institutional imagination'. Fortunately, there are numerous theoretical components in the social science literature which offer support for more than a residual conception of this third sector, focusing on different compliance relationships and incentives.

Organization theory was initially more in the domain of sociologists. Etzioni some years ago (1961) identified three ideal types of organizations based on alternative means for gaining compliance: *coercive*, *remunerative* (or utilitarian) and normative. Respective examples would be a prison, a business, and a service organization such as the Rotary Club. These corresponded, though Etzioni did not make the connection, to the several kinds of *power* that French and Raven (1959)

had delineated in their unusually rigorous analysis of the subject: coercive power, reward power and referent power, the latter similar to what they called legitimate power.

Meanwhile, economists were constructing distinctions paralleling, without apparent connection, those which sociologists had proposed. Boulding (1964) suggested three alternative types of social systems based on different principles for getting cooperation: *threat systems* (where 'bads', the opposite of goods, were exchanged for 'bads'), *exchange systems* (where goods are exchanged for goods), and *integrative systems* (where goods are given without requiring something in return).[4] Galbraith subsequently (1983) wrote about three types of power – *condign*, *compensatory* and *conditioned* – which correspond almost exactly to the distinctions made by Boulding and Etzioni, though he made no connection between his categories and theirs.

These classifications relate to some distinctions made in game theory, which has provided a basis for some of the more theoretically powerful propositions in social science. The first of these three types of compliance is *negative-sum*, the second *zero-sum*, and the third *positive-sum*. Another way of contrasting them is to compare the relationships they assume among people's utility functions. In the first kind of exchange, there is *negative interdependence* of utility functions, as one person's loss is considered as another person's gain. In the second category, there is *independence of utility functions*, while in the third situation there is *positive interdependence*, with people regarding others' gains as also their own.

Most economists have assumed in their analysis, for convenience's sake, that people's utility functions are all separate from one another, with any mutuality of interests represented as independent payoffs to the respective players. In fact, all three possibilities exist in the real world, with negative interdependence represented by the green-eyed monster of envy and positive interdependence by the multiple examples of altruism and charity we can observe around us.[5]

A further paradigm now widely appreciated in the social sciences which parallels this set of behavioural alternatives is that of Hirschman (1970) – *exit*, *voice* and *loyalty*. The first option, exit, breaking off all relationships, is preferred where game outcomes are negative-sum or when utility functions are negatively interdependent, though exit may be prevented by the use of coercion. Voice stands for a bargaining situation where exchanges take place on a *quid pro quo* basis, while loyalty reflects an interdependence of utility functions and positive-sum

outcomes that integrate persons with one another. These various similar distinctions are summarized in Table 7.2.

Such parallelism is more than coincidence and suggests why a simple public vs. private sector breakdown is not very apt. The 'private' sector exhibits the characteristics of column II in Table 7.2, while the 'public' sector, because its decisions are uniquely backed by the threat or exercise of coercion, has features of column I (though as discussed below it has some features of all three columns). The 'third' sector which includes NGOs and particularly GROs is linked particularly with the motivations and dynamics represented by column III.

These three sets of organizational and behavioural principles are not mutually exclusive (Boulding, 1989). Even armies, which are quintessential examples of threat systems, have exchange and integrative aspects, and social or service clubs which exemplify the third category can have a few coercive features. For the same reasons that Hunter (1969) said the three approaches to rural development he was differentiating were nevertheless complementary, we should not seek to reduce all policy or action to any one of these three clusterings of differentiated norms and behaviours.

It is worth noting a kind of stepwise relationship among the three sectoral alternatives – state, market and collective action (membership, voluntary, self-help, participatory) – as this suggests some possibly evolutionary relationships. The market sector is most fully represented by a single set of principles, those in column II of Table 7.2. The

Table 7.2 *Alternative principles of organization and behaviour*

	I	*II*	*III*
Types of organizations (Etzioni, 1961)	Coercive	Remunerative	Normative
Types of power (French and Raven, 1959)	Coercive power	Reward power	Referent power Legitimate power
Kinds of systems (Boulding, 1964, 1989)	Threat systems	Exchange systems	Integrative systems
Kinds of power (Galbraith, 1983)	Condign power	Compensatory power	Conditioned power
Game theory outcomes (Rappaport, 1969)	Negative-sum	Zero-sum	Positive-sum
Relationship of utility functions	Interdependent (negative)	Independent	Interdependent (Positive)
Behavioural alternatives (Hirschman, 1970)	Exit (desired; but may be prevented)	Voice (criticism and bargaining)	Loyalty (acceptance of some disutilities)

collective action sector is best characterized by principles in column III, while also having some attributes of column II but not column I. The state sector has features of all three compliance systems, but it is distinguished from the other two sectors by being able to enforce decisions by use of *coercion*, which identifies it particularly with column I.[6] This suggests a continuum, using Etzioni's terms to represent the respective columns:

Market sector	(1st) Remunerative		
Collective action sector	(1st) Normative	(2nd) Remunerative	
State sector	(1st) Coercive	(2nd) Normative	(3rd) Remunerative

This gives some theoretical basis for the commonsense notion of a sectoral continuum, with the collective action sector located 'between' the market and state sectors.

When considering institutional alternatives for promoting rural development, we should think in terms of the continuum of sectors shown in Table 7.3. Each of the three sectors, it turns out, has two particular types of local institutions associated with it. All of these are 'grassroots organizations', according to the distinctions made above among *levels* of organization for decision-making and action.

The bottom row in Table 7.3 characterizes the relationships that people have to these different kinds of GROs or grassroots institutions (GRIs). With the first set, people as citizens and voters have some rights and influence concerning which services will be provided and how. But it is indirect control if exercised through representatives, who are generally remote from local administrative units, compared with more direct control with local government bodies which are more proximate.

Service organizations are grouped together with private businesses because organizationally there is little difference between being a client or beneficiary of the first and being a customer or employee of the second. Those who make the decisions in either kind of organization are *not accountable* to those who receive the goods and services provided. Clients and beneficiaries may receive more benign treatment from a charitable organization that assists or hires them than do customers and employees of a business. But none of these has a right to make decisions about the goods and services or jobs provided.

Patients in a private hospital, for example, will pay for services while those in a charity hospital do not, but both clients and customers are in

Table 7.3 *Continuum of types of local institutions, by sector* (adapted from Uphoff, 1986: 5)

Public sector		*Collective action sector*		*Private sector*	
Local administration	**Local government**	**Membership organizations**	**Cooperatives**	**Service organizations**	**Private businesses**
Orientations of Local Institutions					
Bureaucratic	Political	Self-help (common interests)	Self-help (resource pooling)	Charitable (non-profit enterprise)	Profit-making (business enterprise)
Roles of Individual in Relation to Different Kinds of Local Institutions					
Citizens or subjects	Voters and constituents	Members	Members	Clients or beneficiaries	Customers or employees

a 'take-it-or-leave it' relationship with any private organization that provides them goods, services or employment. They are free to go elsewhere if they don't like what they are being given or are paying for. Neither non-profit nor profit-making enterprises regard those who receive their goods and services as *members* with any associated rights or duties. On the other hand, members of organizations such as a farmers' association or a cooperative have rights that can be invoked because their contributions brought the organization into being and maintain it.[7]

The purpose of distinguishing these kinds of local institutions (all of which are GROs and most of which are NGOs) is not to judge some better than others. Each of these channels for planning and carrying out activities that further rural development has some strengths and some weaknesses. The spirit of voluntarism can lower operating costs of a member-operated pharmacy, but its services may lapse if there is internal factionalism or loss of leadership. A government pharmacy can be located where people's incomes are too low to attract a private dispensary, but it may run out of medicines toward the end of the budget year or maintain stocks that don't match local needs. A private drug store may provide medicines efficiently and responsively, but the profit motive can tempt it to give inferior quality drugs, or it may be open only during hours or on days when it can maximize its profits. Will there be enough idealism, supervision or competition to maintain high standards of service in these respective kinds of institutions? There is no guarantee of any of these. Even having more than one private pharmacy does not guarantee competition as we know from the frequency of collusion in less-developed countries (LDCs).

The main conclusion of a comparative study of rural development in 16 countries of Asia, ranging from China and Japan to Turkey and Yugoslavia, was that countries which had the best *linkage* between central government and rural communities through a *network* of local institutions also had the best performance in agriculture and in various social indicators. The more organized countries raised their total agricultural production per capita by 47 per cent between 1952 and 1977, compared with an increase for the less organized countries of only 13 per cent in this period. Similarly impressive differentials were found for nutrition, health and education improvements.[8]

The two main aspects of networks which provide linkage between national and local levels are: (*a*) having organizations/institutions (the distinction is discussed in the next section) at many *levels*, not just concentrated at, say, the district or the community level; and (*b*) having

organizations/institutions of different kinds, that is, representing all three *sectors*, as these can balance and complement one another, the strengths of one sector compensating for the weaknesses of another.

Competition to keep private businesses honest and efficient can come from cooperatives *or* state enterprises, and vice versa. Those persons not well-served by the private sector can look to government programmes *or* to self-help organizations. (Unfortunately, 'free' public sector goods and services are likely to undermine other sector alternatives.) For some activities, decision-making and implement tion based on authority are generally most effective (e.g. building roads), while for others, collective action (e.g. distribution of water among irrigation users) or private channels (e.g. supply of agricultural inputs) are generally more efficient and preferable.

One way of appreciating this is to use what Streeten calls 'institutional imagination', combining analysis of levels (Figure 7.1) with that of sectors (Table 7.3). This produces a matrix of institutional possibilities ranging from international to local levels as shown in Figure 7.4. GROs are those at locality, community and group levels (bold-faced). NGOs refer to the middle column of organizations. The two sets overlap in the centre of Table 7.4, with a wholesale cooperative society, a village dike patrol, or a mothers' club as examples.

At local levels, organizations may be informal rather than formal and yet still be important for meeting people's development needs. What is called 'the informal sector' refers mostly to private sector (for-profit) organizations at group, community and locality levels. By the time an enterprise gets large enough to be operating at the subdistrict or district level, it is usually formal, i.e. registered with the government, paying taxes and duties, etc. The informal sector of the economy as a whole includes organizations which operate respectively at different levels of decision-making and action as analysed here, with higher levels subsuming lower ones.

7.3 DISTINGUISHING BETWEEN ORGANIZATIONS AND INSTITUTIONS

In the discussion thus far, as in most of the social science literature, no consistent distinction has been made between 'organizations' and 'institutions'. The two words are usually used interchangeably, though if they mean exactly the same thing we do not need both terms. Confusion arises because they refer to different but overlapping sets of

Table 7.4 *Examples of institutional channels and roles for decision-making and action, by sector and level*

Levels	Sectors: Public	Collective action	Private
INTERNATIONAL	United Nations agencies; multilateral and bilateral donor agencies	Society for International Development	Multinational corporations; external PVOs
NATIONAL	Central government ministries; parastatal corporations	National cooperative federation; national women's association	National corporations; national PVOs; PVO coordinating bodies
REGIONAL	Regional administrative bodies; regional development authorities	Regional cooperative federation; watershed consultive assembly	Regional companies; regional PVOs; PVO councils
DISTRICT	District council; district administrative offices	District supply cooperative; soil conversion educational forum	District firms; charitable organizations
SUBDISTRICT	Subdistrict council; subdistrict administrative offices	Subdistrict marketing cooperative; area sports club	Rural enterprises; private hospitals; bank branch office
LOCALITY	Division council; health clinic; secondary school; extension office	Wholesale cooperative society; forest protection association	Market town businesses; service clubs (e.g. Rotary)

COMMUNITY	Village council; post office; primary school; extension worker	Primary cooperative society; village dike patrol; parent-teachers association (PTA)	Village shops; mosque committee for village welfare
GROUP	Caste panchayat; ward or neighbourhood assembly	Tubewell users association; mothers' club; savings group	Microenterprises
ROLES OF INDIVIDUALS	Citizen/voter/taxpayer/ partaker of services	Member	Customer/client/ beneficiary/employee

social phenomena, worth distinguishing from one another. *Institution* is the broader and more encompassing term, but it should be used carefully, even sparingly, because it has qualitative aspects that are essential and should not be taken lightly. The subtle but important distinction between the two concepts is spelled out in the following set of definitions. These are consistent with most if not all of the social science literature, which is itself not always consistent.[9]

> *Organizations*, whether institutions or not, are structures of recognized and accepted *roles*, while
>
> *Institutions*, whether organizations or not, are complexes of *norms and behaviours* that persist over time by serving collectively valued purposes.

These definitions are consistent with the following categorizations with examples. The first and second columns in Table 7.5 follow Knight's distinction between two types of institutions, one 'created by the "invisible hand" (for which) deliberate action hardly figures', and the other 'deliberately made'. His examples were language and the Federal Reserve system (cited in Ruttan, 1978: 328). The overlap between institutions and organizations is illustrated in Figure 7.4. Since there has never been a complete enumeration of either category, we cannot know which is the larger set.

This representation reflects our way of thinking and talking about institutions and organizations as if they were one or the other or both. They can be spoken of (and reified) as discrete economic, social or political phenomena. But in fact, institutions, like organizations, should be understood as matters of *degree*. Marriage, for example, may

Table 7.5 *Contrasting examples of institutions and organisations*

Institutions that are not organizations	*Institutions that are organizations, and vice versa*	*Organizations that are not institutions*
Money	The Central Bank	A local bank
The law	The Supreme Court	A new law partnership
Marriage	'The family'	A particular family
Land tenure	The Land Registrar's Office	A surveying company
Higher education	Oxford University	A tutoring service
Technical assistance	The World Bank	A consulting firm

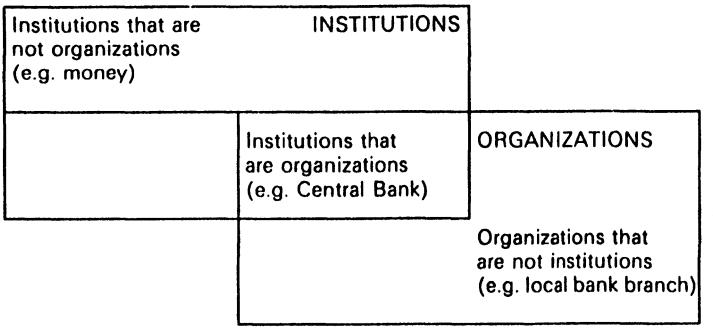


Figure 7.2 *Institutions and organizations as overlapping sets*

become more or less of an 'institution' depending on the scope and intensity of its recognition and acceptance by people as a legitimate complex of norms and behaviours, one which people feel obliged to accommodate and comply with. This is true of any institution, whether or not it has organizational form. 'Institutionalization' is a process, and organizations can become more or less 'institutional' over time to the extent that they enjoy special status and legitimacy for having satisfied people's needs and for having met their normative expectations over time.[10]

Why is this distinction and dynamic relevant for our concern with rural development in the 1990s and beyond? Because the process of institutionalization is an essential aspect of development, the more keenly felt now that we see institutional retrogression in a number of countries, particularly in Africa. Institutionalization is not an invariable or irreversible trend, as thought in previous, more optimistic decades. The more legitimacy an institution enjoys from various sectors of the public, the more it will be able to command respect and other resources that raise the level of compliance. Conversely, the less of these resources it receives, the less institutional status and influence it will have.

Whether organizations, roles, practices or procedures acquire such status and influence depends particularly on their performance and on meeting needs and expectations, as noted above. Complexes of norms and behaviours that have enjoyed a certain stability and productivity can decline, for lack of economic resources, political support, social and cultural congruence, or disruption and disappointment of many kinds. We cannot go into an extended discussion here of the process of

institutionalization and its reverse, but readers should appreciate already from this discussion why not to equate organizations automatically with institutions. Some are, but most are not.

Many social scientists have blurred or neglected the difference between institutions and organizations, casually assigning 'institutional' status even to rules or procedures.[11] NGOs and GROs are properly designated as 'organizations'. They may or may not enjoy institutional status. That is an empirical question. Some do and others do not. Some have been respected previously but have lost some of their legitimacy as institutions, while others are gaining in public regard and are acquiring institutional standing in the public eye. Governmental organizations claim to be institutions by virtue of their attachment to the state, which asserts that they are legitimate claimants of people's acquiescence and support in all matters. If this claim is accepted, it makes no difference on what basis it is accepted, since compliance is thereby achieved and they share in the state's institutionalized power.

NGOs in some cultures and in some countries are denied legitimacy and thus have no institutional status *ipso facto*. But this is changing. One of the most interesting trends in LDCs is the increasing institutionalization of NGOs *as a category*, quite apart from whether individual nongovernmental organizations have become institutions or not (Berg, 1987). That the World Bank and United Nations bodies have granted NGOs observer status and other special recognition has enhanced their ability to affect policy pronouncements and resource allocations over and above their respective abilities to exercise power or influence. GROs may enjoy legitimacy in the eyes of local people and be institutions *for them* but not for higher-level decision-makers. Helping GROs grow into GRIs in the full meaning of 'institution' is a process now under-way.

7.4 ACCELERATING RURAL DEVELOPMENT THROUGH GROS/NGOS

Ideally, each developing country would have a full set of institutions/organizations such as shown in Table 7.4 above. Channels for gaining cooperation and compliance through all three sectors' complementary methods for resource mobilization and management can operate at all levels. Such a structure, to be sure, may be as much a result as a cause of development. Not just lack of material resources but also lack of

experience and habits of working together contribute to the incomplete institutional matrixes we find in most LDCs. What is to be mobilized through such a structure is not just material contributions and labour but also ideas, management skills and a sense of social responsibility. State institutions by themselves are inadequate for this, as are market institutions alone.

There is growing evidence that working with and through collective action organizations at local levels can produce improvements in productivity and well-being more far-reaching than the stereotype that local efforts benefit only a few communities or a few families (Uphoff, 1988).

- In Malawi, a rural self-help programme has brought clean water to over a million people now at a cost of around $10 per person, mobilizing community labour and management skills and employing local people as para-professionals for construction and maintenance (Liebenow, 1981; Glennie, 1983).
- In Haiti, an agro-forestry outreach project with USAID support, drawing on anthropological expertise and engaging NGOs and GROs, got farmers to plant over 20 million trees in four years instead of just 3 million trees during five years as originally planned (Murray, 1986, 1991). The programme has continued to enlist the cooperative efforts of tens of thousands of farmers under quite unfavourable conditions.
- In northern Pakistan, in remote areas where government personnel hardly travelled, the Aga Khan Rural Support Programme has improved the lives of over half a million villagers through their Village Organizations being given some outside assistance on the condition of making their own self-help efforts (World Bank, 1987). In the slums of Orangi on the outskirts of Karachi, lane committees have provided self-help sewerage and water supply with little outside financing in an area serving over 100,000 people, showing that participatory methods can also work in urban areas (Gafoor, 1987).
- The Kenya Tea Development Authority, by working with grower committees, was able to promote peasant production of a crop thought 'too difficult' for small farmers. Their share of exports went from zero to one-third of the national total within 15 years, producing premium quality tea that fetched top prices in the world market and improving rural incomes substantially (Lamb and Mueller, 1982; Paul, 1982: 51–62).

- In Bangladesh, the Grameen Bank, working through small saver-borrower groups and federations of these, has made loans to over 1.2 million of the poorest of the rural poor. Repayment rates are near 100 per cent, while incomes have been raised by 50 per cent or more through small loans averaging about $75. Savings have been doubling every year, with a marginal savings rate as high as 50 per cent among previously impoverished people, mostly women, with deposits reaching $20 million (Fugelsang and Chandler, 1986; Counts, 1991).
- The Bangladesh Rural Advancement Committee has 600,000 members in the groups of landless it has sponsored for self-help activities. Its Women's Health and Development Programs expect to reach 3 million people, and its 6,000 non-formal primary schools already cover 180,000 children from poorer households who had dropped out of school or were not enrolled before (Abed, 1992; Howes and Sattar, 1992).
- Rural residents in the Baglung district of Nepal in five years put up 62 suspended bridges, some of them up to 300 feet long, in often difficult and dangerous locations, in much less time than if the government had built them, and at about one-quarter of the cost. The government needed only to supply the necessary steel cables (Pradhan, 1980).
- In Lima, Peru, community organizations planted half a million trees, built 26 schools, 150 day-care centres and 300 community kitchens, and trained hundreds of health workers to go door-to-door improving public sanitation and basic health (Durning, 1989: 23–4).
- The Iringa rural nutrition programme in Tanzania in four years' time with a structure of organization at the regional, district, divisional (subdistrict), ward (locality) and community levels, by involving parents and village committees, reduced malnutrition from 56 to 38 per cent, and severe malnutrition from 6.3 to 1.8 per cent (Pelletier, 1991).
- A soil conservation and agricultural development project in the Ciamis district of Indonesia, by mobilizing vast amounts of 'social energy'[12] was able to construct terraces at one-twelfth the cost of government programmes and to improve 48,000 hectares of farmland for participating villagers compared with the 4,000 originally planned (Craig and Poerbo, 1988).
- The 6-S movement in nine countries of West Africa has similarly mobilized social energy from half a million people through peasant federations in over 2,000 communities to combat the hardships of

the long dry season in the Sahel (LeComte, 1986: 148–55; Harrison, 1987: 279–84).

Still other examples could be cited. A common element of success is that most of these programmes adopted what Korten (1980) characterizes as a *learning process* approach, inductively developing appropriate technologies and organizational models that achieve a good 'fit' between technology and organization in terms of their incentives, manageability, sequences of expansion, etc. They must become effective and efficient before they can be expanded.

The critical issue for GRO/NGO development policy is whether outside resources serve a 'pump-priming' function, whether they fill in critical financial needs and encourage matching or greater flows of funds in return. Too often, external funds have simply *substituted* for local resources, replacing them in a zero-sum way. Sometimes they have even *discouraged* local contributions, with a negative-sum result. Depending on their terms and conditions, the effects of grants to local governments or organizations can be positive-, zero- or negative-sum.

It is often said that central governments cannot let localities and communities participate in deciding about local services because the demands from below will overwhelm the fiscal capabilities of the government. This may be true where central funds are less than the potential demand for them and the best local strategy is to make extreme demands in with the hope that at least some of them will be met. Where communities are not competing for 'free goods' but are expected to provide their share of the costs, more reasonable proposals and requests should be forthcoming. Such a requirement of matching contributions can be explained and legitimated on the grounds that mobilization of local resources enables the central government to spread its assistance to more communities. Most communities would rather have a greater probability of getting desired services or goods at some cost to themselves, than gamble with longer odds of getting all-or-nothing benefits.

When communities or localities must mobilize substantial resources to make improvements, this in an indirect way empowers more peripheral people, whose potential resource contributions become more important. If goods come free from above or outside, there is incentive for the powerful to monopolize them and exclude other persons from benefits. When there is significant cost required for investments or maintenance, there is reason to bring more people into the organization to share costs. This was seen in a comparative study of

hill irrigation systems in Nepal, where the more difficult it was to acquire and convey water from some stream or river source to the fields to be irrigated, and the more effort was required to maintain the flow once started, the more equitable and broader was participation in decision-making, in work and in benefits (Martin and Yoder, 1987).

One objection to relying on GROs and NGOs is that they may function most successfully where there are already relatively more financial resources available, so that a self-help strategy could reinforce the existing advantages of better-endowed areas. This is seen with the *harambee* self-help movement in Kenya. Better-endowed areas are able to benefit more from centrally planned and implemented programmes, having better contacts and more influence at higher levels than have poor communities. Even so, many benefits from such collective self-help efforts did benefit poorer sections and richer residents paid a larger share of the costs (Thomas, 1985).

A systematic study of local development programmes in Thailand found that poorer communities were more disposed to use self-help methods than were richer ones (AIR, 1973). Once basic amenities like roads and water supply were in place, there was less willingness as well as need on the part of villagers to cooperate to create such collective goods. Also, more individualism was observed in better-off localities. So supporting GROs and NGOs in the promotion of local development may not be to the disadvantage of the less well endowed, who tend to lose out anyway. Self-help may be the only way they can gain some control over their destinies.

Efficiency and productivity can be enhanced by more local participation in decision-making if the parameters for this are appropriately laid out. A quantified study of rural electrification in the Indian State of Rajasthan found that when local governments, instead of the state agency, were given responsibility for allocating hook-ups of villages to the state distribution grid, more of the villages hooked up were within the minimum specified distance from the grid, reducing the costs of connection and raising efficiency, and more were in areas with potential for pump irrigation so that electrification was more likely to increase agricultural output and justify the investment economically. When decisions were made at higher levels, away from public scrutiny, politicians more often intervened to circumvent the bureaucracy's own criteria for efficient, productive allocation of a scarce resource, in this case electricity (Hadden, 1980).

One of the most important things about GROs is that while they may start out to serve some particular function, they often diversify

into other needed areas of service once their organizational capabilities become effective. The organizations of *tricicleros* (tricycle rickshaw drivers) in the Dominican Republic about which Hirschman writes (1984: 14–16) were started to facilitate their getting loans to buy rickshaws for themselves, rather than having to continue to pay out most of their income in rent. Once established, the groups organized a rudimentary health insurance scheme and a burial society to cover members' funeral expenses. They also set up a mechanical repair shop for members and used group pressure (clogging up traffic in Santo Domingo) to get the police to stop extorting money from them.

Grameen Bank groups, referred to above, have gone beyond their savings and loan functions to get agreement among members to put an end to child marriages and dowries, which contribute to the financial bondage of the poor, especially women. They have also banded together on a non-partisan basis to elect local officials in whom the poor can have some confidence of fair dealing, as have the Small Farmer Development Programme groups in Nepal (Rahman, 1984; Esman and Uphoff, 1984: 343–50).

Perhaps the most impressive case of GRO development is that of the Deedar multi-purpose cooperative in Bangladesh (Ray, 1983). It started in 1960 with eight rickshaw pullers, the poorest of the poor, saving the cost of one cup of tea a day until they could buy their own rickshaws and start retaining all the income they earned each day. From this base they expanded, adding members and activities, until 25 years later, with no outside financial aid, the cooperative has 1200 members, 2 million thaka in share capital and 6 million thaka in assets. The assets include trucks, tubewells, brick kilns, grain mills, a consumer store and a cooperative marketing center, all intended to increase jobs and income for members, which include women and youths as well as men. The coop sponsors a 'model' secondary school in the village and also a health insurance scheme for members. This case, like that of the Yachiho multi-purpose cooperative in Japan (Uphoff, 1986: 340–3), demonstrates the kind of comprehensive grassroots development which is possible with energized NGOs and GROs.

7.5 COMPARATIVE INSTITUTIONAL AND TIME PERSPECTIVES ON GROs/NGOs

GROs and NGOs are increasingly seen as channels for promoting economic and social development, also contributing to democratiza-

tion of the economy, society and polity (Carroll, 1992; Edwards and Hulme, 1992; Farrington *et al.*, 1993; Fisher-Peck, 1993). The role of the state is being rethought and generally retracted, though there is growing consensus that the 'pendulum swing' away from its over-extended condition in many countries should not proceed too far. The scope of market-driven activities is increasing partly because of deregulation policies and partly by default, as state institutions in LDCs cannot manage as broad a range of functions as was thought previously. There is nonetheless a need for a well-functioning state for market and GRO/NGO institutions to achieve their potential.[13]

One needs to assess carefully the impacts on GROs and NGOs of changes that occur in the state and market sectors – liberalization, structural adjustment, privatization, parallel markets, contracting services, etc. – because the collective action sector is more vulnerable than the other two. It is not undergirded by the staying power of authority or by the tangibility of individual material benefits. Voluntary activities tend to be volatile, subject to changes in the public mood and in climates of opinion as well as in private incentives that may decline in amount or value. Moreover, profit-seeking entrepreneurs can mount tough competition with the collective action sector because when times get tough, there is a tendency to give more weight to self-interest.

Conditions of scarcity, however, can be fertile ground for collaborative, altruistic behaviour. The concept of interdependent utility functions is not hard to grasp, and when resource constraints become more pervasive, pooling resources and risks takes on more meaning. In the US, an older generation still talks about how much more solidarity and generosity they observed during the Great Depression of the 1930s. Whether people adopt more individualistic or more cooperative strategies to meet their own needs and those of persons whose welfare they most care about depends very much on the examples and values emanating from local and national leaders.

A time perspective is important on all this. The trends which have made GROs and NGOs more numerous in recent years reflects a general freeing up of individual and personal resources for locally initiated activities. A general movement toward democratization is occurring. Returning to a high degree of state control is not feasible. But this creates opportunities for expansion of collective action; it does not determine or ensure such an outcome.

Collective action has functioned for centuries at local levels in Third World countries. Its present uneven performance is partly a con-

sequence of 'state penetration' that has often displaced, constrained or distorted the informal institutions that met a variety of people's needs before – for agricultural production, consumption guarantees, constructing public facilities, etc. The penetration to local levels of commercial market forces has also disrupted many local voluntary activities, as working for cash income has taken on more importance.

We see in the contemporary Third World a recovery of interest in collective action solutions as state institutions are proving less capable of meeting people's needs and as markets do not meet everyone's expectations for adequate or fair provision of goods and services. Where local people can get the state or private entrepreneurs to bear the cost of providing health care, agricultural inputs, bridges and roads, clean water, etc., this is likely to be welcomed. Collective action functions now usually as a default mode for meeting development needs, whereas previously it was a more 'normal' or 'natural' mode.

This is true both for the US and for LDCs. The health care sector is an interesting case in point. A collective action strategy gets adopted only where public and private providers are not available or satisfactory. In developing countries, locally sponsored health care facilities are found where it is too difficult or too expensive for the government to deploy doctors, or where there is not enough purchasing power to attract private practitioners. In the US, cooperative health maintenance organizations (HMOs) such as the Group Health Plan emerged interstitially, reflecting inadequacies in state and market institutions. Once the performance of public and private institutions improves, they are likely to replace cooperative forms of health care because the latter require an investment of members' time and energy to maintain and manage the coop.

Collective action is better at creating facilities than maintaining them. Maintenance activities require regular and repetitive efforts that are better done on a paid or for-profit basis than by reliance on voluntary efforts. In the US, with supportive government policies, much of the rural electrification was carried out by cooperatives on a collective action basis. Most have been superseded now by private enterprises or have changed from cooperatives into private enterprises. Input supply cooperatives played important roles in the development of American agriculture earlier in this century, but most have now given way to private enterprise or been converted into businesses.

This perspective suggests that collective action institutions should be regarded as positive examples of opportunism. The state, like the market, we have always with us. But self-help organizations of different

sorts are more variable. It is instructive to see a host of 'neighbourhood watch associations' springing up in American cities as public police forces are unable to provide the desired level of security for people and property and as the costs of private provision of such security are judged too great. Volunteer patrols and communication networks can add much-valued low-cost increments of security, though they are most often (and maybe only) effective in association with public police forces. We also see cooperative day care on the rise, as the cost or unavailability of public and private alternatives gives impetus to collective action.

In conclusion, we need to think analytically as well as critically about GROs and NGOs. Grassroots organizations are defined by their geographic *level* of organization, while nongovernment organizations are categorized according to some concept of *sector*. These two principles of organization intersect in the case of neighbourhood watch associations and cooperative day care centres, for example, which are NGOs that are also GROs. We should be concerned with other kinds of grassroots organizations which are not NGOs remembering that state and market sector institutions at local levels are also GROs.

Grassroots organizations and NGOs bring different advantages to our quest for poverty alleviation and multi-faceted development. GROs offer closeness to the people, knowledge of local conditions, responsiveness to local needs. NGOs represent different principles of motivation for creating goods and services and for receiving them from those that animate state and market institutions. The collective action sector is motivated by self-interest but also by common interest, which can be described in terms of the degree of interdependence of utility functions among NGO members. To the extent that members derive some satisfaction from improvements in the welfare of fellow members, any advances achieved for some produce multiple and thus greater total satisfactions for all (Uphoff, 1992: 285–9; 326–55).

While collective action has been a major force in LDCs in earlier decades and centuries, it is presently undermined by some new 'traditions' emanating from the state and market sectors. Paternalistic pronouncements and practices by government agencies discourage previously reasonable expectations of self-help, and preoccupations with personal profit can deter people from pooling resources to create public goods. The disrepair into which many roads and irrigation canals have fallen in developing countries reflects either or both of these influences.

To revive and expand collective action will require public policies that capitalize on complementary relationships of this third sector with state and market institutions, filling in gaps between the public and the private sectors and helping make each of them more effective. Exhortation alone is not likely to elicit voluntary efforts on a scale or for a duration desired. The principle of 'assisted self-reliance' (Uphoff, 1988), despite its paradoxical sound, is one to be explored. It represents a pump-priming approach to mobilizing local resources in a positive-sum way, where external funds and technical assistance are offered on acceptable matching bases.

Economists are likely to favour 'block grants' with the fewest possible conditions as a matter of disciplinary conviction. But we know that present power imbalances at local levels can distort beneficial uses of resources coming from above, especially given the propensities of politicians to dispense them in dependency-creating ways and to try to strengthen patron-client bonds. It is defensible to have restrictions on use and to allow for bargaining over terms for grants. The legitimating purpose and criterion for matching grants is to spread government (and private) resources in an optimizing, positive-sum way, to meet as many needs as possible – for infrastructure, for job creation, for public health facilities, and so forth. The goal is to combine outside and local funds, personnel and expertise as well as to regulate and energize behaviour in ways that government programmes alone and the workings of the market cannot.

Notes

1. Note that the root of the English word 'social' is the Latin word for 'friend' (*socius*). Similarly, the German word for 'social' (*gesellschaftlich*) has its origin in a word meaning 'comrade' (*Gesell*). So the social sciences in some fundamental sense should be seen as being about friendship (Uphoff, 1992: 365–7, 378–87).
2. Streeten (1991: 8) writes of 'a large third sector, neither private nor public, that consists of non-governmental, non-profit organizations, that draws on the voluntary energies of its members'. Examples given include churches, colleges, universities, Oxfam, Bread for the World, orchestras, hospitals, museums, the Red Cross, Friends of the Earth, Amnesty International, charities, cooperatives, the Grameen Bank, neighbourhood organizations, local action committees, all of which 'draw on people's voluntary efforts and contribute often highly efficiently not only to the gross national product but to a flourishing civil society, essential for a democracy'. This concept of a third sector, operating between business and government, featured prominently in the report of the US Commission on Private Philanthropy and Public Needs (Douglas, 1983).

3. Platteau (1990) proposes as an alternative approach using legal means to enact a new structure of property rights that defines privileges and obligations of the users/owners of the commons. However, this would still have to be implemented through one of these three approaches: using administrative means to ensure cooperation with the new property regime; letting market forces reward or penalize individuals; or having groups take responsibility for enforcing the reassigned rights and obligations among themselves.
4. These are analysed at greater length in Boulding (1989). His designation of the second type of system as an 'exchange' system is unfortunate because all three types are exchange systems, involving the trading of different kinds of goods or bads. The general application of these systems is discussed in Streeten (1989).
5. Game-theory analysis has been preoccupied with zero-sum analysis, where the gains of some equal the losses of others, with less evident interest in 'positive-sum' games, at least until recent years. The latter concept was not in the initial game theory presentations of von Neumann and Morgenstern (1953), Luce and Raiffa (1957) or Rappoport (1969). Ordeshook's comprehensive review of game theory (1986) lists 10 headings under 'zero-sum' in the index and *none* for 'positive-sum'. He devotes only four pages out of 500 to non-zero-sum games, which can include positive-sum games. Von Neumann and Morgenstern acknowledged at the outset that: 'The zero-sum restriction weakens the connection between games and economic problems quite considerably . . . [by emphasizing] problems of apportionment to the detriment of problems of 'productivity' proper' (1953: 504). Yet their discussion of non-zero-sum games (pp. 504–86) focused mostly on what happens when the number of players is changed rather than when potential payoffs are expanded through cooperation or through valuing each others' gains. Morgenstern, writing in the *International Encyclopedia of the Social Sciences*, commented that 'applications of game theory to economic or political problems require the study of these [non-zero-sum] games' (1968: 63), yet he still devoted almost all of his essay to zero-sum analysis, not even making any reference to positive-sum alternatives.
6. The most widely accepted definition of the state is that of Max Weber, as a territorially defined organization 'that successfully upholds a claim to the monopoly of the legitimate use of physical force in the enforcement of its orders' (1947: 154). A technical definition of 'coercion' is that of physical force used with a claim (or acceptance) of its legitimacy. Force used without such a claim (or acceptance) is called 'violence'. See Uphoff (1990) on this and other related analytical questions concerning power, authority and legitimacy.
7. Hirschman's distinctions among exit, voice and loyalty when classified in Figure 7.2 were presented in terms of alternative systems of organizations. From an individual, bottom-up perspective, the alternatives look different. One might identify voice with the public sector, and exit with the private sector, while loyalty is sought in the collective action sector (where loyalty is a variable rather than a given).

8. It might be thought that various differences are attributable to differentials in per capita income. In 1975, aggregate per capita income for the more organized cases (China, Egypt, Israel, Japan, South Korea, Sri Lanka, Taiwan and Yugoslavia) was $740, compared with $185 for the less organized cases (Bangladesh, India, Indonesia, Malaysia, Pakistan, Philippines, Thailand and Turkey). But in 1953 they were all about the same level – $74 for the more organized cases and $78 for the less organized ones (Esman and Uphoff, 1982: 22–5). Correlations do not prove causation, but these are large enough and the substantive connections between local capacities and agricultural, economic and social progress great enough, that the inference of some association between the two has been widely accepted. The methodology and case studies are given in Uphoff (1982–3).
9. These definitions and the rationale behind them are discussed in Uphoff (1986: 8–10). Institutions are conceived here along the lines proposed by Selznick, Huntington, Crozier and others who proceed from a sociological perspective. An alternative school, following the institutional economics tradition of John R. Commons, is represented by the work of Ruttan, Ostrom, North and others. Though I am personally closer to the more economic persuasion, I find the first view of institutions more fruitful, being better informed by organization theory. The two conceptions are compatible, even if the first focuses more on 'roles' and the second on 'rules'.
10. Huntington describes this dynamic well when he writes that 'institutions are stable, valued, recurring patterns of behaviour. Organizations and procedures vary in their degree of institutionalization . . . (which) is the process by which organizations and procedures acquire value and stability'. (1965: 378).
11. An example would be the way Fields and Wan (1989) treat the subject of 'wage-setting institutions'. They lump together as institutions: (*a*) minimum wage laws, which can change from one week to the next and which seldom command enough compliance to demonstrate that they have any real legitimacy or respect; (*b*) labour unions, which often qualify as institutions because they survive even when not conferring broadly-based benefits on society; (*c*) pay policy, which is often ephemeral and hardly institutional by anyone's definition, though it may emanate *from* institutions; (*d*) multinational corporations, which certainly are organizations but not all are evidently institutions given the frequency of mergers; and (*e*) labour codes and protective labour legislation, which are much like (*a*). Considering all of these to be 'institutions' deprives the term of much of its content and meaning.
12. This concept, proposed by Hirschman (1984: 42–57), is elaborated in Uphoff (1992: 357–87).
13. Barber Conable, former president of the World Bank, writes: 'A root cause of weak economic performance in the past has been the failure of public institutions. Private sector initiative and market mechanisms are important, but they must go hand-in-hand with good governance – a public service that is efficient, a judicial system that is reliable, and an

administration that is accountable to the public' (World Bank, 1989: xii). The NGO sector also needs an effective and efficient set of state institutions (Farrington *et al.*, 1993).

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8 Between State, Markets and Households: A Neo-Institutional Analysis of Local Organizations and Institutions

Jeffrey B. Nugent

8.1 INTRODUCTION

The experience of LDCs in rural economic development over the last half-century has demonstrated that neither direct state intervention nor indirect state influence through macro policies (such as 'getting the prices right') is a sufficient condition for success. So too, neither the best efforts to utilize existing markets on the part of rural households themselves can be guaranteed to lead rural residents out of pervasive poverty.

It is the thesis of this chapter that the failures in such approaches and efforts often lie in communication and implementation failures between households, markets and the state. Such failures can be attributed to the lack of vibrant, functional and healthy local organizations and institutions (LOIs) and can be overcome by their presence.[1]

In ideal circumstances characterized by neither state nor market failures, the absence of such intermediating LOIs might not be critical. Given the pervasiveness of such failures in rural areas of developing countries (LDCRAs), however, their absence can be of telling importance. In view of the diminished capabilities of the state expected to prevail in the foreseeable future in most LDCs, the potential importance of filling this void is considerably greater than in the past.

The purpose of this chapter is to draw upon some relevant strands of analysis from both the theory of games, transaction costs and collective action and comparative institutional analysis to identify mechanisms by which and circumstances in which the obstacles to healthy LOIs (and the local public goods which they may create) can be overcome.[2]

These LOIs should be structurally linked not only to one another but also to market and state institutions.

The single most distinctive characteristic of the vast literature on the provision and maintenance of goods with the traits of public goods in general, and those supplied at the local rural level in particular, has been pessimism about the prospects for success. In Section 8.2 which follows we briefly review the grounds for such pessimism. This is followed in Section 8.3 with some reasons for believing the pessimism to have been overplayed. Section 8.4 identifies some useful linkages of LOIs both to one another and to other institutions. Section 8.5 provides a concluding theme.

8.2 THE GROUNDS FOR PESSIMISM IN THE CREATION AND MAINTENANCE OF LOCAL PUBLIC GOODS

The pessimism that has become so pervasive among economists, social scientists and the general populace concerning the ability of people in LDCRAs to create and maintain LOIs in the service of rural economic development was launched by Garrett Hardin's (1968) 'tragedy of the commons'. According to Hardin, in the case of commonly owned resources, each individual has the incentive to overuse the resources, regardless of what others do, thereby leading to the destruction of those resources. Hardin's prime example was that of herdsmen putting their animals on open access grazing areas, and his solution was strong and appropriate intervention by the state. Subsequent to Hardin's famous article, various other 'tragedy-hunters' have identified numerous other examples and often offered the same solution.

Olson (1965), Russell Hardin (1982) and Dawes (1975) have subsequently provided a more solid analytic basis for Hardin's pessimism about the prospects for local cooperation by developing the principles of collective action (with its concept of free-riding) and game-theoretic formulations of the prisoner's dilemma.

Suppose that a common grazing ground is capable of supporting 200 head of cattle and that there are two herding families in the area (A and B). If A and B both stint in the use of the grazing ground, each can raise and sell 100 head of cattle per year. If neither stints, i.e. each tries to put 200 head of cattle on the commons, neither succeeds and most of the cattle die, the net proceeds of each being zero. If one stints (e.g. A) but the other (B) does not and gets its cattle on the commons first, then A loses its entire herd (−100) while B could raise and sell twice as large

a herd (200). These figures are represented in the payoff matrix shown for cooperation (C) and non-cooperation (NC) in Table 8.1. As the reader can easily see, each family has a dominant strategy of NC since, no matter which action the other family takes, it is better off not cooperating. For example, if B cooperates, the payoff to A of NC (200) exceeds that of C (100) just as, if B does not cooperate, the payoff to A of NC (0) exceeds that of C (−100).

Another grounds for pessimism about the prospect for appropriate and functional LOIs derives from dynamic considerations. Even if LOIs and cooperation do develop and are appropriate for the initial environmental conditions, because these conditions are always changing and the transaction costs of institutional change are high, the LOIs in existence at any subsequent time may not be appropriate (efficient and equitable) for the conditions in effect at that time. This problem may be exacerbated by path dependence in institutional decision-making, wherein superior institutional alternatives may be ruled out by past choices.[3] As a result, even once highly appropriate institutions may long outlive their usefulness.

The prospects of success in local cooperation and the creation of appropriate LOIs can also be undermined by the penetration of markets on the one hand and the state on the other.[4] To the extent that rural development can be associated with the increasing importance of both states and markets, extrapolation from historical experience would seem to suggest the continuing demise of LOIs.

8.3 REASONS FOR BELIEVING THE PESSIMISM TO BE EXAGGERATED

Recent developments in a number of fields, however, have identified various reasons for believing success in cooperation and collective action in LDCRAs to be considerably more likely.

Table 8.1 *Payoffs in a two-person symmetric prisoner's dilemma game (i)*

		Family B's actions	
		C	*NC*
Family A's actions	C	100,100	−100,200
	NC	200,−100	0,0

Note: C represents the decision to cooperate and NC that to not cooperate.

One such development comes in the more recent work of collective action theorists Olson and Russell Hardin in identifying group characteristics that *are* conducive to success in collective action, even in LDCRAs. For example, in smaller and more closed groups, the costs of cooperating would be lower and the ability to observe any free riding by others would be greater, in both cases reducing the incentive to free ride. Groups in LDCRAs tend to be more homogeneous in backgrounds, have greater lengths of association and lower costs of communication than their counterparts in cities and more industrialized countries. They may also have suffered greater relative deprivation and hence may have a more urgent need to organize, perhaps even for their very survival. Even if large and heterogeneous, the disadvantages of such characteristics can be offset by organizing them into federations or by using selective incentives.[5]

From game theory have come a number of other important developments leading to greater optimism about cooperative behaviour. Among these are repeated game situations which give rise to strategies more conducive to cooperation like 'Tit-for-Tat'. With tit-for-tat, if cooperation gets started, it will probably be reciprocated.

Naturally, when one considers various sources of risk, uncertainty, imperfect information and incomplete observability (even after the fact), the relevant games get more complicated. For example, mistakes and short-term aberrations may occur in which individuals are perceived to defect temporarily from cooperation while otherwise remaining on a cooperation-inducing Tit-for-Tat strategy. Since it may be both privately and socially costly to treat these as defections (thereby getting permanently locked into non-cooperative outcomes), a modified Tit-for-Tat strategy with a certain tolerance for mistakes may be adopted.[6]

Another important finding is that pre-game communication can induce cooperative behaviour, at least as a starting point. Not surprisingly, however, the actual outcomes depend heavily not only on the quantity but also on the character of that communication.

As several contributors to this volume have pointed out, credible threats and precommitments to retaliatory actions can play important roles in deterring non-cooperative behaviour.[7] Other ways out of the classical PD problem involve transforming the structure of the game. For example, a norm of fairness may develop which allows the actions to be sequential and everyone to adopt the behaviour taken by others. Because the NC stategy is chosen by A primarily out of fear of becoming a 'sucker' should B choose NC, the problem can be solved if each

party assures the other of cooperation. Without assurance of cooperation by others, NC will be the optimal strategy as in the PD game of Table 8.1. With such assurance, however, each party chooses C.

This is illustrated by the payoff matrix given in Table 8.2 in which all the payoffs are the same as in Table 8.1, except those of the one party not cooperating while the other party cooperates. The result of this seemingly small change in the payoff matrix is that the NC strategy no longer dominates. There are now two equilibrium strategies (C,C and NC,NC), the choice between them depending on the expected probability that the other party will cooperate (p). Simple comparison of the expected payoffs to C and NC, using the expected probabilities p and $(1 - p)$ as the weights, shows that 2/3 is the value of p which equates the values of the two strategies. Hence, for any $p > 2/3$, C is optimal.

Sometimes, the payoff structure can be changed by changing the content of the actions. For example, in the aforementioned example, cooperation might include both stinting and protecting the commons from outsiders, the latter activity being ineffective unless both cooperate.[8]

Otherwise, the required transformation in the payoff matrices may have to be accomplished by: (1) creating appropriate selective incentives, and/or (2) creating appropriate social norms. Indeed, in practice both may be desirable in that each can complement the other.[9]

With respect to the use of selective incentives, it is important to distinguish between positive and negative selective incentives. *Positive* selective incentives could be used to raise the payoff of C and *negative* incentives to lower that of NC in the relevant payoff matrices. Since their costs can be substantial, the choice between them might well depend on their relative costs. Because social norms (like social capital) are subject to depreciation, and hence certain costs may be required for

Table 8.2 *Payoffs in a two-person symmetric prisoner's dilemma game (ii)*

		Family B's actions	
		C	*NC*
Family A's actions	C	100,100	−100,50
	NC	50,−100	0,0

Note: C represents the decision to cooperate and NC that to not cooperate.

their maintenance, similar considerations apply to the use of social norms.[10]

Realistically, in applications to large groups, group members may differ in their respective payoffs to C and NC, in their attitudes, and in their expectations about the likelihood of others to cooperate. In assurance game situations, such differences may result in the formation of different subgroups, each with a different threshold value of the expected probability of cooperation by others for their own cooperation.[11] Moreover, since expectations in such contexts are open to continuous revision on the basis of revealed behaviour and the decisions of different subgroups are potentially interdependent, even small changes in expectations by a few can generate chain reactions. As a result, there can arise sudden changes in cooperation.

One implication of such possibilities is that even longstanding institutions in support of cooperation can unravel quickly. Another, however, is that a conversion of the right catalysts to the side of cooperation can induce many others to follow. As a result, heretofore non-cooperative societies can achieve a relatively high degree of cooperation in a relatively short period of time.[12]

In dynamic settings of this sort with possibilities of multiple equilibria (some stable and others unstable), selective incentives may be especially useful. For example, Basu (1989) showed how low-cost positive incentives, such as civic awards, honours and other 'association goods', not only can be concentrated on the few people who really matter (by virtue of their positions of leadership and/or in the hierarchy of subgroups with linkages exerted from one such group to another), but also can serve as means of entry into more exclusive groups within which collective action is facilitated.[13] By contrast, because of economies of scale in their provision and use, the costs of negative selective incentives may decline with use.

Greater optimism concerning the possibility of success in collective action also arises from the results of experimental work on victims in distress (Frank, 1988). In general, even when such experiments are carried out in large group settings in which the participants have never seen each other before nor are likely to do so again, a surprising amount of help is typically offered. As long as their actions are observable by others (even strangers), people seem unwilling to be seen failing to help the victims in distress. Fairness and the revealed experience of others also encourage willingness to help.[14]

Many collective action failures are attributable to the incentive either to free-ride in contributing to the provision of the local public goods or

equivalently to falsify declarations concerning willingness to pay. But various experiments have shown that these incentives can be overcome under the right set of rules, such as one in which the individual contributions follow a schedule deemed to be fair and by which, if the critical minimum contributions for production of the public good are not obtained, the funds collected will be returned in full.[15]

In the wake of the numerous environmental changes which make for increasing LDCRA complexity and heterogeneity, the gap between real world conditions of LOIs and those of the simple types utilized in much of game theory has widened considerably. The quest for a better match between existing institutions and their incentive structure, on the one hand, and the needs of equitable development, on the other, has led analysts to *comparative institutional analysis.*

This approach usually focuses on a single institutional problem and includes both (1) an evaluative survey of how different communities have dealt with the problem and their comparative effectiveness and (2) an analysis of the factors which distinguish success from failure. The approach has demonstrated both the variety of possible local solutions to common problems and that the LOI solutions may be superior to those of either the state or market. While external actors have sometimes played important roles in initiating and financing LOIs, usually it has been the quantity and quality of indigenous efforts that have been critical.[16] Because of their relevance to the subject at hand, there follows a brief recap of the most important findings from comparative institutional case studies.

First, many of the factors judged by collective action theorists to be conducive to success have been substantiated. Second, the *nature* of the product resulting from collective action is also important. In particular, success is more likely when that product is not a pure public good but rather a club good so that non-members are at least potentially excludable from its use but not necessarily from sharing in the costs (Hechter, 1987).

Third, monitoring is crucial because only with monitoring can the commitments to participate in and to support cooperative efforts be made credible. The benefits relative to costs of such monitoring are likely to be highest when that monitoring occurs mutually.[17] If mutual monitoring is not possible, the monitoring should be by agents *accountable to the members.*[18]

Fourth, the likelihood of success can be raised by imposing sanctions on observed rule-violators. The effectiveness of such sanctions can be increased by making them vary with the seriousness or frequency of

rule violation and by applying them in a strict and unambiguous manner. These features increase the credibility of their application. Rule adherence can also be increased by threats of retaliation against those caught not cooperating.[19]

Since environmental conditions, group membership and group objectives are all likely to change over time and, even if they don't, shortcomings in existing rules may become apparent only over time, the long-run viability and success of LOIs and their activities may require a way of changing the rules. The means of doing so should be neither too costly as to discourage desirable improvements nor too easy to lead to instability of expectations. To make such changes rationally, one needs a means of calculating the costs and benefits of rule changes. Naturally, the costs of adjustment to new rules are likely to be higher the more numerous and more substantial are the rule changes.

One step at a time, sequential changes in rules are generally more cost-effective than abrupt, multi-faceted ones. This is because (1) it is easier to learn from such changes, (2) the information costs are lower and (3) the risks are smaller. The costs of rule changes for LOIs may also be reduced by (1) greater autonomy from national, regional and other authorities (2) undertaking them according to procedures laid out in a national constitution and (3) shared norms for cooperation and compliance.[20]

Comparative institutional analyses have also shown that over time, as (1) positive feedback from an existing system is realized, (2) cooperative norms are built up and (3) the costs of the relevant information to group members are reduced, more difficult-to-achieve objectives of collective action, such as the production of pure public goods, may become more attainable (Hechter, 1987).

The greater the degree of potential competition among alternative institutions, the more quickly institutional changes may be undertaken. However, the more alternatives there are to choose from, the more slowly such changes will be made. Because individuals tend to be risk-averse and the risks and uncertainties involved in rule changes are large, the riskier the rule changes are for any given benefit-cost, the less likely they are to be accepted (Ostrom, 1990).

8.4 LINKAGES AND OTHER UNDERAPPRECIATED ISSUES

Although comparative institutional analysis has served as an empirical and real-world-oriented complement to the earlier approaches ident-

ified above, it still leaves us with various lacunae concerning the analysis of LOIs in LDCRAs. Several important issues have not yet been recognized, let alone confronted and resolved.

One of these is insufficient recognition that the same problems that arise in relation to the theory of the state and its role in economic development also arise at the local level. The rules which emerge in LOIs are just as likely to be motivated by rent-seeking as those at the national level and the resulting efficiency losses need not be any smaller. Also, LOIs need not be more representative than national governments and entrepreneurs capable of identifying LOI opportunities may be even scarcer. Indeed, the limitations of LOIs may be so severe as to cause state or market institutions to expand at their expense.[21] An important topic for further research, therefore, is to identify the conditions under which LOI participants may lead to 'voice' (and hence LOI reform) instead of 'exit'.

Another underexplored issue concerns the internal governance structures of both individual LOIs and the constitutional environments within which they operate. Clearly, governance can matter. In the previous section one dimension of constitutional choice was discussed, namely flexibility. Even with respect to flexibility, the importance of and character of a constitution may vary substantially according to local conditions. For example, even within this volume (Chapter 17) Rausser and Johnson argue (in the context of Eastern Europe) that the absence of an adequate and generally accepted constitution is a critically important constraint on both institutional and economic development, while Fafchamps (Chapter 11) argues that certain societies (e.g. in Africa) may be able to do better by periodic complete recontracting without need of a constitution. The critical differences between these judgements may lie in different abilities to explore and thrash out alternatives through communication and in the degree of instability of expectations.[22]

There are, however, many other important dimensions of governance structure. One is the set of checks and balances designed to limit the opportunities and incentives for opportunistic behaviour on the part of those in the governance hierarchy.[23] Some small and traditional LOIs have been quite successful in accomplishing this with little hierarchy and little need for independent checks on the abuse of power.[24]

As the size and heterogeneity of the LOI's membership grow, however, greater hierarchy may be necessary. While in such circumstances it may be appropriate to delegate various kinds of authority to

certain LOI officials, there should exist credible mechanisms for removing such officials and/or for sanctioning them in the case of demonstrated abuses of their power. This also implies the need for a neutral or independent party to investigate alleged abuses. Naturally, the maintenance of such independent investigating, decision-making and sanctioning systems can be costly in terms of both resources and time (in the latter case by slowing down decision-making and implementation). While external agents may be more independent and therefore more credible as fair and impartial judges, it may be more costly for them to obtain the necessary information and their use may also render the LOI vulnerable to outside influence.

Another largely unexplored issue is: 'To what extent and how should one try to take advantage of, or build on, traditional LOIs?' Is one better off to start from scratch in building LOIs along modern lines or to build on whatever social capital may already exist in traditional ones?

In seeking answers to these questions, attention needs to be given to both static and dynamic efficiency and distributional equity. While generalizations in these respects are obviously risky, one important hypothesis is that of North (1991) who suggests that many traditional institutions may be insufficiently flexible to allow for innovation and the evolution of dynamic linkages to other institutions.[25]

While the verdict on such a generalization may have to await further study, there are certainly examples of traditional LOIs that have been remarkably innovative and adaptable.[26] Moreover, even if it were true that traditional LOIs were less adaptable and dynamically efficient than other LOIs, appropriate policy and other implications could be derived only after identifying the explanation for their inferiority. According to North, the explanation lies in the fact that traditional LOIs use personal reputation as the primary means of controlling opportunistic behaviour whereas non-traditional ones rely heavily on private property rights and the institutions which support it. Not only is personal reputation more subject to diminishing returns with respect to distance and infrequency of contact than the alternative mechanisms, but also it provides less incentive to those possessing it to allow or promote other means of solving the adverse selection and moral hazard problems inherent in long-distance and more anonymous transactions.

An alternative explanation for the lower degree of dynamism in traditional LOIs, however, may lie in lower rates of return to such innovations, slower growth of markets (and hence of the need for the

division of labour) and other environmental differences. Notably, the evidence cited by North (see Note 26) do not and cannot distinguish between these alternative explanations. Between the two explanations, moreover, there is at least some evidence to suggest that the one based on environmental differences may be the more important, at least in certain settings.[27]

If there are existing traditional institutions in LDCRAs (at least when appropriately reformed) which could serve as useful foundations on which to build (or with which to link) modern LOIs, does this imply that something should be done? While clearly the answer would depend on the social benefits relative to costs of revitalizing the existing institution as well as those of the various alternative actions which might be undertaken, there would seem to be several general classes of situations where doing something would be justified. First, situations in which the institution is consistent with the preservation of social norms supporting cooperative behaviour.[28] Second, and closely related, cases in which, even if social norms are not operating, the costs of the selective incentives needed to obtain cooperation are considerably lower than otherwise. Third, and perhaps most important, cases in which there is a reduction in transaction costs attributable to the greater opportunity for low-cost mutual monitoring.

If it should be determined that something should be done, what should be done and how? Since alternative answers to these questions depend on the identity of the factor(s) responsible for the particular LOI problems needing to be addressed, the latter cannot be determined without first answering these questions. Given the large number of alternative factors and the several different ways of reforming existing LOIs in each respect, even a brief survey of the many alternatives is well beyond the scope of this study. Nevertheless, it may be useful to identify a few actions which outside agents could take so as to both assist this process and foster economic development.

One approach used is to strengthen traditional culture (literature, drama, music and religious mores). A stronger culture may help revitalize the various social norms which (as mentioned above) can play a vital role in lowering the transaction costs and raising the efficiency and equity of traditional LOIs. Another useful approach is to provide LOI members with a better understanding of the market, state and other activities outside the village upon which the success of LOI activities are heavily dependent. Externally provided matching funds often help to stimulate contributions to LOIs from the local community. Assistance in developing local problem-solving and

research capabilities (e.g. to be able to try out or investigate the benefits and costs of local proposals for LOI activities) can also be useful.

Networking with other LOIs can be useful not only in pooling information and resources but also in building political links to other groups and to the state.[29] The linking of different LOIs need not be confined to those which are similar. Indeed, the ability to tap potential complementarities may constitute an important objective in establishing such linkages.

For example, LOIs in communities experiencing considerable out-migration might well benefit from links to LOIs in those communities receiving most of the migrants. Such a link could re-establish 'closure' in the relevant information networks and sanctioning mechanisms, thereby discouraging opportunistic behaviour with respect to loan repayment, old age and disability support to family members and other contractual relationships among out-migrants. Similarly, the linking of the credit bureaus of urban-based financial communities with the traditional information networks of rural-based informal credit markets could go a long way towards overcoming the familiar information asymmetries in the provision of rural credit.[30]

Still another useful form of rural LOI–urban linking might be one between farmers and wholesalers or exporters designed to induce better timing and quality in the supply response of agricultural products to announced market opportunities. For example, although price signals may be communicated satisfactorily without resorting to a non-market information system, the need for more detailed information about quality, timing and other requirements may justify a non-market information system linking farmers (through their LOI) with wholesalers and exports. Such a system could do much to help the farmers obtain a larger share of the gains from commercialization.[31]

Three other reasons for establishing a variety of linkages between rural and urban LOIs should be mentioned. One is that such linkages can provide increased competition in the various markets, thereby limiting the (perhaps excessive) power and control exercised by the wealthy few over the poor. Second, as shown by Fafchamps (Chapter 11) in the case of mutual insurance and Milgrom, North and Weingast (1990) in the case of law merchants and private judges, a whole set of internally consistent incentives must be present for the institution (no matter how important its purpose or rational its function) to (1) function well, (2) avoid degenerating into rule by a subgroup and (3) reinforce mutually cooperative behaviour. Third, the satisfaction of such conditions may require other linkages to and from LOIs.

Since the modeling of the aforementioned linkages between traditional and other LOIs and modern, urban-based LOIs (including markets) is still in its infancy, it is hoped that the aforementioned examples of its potential importance will contribute to such modelling.[32]

8.5 CONCLUSION

Finally, we return to the nature of relationships between the LOIs and the state on the one hand and markets on the other. As the state is increasingly forced to reduce its funding for rural public and semi-public goods, success in rural development will require an increasingly good match between LOIs and the incentives for the creation and maintenance of these goods. Attention to both the theory and the practical lessons of experience reviewed above could help avoid dangerous mistakes. Even so, however, in view of the remarkable pace of events, and the presence of new actors (e.g. NGOs and their networks), knowledge of how to do it in the field is likely to lag well behind theory in the design, finance and maintenance of efficient, equitable and effective LOIs.

It is also clear that no single type of institution or set of rules will be appropriate for all situations. Theory can be useful in narrowing down the institutional choices and outlining their requirements of success. The existence of historical endowments may further narrow the scope of choice. This is especially true since experience has generally shown it better (1) to start LOIs modestly and, with success, to take on more difficult tasks and (2), when feasible to do so, to build on an existing institution rather than to start one from scratch. Nevertheless, in practice, there remains considerable room for leadership and strategic choice in the design and maintenance of LOIs.

Historically, many traditional LOIs originated where states were virtually non-existent and markets imperfect and incomplete. At their zenith many of these LOIs undertook many of the functions of states and greatly facilitated specialization and exchange. In many cases, the strength and integrity of these LOIs were subsequently eclipsed by the rise of the state and/or markets. As in part reported elsewhere in this volume, more recently many LOIs – both traditional and modern – have been resuscitated or created by state and/or market failures. This demonstrates that LOIs and states or markets can be substitutes for one another.

At the same time, however, there is evidence (1) that the existence of the state and the rules it establishes and enforces can strengthen and increase the efficiency of LOIs and (2) that, at least in coalitions with other urban-based groups, LOIs can give rise to collective action increasing the power of the state. Similar statements could be made about the relationship between markets and LOIs. Hence, clearly, the relationships between LOIs and states and/or markets can also be complementary.

One of the challenges ahead for development theorists and practitioners is how best to take advantage of both types of relationships in the cause of improving human welfare in LDCRAs. The failure and demise of the state throughout much of the developing world may allow and force LOIs to rise. The same thing might be said of markets strangled by government regulation and taxation. Yet, because of the potential complementarity between the state and both markets and LOIs, all can be strengthened by developing appropriate linkages between them.

Notes

1. See International Labour Office (1990) and Korten (1980).
2. Public goods (including institutions) require collective action to be produced. Therefore, throughout the following discussion, we use the terms collection action, cooperation and the creation of LOIs interchangeably, thus justifying an integration of their determinants and effects.
3. See especially Arthur (1989).
4. Sahn and Sarris (Chapter 15, this volume) have shown the extent to which (for Africa in the colonial and post-independence periods) expansion of the state has come at the expense of traditional LOIs. For example, urban labour markets have attracted migrants from rural areas, thereby undermining existing social norms, and market opportunities in rapidly growing rural areas have attracted migrants from other areas, thereby undermining occupational and social homogeneity and consensus-building ability among residents of rural communities.
5. This creates, however, a secondary free-riding problem in that there is an incentive to free-ride on the creation and maintenance of the selective incentives.
6. Although greater tolerance could in principle give rise to more free riding, thereby undermining the basis for continued cooperation, such an incentive can be overcome by the general acceptance of a norm providing for a toleration band coupled with reputation. In particular, toleration for temporary errors or deviations from cooperation would be granted only to those with good reputations for not violating the norm. Abuses of toleration allowances could be further controlled by imposing reparation payments on the parties benefiting from such allowances (Sugden, 1986).

7. Admittedly, inequalities in income and wealth can convert the relevant payoff matrices of Table 8.1 into asymmetric ones and prevent some from making credible threats against others. Although as a result the cost burden of the collective action may fall more disproportionately on the poor and less powerful, asymmetries need not lower the likelihood of collective action. See also Chapter 9, this volume.
8. This method of getting out of PDs may be both inexpensive and reliable.
9. For example, the cost effectiveness of selective incentives may be increased by norms allowing negative selective incentives to be applied not only to the freeriders themselves but also to those who fail to turn in or punish the free riders. Social norms to do 'the right thing' or 'unto others as you would have them do unto you' can also play useful roles in overcoming incentives to free ride.
10. See Coleman (1987) for the use of this terminology and Basu in this volume (Chapter 10) for insights from evolution theory into difficulties in norm creation and maintenance.
11. A detailed demonstration is provided by Margolis (1991).
12. The pioneer in this analysis was Schelling (1978). More recent extensions and applications are provided by Margolis (1991) and Kuran (1987, 1989 and 1991).
13. The effectiveness of such awards, however, tends to decline sharply with use.
14. For example, those who have seen others providing help to victims are more inclined to offer help than those who haven't and they do so even though it costs them something (e.g. their time) to do so.
15. For some remarkable successes see Dawes *et al.* (1986) and Bagnoli and McKee (1991).
16. Note also that the incentives to local actors can be rendered perverse by inappropriate interventions by state or foreign actors. In order to reduce such harm, the external parties should improve the incentive compatibility of their interventions (Uphoff, 1986).
17. Although mutual monitoring tends to be feasible primarily only in relatively small groups, it can be rendered more feasible in large groups by adopting a federational structure with overlapping memberships and/or encouraging households to make their behaviour transparent. One means of accomplishing this is creation of a social norm that households should provide in-home hospitality to all neighbours (or at least the representatives thereof) on a regular basis. 'Cheap talk' or gossip can also help.
18. See, e.g. Hechter (1987), Wade (1988) and Ostrom (1990).
19. To make such threats credible, monitoring is again required (Hechter, 1987, and Ostrom, 1990).
20. But norms that reinforce only existing rules may raise the transaction costs of rule changes.
21. For example, the availability of pumpsets purchasable privately in the market may constitute for those who can afford them an attractive alternative to ineffective and unreliable LOI-supplied irrigation water.
22. Palaver would appear to work better and expectations be more stable in Africa than in Eastern Europe.

23. For an interesting application of LOI constitutional issues to the viability of economic activity among American Indian tribes, see Cornell and Kalt (1991).
24. For example, the community as a whole (or more frequently its council of elders) may be able to act effectively in resolving disputes, enforcing sanctions and maintaining norms of fairness and cooperation.
25. In particular, North identifies the tribal institutions, caravan trade and market bazaars of North Africa as examples of institutions which lack dynamic linkages to other institutions, and law merchants, notary publics and other institutions of medieval Europe as ones with such linkages.
26. See, e.g. Barfield (1981), Bates (1989) and Ensminger and Rutten (1991) for examples of innovative tribes.
27. For example, even within generally very static traditional LOIs (such as the tribes and local bazaars) of North Africa cited by North, innovations did take place (1) in the caravan trade while that trade was booming in the late nineteenth century (Baier, 1980) and (2) in the suq of Tunis during the eighteenth century in the one market which was booming, namely the market for sheshiyas (the felt hats then popular throughout the Ottoman Empire and of which Tunisia became the leading exporter) (Valensi, 1969, and Kuran, 1989).
28. Coleman (1987) has argued that social norms constitute social capital which can have the effect of shifting society's production possibility frontier outward, even if not equally in all activities.
29. De Janvry, Fargeix and Sadoulet (1991) argue that there is considerable scope for farmer groups to form politically influential coalitions with urban workers. However, since the exercise of such influence is a public good, it may be subject to some free riding.
30. This is one of the roles which the internationally supported Grameen Bank has played in supplying credit to the landless poor (especially women) in Bangladesh.
31. According to Lamb and Muller (1982), links between Kenyan farmer groups and the Kenyan Tea Development Authority accounted for the remarkable success of Kenya's tea exports.
32. For early attempts at modelling see Arnott and Stiglitz (1991) and Besley and Coate (1991).

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9 Analytics of the Institution of Informal Cooperation in Rural Development

Pranab Bardhan

I

While the polar opposites of the state and the private markets hog the limelight in development debates, less attention is paid to the small-group voluntary organizations at the local community level which may avoid the 'failures' usually associated with the two poles and may, in principle, lessen the severity of some of the agency problems while achieving more equity. In this chapter I concentrate on community institutions of informal cooperation in matters of local water management and conflict resolution in water use, but some of the problems discussed are similar to those in co-operative management of other common property resources, in forestry grazing, crop protection, prevention of soil erosion, etc.

In South Asia and sub-Saharan Africa – the two regions where mass poverty in the world is geographically concentrated – controlled supply of water is crucial for rural development. 'Water reform' in the sense of building or promoting genuine broad-based community institutions of cooperation from below (as opposed to government-mandated water-user associations) is absolutely important in significantly increasing the existing levels of utilization of irrigation potential – by pooling efforts – and resources in constructing and maintaining field channels at the outlet level of the main canal systems; by regulating water allocation and monitoring violations; in cases of tank irrigation by desilting, weeding and stopping encroachments on tank beds; by repairing, maintaining and controlling water allocation from state and community tubewells; by controlling groundwater over-exploitation with privately owned pumps in areas with fragile aquifers, and so on. But the history of local community-level cooperative organizations of water

users in many areas is rather mixed. There are several documented examples[1] of successful local-level cooperation in water management in poor countries (although usually at a rather low level of organizational form), but there are more numerous cases of failure of such cooperation or coordination, often leading to an anarchical regime of scramble for water with the inevitable dominance of the rich and powerful farmers. It is therefore important to understand the conditions working for and against sustainability of cooperation in situations of economic and social interdependence. In this context I shall first try to draw some lessons from the growing theoretical literature on cooperation in repeated game theory and in evolutionary biology, and then comment upon some limitations of the theoretical literature, particularly in the light of some of the pragmatic insights one can glean from the available field studies on the subject. My purpose in this chapter is largely integrative, putting together evidence from disparate sources, theoretical and empirical.

II

For quite some time the literature on collective action has been characterized by a pervasive pessimism on cooperation, as, for example, in the widely noted work of Mancur Olson on political economy or that of G. Hardin on the tragedy of the (open-access) commons. The theoretical underpinning of this literature has been provided by the standard one-shot prisoners' dilemma game as in Figure 9.1(*a*), in which 'defection' or non-cooperation is the dominant strategy of each player, no matter what the other players do. But as Taylor (1987) and others have pointed out, the constellation of costs and benefits of collective action on common-pool resources like water is often of a kind which is much more favourable to the possibility of cooperation than the prisoners' dilemma game. Take, for example, the case of what Taylor calls the 'chicken' game (or what evolutionary biologists usually call the 'hawk-and-dove' game), as depicted in the payoff matrix of Figure 9.1(*b*). Suppose two neighbouring farmers are pondering the issue of who will carry out the essential maintenance work on the irrigation ditches which both use. Either farmer can do it by himself but each, of course, prefers to 'free-ride' on the other's work. The literature usually jumps to the extreme case of prisoners' dilemma immediately after mentioning the free-rider problem. But in the case of

many vital common-pool resources like water the consequences of 'defection' on the part of both agents may be so bad that either of them would rather do the work himself if the other did not. As Figure 9.1(*b*) shows, (defect, defect) is not the dominant strategy, unlike in the prisoners' dilemma game. Of course, in this case precommitment to an aggressive strategy is individually advantageous, and the powerful people in the village may resort to this, but at least the necessary maintenance work will not go by default.

There are, of course, cases in which an individual farmer cannot by himself do the whole work, and the extra benefits from the part of the work done by him do not fully cover his costs, as in the example of Figure 9.1(*c*). In this example, however, each farmer cooperates when

Farmer II/ Farmer I	C	D
C	3,3	1,4
D	4,1	2,2

(a) Prisoners' dilemma game

Farmer II/ Farmer I	C	D
C	3,3	2,4
D	4,2	1,1

(b) Chicken or hawk-and-dove game

Farmer II/ Farmer I	C	D
C	2,2	2,4
D	4,2	1,1

(c) Assurance game

Figure 9.1

the other does, but defects when the other defects. This is an assurance game, which captures a widely observed phenomenon in the field studies: nobody wants to be 'suckered', but one tends to be cooperative when the others (at least a critical mass of others, in a multi-person game) are, something that the prisoners' dilemma game fails to capture.

Even in the case of the prisoners' dilemma the earlier pessimism is modified in the repeated game theory literature where it is shown that cooperative equilibria can be spontaneously sustained by the long-run interests of foresighted self-interested individuals. The possibility of cooperation will, of course, depend on the future payoffs not being discounted too heavily or the short-run rewards to defection (like stealing water) being not too large. The proofs of the relevant theorems in the literature[2] of discounted many-person repeated games work on the basis of the possibility of administering sufficient punishments over time to outweigh the immediate benefits for the defector and of these punishments being credible. But therein lies a second-order collective action problem, since punishment is costly to the punisher, while the benefits are distributed diffusely in the community. The primary trick here is to devise strategies that punish players who fail to play their part in punishing the defector – i.e. rules of what can be called meta-punishment.

Elster (1989) has raised a question about such meta-punishment rules: do people really punish others when they fail to sanction people who fail to sanction people who fail to sanction a defector? In a large community it is quite likely that sanctions run out of steam at two or three removes from the original violation. But in a small community of irrigators meta-punishments may not be unreasonable (but then, in small communities the social costs of punishment to the punisher as well as the punished may also be larger).

The theoretical models point to a potentially large number of equilibrium outcomes, facing which players may use observed past behaviour of others as a guide in their choice. In other words, even when costs and benefits of cooperation are otherwise identical, what degree of trust the players have in one another serves a crucial role. Seabright (1990) has in this context a model of trust where he shows that when many equilibria can exist in which the players' beliefs about each other's trustworthiness are confirmed by subsequent behaviour, there is a tendency of cooperative behaviour to enhance the prospects for successful further cooperation. As Seabright points out, when trust matters for the possibility of cooperation, the equilibrium is more renegotiation-proof since the reputation loss in a breach of trust will

make it difficult for the violator to persuade the others to let bygones be bygones. This ensures that punishments are more credible.

Conditions under which cooperation survives have also been explored in evolutionary biology. In a framework of limited rationality and learning by trial and error, game theory has been used to explain evolutionary processes. The central concept, as explained by Smith (1982), is that of evolutionary stability. An evolutionarily stable strategy (ESS) is a pattern of behaviour such that if it is generally followed in the population, any small number of people who deviate from it will do less well than the others: no 'mutant' strategy can 'invade' the population. Let us consider a large population from which pairs of individuals are repeatedly drawn at random to play a particular two-person symmetric game. If V(I,J) is the expected payoff to playing I against an opponent who plays J, then the average payoff to playing I in a large population of others playing I is V(I,I), and the average payoff to playing J in the population is V(J,I). In this case I is an ESS when (*a*) either $V(I,I) > V(J,I)$, or (*b*) $V(I,I) = V(J,I)$ and $V(I,J) > V(J,J)$. In a two-person repeated prisoners' dilemma game it can be shown that conditional cooperation (tit-for-tat) is ESS, as long as rates of time discount are not too large, the expected duration of the game is sufficiently long, the rewards to defection are not too great, and the punishment for defection is very costly to the defector. These conditions should be familiar from our discussion in the earlier part of this section.

But while conditional cooperation is *stable* under these circumstances (i.e. it can defend itself against invasion), it may not be *viable* in the sense of Axelrod and Hamilton (1981), i.e. it cannot invade a large population of non-cooperators. If, however, we give up the assumption that agents are randomly paired for contests, and allow for the fact that agents are more likely to be paired with others adopting the same strategy, conditional cooperation may be viable as well as stable. As Bowles (1989) notes, when what he calls the 'degree of community' is sufficiently great (i.e. the fraction of all contests which are among agents playing the same strategy is large), the likelihood of both stability and viability of the conditional cooperation strategy is enhanced.

III

While the game-theoretic models in general give us important insights into the sustainability of cooperation among self-interested agents in a

situation of strategic interdependence in the management of common-pool resources like water, it is at the same time important to recognize that these models in a way divert attention from other salient issues in real-world cooperation which the models are much too mechanical and rigid to be able to cope with any degree of subtlety. For example, they cannot usually handle the impact of on-going interactions among agents in the updating and contingent modifications of the rules of the game, changes in the payoff matrix (as non-cooperative choices cumulatively drain a common resource,[3] as in the case of the overexploitation of groundwater) and the possible evolution of strategy sets as an outcome of successive rounds of a game. The models also ignore the importance of group dynamics, which through deliberation and persuasion may bring about endogenous preference changes and reorientation of values in a community, and the importance of leaders and political entrepreneurs acting as catalysts in initiating cooperation and breaking deadlocks, emphasizing to people how others' efforts are contingent on theirs and enlarging the shadow of the future.

The language of prisoners' dilemma game theory, as Sen (1987) has pointed out, makes it hard to discuss behaviour patterns which in adapting to the recognition of mutual interdependence go beyond what Sen calls 'self-goal choice' and work towards the enhancement of the respective goals of the members of a group. Such social norms may be particularly important in a small water community of a village. As Wade (1987) notes in his field study the villagers were not particularly morally motivated, they were more pragmatic, but their self-interest was usually coupled with the moral capacity to recognize the related claims of others. Such social empathy[4] (the ability to imagine oneself in the shoes of others), even sympathy and commitment, if it induces reciprocal behaviour, may, of course, be instrumentally useful in the general pursuit of self-goals. Besides, in a world where we often cannot predict each other's reactions, norms provide much-needed rules of thumb and focal points and lend a degree of inflexibility and commitment which form the basis of our binding agreements. As a result, as Elster (1989) points out, we often do better by following norms than by calculation.

Field studies in villages, as well as experimental studies of psychologists and economists, show that quite a large number of people are motivated by the norm of fairness: they don't want to free ride on the cooperation of others nor do they want to cooperate when few others do. Sociologists have emphasized what Coleman (1990) calls 'zeal', the

opposite of free-ridership, how individuals, particularly in small communities, sometimes incur high costs for what they perceive to be good for their 'team', driven by the human desire for approval from others (positive sanctions). Of course, such team spirit may be rare in faction-ridden villages. Simon (1990) has described an evolutionary mechanism, based on human receptivity to social influence and bounded rationality, that can account for the evolutionary success of even genuinely altruistic behaviour (in contrast to 'selfish gene' models which keep very little room for survivability of altruistic behaviour): individuals are often unable to distinguish socially prescribed behaviour (that contributes to genetic fitness) from altruistic behaviour. Internal sanctions or internalization of social norms (often working through guilt, loss of self-respect, etc.) of course, depends on factors like the degree to which the individual identifies with the group and the degree to which the norm and its sponsors are seen as legitimate. Intra-village conflicts may thus hamper the process of such internalization. On the other hand, if the conflict is perceived as something *vis-à-vis* outsiders or common adversaries, norms solidify more easily. As Wade (1987) comments, 'the [Irrigation Department] official who has to be bribed or entreated, the upstream village that has to be stopped from taking too much water, becomes an antagonistic "them", and being reified, can enhance perception of a reified collective "us".'

As for external sanctions in support of norms and meta-norms, as Axelrod (1986) indicates, they depend on similar structures of punishments and meta-punishments as in our earlier discussion of cooperation in repeated games.

As Ostrom (1990) notes, in actual field setting, unlike in the abstract models, one observes many cases of collectively arranged and financed 'enforcers' of cooperative arrangements (like the 'common irrigators' in Wade's villages in South India) and a great deal of peer monitoring. In cases of violations, the system of sanctions is often quite flexible and graduated, depending on the seriousness and context of the offence. Such contextuality is usually missing in the inexorable trigger strategies of punishment in the theoretical models. Too much flexibility, of course, can give wrong incentives.

Not surprisingly, cooperation works better in small groups[5] with similarity of hydrologic needs and clear boundaries, and shared norms and patterns of reciprocity. In such communities monitoring is easier, the 'common knowledge' assumption of models of strategic decisions is likely to be more valid, and social sanctions are easier to implement

through reputation mechanisms and multiplex relationships of face-to-face communities.

Migration and mobility possibilities work against cooperation. Contact with outsiders and the exit option reduce the effectiveness of social norms and the validity of the 'common knowledge' assumption. Prolonged repetition of the game also becomes more uncertain, raising incentives for short-run opportunism.

Even with similarity of social norms and of demographic size and composition, different villages can have completely different degrees of success in cooperative irrigation organization, depending crucially on hydrologic circumstances and the extent of ecological stress. Several cases suggest a kind of backward-bending curve relating the success of cooperative organization to (the quantity and reliability of) water supply: when the latter is extremely deficient, cooperation is difficult to organize; then at moderate levels of scarcity chances of success improve, other things remaining the same; then again when water is much too plentiful the urge to cooperate diminishes.

As is well known, the models emphasizing opportunism and incentives to break an agreement point to only one aspect of the collective action problem: the other, often the more difficult one, is the bargaining problem where disputes about sharing the potential benefits may lead to a breakdown of the necessary coordination. Here an increase in the disparity in private benefits from common property resource management can lead to a situation in which some parties may lose from cooperation (in the usual case of absence of side-payments) and this may erode a pre-existing cooperative arrangement.[6] Intra-group heterogeneity in payoffs may thus have an adverse consequence for the sustainability of cooperative agreements. This adds to some of the factors we have cited before to reinforce the conclusion that social heterogeneity and intra-village conflicts and inequality may impede collective action in water management: internalization of cooperative norms is more difficult under such circumstances; the degree of confidence or trust that individuals have in the likelihood that others will play their part in a cooperative agreement, as in Seabright's model (1990), may be low; the 'degree of community' which lends *viability* to conditional cooperation in the evolutionary models we have discussed may be missing;

Field studies confirm these theoretical expectations. From a study of 23 community irrigation systems in different countries Tang (1991) observes: 'a low variance of the average annual family income among

irrigators tends to be associated with a high degree of rule conformance and good maintenance'. Jayaraman (1981) notes how the relatively egalitarian structure of the community is an important factor in the farmers' coming together in his case studies of farmers' organizations in surface irrigation projects in Gujarat. A study of 10 tank irrigation cases in Tamil Nadu by Easter and Palanisami (1986) shows that the smaller the variation in farm size among the farmers, the more likely they are to form water user organizations. Some other case studies indicate that with the increased access to private pumpsets the powerful people in the village are less interested than before in the maintenance of irrigation channels. Wade (1987) describes how in villages where the rich farmers are able to get enough water for their land without having to organize corporately and without having to incur large additional expenditures themselves since they own the land immediately below the canal outlets, they even block the formation of a cooperative water control committee (which might curtail their own irrigation freedom) at the expense of the small cultivators lower down. Thus the distribution of control over land in relation to proximity to the outlets strongly influences the nature of corporate response to a given water scarcity situation in a village. Sometimes land fragmentation (which may have adverse effects in other aspects of agriculture) may actually help cooperation, since some of the big farmers may have fragments of land at disadvantaged locations, away from the outlets, and may thus be induced to organize cooperation. Boyce (1987) notes how in tubewell irrigation cooperatives in Bangladesh, when some powerful individuals manipulate the location of the tubewell and distribution of water in their favour, the resentment of those excluded or unfairly treated leads them sometimes to sabotage the pumpsets. Bandyopadhyay and von Eschen (1988), apart from generally noting from their survey some decades back of some villages in West Bengal the marked negative effect of economic and social stratification on cooperation, cite instances of village elites frustrating efforts at cooperation on the part of the poor:

> One instance of a deliberate effort to prevent cooperation took place in a village where several small cultivators tried to cooperate informally to irrigate their land by bringing water from a nearby source. Two of the richer farmers in the area, however, opposed this idea, claiming that the interest on money they had earlier lent these cultivators was greater than the amount the latter intended to invest

for the irrigation, and demanding immediate repayment instead. The small cultivators felt the real reason was that, if their irrigation efforts had succeeded, they would no longer have been dependent on the richer farmers, nor could the farmers continue to earn an easy income by loaning money at high interest rates with little risk. The two rich farmers in question successfully frustrated the efforts at cooperation by first lodging false charges with the police of theft and trespassing, and then going to court to seek an injunction against digging irrigation channels on the grounds that these would pass over land which they owned – land which, in fact, did not belong to them and which they simply seized. This harassment ultimately led the small farmers to abandon their efforts.

This is, of course, a case in which the rich farmers did not themselves belong to the irrigation community, and thus did not subscribe to its norms or obey its sanctions. Even when they belong to the irrigation community, in cases of sharp class antagonism the sanctions may be less effective if reputation loss beyond one's own class or reference group is perceived as insignificant.

While the previous points focus on some degree of egalitarianism facilitating cooperation, let us finally note a somewhat contrary factor that one observes in some case studies. In many local communities some rudimentary forms of cooperation have been sustained and enforced over the years by traditional authority structures. While there may have been something of a sharing ethic, the predominant social norm was often that of an unequal patron–client system, in which the powerful who might enjoy disproportionate benefits from the institution of cooperation enforced the rules of the game and gave leadership to solidaristic efforts. As the advent of participatory politics and social upheavals erode the legitimacy of these traditional authorities and as modernization improves the options of both 'exit' and 'voice' for the common people, these solidaristic ties loosen and the old cooperative institutions sometimes crumble. Appeals to supralocal authorities for conflict resolution and arbitration become more common, frequent recourse to external political intervention to reverse local sanctions make them much less effective in punishing defectors from cooperative arrangements, and increases dependence on the state to carry out functions like local water management and repair and maintenance of irrigation structures which earlier used to be in the domain of locally autonomous, though hierarchical, organizations.

Many rural communities in developing countries are now in the difficult transition period between the decline of the traditional cooperative institutions and the new water user associations, based on shared reciprocity and defined rights, common lobbying interest, and legal-rationalistic norms (like regular auditing of accounts or checks and balances on arbitrary use of power), yet struggling to be born. With the growing politicization, accountability of the decision-makers in the local community has increased in many places, but sometimes at the expense of loosening enforcement standards on rules and assignments of cooperative arrangements. With increased political and social awareness villagers are, however, increasingly able to differentiate between domains of relationships which formerly used to be lumped in a dense all-encompassing network. As a result even in a highly conflict-ridden village people sometimes are able to leave their factional disputes or caste conflicts behind when they settle rules of allocation and monitoring in a functionally separate water-user community, enhancing the latter's chances of survival.[7]

Notes

1. See, for example, Wade (1987), Ostrom (1990) and Tang (1991).
2. See Abreu (1988), Fudenberg and Maskin (1986).
3. In a multi-person situation one can imagine the marginal sanction on defectors depending on both the state of the (degrading) resource and the support a cooperator gets from others in the act of sanctioning. If p is the proportion of cooperators, the marginal sanction may then depend on the product $p(1-p)$. If the net benefit from cooperation is linear, then it can be shown in a simple model like that in Brown (1989) that there will be multiple equilibria allowing the possibility of a small amount of defection without a total breakdown of the village cooperative effort.
4. I agree with Binmore (1991) that sympathy, which is different from sympathy in the sense of Hume and Adam Smith, can easily be accommodated in the repertoire of the *homo economicus*.
5. In a game played by rotating irrigators (turntakers and turnwaiters) with self-enforced rules (i.e., without formal guards), Weissing and Ostrom (1990) show that in the equilibrium an increase in the number of irrigators is associated with an increase in the stealing of water, other things remaining the same. But, of course, in actual field settings other things do not remain the same: in larger systems the irrigators often increase the rate of monitoring.
6. For a numerical example of this case, see Kanbur (1991).
7. In a different context, Amulya Reddy, a scientist leader in the alternative technology movement in India, has commented on this ability of villagers to separate domains of conflictual issues by referring to the Indian practice of leaving *chappals* (sandals) outside before entering a temple.

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10 Civil Institutions and Evolution

Kaushik Basu*

10.1 INTRODUCTION

Indians in India do not accept torn currency notes. Englishmen in England do. This need not be because of any inherent difference between Indians and the English. Indians do not accept torn currency notes because other Indians do not accept torn currency notes. Englishmen do because other Englishmen do. In other words, it is possible that both India and England had two potential equilibria – one in which Scotch-taped notes are accepted and another in which they are not – and each country is caught in a different equilibrium. Once they are in equilibrium, it is not individually rational to try to deviate from the norm. The norm acquires its own *raison d'être* and survives.

When studying the causes of the rise and fall of nations or the technological advance or stagnation of different regions, economists have usually looked for differences in resource availabilities, the appropriateness of government policies and international relations. Thus, in planning to boost agricultural production in a region, we typically wonder whether we should intervene in the credit market to ensure the availability of cheap credit or provide agricultural extension services or stem the adverse movement of the terms of trade between agriculture and industry. What has not however been adequately discussed is the role of different norms. One community may be more prone to taking risks than another. Hence, one may be more likely to accept high-yielding varieties than the other.

Is such a difference in the attitude to risk between, say, the Punjab farmer and the farmer from Tamil Nadu an inherent difference? The answer may depend on how long a view we take of the matter. In the

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short run, of course there are inherent differences. But if we take a sufficiently long view of history, it is entirely possible that these are merely different norms which have *evolved* from roots which were once similar.

In textbook economics individuals choose from a set which is constrained by only what their money can buy. In reality, there are additional constraints imposed by the norms of the society or community to which one belongs. These are often very strong and can colour our language and lifestyles. When a Marwari tells you that so-and-so has become a businessman, it is reasonable to assume that he is expressing admiration and perhaps a little envy. When a Bengali tells you the same, it is safe to assume that he is trying his hand at scandal-mongering.

Norms can be economically progressive or regressive. From all accounts, the Protestant work ethic helps economic progress; Rastafarianism does not. Hence, the study of the survival and demise of norms may give us clues to the successes and failures of economies.

Norms however do not appear and vanish overnight. They evolve over long stretches of time and may outlive their original purpose, if any (Basu, Jones and Schlicht, 1987). Their survival in the short run requires that it be individually rational to adhere to these norms. Their survival in the long run may depend on the evolutionary process and natural selection.

Let me explain this with an example. In Nugent and Sanchez's (1989) paper discussing the Castilian Mesta – the Spanish guild of shepherds with grazing rights so extensive that they often conflicted with the private property rights of land owners – one of the characters, Harry, argues as follows (p. 263): 'Although the preservation of inefficient institutions is not unheard of (Akerlof, 1976; Basu *et al*, 1987), in view of the Mesta's very remarkable strength and longevity (having lasted from 1273 to 1836), I suspect that it was serving a socially useful purpose'.

But is there any *basis* to the suspicion of Nugent and Sanchez, alias Harry, that a social purpose was being served? Clearly 'longevity' *in itself* is no explanation. But there may indeed be an indirect link. Longevity of a civil institution guarantees that the institution must have passed the test of natural selection and so must have some minimal usefulness. Hence 'Harry's' view can be given an evolutionary justification.

The purpose of this study is to examine the relation between social norms and civil institutions on the one hand and evolutionary pro-

cesses on the other. The formal analysis of evolution in economics is a relatively recent phenomenon. Its roots are to be found in biology, in particular in the seminal work of Maynard Smith and Price (1973) (see also Maynard Smith, 1982). Their analysis of evolutionary games has caught the attention of economists and there has been an enormous outpouring of writings on it (for references see Van Damme, 1991). This is indeed an important area for economists' interested in development and the growth and decay of norms.

The study of the formation and persistence of social norms, though still in its nascency, has a substantial literature (to name just a few: Akerlof, 1976; Basu, 1986; Platteau and Abraham, 1987; Nabli and Nugent, 1989; Elster, 1989; Sugden, 1989). But none of these papers use results and concepts from the literature on evolutionary games. This paper may be viewed as an attempt to provide a bridge – pontoon, critics would no doubt say – between these two kinds of analyses.

Since evolutionary games have not yet found their way into the development literature, it may be useful to begin with a primer for development economists. This is attempted in Section 10.3. It is then argued that economists have got excessively involved in the technical solutions of evolutionary games, without paying adequate attention to how these may be adapted to the human context. After all, Maynard Smith and Price's original paper was called *The Logic of Animal Conflict*. I suggest ways in which this may be altered to be applicable to human conflict. Finally, I develop a new solution concept which identifies social norms that can survive the sieve of natural selection.

10.2 INSTITUTIONS AND NATURAL SELECTION: PRELIMINARY IDEAS

The idea of evolution in society is not one idea but many. And though the infusion of biological game models in the social sciences is very recent, social scientists and philosophers have for a long time talked about the relation between social norms and evolution. One finds evidence of this not only in the works of Schumpeter (1934), Alchian (1950), Hayek (1960), Nelson and Winter (1982) and Jacquemin (1987), but even earlier writers (see Platteau, 1991, for discussion).

To give a somewhat more concrete idea of how evolution can help us understand certain civil institutions, let me begin with an example I have discussed elsewhere (Basu, 1990). It is an example which tries to

reject what is often referred to as 'functionalism' and replace it with what may be called 'minimal functionalism'.

It has been noted by anthropologists that in most primitive societies people have 'possessory rights', that is, whoever first gets to possess a good has a right to it. Posner (1981, p. 182) has noted however that in primitive societies where investment is feasible the investor is often protected by the grant of a non-possessory right. For instance, in a hunter-gatherer society, the trap-setter has the right to a trapped animal instead of the person who first finds the animal. Posner seems to be explaining with this example how societies choose institutions which are optimal for their lifestyles. There are others who have adopted more extreme 'functionalist' positions, arguing, for instance, that societies invariably choose laws and civil institutions which are functionally optimal or are ones for which benefits outweigh costs. Such naive transplanting of individual choice models on social domains has been rightly criticized by many (see, for instance, Bardhan, 1989).

It is however possible to argue that though such extreme functionalism is best jettisoned, a 'minimal functionalism' can be defended by a very different route, namely evolution. If one finds that a society which has remained (and therefore survived) unchanged over a long stretch of history has certain norms, it is arguable that these norms cannot be too detrimental for the people. The fact that the people practising this norm have survived such a long time ensures this. Turning to the above example, suppose that there is a hunter-gatherer economy where the trap-setter does not have the right to the trapped animal, but the first person to lay his hands on the animal gets to keep it. In such an economy people would either cease to set traps or, after setting a trap, wait there, foregoing all other activities (such as hunting and gathering). The productivity or 'fitness' of such an economy would be low and it is possible that the economy would not survive too many generations.[1] Hence, hunter-gatherer economies which survive to be analysed by anthropologists happen to be the ones which grant the trap-setter rights over the possessor. Thus, like the giraffe's long neck and the housefly's resistance to DDT, social groups have norms which serve minimal functions to ensure that they survive.[2]

Unlike the colour of my shirt or the location of your house, the norms of a society cannot be explained in terms of human volition. Just as lions move in prides not because they choose to do so but because if they did not, their hunting ability would fall drastically and they would not survive to be seen,[3] hunter-gatherer societies may have the norms

they do because these norms have survived natural selection or, in Nozick's (1974, p. 314) terminology, 'filter processes'.

To sum up: for us to explain a social norm or civil institution which exists, we must be able to demonstrate

1. that it is individually rational to adhere to the norm once it is there, and
2. that it is robust in terms of evolutionary processes.

I discussed the method of (1) in Basu (1986) and argued that (1) does not guarantee that the norm is desirable from the society's point of view. Indeed, the norm could be such that every person following it wishes it were never there. On the other hand, to satisfy (2) requires that the norm has at least some minimal desirable properties. Thus, for instance, if we are to explain cooperative behaviour[4] norms in a society, it seems useful to take the evolutionary approach. Unfortunately, it will be seen that Maynard Smith and Price's 'Evolutionarily Stable Strategy' or phenotype turns out to be necessarily a Nash equilibrium. I shall however demonstrate that my modified solution concept can admit non-Nash strategies and therefore may be better suited to explaining cooperation.

The above discussion is of an evolutionary process in which there is no explicit recognition of the strategic nature of interaction between agents. This is also true of Nelson and Winter's (1982) important work on evolution which differs from the above analysis (especially in its emphasis on the dynamics) and also from the Maynard Smith and Price type of analysis by not drawing out the strategic nature of interactions between agents. This caveat has been noted: see Stiglitz's comment following Nelson's (1986) discursive paper in Stiglitz and Matthewson (1986, p. 473).

The advantage of the recent work on evolutionary games is that interpersonal interdependence is at the centre of the story. It has other shortcomings. But before taking these up, we must do a brief recapitulation of its main ideas.

10.3 EVOLUTIONARY STABLE STRATEGIES

When in 1858 Charles Darwin and Alfred Russell Wallace presented their path-breaking ideas on the evolutionary origins of human beings

to the Linnaean Society in London, the ideas had seemed firmly rooted within the natural sciences. This need not have been so, since Darwin had been influenced by Robert Malthus. Nevertheless, the social sciences had for a long time remained untouched by the rise of evolutionary models in the natural sciences. This is now changing as a consequence of Maynard Smith and Price's (1973) work. Their work on combining evolution with game theory had precursors – the most notable being Lewontin (1961). But in Lewontin's model a species plays games against nature. The distinguishing feature of the work on evolutionary games is that it allows for strategic interaction between players.

Let $G = (S_1, S_2, P_1, P_2)$ be a two-player normal-form game where S_i is player i's set of strategies and P_i the payoff function. G is an *evolutionary game* if the following is true:

(i) S_1 and S_2 have the same, finite number of elements. We shall write $S_i \equiv \{1, \ldots, m\} S$.
(ii) The payoff matrix is symmetric. That is, for all $i,j \in S$, $P_1(i,j) = P_2(j,i)$. Define $A(i,j) = P_1(i,j)$. Note that the entire payoff matrix can be deduced from the function A.

From now on we shall hold the S_i's as fixed. Hence an *evolutionary game* is fully defined by A. If we write a_{ij} for $A(i,j)$, then the information in A is also fully captured by the matrix $[a_{ij}]$. Distorting notation a little, I shall write $[a_{ij}] = A$. Hence A represents both A matrix and a function. It will be clear from the context as to which sense it is being used in.

Let $M(S)$ be the set of all mixed strategies open to player i. That is,

$$M(S) \equiv \{x \in E^m \mid \sum x_i = 1; x_i \succeq 0, i = 1, \ldots m\}$$

where E^m is the m-dimensional Euclidean space. If $x \in M(S)$, it means that the player will play strategy $i \in S$ with probability x_i. More generally, if $T \subset S$, we define the set of all mixed strategies with support in T as $M(T)$.

If 1 and 2 play strategies x and y in $M(S)$, then player 1's (expected) payoff is $x^T A y$ which, again distorting notation a little, I shall also write as $A(xy)$.

Though an evolutionary game looks like any ordinary game with some symmetry conditions added on, its interpretation is very distinct. What are called 'strategies' here are not really the 'strategies' of von

Neumann and Morgenstern but phenotypes. Each player is a certain phenotype. That is, we could think of each player as born to play a fixed strategy $p \in M(S)$. Moreover, a p-player's child is also a p-player.

Next, the payoff in an evolutionary game depicts not the level of happiness of agents, but their fitness. Indeed, Maynard Smith (1982) refers to A as the fitness matrix. I shall however take it – as will be clear later – that utility coincides with fitness.

Though an evolutionary game is a two-player game we should think of there being an infinite population. From this, players are randomly matched in pairs and made to play the game A. It is assumed that if in a certain population a strategy q (that is, a player who always plays q) gets a lower expected payoff than strategy p, then q will gradually die out from the population because players of type q will have a lower reproduction rate than those of type p.

Now consider a monomorphic population of type $p \in M(S)$. That is, the entire population consists of agents who play p. Following the discussion in the above paragraph, we shall say that p is *immune* to $q \in M(S)$ if

(1) $A(p,p) \succeq A(q,p)$ and
(2) if $A(p,p) = A(q,p)$, then $A(p,q) \succ A(q,q)$.

Since immunity is such an important element in the definition of ESS, its motivation needs to be spelt out. The usual justification is in terms of 'small invasions' of mutants. I think this justification is best formalized in lexicographic terms. Since the bulk of the population consists of type p and a tiny invasion is of type q, if p does better against p than q does against p, it is reasonable to suppose that q will be less fit than p and get destroyed. Performance against q is of secondary importance. If both p and q perform equally well against p, then q will be less fit than p if p does better against q than q does against q. (1) and (2) capture just this idea.

A strategy $p \in M(S)$ is an *evolutionarily stable strategy* (ESS) if p is immune to all $q \in M(S) - \{p\}$.

It is clear from (1) that an ESS has to be a Nash equilibrium and over and above that it must have the refinement that comes with (2). Indeed, subsequent analysis shows that it is a very sharp refinement. As ESS is, in fact, not just a Nash equilibrium but also perfect and proper (Van Damme, 1987: theorems 9.3.1 and 9.3.4).[5] And it is also true that there are games which do not possess any ESS.

Before proceeding with further discussion, note that in the above definition we allow for phenotypes to be mixed strategies. If we want to define an ESS under the presumption that players cannot play mixed strategies, it is easy to modify the above definition. In defining immunity and ESS we have to simply replace M(S), wherever it occurs, with S. In what follows, it will be generally assumed that mixed strategies are allowed. Whenever an assumption to the contrary is used, I shall state it explicitly.

To illustrate this equilibrium concept at work, let us quickly review a special case of the well-known Hawk-Dove game (see Maynard Smith, 1982, Chapter 2, or Van Damme, 1987, Chapter 9).

A player can be aggressive (A) or timid (T). Player 1's payoffs are given by the matrix below.

Game G_1

		Player 2	
		A	T
Player 1	A	-1	2
	T	0	1

This game (2's payoffs are symmetric) has only one ESS: a strategy which plays a with probability 1/2 and T with probability 1/2. In other words, only a population of agents who are aggressive half the time is immune from the invasion of mutants.

Next, consider the game G_2 described below.

Game G_2

		Player 2	
		x	y
Player 1	x	1	0
	y	1	0

Consider a strategy $(p, 1-p)$, which I shall refer to, in brief, as simply p. In this p is the probability of playing x. Is p an ESS? Note that $A(p,p) = p, A(q,p) = p$, for all q. Hence, condition (1) for immunity is satisfied by p. Next, note that $A(p,q) = q$. So since $A(p,q) = A(q,q)A$, (2) cannot be satisfied. In other words, game G does not possess an ESS. This is somewhat unfortunate, because there is clearly something robust about strategy x. Fortunately, as we shall see later, with a very reasonable modification of ESS, x will be found to be evolutionarily robust. This will be so not just in the sense of 'neutral stability', which x satisfies, but in terms of a new solution concept – especially suited to analysing human conflict – defined below.

10.4 THE LOGIC OF HUMAN CONFLICT

The title of this section is not very original. It simply replaces the word 'animal' with 'human' in Maynard Smith and Price's (1973) classic paper. The intention is to stress the modifications necessary in their model – described in the previous section – in order for it to be applicable to human and social contexts. I shall here focus on two features.

Note that in the above model a player exercises no choice. So players cannot be rational or irrational; their behaviour is inherited and unchanging. Standard game theory on the other hand gives players full freedom to choose from the set of strategies. In reality, human beings are somewhere in between. They choose and optimize over some strategies but also consider some strategies as out of bounds. These latter are determined by a person's inherited training in the norms of the society he lives in. Thus we may choose between several possible careers but may consider picking pockets as something we would not do, whatever the payoffs. There may be others who consider pickpocketing as a reasonable career – I have first hand evidence of the existence of such persons. Similarly, in some communities, children are taught to always pay their taxes when they grow up; whereas in others children are taught that taxes ought to be paid if the expected penalty of not paying exceeds the amount of tax not paid. What we want to study is which of these norms will survive natural selection.

Let S be the set of all conceivable strategies open to a player. Taking a hint from the above discussion, I shall define a *civil norm* as any subset, T, of S. If an agent adheres to civil norm T it means that he *chooses* the optimal strategy from *within* T and considers strategies in S–T as ones which one ought not to use. Norms, we shall assume, are inherited.

Under this reformulation, a civil norm is considered evolutionarily robust if it is immune to invasions of small numbers of agents with other civil norms. Note that an ESS would be a special case of this if the civil norms were restricted to unit sets (that is, sets with only one member).

A similar idea is expressed by Nelson (1986, p. 452) when he writes that it is a 'common situation' where 'firms have not thought through the full range of possible actions they might take for any particular set of circumstances', though the underlying reason here has nothing to do with civil norms but arises from the firm's ignorance. But the net effect is the same: the firm chooses from a subset of S.

To appreciate the second problem of ESS, suppose that there is a planet (earth) and people live in different nations. A mutant in one nation is like a migrant. With the notion of a planet and nations interpreted in abstract terms, one can see the importance of the mutant everywhere. A small trickle of migrants from one area to another have at times flourished in the region of their adoption and at other times they have perished. The Marwaris in Bengal, the Gujaratis in Maharashtra, the English in India in the eighteenth and nineteenth centuries, the Indians in England today are the success stories. The stories where migrants have done poorly and have become negligible are many more.

It is arguable that in these examples who succeeds and who fails is not so much a matter of inherent traits of a community as a question of chemistry. *X* may do well in a population of *Ys*. The reason why this is at least *prima facie* possible is because every society has its civil norms. A Scandinavian does not cross a street outside the zebra crossing not because of a rational calculus based on the advantages of doing so minus the expected cost of being caught and fined but because it is not done.[6] A Spaniard in this regard fits much more our description of a *homo economicus*. To many an Indian, not paying income taxes has the same status as mountaineering. It has its risks but the joys of success frequently outweigh the risks. There is no special moral value attached to this, one way or the other. But for Indians, looking after the old is something you just do; it is not a part of your maximization calculus.

I shall call these gaps in utility maximization a society's *normative loopholes*. These are things which a person would not do (or would do) purely because they are a norm in his society and irrespective of their utility or payoff consequences. Not breaking queues is a normative loophole of, for instance, Finnish society. I call it a 'loophole' because a mutant or a migrant from another society who does not have this norm can presumably exploit this and do well for himself. I believe that the English took such easy control of India in the eighteenth and nineteenth centuries because they exploited the normative loopholes of that India. The Spanish against the early American civilizations was a similar story. The natives were surprised by the range of actions which the invaders were willing to use. The success story behind the Jewish diaspora and also some of the Asian migrants in contemporary times is I think the same one.

In outlining what I called the 'second problem' of ESS as applied to human situations, I have gone on for somewhat longer than originally intended. Some of the ideas motivated will be taken up later. But in the

immediate context I want to take up one element of it. If a mutant in one society or nation is a member of another society, a mutant cannot have just any norms but must have a norm which is itself 'stable'. In other words, in defining a stable norm, to ensure that the norm is uninvadable by all *conceivable* norms is to err on the side of caution. We should instead simply check that it is uninvadable by other stable norms. But note that this introduces recursion in the definition of a stable norm. So we have to proceed with caution towards a set-valued solution concept as, for instance, in Kohlberg and Mertens (1986) and Basu and Weibull (1991).

Though in the end I shall suggest a solution concept which takes account of both these criticisms, it is pedagogically more transparent if it is done in two stages. Thus, in Section 10.5, I simply formalize the recursion idea. Then, in Section 10.6, I introduce the idea of a civil norm instead of a strategy as a phenotype; and go on to incorporate both these ideas simultaneously in the solution concept.

10.4 MUTANTS AS MIGRANTS

We shall say that $T \subset M(S)$ is a *conclave of evolutionarily stable strategies (CESS)*
if

(I) for all $p, q \in T$, such that $p \neq q$, p is immune to q and

(II) for all $p \in M(S) - T$, there exists $q \in M(S)$ such that p is not immune to q.

The idea of such recursive definitions which result in set-valued solution concepts is not a new one. It has, as already pointed out, been used in game theory in general, CESS being a definition in the spirit of von Neumann and Morgenstern's (1944) 'stable set' and even in evolutionary contexts Swinkels (1990) has explored concepts which are related to CESS.

The technical properties of CESS need to be investigated; but that is not my intent here. Instead, let us check how CESS *performs* in practice. Consider game G_2, described above. Though that game, as shown earlier, has no ESS, it has a CESS. Indeed, the reasonable looking outcome $\{x\}$ happens to be CESS. Note that $\{x\}$ satisfies property (I) of CESS trivially. Next, take any mixed strategy $q\,[0, 1]$. It is easy to see that q is not immune against the pure strategy x (or equivalently against the mixed strategy $p = 1$), since $A(p, q) = p = 1$ and $A(q, q) =< 1$.

What is interesting and worth noting here is that CESS allows us to explain how non-Nash equilibria could survive in reality. Hence, it gives us a new route for explaining cooperative behaviour in non-cooperative games. I illustrate this with an example.

Game G_3

	A	B	C	D
A	2	1	1	3
B	1	2	3	1
C	1	3	1	0
D	3	1	1	0

Let us rule out the use of mixed strategies in game G. Note that G_3 has no symmetric Nash equilibria. That is, none of (A,A), (B,B), (C,C) and (D,D) is a Nash equilibrium. It will now be demonstrated that $\{A,B\}$ is a CESS. Check that A is immune to B and B is immune to A. Consider next A country of only C. This is not immune to B. Similarly, D is not immune to A.

It is not difficult to check that in this game $\{A,B\}$ is the unique CESS. Thus we may have some nations having only type A's and some only B's. Each will withstand the occasional invasion of the other. C and D will not exist. They are the *social* unicorns and mermaids. We can conceive of them but the earth is too hostile for their survival.

10.6 CIVIL NORMS

As discussed in Section 10.4, ideally we should model human beings neither as devoid of rationality, that is, the ability to *choose* from among strategies (as in the original evolutionary model of Section 10.3 and also in Section 10.4), nor as devoid of civil norms which typically constrain the set of strategies from which a person chooses. Thus if $\{x,y,z\}$ are all conceivable strategies open to a person and z entails dipping into other people's pockets, especially in overcrowded buses, in search of M_1, then a civil norm could be $\{x,y\}$. This norm says that picking pockets is wrong. A person choosing from $\{x,y,z\}$ and endowed with this norm will maximize his utility by selecting a strategy from within $\{x,y\}$.

Consider a game A. As before, the set of pure strategies is given by $S=\{1,\ldots m\}$. I shall define a *restricted game* of A as (X,Y), where

$(X, Y) \subset S$. The payoffs in this restricted game are simply the restriction of the payoff functions P_1 and P_2. Thus if the two players choose $(x, y) \in XxY$, then 1's payoff is $P_1(x, y) = A(x, y)$ and 2's payoff is $P_2(x, y) = A(y, x)$. Payoffs from mixed strategies are defined as before.

Suppose a person with civil norm $X \subset S$ meets another person with civil norm $Y \subset S$, what is the expected outcome? I shall here stay out of the problem of informational asymmetries by assuming that the civil norms of the two players are common knowledge among the two players. If the two players are rational, it may be reasonable to suppose that a Nash equilibrium of the restricted game (X, Y) will occur. But if (X, Y) has more than one Nash equilibrium, which one should we expect? I shall get around this by assuming that this is *given* in the description of the human evolutionary game defined below.

The *Nash equilibrium* of a restricted game (X, Y) is $p \in M(X)$ and $q \in M(Y)$ such that $A(p', q) \succeq A(p', q)$, for all $p' \in M(X)$ and $A(q, p) \succeq A(q', p)$, for all $q' \in M(Y)$.

Let us define 2^x as the collection of all non-empty subsets of X and recall that E is the set of real numbers.

A *human evolutionary game*, (A, N), is an ordered pair such that A is an evolutionary game and N is a mapping, $N : 2^s \times 2^s \rightarrow E \times E$, such that, for all $(A, B) \in 2^s \times 2^s$, $(N_1(A, B) \equiv [N_1(A, B), N_2(A, B)]$ and there exists one Nash equilibrium in the restricted game (A, B) which gives players 1 and 2 payoffs of $N_1(A, B)$ and $N_2(A, B)$ and, in addition, if $A = B$, then $N_1(A, B) = N_2(A, B)$.

That every restricted game will have at least on Nash equilibrium is well known. That a restricted game, (A, B), with $A = B$, will have a Nash equilibrium with equal payoffs to both players follows from Lemma 9.2.1. in Van Damme (1987, p. 212). Hence, for every evolutionary game, A, we can define at least one human evolutionary game, (A, N).

Given a game (A, N), we define a *civil norm* as any subset T of S.[7] We are interested in identifying civil norms which can withstand the arrival of mutants or migrants with other civil norms.[8] This can be easily defined following Maynard Smith and Price's method.

Let (A, N) be a human evolutionary game. The civil norm T is *immune* to civil norm X if (3) $N(T, T) \succeq N_2(T, X)$ and (4) $[N_1(T, T) = N_2(T, X)] \rightarrow [N_1(T, X) \succeq N_2(X, X)]$.

I shall describe a civil norm T as an *invasion resistant set* (IRS) if T is immune to all $X \in 2^s - T$.

Note that an IRS is also a set-valued solution concept though it is so in a different sense from CESS. It is worth observing that by virtue of the use of the *weak* inequality in (4), the IRS is the set-valued counterpart of Maynard Smith's (1982) *neutrally stable strategy* (see also, Van Damme, 1987, p. 212). I do this in order to prevent a trivial non-existence problem that can arise. As before, we can impose a recursion property on IRS in the same way as was done for ESS in Section 10.5, to get a meta-set-valued solution, which will be called CIRS.

We shall say that a collection of civil norms, $K = \{T_1, \ldots T_n\}$, is a *conclave of invasion resistant sets* (CIRS) if,

(III) for all $T, X \in K$, and $T \neq X$, T is immune to X, *and*

(IV) for all civil norm $T \notin K$, there exists $X \in K$, such that T is not immune to X.

To illustrate how these solution concepts work and, in particular, how they work differently from standard solution concepts, consider the well-known Rock-Scissors-Paper game (see Maynard Smith, 1982; and Van Damme, 1987, for discussion) which is illustrated below as game G_4.

Game G_4

	x	y	z	
x	$\in$	-1	1	
y	1	$\in$	-1	$0 \succeq \in \preceq 1$
z	-1	1	$\in$	

As is well known, this game has no ESS and no neutrally stable strategy either.

However this game has an IRS. In particular, the civil norm $S = \{x, y, z\}$ is an IRS. The restricted game SxS has only one symmetric Nash equilibrium in which each player earns $\in/3$. Consider now any single-strategy mutant, without loss of generality, say x. The restricted game $(\{x\}, S)$ has a unique Nash equilibrium in which S earns 1 and $\{x\}$ earns -1. Since $-1 < \in/3$, S is immune to $\{x\}$. Next consider two-strategy mutants. Without loss of generality consider the mutant civil norm $\{x, y\}$. The restricted game $(\{x, y\}, S)$, it can be checked has a unique Nash equilibrium in which $\{x, y\}$ earns $(\in -1)/(3+\in)$. Since $(\in -1)/(3+\in) < \in/3$, S is immune to $\{x, y\}$. Hence S is immune to all invasions of civil norms $T \in 2^S - S$. Hence S is an IRS.

Next check that, for all $T \in 2^S - S$, T is *not* immune to S. Thus $\{S\}$ is CIRS.

10.7 PROGRESSIVE AND REGRESSIVE INSTITUTIONS

What Section 10.6 did was to pick up the threads of the various arguments presented in this paper and suggest a framework which seems to be most apt for the analysis of civil norms and institutions. In particular, a method is developed for distinguishing between progressive and regressive civil norms, that is, between, respectively, norms which aid the progress of its adherents and ones which bring about their demise.

In the literature on development much has been written on the role of economic factors in ushering in technical progress. We have learnt of the role of credit availability, extension services, the terms of trade between sectors. What has however been seldom studied – though we do pay frequent lip service to it – is the role of social norms and civil institutions. In some societies, hard work is a cause of embarrassment, in others it is a source of pride. In some societies, honesty in speech is an ingrained habit, in others honesty is followed only when this is to one's advantage.

Many of these norms get transmitted from parents to children (and from them to *their* children). To appreciate this, it is useful to distinguish between 'teachings' and 'common teachings'. A *teaching G* is what we teach our children; whereas something is *common teaching* if we teach it to our children, teach them to teach it to their children and to teach their children to teach it to their children, and so on. In a Hindu household, when a parent teaches his or her child *karma*, it is typically meant to be a common teaching. When a parent teaches his or her child not to use a balcony (for instance, because the railings are broken), this is a teaching without being a common teaching. A common teaching is social science's counterpart of the gene in biology. Civil norms get transmitted from generation to generation through common teachings. The purpose of this study was to develop a model for studying the strengths and weaknesses of civil norms. The model provides a bridge between the optimality claims of some schools of thought and its total negligence in others.

There are several directions that can be fruitfully pursued from here. My general discussion of evolutionary processes in Sections 10.1 and 10.2 often hint at the importance of 'group selection'. If a group of identifiable people (for instance, those belonging to the same caste group) are committed to the same norm (for example: 'never tell lies') it may help the survival of the group *vis-à-vis* other groups with other norms. In the formal section of the paper the idea of group selection

was not pursued. This may, however, be a line of research which will yield rich dividends in the future.

It may appear at first sight that in this chapter I take too stationary a view of norms. After all, norms do change and undergo mutations. While it is true that I did not go into the dynamics of civil norms and institutions, an evolutionary model in no way denies this; and, in fact, may be particularly well suited to examining such mutations.

An exogenous change that changes the underlying game could well trigger off the demise of existing norms and usher in new ones, just as in England, as industrialization increased, darker moths became better protected from their prey because they blended into the soot-laden background and soon these darker moths became the dominant variety. Hence, though the present model is static, my 'human evolutionary games' can be adapted to study the dynamics of civil institutions.

Notes

1. When I talk of a society 'not surviving' too many generations, I am not necessarily referring to the case of the society gradually facing Malthusian death. A society can fail to survive because its territories get taken over by pastoralists or colonial invaders. Indeed the idea of survival in the face of invasions is central to the analysis of evolutionary stability, as we shall see below.
2. It is a similar idea being expressed by Nelson and Winter (1982, p. 4) when they write: 'Our firms are modeled as simply having, at any given time, certain capabilities and decision rules. . . . And over time, the economic analogue of natural selection operates as the market determines which firms are profitable and which are unprofitable, and tends to winnow out the latter'.
3. This theory has been attributed to G.B.Schaller by Wilson (1975, p. 504).
4. 'Cooperative behaviour' usually refers to the choice of strategies which result in Pareto-optimal payoffs. Since there is no reason to expect Nash equilibria to be Pareto optimal, explaining cooperation often requires us to use non-Nash solution concepts.
5. Using the framework of repeated games, Fudenberg and Maskin (1990) show that if we introduce mistakes or trembles in the model, and even more drastic refinement becomes possible, in fact one which ensures that only the Pareto optimal among the Nash equilibria can survive.
6. This is, perhaps, not a very good example. During a recent visit to Scandinavia (that is, after I had written the first version of this paper) I got the impression that young Scandinavians at street crossings are beginning to yield to the pressures of individual rationality.
7. An alternative approach would be to require that T be a subset of $M(S)$.
8. Banerjee and Weibull (1991) have modelled evolutionary games where phenotypes mingle with rational agents (that is, agents whose civil norms

are the entire set of strategies, S). Their model can help us understand the survival chances of rational agents. Phenotypes have the advantage of being able to make commitments, whereas rational agents have the advantage of being able to respond optimally.

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11 The Rural Community, Mutal Assistance and Structural Adjustment

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In sub-Saharan Africa as elsewhere in the Third World, protection against temporary income shortfall, disease, loss of employment, or old age is predominantly provided by mutual assistance arrangements (MAAs). Such arrangements allow people to share risk in an informal way. They often are community based and rely mostly on family, vicinity and consanguinity ties.

Although MAAs were initially thought to be exclusively driven by altruism and ethics, more recently many authors have argued (Posner, 1980; Ben-Porath, 1980; Rosenzweig, 1988; Platteau, 1991) and provided evidence (Lucas and Stark, 1985; Rosenzweig and Stark, 1989; Ravaillon and Chaudhuri, 1991) that self-interest may also be a powerful motivation behind the provision of assistance to others. This argument can be formalized as a repeated game in which mutual assistance is self-enforcing (Kimball, 1988; Coate and Ravaillon, 1989; Fafchamps, 1992b).

Repeated game theory and other insights from industrial organization literature are used here to suggest promising lines of enquiry not only about mutual assistance, but also about market institutions. Major conclusions are as follows:

1. MAAs are partly ineffective at redistributing income or preventing destitution;
2. The decentralization of social arrangements into networks of interpersonal relationships helps reduce the cost of renegotiation and information-processing and may increase the resilience of MAAs to unanticipated external shocks;
3. Market transactions between parties to an MAA are affected by it;
4. Enforceable delayed contractual obligations can be viewed as means to influence the bargaining power of parties linked by incompletely specified, long-term MAAs;

5. In the long run, the position of farmers relative to urban dwellers is likely to improve as a result of structural adjustment.

In the first section, community-based self-enforcing arrangements are presented and some of their limitations discussed. The effect of unanticipated shocks on MAAs is examined in Section 11.2. In Section 11.3, the complex relationship between mutual assistance arrangements and markets is explored. In the last section, a simple simulation illustrates the possible effectiveness of informal arrangements in mitigating the impact of structural adjustment programmes (SAP) on individual incomes and risk.

11.1 MUTUAL ASSISTANCE AS SOCIAL INSURANCE

Community-Based Self-Enforcing Arrangements

Mutual assistance takes many forms (Platteau, 1991): gifts, transfers and remittances; manpower assistance; cost-free land and livestock loans; consumption loans at zero interest and/or whose repayment is contingent upon the borrower's recovery; caring for visiting relatives; and even (temporary) adoption of children. All share a common feature, however, that of not being directly enforceable: either the respect of mutual obligations is not verifiable by third parties; or forceful enforcement via court proceedings is too onerous to constitute a credible threat; or incompleteness of contractual obligations is required to provide insurance against events that cannot be anticipated beforehand (see Section 11.2). As a consequence, MAAs must be self-enforcing.

Two major theoretical explanations for self-enforcement have been proposed: the first one argues that parties to an MAA feel genuine affection, care or altruism towards each other (Scott, 1976; Ravaillon and Dearden, 1988); the other that self-interest dictates continued participation to MAAs as a subgame perfect equilibrium of a repeated game (Posner, 1980; Kimball, 1988; Coate and Ravaillon, 1989; Fafchamps, 1992b). In practice, MAAs probably result in a combination of both whereby altruism and self-interest reinforce each other. Either way, repeated interaction between participants to an MAA is required: it is indeed essential for cooperation to emerge among self-interested members; and it is probably necessary for

affection and altruism to develop over time. Thus, not surprisingly, lineage, consanguinity, vicinity, and to a lesser extent kinship, work companionship, and friendship all constitute the social environment in which most MAAs operate (Ben-Porath, 1980). For similar reasons, MAAs are more prevalent among rural populations.

This brings us to a third enabling factor that has often been recognized in the literature: i.e. ethics and social values emphasizing solidarity and compassion (Scott, 1976). Undoubtedly, by adding moral sanction to the respect of mutual assistance obligations, ethics create internalized penalties and rewards (i.e. guilt and salvation) for otherwise unobserved or unsanctionable opportunistic behaviour. Ethics thus reinforce observance of MAAs. At a more abstract level, however, it could be argued that moral codes and other social norms are nothing but *extensions* of informal MAAs otherwise based on altruism or self-interest. Moral codes may have been explicitly designed as support or reinforcement for Pareto-improving mutual assistance; or those social norms that survive and prosper may be the result of a natural selection process whereby societies with MAAs matched by a supportive moral code fare better and progressively take over/absorb others (see Chapter 10).[2]

Widespread evidence of opportunism in human societies, even 'traditional' ones (Popkin, 1979; Poewe, 1989), suggests that in order to survive and prosper, moral codes must be robust in response to opportunistic behaviour, especially when they attempt to regulate social obligations among people who feel no real affection towards each other. Indeed, by the evolutionist argument, any human society with an overly idealistic moral code (i.e. utopia) would quickly succumb to infiltration by opportunists. Self-interest thus puts bounds on the kind of long-run sustainable equilibrium that moral codes and other social norms can achieve. Consequently, we concentrate in this chapter on self-enforcing MAAs that are robust in response to opportunistic behaviour – i.e. that are subgame perfect equilibria of a repeated mutual assistance game among self-interested participants.

As is well known (e.g. Chapter 9), cooperation in repeated games can be sustained by imposing harsh punishments upon deviant players. Given those punishments, it is then in the interest of each individual participant to continue following whatever cooperative strategy is being played. To verify that this is the case, one only has to check that participation constraints (also called individual rationality or IR constraints) are satisfied. IR constraints must also be satisfied along punishment paths; in the case of MAAs, this is ensured for any

punishment path whose expected discounted payoff is at least equivalent to what any participant would get by withdrawing from the group, i.e. the autarky payoff.[3] IR constraints thus represent the bounds that opportunistic behaviour put on any informal social arrangement. In the case of MAAs, they restrict the amount of risk sharing that can be achieved. Studying IR constraints throws light on specific institutional details of MAAs (Fafchamps, 1992a).

As such, however, repeated game theory fails to be a complete theory of MAAs. Indeed, an infinite number of equilibria usually satisfy participation constraints, and most of these equilibria are not even (constrained) Pareto efficient. Furthermore, repeated game theory does not specify an organizational structure whereby the arrangement can be implemented. One may then wonder how specific MAAs are chosen. To date there is no definitive answer to this question, but if one were to build such a theory, it seems that it ought to recognize three major elements: ethics and culture; political institutions; and historical events.

Ethics, social values and cultural representations play an essential role in identifying a focal point on which people can easily agree. In this way, the choice of social contract depends upon social ethics as well as upon perceptions about fairness and altruism that happen to be commonly shared in an particular society at a certain point in time. Symbolic claims to superiority (e.g. age, sex, caste, nobility, religion, ethnic origin, etc.) may also influence the choice of local institutions. Overemphasizing fairness, ethics or symbolic claims, however, may fail to satisfy participation constraints and lead to social arrangements that are vulnerable to opportunistic behaviour.

A consequence of the above is that positive feedbacks are likely to emerge between symbolic representations and ethics on the one hand, and actual MAAs on the other. Just as ethics and culture help identify a socially acceptable distribution of the gains from cooperation, the everyday workings of the MAA reinforce social values by putting them into practice. This has two corollaries, a good one and a bad one. The good one is that, in a static society, mutual assistance gets reinforced over time as social arrangements and moral codes resonate with each other and social obligations get internalized. The bad one is that positive feedbacks generate a lock-in effect: a society faced with sudden change may find it extremely difficult to revise social institutions like MAAs without entering into conflict with its own culture, ethics and other symbolic representations. Such conflicts may lead to peasant revolt or resistance (Scott, 1976; Watts, 1983), populist religious movements (Nigeria, India), etc.[4]

The second major element of a theory of social contracts ought to be political institutions and more generally pre-existing forms of social organization. There is no room here to cover this issue in detail, but obviously the multiplicity of subgame perfect equilibria raises the issue of coordination. In the best of cases, ethics and culture may provide a single, unambiguously determined focal point. In most cases, however, they alone are unlikely to fully specify what social arrangement ought to be chosen and may even fail to achieve (constrained) Pareto efficiency. Thus political institutions and social organizations play a role in determining the extent of efficiency that is achieved, and the distribution of cooperation gains.

Finally, even political institutions and social organizations *per se* are unlikely to determine entirely the outcome of the social choice process.[5] This leaves plenty of room for individual negotiating skills, local leaders' charisma, and external catalysts (e.g. NGOs, government, development project) to influence the outcome and fashion local institutions.

Combining all three elements results in a theory that is intrinsically non-linear. Consequently, small pre-existing conditions and exogenous events that are hardly observable may turn out to have large consequences. This means that local conditions, as they are imperfectly measured and appreciated by an external observer, need not always lead to the same outcome. If all the above conjectures are correct, building a *verifiable* theory of social contracts in general and institutions in particular will prove extremely difficult.

Patron-Client Relationships

We now return to a repeated game framework and examine two types of restrictions that participation constraints impose on MAAs. The first is the preferential treatment reserved for wealthy people; the second is the difficulty of protecting unproductive members of society against destitution.

A first limitation of MAAs results from the dilemma created by the possibility of wealth accumulation. In many societies, accumulation is the only source of insurance against collective risk and for that reason must be encouraged. Yet it opens the door to other forms of opportunistic behaviour: the rich may indeed be tempted to renege on their mutual assistance obligations and seek self-insurance via individual wealth accumulation. In order to resolve the dilemma, they

typically need to be compensated to ensure their participation in MAAs.

This can easily be shown formally. Let the income of individual i in state of the world s be y_s^i. Consider an MAA specifying a vector of net contingent transfers π_s^i among individuals. Say individual i is rich and thus able to withstand small risks. That individual is thus approximately risk neutral with respect to small contingent transfers. In that case, the IR constraint boils down to:

$$-\pi_s^i \leq \frac{\delta}{1-\delta} E\pi_s^i \tag{1}$$

Equation (1) implies that a wealthy, risk-neutral individual will refuse to participate in the MAA unless, on average, she receives a positive payment from others. Since poor people are likely to be risk averse, they are prepared to pay for insurance. Consequently, the relationship between the rich and the poor implies a transfer of resources from the latter to the former.[6]

This result in itself is not unique to MAAs. In agency models of sharecropping, for instance, landlords also extract insurance premia from their tenants. There, however, the principal receives all the insurance surplus (minus the incentive rent in the case of adverse selection, or efficiency loss in the case of moral hazard) because, by construction, she is granted all the bargaining power. Here the rich extract a rent even if they do not have all the bargaining power.[7] Similarly, in partial equilibrium models of insurance markets, the insurer is often shown or assumed to receive part if not all of the certainty equivalent gain from insurance. Yet, in general equilibrium, free entry into insurance and arbitrage among various uses of capital should eliminate insurance rents. In MAAs, however, rents do not disappear even in general (non-market) equilibrium: IR constraints indeed require that risk-neutral insurers perceive a strictly positive rent.

Equation (1) also implies that the maximum transfer that can be expected from a risk-neutral individual is capped by the discounted value of one's own average contribution. In other words, if there is very little that poor people can do to increase rich people's welfare, there is very little insurance they can expect from them. For instance, if what poor people can contribute is their labour, and labour is plentiful, then the level of insurance protection they will achieve via MAAs is very limited. In the absence of technological change, population pressure is

thus likely to lead to a deterioration of the status of landless workers even in the presence of MAAs.

Asymmetric informal insurance arrangements of this kind have often been called patron–client relationships. They are prevalent throughout the Third World (Scott, 1976; Platteau, 1991; Platteau and Abraham, 1987) and have been documented in sub-Saharan Africa as well (Watts, 1983; Ellsworth, 1989). Patronage may enter in conflict with ethical values that portray MAAs as the result of solidarity and compassion. An accommodation many societies seem to have found is the institution of symbolic differences among its members: age, sex, race, ethnic origin, caste, nobility and religious status are in many places the basis for superiority claims that justify asymmetric relations among society members in general, and within MAAs in particular.

The Prevention of Destitution

The theory of repeated games also casts an interesting light on destitution among rural societies. Indeed, it is in the *ex post* self-interest of the MAA group as a whole to discard members whose future expected contribution is null or negative, even though it is in its *ex ante* interest to provide insurance against events that could affect anyone (e.g. old age, physical or mental handicap, incurable disease). The dilemma societies thus face is how to prevent a coalition of healthy people from forming *ex post* and renegotiating the MAA among themselves to exclude unproductive members.

Circumstantial evidence suggests that rural societies of the Third World are in general able to prevent this from happening and to take care of the old and the disabled provided that:

1. The cost of doing so is not prohibitive;
2. Unproductive members have close living relatives.

The first condition fails to be satisfied for nomadic hunters, reported to abandon members who can no longer walk; or when a famine strikes, in which case scarce resources get concentrated on able-bodied members of the community while the old and disabled are pretty well left to their own device (Sen, 1981).

When the second condition is not satisfied, unproductive members of society are seldom adequately taken care of. This is true for instance of old people without descendants, handicapped orphans, or abandoned

wives who are much more likely candidates for destitution, even in rural societies with strong MAAs, than similarly affected community members who can rely on close relatives for support. The major reason is that close relatives are more likely to experience affection and compassion for their parent in difficulty. It can be supplemented by self-interested motivations, like inheritance for instance (Cox, 1987; Nugent, 1990)[8], or the accumulation by the old of asset- and lineage-specific experience and other valuable information (Rosenzweig and Wolpin, 1985).

Societies may attempt to prevent *ex post* renegotiation among the healthy by setting up institutional obstacles to the formation of takeover coalitions. The political and economic control of communal resources by the elders, so common in sub-Saharan Africa, could be interpreted as an institutional effort to prevent the formation of a hostile coalition of younger society members. Interference by central government (e.g. Sankara in Burkina Faso) may try to upset this equilibrium.

11.2 UNANTICIPATED CHANGE

By definition, the purpose of MAAs is to buttress individuals against exogenous shocks. But how is an MAA to react to an *unanticipated* change in its environment, say to the exogenous introduction of technological change; or to the building of a new road by the state; or to exogenous interference with local land tenure arrangements? Again, the repeated game parable throws some light on the issue.

As we have seen, for cooperation to be sustained as a subgame perfect equilibrium, punishment strategies must be defined by which deviation triggers retaliation. For punishment to be feasible, deviation must be identified without ambiguity. In a stationary environment, this can be achieved by designing rules that prescribe behaviour as a function of circumstances. Obviously, in order to achieve mutual insurance, rules of behaviour must be contingent upon realized states of nature. In general, for any given set of stable initial conditions, a wide variety of contingent rules can sustain the same vector of equilibrium payoffs and the wording of the social contract is largely irrelevant.

The distribution of gains or losses generated by unanticipated change, however, depends crucially upon the wording of the social

contract. This generates several difficulties. First of all, the effect of unanticipated change on the mean and distribution of individual incomes will not be immediately apparent; some learning will be required. Consequently, it is difficult to design implementable[9] MAAs that are contingent on the entire distribution function of individual incomes. Consequently, implementable MAAs must have a fairly simple wording. Unfortunately it is very difficult if not impossible to find a simple implementable wording of mutual obligations such that the MAA would survive *any* unanticipated change. Indeed, nothing guarantees that the expected payoff vector resulting from the MAA's wording would belong to the post-change set of feasible IR payoffs. After the change, the rules may either prescribe behaviour that is no longer feasible, or prescribe a redistribution of resources that is no longer robust to opportunistic behaviour. In this case, the MAA would succumb.

Secondly, suppose that one starts with an efficient implementable MAA, that is, an MAA that supports a vector of expected payoffs resting on the outer frontier of the set of feasible IR payoffs. Then, there most probably exist unanticipated changes that would place the resulting payoff vector *strictly inside* the equilibrium payoff set. In other words, after the change, the old rules of behaviour would still constitute an equilibrium, but one that no longer is efficient. The external change would make the MAA dysfunctional.

At this point we seem to have reached an inextricable dilemma: in order to enforce cooperation, precise rules of behaviour must be specified so that deviations can be identified and punished; but it is very difficult if not impossible to design precise rules of behaviour that would survive any change in exogenous circumstances. How can the trade-off between efficiency in cooperation on one hand, and robustness to unanticipated changes be resolved? In theory, several approaches can be envisaged.

First, one may attempt to anticipate as many exogenous changes as possible and specify how rules of behaviour would be amended accordingly. If this were the approach taken, a significant amount of time and resources would need to be spent perfecting the actual wording of social institutions. Possibly, a body of codified vocabulary and discourse may emerge, with a class of individuals trained and specialized in designing complex contracts. In modern societies, these individuals are lawyers, judges and other private law specialists. In traditional societies, this function is often assumed on a part-time basis by chiefs, holy men, and other council of elders.

Imagining beforehand what kind of unanticipated events might shake an institution off balance, however, is a very complex if not impossible task. Furthermore, in the case of MAAs, specifying a residual claimant is no guarantee that efficiency is preserved in all circumstances. A second approach can then be envisaged whereby mutual obligations are only incompletely specified, but a mechanism for arbitrage and/or renegotiation is put in place. In practice, arbitrage is often achieved through the reinterpretation of the original intent of the parties to the social contract, together with some general principle regarding residual claims.[10] The difficulty in small traditional societies is often to find arbitrators who are both impartial and knowledgeable enough of local conditions to identify deviants.

Mechanisms for renegotiation can also be put into place specifying how rules of behaviour can be modified if the need arises: e.g. whether any party to the original contract can veto contractual changes; or whether a majority of parties can modify the contract even against the will of some of them, etc. Modern societies often distinguish themselves by the degree of sophistication achieved in the spectrum of institutions put in place to facilitate renegotiations. In traditional societies, sophistication in this respect is less marked, but local institutions usually exist whereby practices and rules of good behaviour can be designed and modified.

Whether societies attempt to specify very precisely their mutual assistance obligations, or rely instead on mechanisms of *ex post* arbitration and renegotiation is likely to depend upon the relative costs of both options as well as upon the probability of unanticipated change. In very stable environments, societies may well avoid the cost of designing complex contracts and rely on simple mechanisms of arbitration and renegotiation to handle infrequent change. In environments subject to rapid change, on the other hand, more resources are likely to be invested into: (1) specifying general rules regarding residual claims (ownership and liability); (2) designing complex contingent contracts; and/or (3) setting up multi-layered mechanisms of arbitration and renegotiation.

There is yet another approach to mitigate the detrimental effects of unanticipated change: that of deliberately ambiguous contracts. Here the idea is to adopt a wording that is openly insufficient, for instance to specify that 'People must help each other in times of trouble', but to expect parties to renegotiate their respective obligations *ex post*.[11] A more efficient, better adapted arrangement may be achieved, but at the cost of recurrent renegotiations. What emerges is an MAA that is

constantly evolving and a society in which social cohesion is achieved via more or less permanent negotiations. This last approach is largely consistent with the role of palaver in many African societies.

If mutual obligations are partly unspecified, however, how can renegotiation costs be minimized? One possibility, it seems, is to organize the MAA as a decentralized, modular network. In such a system, mutual obligations are not specified between all participants of the mutual assistance group, but between pairs of individuals or households. Each individual has ties with several others and knows that others themselves have interpersonal ties with others, etc. Clearly, in the absence of negotiation costs and information asymmetries, such a network could sustain any social arrangement that could be achieved by the group as a whole. Indeed, even if direct transfers between, say, A and Z were not possible, they could be achieved indirectly via transfers from A to B, B to C, etc. Thus, in the absence of negotiation and information problems, both modes of social organization are equivalent.

When renegotiation and/or the communication of information are costly, however, a network organization is likely to dominate. Although a formal proof of this assertion is left for further research, the intuition behind it is straightforward. First of all, a network structure reduces the need for cross-monitoring and allows trust to build up between individuals and households (Fafchamps, 1992b, section IV.d). By the same token it decreases the need for information flows and economizes on information-processing. Finally, it limits the number of times situations occur in which mutual obligations are not specified and must be renegotiated. This last point can easily be seen with the help of the following example. Consider an MAA between N individuals. If the arrangement is organized as a community-wide system, mutual obligations are specified as a vector of transfers to and from the group contingent upon all individual incomes. If it is organized as a network, mutual obligations are pacified as transfer vectors between each pair of individuals that happen to be tied to each other. Of course, in the absence of unanticipated change, the same pattern of net transfers can be achieved in both cases. Now suppose that the income stream of one of the participants, say A, changes unexpectedly. If the arrangement is community-wide, all mutual obligations need to be renegotiated. If it operates as a network, however, and if the change in A's income stream is not too large, it is likely that only the obligations between A and those with whom A is directly linked need to be renegotiated. The indirect effect on other

participants may be small enough not to justify renegotiation, that is, may remain within the set of feasible, individually rational equilibria of the global community game. The above example would obviously gain by being formalized, but it should be clear that renegotiation costs may be reduced if the MAA is run as a network, even if at the cost of some loss in efficiency. It is interesting to note that, in practice, MAAs operate mostly as networks of interpersonal relationships – the 'F-connection', in the words of Ben-Porath. In fact, the archetype of interpersonal network is the family, and the family is always the cornerstone of any MAA.

11.3 MUTUAL ASSISTANCE AND MARKETS

Markets as Social Insurance

MAAs not only fulfil an insurance function; they also represent a form of non-market exchange within the assistance group. How does the resulting allocation of commodities compare with what would be generated by a hypothetical intertemporal Arrow–Debreu economy in which perfect competitive individuals trade under uncertainty?

First of all, note that if trade takes place between risk-averse individuals, the Pareto-efficient perfect competitive (PEPC) allocation implements perfect risk pooling (Udry, 1991a; Morduch, 1991). As is well known, in the absence of transaction costs and information asymmetries, a variety of market arrangements are able to support the (PEPC) allocation. Examples are: an economy in which contingent contracts span the entire spectrum of possible contingencies for all goods (Arrow and Hahn, 1971); a combination of spot markets for all goods plus credit and insurance markets for a numeraire good (Lucas, 1978; Prescott and Mehra, 1980); and spot market for all goods combined with a single market for insured credit (Udry, 1991a).

Non-market arrangements may also support the PEPC allocation. The enlightened social planner of the general equilibrium literature is probably the best-known illustration. Mutual assistance is another such non-market arrangement. Whether it can support the PEPC allocation, however, depends upon the severity of the IR constraints. Provided that participants are not too impatient (i.e. the discount factor is close to unity) and that the utility gain from mutual assistance is large (i.e. the risk of starvation is large without mutual assistance), any Pareto-efficient allocation can be supported by an MAA.[12] The

PEPC is simply one of them. Thus in theory, and provided that some conditions are fulfilled, an MAA could achieve the same allocation as a perfect competitive economy. Whether it does, however, depends on two further conditions: (1) whether or not the institution-formation process (see supra) results in an efficient equilibrium; and (2) whether that equilibrium depends on initial endowments in the same way that the perfect competitive equilibrium does. If either of those conditions is not satisfied, the MAA will support some form of non-market exchange, but will not implement the PEPC allocation.

Define a gift economy as an economy in which all economic exchange takes place through a MAA. The advantage of a gift economy is that it eliminates the need for money in intra-village transactions, and does not require a complicated set of contingent prices. Unfortunately, information-processing requirements are large. What is remarkable, however, is that a gift economy can conceptually reach economic efficiency without any market at all nor any explicit centralized guidance. Whether or not efficiency is actually achieved obviously depends on information flows and the associated incentive effects (Platteau, 1991; Fafchamps, 1992b), but those difficulties plague market economies as well.

The Pollution of Market Transactions

In most of the Third World today, intra-community market transactions coexist with MAAs.[13] Whenever that happens, market exchange cannot be understood in isolation from MAAs. As the theory of interlinked contracts has brought to light, the terms of a given contract can be influenced by any other contract between the same parties (Braverman and Stiglitz, 1982; Bardhan, 1989). When the parties to a market transaction are also linked by an MAA, any deviation from market price can therefore be interpreted as a voluntary transfer dictated by the implicit arrangement between them: Market transactions are 'polluted' by MAAs. This makes it hard to analyse the African rural markets for which most of the transactions take place within the local community: i.e. credit, land and labour.

Market transactions can be 'polluted' by MAAs in several ways. First of all a commodity or service may be transferred without immediate full payment. For instance, one may sell something to a friend or relative at a bargain price, that is, at a lower than market price. The transfer implied by the difference between market and bargain price may result from altruism. It may also result from long-

term self-interest. In that case, payment is understood to be deferred, in whole or in part, because it is guaranteed by MAA obligations: the MAA serves as collateral for what amount to a form of credit. If the MAA bond between parties is strong enough, payment can be entirely deferred. Even if it is not, it may still be sufficient to guarantee partial payment. In that case, immediate payment only needs to cover whatever is not guaranteed by MAA collateral.

The implicit transfer element in transactions for which a payment is observed may also lead to a higher than market price. For instance, one may purchase from a friend in need of liquidities something at a price higher than the market price. Similarly, one may buy from a friend something one does not really need and would not buy otherwise. This includes hiring someone as redundant worker, a form of patronage very common in Africa for example. Consequently, whenever one studies rural markets in the presence of MAAs, one should be careful not to interpret observed instantaneous payment as representing the full value – i.e. the *price* – of the commodity or service as perceived by both parties.

A second way in which MAAs 'pollute' market transactions is by allowing the price to be made contingent upon the circumstances affecting the parties. In other words, not only can credit be implicitly present in market transactions, so can insurance too. For instance, one may sell grain cheap to a friend in order to help him in bad times. Or one may lend money at low interest. The implicit insurance element is particularly pronounced in market transactions for which some of the contractual obligations are delayed in time: credit (interest and principal repayment are delayed), labour contract (wage payment is delayed), order from craftsman (payment delayed until thing is completed), etc. In all these cases, not only can the contract be made contingent upon the *initial* circumstances of the parties, but the size of delayed obligations can also be renegotiated *ex post*.

In general the degree by which market transactions are 'polluted' depends upon the strength of the MAA linking the parties. At one extreme, if they are tied by a very strong bond, the need for immediate payment may be dispensed with altogether, and delayed repayment may be made entirely contingent upon the future circumstances of the parties. The exchange takes the form of a gift. At the other extreme, if the parties to the market transaction are complete strangers and unlikely to meet again, they will insist on a fully balanced transaction, that is, on the usual 'market' exchange of economic theory. Between the two there is room for unbalanced economic exchange sharing both

market and non-market features: partial immediate payment; and price partly contingent upon the circumstances affecting the parties. The extent by which local exchange is polluted by MAAs could in principle be measured and constitutes an interesting potential research topic.

From Gift Economy to Markets

Although gift economies have been documented in primitive societies, the situation most prevalent in the Third World today is one in which manifestations of group solidarity coexist side by side with intra-community transactions that display market-like features. Can the ideas presented here throw some light upon the process whereby a village economy evolves from pure gift exchange to pure market exchange? The answer is yes.

First of all, a gift economy can only thrive in communities within which economic flows are few and simple and in which information flows freely. Indeed, as the economy develops and the complexity of transactions increases, the costs of information-processing and individual accounting increase exponentially. Many of these costs can be reduced by switching to a market system in which the household's budget constraint plays the role of accounting device.

Secondly, the process of 'market penetration', 'monetization' or 'commercialization' of the Third World rural economy, and the erosion of MAAs are but the two sides of the same coin: as mutual assistance ties get weaker due to increased prosperity and specialization, and as the frequency of unanticipated change increases, parties to instantaneous contracts are less and less willing to rely on mutual assistance obligation as guarantee for future payment and more likely to insist on balanced transactions.

Consequently one would expect market transactions to rise and the gift economy to recede as: (1) the risk of starvation declines (because it is the central motivation for MAAs); (2) the number and complexity of economic exchange increase (because it increases information-processing costs); (3) the value of individual transactions as well as individual wealth increase (because this decreases the cost of contract enforcement relative to the value of the transaction and therefore makes it easier to rely on explicit contracts to enforce delayed contractual obligations). Consequently, one would expect MAAs to be phased out as economic development takes place, and to be 'naturally' replaced by market transactions.

This by no means implies that the phasing-out process is smooth and maintains efficiency at each point in time. Actually, in Section 11.2 we speculated that institutional change may take various routes, some of which are smooth (e.g. renegotiation), some of which involve the sudden renegotiation of social institutions when a rupture point has been reached (complete contracts that become infeasible or dysfunctional). These issues deserve further research.

Contracts as Bargaining Power

Contracts with delayed obligations raise another interesting question, that of enforcement. In instantaneous contracts, enforcement issues can by definition be ignored.[14] In a sales contract or a barter contract, for instance, the terms of the exchange are those that are carried out instantaneously. If a party does not agree to the conditions of exchange, she simply refuses to transact. If the transaction is not balanced in the sense that one side to the exchange gives more than she receives, the sales or barter contract offers no future recourse: commodities and cash have passed hands and the parties are no longer legally bound to each other. Of course, the parties may still be bound by an MAA, but the very informality of MAAs deprives them of any legal standing.

In non-instantaneous transactions, however, the contract generates enforceable delayed obligations. Of course, enforcement supposes the existence of special organizations in charge of arbitrating conflicts about contracts and ensuring compliance with their orders. For parties to be able to freely delineate their future obligations, the enforcement organization needs to arbitrate conflicts on the sole basis of contractual obligations (and common knowledge rules of conduct). This condition is only imperfectly satisfied when the arbitration and enforcement agencies are themselves party to an MAA with one or both of the parties to the contract.

In small rural communities, impartiality is hard to achieve. In practice, community-based arbitration and enforcement procedures often involve individuals who are directly or indirectly interested in the outcome of the dispute. In the absence of non-community-based courts and police, imperfect enforceability of delayed contracts can nevertheless be achieved via procedures involving a large enough community. The idea is that, in a large group, (1) information about the particular circumstances of the parties to a dispute is less commonly available; and (2) the mutual assistance ties between the parties and the

people in charge of arbitration and enforcement are likely to be weaker. In that case, community-based arbitration and enforcement can credibly base its decision mostly on verifiable contractual obligations and ignore irrelevant contingencies affecting the parties.[15]

The requirement that enforcement be ensured by courts and police remote enough from local MAAs itself generates difficulties. In particular, it is very difficult if not impossible for an external court to verify claims about complicated contingent contracts, for the simple reason that it cannot rely on impartial sources of information on the circumstances governing the contract. This means that, in order to be enforceable, contracts must be simple enough. In particular, they should not include contingent obligations that depend on conditions unverifiable by outside courts.

Having somewhat clarified the issue of enforcement, we can now turn to the relationship between contracts containing delayed obligations on the one hand, and long-term MAAs on the other. Perhaps the best way to organize the discussion is to consider a simple example, that of consumption loans between members of the same small community. In Africa and elsewhere in the Third World, such consumption loans are characterized by the following stylized facts: they often, but not always, specify usurious interest rates; repayment is subject to great deal of renegotiation; actual interest payments are usually lower than stated in the contract; given the poverty of debtor and the cost of proceedings relative to the value of the contract, court proceedings and foreclosure would often yield less than the capital plus interest (Udry, 1991a, 1991b; Platteau and Abraham, 1987). All this suggests that from the very start the parties understand that the contract they signed is not to be conducted as stated but to be renegotiated at a later date.

Now remember that among local communities credit transactions are likely to be 'polluted' by MAAs. First consider the case in which the MAA is asymmetric, that is, in which both parties to the credit contract are also bound by a patron–client relationship. Enforceable credit contracts, whenever embedded in long-term patronage, are a means for patrons to maximize surplus extraction by increasing their *ex post* bargaining power. To see this, note that after the harvest, debtor and creditor renegotiate loan repayment. If the creditor, via usurious interest rates and successive debt rescheduling, has ensured himself a potential legal claim on all sizeable assets of the debtor, he can drive a hard bargain. In fact, the maximum repayment he can effectively ask for is that which would give the debtor an expected discounted utility

equivalent to what she would achieve were she to forego the protection of the patron and return to autarky. Thus, thanks to repeated credit contracts, the patron is able to make a take-it-or-leave-it offer to his clients whereby he extracts all the efficiency gain from the insurance arrangement, and the debtor-client is maintained at her reservation utility/autarky payoff. Only if the patron's offer is rejected will the debtor be pronounced in default and seizure of assets sought in court. As long as the patron finds it in his interest to perpetuate the relationship, however, his offer will be just sufficient to satisfy the client's participation constraint and thus will be accepted. Whether the unpaid portion of contractual obligations is forgiven or rolled over is irrelevant as long as the patron has enough accumulated legal claims to ensure maximum leverage under all circumstances. Thus, in practice, the threat of foreclosure is seldom carried out and actual debt repayments depend upon the debtor's realized income.

Now consider a more symmetrical MAA in which parties deal on an equal footing. In that case, consumption credit may well be granted without explicitly specifying interest charges. Of course, actual repayment may include interest payments, either directly or indirectly via future assistance. What is important, however, is that by making a loan without interest the creditor does not try to gain a future bargaining advantage. Instead, he chooses to maintain an equal footing in the interpersonal relationship by signalling his intention not to expropriate the debtor of potential future high earnings. Among individuals facing similar conditions, credit without interest may thus be the best way to maintain a fruitful relationship based on trust and mutual respect.

Of course, if the prospective creditor knows that the debtor is already engaged in a long-term abusive credit relationship with someone else, he may also asks for an usurious interest rate in order to protect his legal claim were other creditors to foreclose. Note that, in that case, the debtor would quite willingly agree to high interest rates. Indeed, whenever the debtor already faces debt overhang, all that usurious interest rates do is to redistribute the proceeds of foreclosure and therefore the bargaining power from one patron to another.

To conclude, in the case of instantaneous exchange as well as in the case of enforceable contracts with delayed obligations, market transactions and long-term MAAs appear intertwined. In many cases, a proper understanding of market transactions and contracts cannot be achieved without taking proper care of informal mutual assistance relationships.

11.4 MUTUAL ASSISTANCE AND STRUCTURAL ADJUSTMENT

For most Africans, MAAs is the major form of social insurance. Therefore, one expects that many of the effects of structural adjustment (SA) are mediated through such informal mechanisms. In this section, the ideas presented so far are used to speculate about how this mediation is likely to occur. The approach is essentially illustrative. A stylized simulation model of an African economy is constructed in which three socio-economic groups interact through the provision of mutual insurance. Its purpose is to show how easily repeated game concepts can be operationalized. Insight is gained about the possible interaction between structural adjustment and MAAs.

By no means, however, do the results of the simulation constitute a definitive description of how, in practice, structural adjustment affects social welfare. This can only be achieved via careful data collection, not only on people's average income but also the variance-covariance matrix of incomes, of financial transfers and gifts (Reardon and Matlon, 1989; Ellsworth and Shapiro, 1989; Lucas and Stark, 1985), and other forms of assistance in kind: hospitality towards visiting relatives; taking care of other people's children; granting temporary use of land; manpower assistance; help in securing a job; advice and comfort, etc (Ben-Porath, 1980; Gugler, 1991).

The simulation exercise is constructed as follows. Three stylized socio-economic groups are identified: urban dwellers, commercial farmers, and subsistence farmers;[16] and two situations defined: before and after structural adjustment. SA is assumed to have been unanticipated. Prior to structural adjustment, urban dwellers have a higher than average and moderately variable income (ILO, 1984). SA, by its effects on public sector retrenchment, reduction in industrial employment, and cutbacks in social programmes, is assumed to reduce average urban income. Given the lack of clear evidence regarding the possible effect of SA on the variance of urban income, however, its coefficient of variation is assumed to remain unchanged.

Since by construction subsistence farmers are essentially decoupled from the market, their situation is unaffected by structural adjustment. The income that they draw mostly from traditional agriculture is subject to the vagaries of the weather. Consequently it is variable and low. The average income of commercial farmers is assumed to be higher than that of subsistence farmers. Given that commercial farmers incur cash outlays for fertilizer, improved seeds, etc., and that they face

a possibly more volatile cash crop revenue,[17] their income is also more variable. Here, structural adjustment is assumed to raise farmgate prices for agricultural outputs (through currency devaluation, market liberalization, elimination of price controls, etc.) as well as inputs (elimination of fertilizer subsidies, higher interest rates, etc.). Consequently, it also increases both the mean and the variance of the income of commercial farmers.

Data about income covariances among the above groups are hard to come by. One might argue that, in principle, cash crop and food crop yields on neighbouring farms are likely to be correlated. Given the ecological diversity of most African countries and the possible negative correlation between crop prices and yields, however, this does not necessarily imply that incomes of commercial farmers and subsistence farmers in general are strongly correlated.[18] Therefore, in order to keep the example simple, all three incomes are assumed independent.

The numbers used for the simulation are given in Table 11.1. The simulation procedure can be obtained from the author. The results are presented graphically in Figure 11.1. The figure has three non-empty orthans. In each of them, two closed shapes are displayed, one surrounded by a solid line, the other by a dashed line. Each shape represents the set of expected utility payoffs that can be achieved by feasible and individually rational arrangements. The solid line refers to the situation before structural adjustment; the dashed line to the situation after. The North-East orthan shows the expected utility of the urban dweller (x axis) versus the expected utility of the commercial farmer (y axis). The North-West orthan shows the expected utility of the commercial farmer (y axis) vs. the subsistence farmer (negative x axis). Finally, the South-West orthan shows the expected utility of the subsistence farmer (negative x axis) versus the expected utility of the

Table 11.1 *Simulation design*

Type of household	*Urban*	*Cash crop farmer*	*Subsistence farmer*
Discount factor	.9	.9	.9
Coefficient of relative risk aversion	2	2	2
Average income before Structural Adjustment	3	2	1
Average income after SA	1.5	3	1
CV of income before SA	.3	.7	.5
CV of income after SA	.6	1	.5

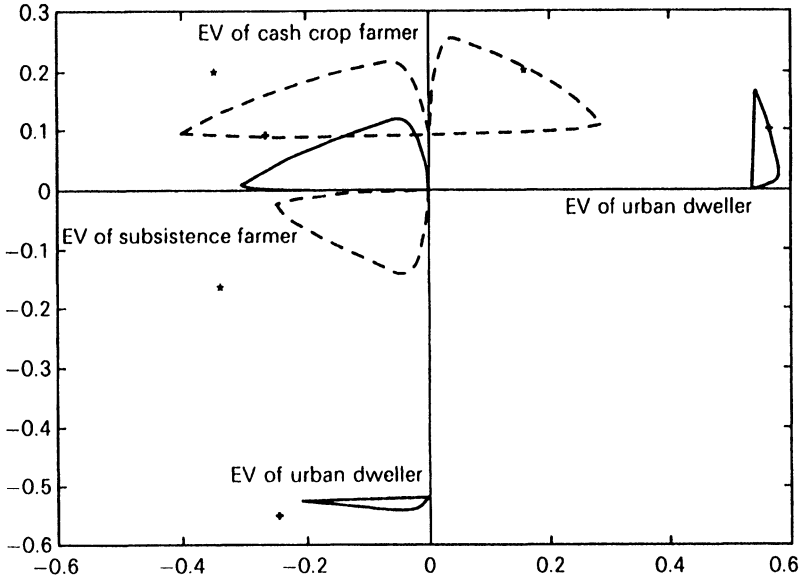


Figure 11.1 *Simulation results*

urban dweller (negative y axis). The units along the axes are utils and therefore have no intrinsinc meaning except as measure of relative utility.

What Figure 11.1 suggests is that there is no way in which the welfare of urban dwellers can be maintained at its pre-structural adjustment level. Indeed the solid and dashed shapes in the NE and SW orthans do not even overlap. This means that it is impossible for urban dwellers to convince relatives living in the countryside – whether commercial farmers or subsistence farmers – to absorb the entirety of their loss of income. Indeed, as soon as rural relatives realize that the shortfall in urban income is bound to last for some time and is *not* just a temporary setback, their willingness to insure urban dwellers will be reduced accordingly. They will re-evaluate the usefulness of the relationship to them and decrease support. In particular, one would expect that any preferential treatment urban relatives and returning migrants may have received during their visits to the village will be seriously revised and downgraded.

Given the choice of simulation parameters, commercial farmers benefit from structural adjustment: the rise in their average income more than compensates them for the increased riskiness of commercial

farming. Furthermore, mutual insurance opportunities rise between commercial farmers and other socio-economic groups. In particular their increased need for insurance may indirectly translate into higher levels of welfare for relatives and kin who produce exclusively for subsistence. Subsistence farmers who have no mutual assistance relationship with commercial farmers, however, (e.g. from other ethnic group, region, etc.) are unlikely to benefit from SA.

Interestingly, the Figure 11.1 also suggests that the increased precariousness of urban incomes incites urban dwellers to seek insurance more actively by pooling risk with other socio-economic groups. This may lead them to agree to more intensive forms of income-sharing with rural relatives than they practised before structural adjustment. A possible (but by no means necessary) consequence is that the share of urban income that is remitted to rural areas may increase on average compared to what it was before – although the absolute value of remittances may decrease. The results also suggest, however, that cooperation between urban and rural people is likely to benefit more than proportionately not the poorest segment of African society, subsistence farmers, but commercial farmers, the actual winners of structural adjustment in the simulation presented here.

An effort was also made to capture the change in the respective bargaining power of the three groups. To do so, the (constrained) cooperative Nash equilibrium was computed, assuming that all three socio-economic groups share risk together. The results are also presented in Figure 1. The cooperative Nash expected utility vector is represented by a '+' for the situation before structural adjustment, and by a '*' for the situation after. Not surprisingly, when all three socio-economic groups share risk, they can reach even higher levels of welfare. Otherwise, the results confirm the inevitable loss incurred by urban dwellers, and the large gain not only in income but also in bargaining power enjoyed by commercial farmers. They also suggest that subsistence farmers, although by construction not affected directly by structural adjustment, may in fact benefit indirectly from it, provided that their bargaining leverage on urban relatives and commercial farmers is large enough.

11.5 CONCLUSION

This paper has pulled upon various threads in the literature on risk and institutions, some of which ancient, some of which very recent. Taking

advantage of models and ideas that mushroomed originally in the theory of industrial organizations, an attempt was made to weave some of these threads together in the hope of defining a new area of potential research on the theory of institution. At this point, this attempt, like that of Ben-Porath more than ten years ago, remains essentially speculative.

There are encouraging signs, however, that enough of the theoretical base has been set that it is now possible to start modelling institutional change. In particular, several suggestions in this chapter draw bridges between the issues of institutions in developing countries and the recent theoretical literature on games and contracts. Some of those issues have already been addressed, and this chapter tried to do justice to recent papers in the theory of risk sharing. Others deserve more research. But the time at which a rigorous theory of institutional change is available has never seemed closer.

The ideas presented in this chapter also suggest how this theory may look. First of all, the theory is unlikely to be deterministic. Indeed, it will have to leave plenty of room for culture, values, political systems and historic leaders to make a difference. This particular feature is unlikely to gain everyone's favour, particularly among economists, used as they are to worlds of single equilibria. Secondly, the theory is unlikely to be linear. Indeed, as this chapter suggests, in some circumstances institutional change is smooth, but in others, it is abrupt, largely unforeseen (Kuran, 1991), and requires intensive bargaining between the interested social groups. In other words, the future theory of institutional change will undoubtedly belong to the world of non-linear dynamics.

Notes

1. It is a pleasure to acknowledge very useful comments by David Sahn, Elisabeth Sadoulet, and Michael Lipton. I also thank the participants to the Cornell Conference on State, Market and Civil Institutions, as well as to seminars at Stanford, the Universtiy of Southern California, and the Facultés Universitaires Notre Dame de la Paix, Namur, Belgium. All remaining errors are mine.
2. At some level of generality, this appears to be the way new religions penetrate societies: i.e. Christianity in the Roman Empire; Islam in the Middle East after Arab conquests, and in Africa today; evangelical churches in Africa and Latin America; etc.
3. This does *not* imply, however, that the punishment ought to be permanent exclusion. Actually, frontloading of punishments is probably more desirable (Abreu, 1988). Punishment can be direct – imposition of fines,

like self-invited guests – or indirect – reputation effect, stigma attached to certain behaviours. Indirect punishments usually influence access to certain public goods and services and the sharing of information. A tarnished reputation can also be used as a signal to coordinate a punishment phase.

4. Note, however, that the possibility of exerting violence, whether legal (police) or illegal (riot), whether by insiders or outsiders, is left out of the analysis presented here. Incorporating it would require singularly more complex tools than repeated game theory and insights from the industrial organization literature.
5. Indeed, by Arrow's impossibility theorem, only dictatorial societies reach outcomes that are independent of irrelevant alternatives. In particular, voting outcomes are often influenced by the order in which things get voted upon, etc.
6. This does not mean, however, that the poor need to become even poorer and the rich ever richer. As long as there are non appropriable resources – i.e. human capital and labour force in the absence of slavery, land in the absence of land market – the MAA equilibrium would not deplete the poor from their ability to contribute to the future welfare of the rich and thus would ensure their survival in the system. As for the infinite accumulation of wealth by the rich, decreasing returns to capital and a lust for luxury usually take care of it!
7. Of course, if they have all the bargaining power, they may be able to extract a rent larger than the minimum dictated by Equation (1) – see Section 3. 'Contracts as bargaining power'.
8. In most societies inheritance is either not feasible between people who are not closely related (e.g. usufruct land rights in sub-Saharan Africa can typically only be passed to children), or heavily taxed.
9. That is, whereby rules of behaviour are contingent only upon mutually observable states of nature and history of play.
10. In legal parlance, principles governing ownership and liability.
11. Obviously the resulting payoff vector would have to be renegotiation-proof in the sense of Farrell and Maskin (1988). The idea here, however, is that such payoff can be achieved more safely and cheaply through actual renegotiations, instead of trying to design *ex ante* an equilibrium path that would never be renegotiated.
12. This simply follows for the folk theorem of repeated games (Fudenberg and Maskin, 1986).
13. Although long term relationships with outsiders may exist and similarly distort market exchange, the general anonymity of exchange with the rest of the workd makes market transactions much more likely. Of course market exchange outside the community (agricultural inputs and outputs) can easily coexist with non-market exchange within the community (land, labour and credit).
14. Except for warranty considerations, not dealt with here for the sake of simplicity. Note that in the economic literature, the term 'contract' is seldom used for market exchange and reserved for transactions with delayed obligations: credit, insurance, sharecropping, labour, etc.

15. Except for acts of God and other natural catastrophes. Obviously a thorough treatment of enforcement issues goes well beyond what can be afforded in these few pages.
16. Migrants' remittances are modelled as part of the informal arrangement between urban dwellers and farmers. Commercial farmers refers to producers generating a marketed surplus, regardless of their size, and regardless of the crops they sell – usually cash crops, but not exclusively.
17. Even if the price is fixed; see Fafchamps (1992a).
18. In his study of Indian villages, Morduch (1991) also showed that idiosyncratic risk is in general high relative to collective risk.

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12 The Role of Collateral in Credit Contracts

Clive Bell*

INTRODUCTION

To secure repayment of a loan, a creditor has several means at his disposal. First, he can resort to the legal system, if the courts are open to him. This requires the existence of a valid, formal contract, the terms of which should be in keeping with the laws governing credit contracts, and that he be willing to commit resources to pursue the claim, even though the final outcome is uncertain. Secondly, he can appeal to local or community authority, as embodied in a council of village elders, for example. If such authority is strong and the potential sanctions that can be imposed on a defaulter are severe, the cost of recovering a loan by these means may be modest. Udry (1990) examines such a case in the course of his analysis of credit arrangements in Kaduna Province, Nigeria. Thirdly, the lender can turn to extra-legal coercion, perhaps in the form of a threat against the borrower's family and property. Fourthly, he can try to devise a self-enforcing contract, the terms of which will induce the borrower to use the loan in a way that serves the lender's interests, and to repay the loan if he is able to do so. One possibility is for the borrower to lodge some form of collateral (or title to it) with the lender, the repossession of which requires that the loan be paid off.[1]

This chapter deals with the role of collateral in self-enforcing contracts when the lender is always able, at a cost, to identify and seize the returns from projects that were financed by loans. What he is not always able to do, however, is to monitor whether a loan is used to finance a project; and if he cannot do so, moral hazard will intrude.

* I am indebted to the participants at the 1991 conference, and especially to Elisabeth Sadoulet, for valuable comments and suggestions. A helpful discussion with Christoph Rosenberg is also gratefully acknowledged. None of the above is responsible for any errors that remain, nor indeed for the opinions to which I have clung. Not to be quoted. Comments are welcomed.

The aim of the chapter is to identify the circumstances under which collateral will be used to secure loans and to establish whether the existence of moral hazard is the main reason for doing so. Conversely, we shall also seek circumstances under which loans will be unsecured despite the potential presence of moral hazard.

In this connection, it is often remarked that informal lenders have an intimate knowledge of their clients' doings and circumstances. When both parties are also members of the same community, much knowledge will be public, which provides a basis for enforcement through social custom and practice. With adverse selection and moral hazard thus mitigated, so the argument goes, the need for collateral as a means of contractual enforcement is much diminished. Institutional lenders, by contrast, typically lack this specific knowledge and cannot count on a sense of community solidarity to ensure enforcement – if anything, such solidarity will work in reverse, with the possible exception of cooperatives. Thus, collateral is potentially very important to ensure the profitability of institutional lenders.

Some empirical evidence for rural economies is discussed by Feder *et al.* (1988, pp. 234–6). In Thailand, fewer than 10 per cent of a sample of farmers with titles to land who obtained institutional loans in 1985/86 did so without any form of collateral; the rest needed to pledge land or a group guarantee. In contrast, almost four-fifths of those who obtained loans from informal sources did so without pledging collateral. The findings of a study of a semi-arid tract of India in 1979/80 are similar. An earlier study of Korea in 1968, when a ban was in force against the use of land as collateral, revealed a somewhat different picture. Institutions relied heavily on third-party guarantee, and almost 20 per cent of the loans were unsecured in any form. Among non-institutional lenders, professional moneylenders in particular found ways to circumvent the ban, with a quarter of their loans thus secured. Fewer than 10 per cent of their loans were wholly unsecured. For all other informal lenders, the latter proportion was much higher, rising from almost 40 per cent in the case of traders, to three-quarters in that of relatives and friends. To sum up, coupled with Udry's study of Kaduna Province, there appears to be geographically widespread evidence that credit institutions demand collateral much more extensively than do their informal counterparts, in keeping with the arguments advanced above.

The plan of the chapter is as follows. In Section 12.1, we begin by formulating a simple model of the loan contract when both the returns from the project financed by the loan and the value of the collateral that secures the loan depend on the state of nature. This formulation

permits default to occur and, when it does so, for the collateral to change hands. It also recognizes the fact that in adverse states of nature there is typically a fall in asset prices relative to output. In order to complete the benchmark case, it is assumed that both parties to the contract share the same prior expectations. A careful distinction is drawn between the case in which the lender can costlessly monitor the borrower's actions (so that there will be no moral hazard) and that in which it is prohibitively costly to do so.

In Section 12.2, the analysis is extended to the case in which there is free entry for lenders, with borrowers choosing the terms of the contract, subject to lenders making non-negative expected profits. In Section 12.3, the assumption that both parties share the same priors is relaxed. The chapter concludes with a discussion of the main findings.

12.1 A MODEL OF THE CREDIT CONTRACT

There are two commodities, which will be called 'assets' and 'returns', respectively. Returns are produced solely by projects that are financed by borrowing, and they are taken as the numeraire. The environment is uncertain, with the state of nature affecting not only the levels of returns and assets, but also the relative price of assets, p. For simplicity, it is assumed that there are just two states of nature. Without loss of generality, let state 1 be labelled as 'bad', and let the probability of its occurrence be.

The borrower has various opportunities for the employment of his assets, the realized stock of which in state i is $A_i (i = 1, 2)$. As livestock may die in floods or droughts, and other assets such as houses may be damaged or destroyed in natural disasters, it is assumed that $A_1 < A_2$. As noted above, the (relative) price of assets is also low in adverse states of nature. Thus, $p_1 < p_2$, and hence $p_1 A_1 < p_2 A_2$. The borrower is assumed to be risk-averse, with preferences that can be represented by the von Neumann-Morgenstern utility function $u(y)$, where y denotes final wealth measured in units of the numeraire. In the absence of a loan, therefore, he attains an expected utility of

$$\delta u(p_1 A_1) + (1 - \delta) u(p_2 A_2) \equiv \underline{V}, \tag{1}$$

which defines his reservation level of utility.

Now let the borrower obtain a loan of B units of the numeraire, bearing a rate of interest r with a maturity of one period. As collateral,

he pledges K units of his assets. The loan is used to finance a project which yields a return of R_2 in the 'good' state, but zero in the 'bad'. In the latter case, the lender seizes the entire collateral. It is assumed that $R_2(B)$ is an increasing, concave and twice differentiable function, which also satisfies the conditions

$$\lim_{B \to 0} R_2'(B) = (1 + \hat{r}) \text{ and } \lim_{B \to \infty} R_2'(B) = 0.$$

where $\hat{r}$ is a large but bounded number. It is also assumed that the borrower's other activities are not affected by such a project, so that his final wealth is

$$\begin{aligned} y_1 &= p_1(A_1 - K) \text{ in state 1} \\ y_2 &= p_2 A_2 + R_2(B) - (1 + r)B \text{ in state 2.} \end{aligned} \tag{2}$$

To be acceptable to the borrower, a loan on these terms must be at least as good as no loan at all. This consideration yields the utility-equivalence constraint:

$$Eu(y) \equiv \delta u(y_1) + (1 - \delta)u(y_2) \geq \underline{V} \tag{3}$$

Turning to the lender, in making the loan, he forgoes the next best use of his funds, which is assumed to be a perfectly safe placement yielding r_0, and he also incurs some administrative costs (a_0). When the loan matures, further costs are incurred. In state 1, he must seize, and perhaps dispose of, the collateral; and in state 2, he must recover principal and interest in full. Let the costs of these actions be a_1 and a_2, respectively. It is plausible that each of a_0, a_1 and a_2 contains a substantial fixed element, while the remainder varies with the size of the loan. If the latter is linear in B, it can be subsumed under r_0. For simplicity, that will be assumed here; so that a_0, a_1 and a_2 are all fixed costs.

Let the borrower and the lender share the same expectations concerning both the probability that a particular state will occur and the price of assets that will rule in each state. Then the lender's profit from such a loan contract is:

$$\begin{aligned} \pi_1 &= p_1 K - (1 + r_0)B - (a_0 + a_1) \text{ in state 1} \\ \pi_2 &= (r - r_0)B - (a_0 + a_2) \text{ in state 2.} \end{aligned} \tag{4}$$

The lender is assumed to be risk-neutral. His expected profit from the loan is

$$E\pi = [(r - r_0) - \delta(1 + r)]B + \delta p_1 K - [a_0 + \delta a_1 + (1 - \delta)a_2]. \qquad (5)$$

In order to make the problem interesting, we now employ an assumption that will ensure that the lender is always able to make non-negative expected profits from lending, while respecting condition (3). Comparing (1) and (2), it is clear that no loan will be acceptable to the borrower unless there exists a B such that $R_2(B) > (1 + r)B$. For this purpose, it is enough to make the above assumption that $R_2(B)$ is very steep when B is sufficiently small. Then, if K is sufficiently small, (3) will be satisfied. If, furthermore, the administrative costs (a_0, a_1, a_2) are sufficiently small, then it follows from (5) that there will exist an r such that $E\pi > 0$, with $E\pi > \underline{V}$.

In what follows, one agent will select the terms of the contract (r, B, K), subject to certain constraints, among which is the requirement that the contract offered be at least as attractive as the other agent's next best alternative. Thus, the shapes of the agents' maps of indifference contours will play an important role in the analysis. It would be especially helpful if both maps were convex; but this turns out not to be the case.

Starting with the borrower, although $u(y)$ is concave in y, it is seen from (2) that $y2$ involves the sum of $R_2(B)$, which is concave, and $-(1 + r)B$, which is quasi-convex for all $(r, B) \geq 0$. It follows that the level surfaces of the borrower's indifference map in the space of (r, B, K) need not be convex in the region $(r, B, K) \geq 0$, and that this applies, in particular, to the set of all contracts satisfying (3).

Similar difficulties arise in connection with the level surfaces of the lender's map of expected profits. By rewriting (5) as

$$E\pi = (1 - \delta)[r - \frac{r_o + \delta}{1 - \delta}]B + \delta p_1 K - [a_0 + \delta a_1 + (1 - \delta)a_2], \qquad (5')$$

it is seen that the terms involving r and B define a quasi-concave function in the region $(r > (r_0 + \delta)/(1 - \delta), B > 0)$, but a quasi-convex function in the region $(r < (r_0 + \delta)/(1 - \delta), B > 0)$. Even in the former case, there remains the difficulty that the sum of quasi-concave functions is not necessarily quasi-concave. Thus, particular care must be taken when interpreting the first-order conditions; for these will not be sufficient to ensure that a maximum has been found. We shall return to the shapes of the maps in greater detail in Section 12.1.3.

In the remainder of this Section, the determination of the contract will be modelled as the outcome of principal–agent game, with the lender as principal.

12.1.1 No Moral Hazard

We begin with the benchmark case in which the lender is able costlessly to monitor the borrower's use of the loan. Thus, the lender's problem is to

$$\text{maximize } E\pi \tag{6}$$

by choice of $(r, B, K) \geq 0$, subject to (3). The first-order conditions are:

$$[1 - \lambda u'(y_2)]B \leq 0 \quad \text{compl.} \quad r \geq 0 \tag{7}$$

$$[(r - r_0) - \delta(1 + r)] + \lambda(1 - \delta)u'(y_2)[R_2' - (1 + r)] \leq 0 \quad \text{compl.} \quad B \geq 0 \tag{8}$$

$$1 - \lambda'(y_1) \leq 0 \quad \text{compl.} \quad K \geq 0 \tag{9}$$

where λ is the dual variable associated with the utility-equivalence constraint (3).

Proposition 1. In the absence of moral hazard, the lender's optimum (r^o, B^o, K^o) satisfies

(*i*) $E_u = \underline{V}$,
(*ii*) $K^o = 0$,
(*iii*) $R_2'(B^o) = (1 + r_0)/(1 - \delta)$, and
(*iv*) $R_2(B^o) = (1 + r^o)B^o$.

Proof:
(*i*) Observe that $\lambda > 0$ implies $Eu = \underline{V}$. Now suppose, on the contrary, that $\lambda = 0$. It follows at once from (5) that r and B should grow without limit.[2] Since $R_2(B)$ is concave, however, condition (3) will then be violated. Hence, $\lambda > 0$: that is, it will be optimal for the lender

to set the terms of the contract so that the borrower will be driven down to his reservation level of expected utility.

(ii) As $K > 0$, (3) requires that $R_2(B)(1 + r)B$. It then follows from $p_1A_1 < p_2A_2$ that $y_1 < y_2$. Hence, by the strict concavity of $u(\cdot)$, $u'(y_1) > u'(y_2)$. Suppose, contrary to part *(ii)* of the Proposition, that $K^o > 0$. Then, from (9), we have

$$1 = u'(y_1) > u'(y_2),$$

which contradicts (7). Hence, $K^o = 0$.

(iii) Since there exists a contract $(r, B, K) >> 0$ such that $E\pi > 0$, and since $K^o = 0$, it follows that $r^o > 0$. Hence, from (7), we have

$$\lambda u'(y_2) = 1. \tag{10}$$

Substituting into (8) and rearranging, we obtain

$$(1 - \delta)R_2'(B) = 1 + r_0. \tag{11}$$

which implicitly defines the optimum for B in terms of r_0 and δ alone: $B^o = B^o(r_0, \delta)$. This optimum is indeed unique; for $R_2(B)$ is increasing and concave.

(iv) Observe that with $K^o = 0$, r^o can be found at once from (3), which we have just shown to hold as a strict equality. By inspection, r^o satisfies

$$R_2(B^o) = (1 + r^o)B^o \tag{12}$$

where B^o is given by (11). That is to say, the return on the project in the good state of nature is exactly equal to the principal and interest on the loan.

To complete the proof, we must check that the first-order conditions have yielded a maximum. From (11) and (12), and the concavity of $R_2(B)$, it follows that $(1 + r^o) > (1 + r_0)/(1 - \delta)$, or $r^o > (r_0 + \delta)/(1 - \delta)$. It is clear that (r^o, B^o, K^o) yields higher expected profits than some other feasible contracts: for example, $E\pi(r^o, B^o, 0) > E\pi(0, B^o, 0)$. Hence, as (r^o, B^o, K^o) is also the unique solution to the first-order conditions, it is indeed the contract that maximizes $E\pi$ in problem (6). QED.

With the solution thus characterized, it will be useful to give the intuition for the finding that the loan will not be secured by collateral.

In the absence of moral hazard, the lender does not need collateral to provide security against shirking or other malfeasance on the borrower's part. Hence, the only remaining role for collateral is to provide a means whereby the two parties can trade across states of nature. Suppose, therefore, that K is positive and that the lender reduces its level by one unit, so that his expected profit will fall by $p_1\delta$. Since he is risk-neutral, the required compensating change in interest charges, which accrue only in the good state, is $p_1\delta/(1-\delta)$. These changes will leave the risk-averse borrower, to whom an extra unit of wealth is more valuable in the bad state, better off. For the resulting change in his expected utility will be $p_1\delta[u'(y_1) - u'(y_2)]$, which is positive for all $K \geq 0$. Hence, the lender can profitably squeeze a little more from him than $p_1\delta/(1-\delta)$ in interest charges without violating the utility-equivalence constraint. Since this argument holds whenever K is positive, it will be optimal for the lender to set K at zero. It is the absence of moral hazard which permits the lender, as the risk-neutral party, to act as insurer to the risk-averse borrower without adverse incentive effects.

The intuition underlying (11) is straightforward. The LHS is the expected value of the marginal return to finance; the RHS is the (certain) value of the lender's opportunity cost of lending another dollar. In a first-best setting, as will be the case in the absence of moral hazard, the size of the loan will be such that they are equal.

12.1.2 Moral Hazard

With Proposition 1 as a benchmark, we now examine the effects of introducing a particular form of moral hazard. Suppose borrowers are mobile before projects are actually undertaken and that lenders can track them down only if they undertake projects, the returns from which (if any) lenders can identify. Then, instead of undertaking a project, a borrower could simply abscond with the money and whatever other assets he could realize or carry off with him, leaving the lender with the collateral – provided, of course, it was placed in the lender's possession when the contract was struck. In this setting, therefore, the borrower has an additional alternative opportunity, beyond that of making do without a loan. If he absconds, his final wealth will be

$$y_i^* = B + p_i(A_i - K) \quad \text{in state } i. \tag{13}$$

Thus, this opportunity yields him an expected utility of

$$\delta u[B + p_1(A_1 - K)] + (1 - \delta)u[B + p_2(A_2 - K)]^* \equiv V^*(B, K). \quad (14)$$

For his part, the lender must now set the terms of the loan in such a way that it is (barely) better for the borrower to undertake the project than to abscond. Formally, we have

$$Eu(y) \geq V^* \quad (15)$$

which is usually called the incentive constraint. If $B > 0$, then $y_1 < y_1^*$. It follows that $y_2 > y_2^*$ if (15) is to be satisfied when a loan is granted. It should also be noted that although $V^*(\cdot)$ is a concave function, the set $S = \{(r, B, K) : Eu(y) \geq V^*, (r, B, K) \geq 0\}$ is not necessarily convex. Once again, therefore, the first-order conditions must be used with care.

In this setting, the lender's problem is to

$$\text{maximize } E\pi \text{ again by choice of } (r, B, K) \geq 0, \text{ and subject to (3) and (15).} \quad (16)$$

Proposition 2. In the presence of moral hazard, the incentive constraint (15) always binds at the lender's optimum.

Proof:

Suppose, on the contrary, that $\mu = 0$. Then the problem reduces to that analysed in Section 12.1.1, in which case, $K^o = 0$ and $R_2 = (1 + r^o)B^o$. Substituting these values into (2) and (13) and comparing them, we see at once that $\underline{V} < V^*$. At the lender's optimum, however, $Eu(y) = \underline{V}$. Thus, condition (15) is violated, which contradicts the assumption that the incentive-compatibility constraint does not bind at the optimum. QED.

This result accords with intuition. It also suggests that the lender should attempt to ease the incentive constraint, from his point of view, by requiring a substantial amount of collateral as security against the loan, while charging a lower rate of interest by way of compensation, if compensation is needed. Yet there are definite limits to such a policy.

Proposition 3. In the presence of moral hazard, the lender's optimum always involves (*i*) a strictly positive rate of interest, and (*ii*) an amount of collateral whose value in the bad state is smaller than the principal of the loan.

Proof:

Suppose, on the contrary, that $r^o = 0$. Then

$$E\pi^o = -(r_0 + \delta)B + \delta p_1 K - [a_0 + \delta a_1 + (1 - \delta)a_2].$$

Since, by hypothesis, there exists a feasible contract that yields positive expected profits, it follows that $p_1K > (1 + r_0/\delta)B > B$.

Substituting into (13), we obtain $y_1^* = p_1A_1 + (B - p_1K) < p_1A_1$, and

$$y_2^* = p_2A_2 + (B - p_2K) < p_2A_2 + (p_1 - p_2)K < p_2A_2.$$

Comparing this pair (y_1^*, y_2^*) with (2), it follows at once that $\underline{V} > V^*$. By Proposition 2, however, the lender's optimum involves $Eu = V*$. Hence, the utility-equivalence constraint (3) is violated, which contradicts the hypothesis that $r^o = 0$.

It should be noted that the argument that leads to $\underline{V} > V^*$ holds for *any* rate of interest when $p_1K \geq B$, as claimed in part *(ii)* of the Proposition. QED.

Proposition 3 tells us that while it may be natural for the lender to use the pledging of collateral to combat moral hazard, the utility-equivalence constraint does not allow any loan to be covered in full.

In order to characterize the solution to the lender's problem more completely, we must turn to the first-order conditions:

$$[1 - (\lambda + \mu)u'(y_2)]B \leq 0 \quad \text{compl.} \qquad (17)$$
$$r \geq 0$$
$$[(r - r_0) - \delta(1 + r)]+$$

$$(\lambda + \mu)(1 - \delta)u'(y_2)[R_2' - (1 + r)] - \mu V_B^* \leq 0 \quad \text{compl.} \qquad (18)$$
$$B \geq 0$$

$$\delta p_1 - (\lambda + \mu)\delta p_1 u'(y_1) - \mu V_K^* \leq 0 \quad \text{compl.} \qquad (19)$$
$$K \geq 0$$

where μ is the dual variable associated with the incentive constraint, and V_B^* and V_K^* denote the partial derivatives of $V^*(\cdot)$ with respect to B and K.

Since $r^o > 0$ and $\mu > 0$, we have, from (17),

$$(\lambda + \mu)u'(y_2) = 1 \qquad (20)$$

Substituting into (18) and simplifying, we get

$$(1 - \delta)R_2' - V_B^*/u'(y_2) = 1 + r_0 \qquad (21)$$

Since $V_B^*/u'(y_2) > 0$, it follows at once from a comparison of (21) with (11) and from the concavity of $R_2(B)$ that B^o is smaller in the presence of moral hazard than in its absence. For even though collateral can be tendered as part of the contract, it turns out that it is infeasible to have the loan fully covered.

What can be said about the optimal amount of collateral? Proposition 2 leaves us with two cases.

Case (a): $\lambda = 0$. That is to say, only the incentive constraint binds.

By writing out V_B^* in full and substituting for μ from (20) in (19), we obtain

$$\{\delta p_1[u'(y_2) - u'(y_1)] + [\delta p_1 u'(y_1^*) + (1-\delta)p_2 u'(y_2^*)]/u'(y_2)\} \leq 0 \quad \text{compl.} \quad K \geq 0 \tag{19'}$$

Suppose that K^o is zero. This implies that y_1 approaches y_1^* as B becomes small. Hence, for B sufficiently small, the LHS of (19′) approaches $[\delta p_1 u(y_2) + (1-\delta)p_2 u'(y_2^*)]$, which is positive, and so contradicts the hypothesis that K^o is zero.

Proposition 3 and this last result, namely, that $K^o > 0$ when B^o is sufficiently small, suggest that Case (a) can arise only if the borrower's assets are sufficiently small in relation to the expected profitability of his investment opportunities. Consider, therefore, the case in which the borrower is risk-neutral ($u' \equiv 1$). It follows at once from (19′) that K^o will lie at its upper limit, that is, all of the borrower's assets will be pledged as collateral. Hence, from (14), $V^* = B$. From (17), $u' \equiv 1$ also implies that $\mu = 1$. Substituting into (21), we obtain

$$(1-\delta)R_2'(B) = (2 + r_0), \tag{22}$$

the solution to which, B^o, is independent of p_i and A_i. Hence, it is certainly possible to find admissible functions $R_2(\cdot)$ and sufficiently small endowments of assets such that B^o satisfies

$$V \equiv \delta p_1 A_1 + (1-\delta)p_2 A_2 < B^o = V^* = Eu(y),$$

which must hold if Case (a) is to arise. Although, in such a case, it is feasible for the lender to reduce B to a level such that the borrower gets just his reservation (expected) utility, it is unprofitable for the lender to do so. It is also clear that, by continuity, the same result will obtain if the borrower is only slightly risk-averse (that is, if $u(\cdot)$ is sufficiently

weakly concave). Thus, the lender demands collateral, not to drive the borrower down to his reservation limit, which would be unprofitable, but rather to ease the incentive constraint.

Case (b): $\lambda > 0$ *and* $\mu > 0$. That is to say, both constraints bind at the optimum.

In this case, collateral is always taken as security against the loan. For suppose, on the contrary, that it is not. Then, a comparison of (2) and (13) reveals that with $B > 0$ and $K = 0$, $\underline{V} < V^* = Eu(y)$, which contradicts $\lambda > 0$.

Comparing $\underline{V}$ with $Eu(y)$, we see that $K > 0$ implies that

$$R_2 > (1 + r)B.$$

Thus, unlike the case where moral hazard is absent, in which the optimum involves $R_2(B^o) = (1 + r^o)B^o$, here the borrower's returns in the favourable state of nature exceed principal and interest on the loan. Likewise, comparing V^* with $Eu(y)$, we see that

$$p_2K > (2 + r)B - R_2.$$

Since $K > 0$, it follows that $R_2 < (2 + r)B$. Combining this with the above inequality, we are able to bound R_2 as follows

$$(1 + r)B < R_2(B) < (2 + r)B. \tag{23}$$

An interesting corollary of these analyses of Cases (a) and (b) is that the borrower's endowment of assets has a strong influence on whether he does strictly better than his reservation level of expected utility. Consider, for example, two risk-neutral borrowers with identical investment opportunities. In both cases, (21) yields (22), so that they will receive identical loans. Now suppose that the first borrower has so few assets that he does better than his reservation level of expected utility, whereas the second has enough assets to meet the condition

$$[\delta p_1 + (1 - \delta)p_2]K = B^o,$$

that is, the expected value of the collateral just covers the principal. It is readily checked that this condition yields the lender's optimal choice of K, and that this borrower gets only his reservation level of expected utility (which is, nevertheless, greater than that of the first borrower).

The foregoing results may be summed up as follows:

Proposition 4. In the presence of moral hazard,

(*i*) the borrower may do strictly better than the reservation alternative of not taking a loan at all, if his endowment of assets is sufficiently small in relation to the expected profitability of his investment opportunities;
(*ii*) whether or not he does so, the loan will be smaller than in the case where there is no moral hazard; and
(*iii*) collateral will always be taken as security when the utility-equivalence constraint binds, and also if the loan is small enough when that constraint does not bind.

12.1.3 A Geometric Exposition

A clearer understanding of the structure of the model and the nature of the main results may be obtained through a geometric exposition in the space of (B, r). From (5′), we see that for each value of K, the map of iso-expected profit contours is a family of rectangular hyperbolae with origin $[0, (r_0 + \delta)/(1 - \delta)]$. For $r > (r_0 + \delta)/(1 - \delta)$, the contours are downward-sloping, convex and bounded below by the horizontal line through the said origin. For $r < (r_0 + \delta)/(1 - \delta)$, the contours are upward-sloping, concave and bounded above by that line.

Where the borrower's map of iso-expected utility contours is concerned, observe from (2) and (3) that for a given value of K, $[R_2 - (1 + r)B]$ will be constant along such a contour. Hence, the slope of the contour passing through the point (B, r) is

$$\frac{dr}{dB} \mid Eu = \frac{R_2' - (1 + r)}{B}. \tag{24}$$

As $R_2(B)$ is strictly concave, the derivative $(dr/dB)_{Eu}$ will vanish at a unique value of B for each value of r. The locus of all points at which the slopes of the contours are zero is the borrower's notional demand schedule for credit, with the restriction that only those points for which $Eu(y) \geq \underline{V}$ are relevant. In the present case, this schedule is the set of all points satisfying $Eu(y) \geq \underline{V}$ and $R_2'(B) - (1 + r) = 0$. Given the assumptions on $R_2(B)$, the schedule is continuous almost everywhere (see below) and downward-sloping. Differentiating (24) once more, we have

$$\frac{d^2r}{dB^2} \mid Eu = \{B_{R_2'} - 2[R_2' - (1 + r)]\}/B^2,$$

which is negative at all points on the notional demand schedule.

We now examine the borrower's reservation frontier $Eu = \underline{V}$. Since $R_2(B)$ is concave and $R_2 = (1 + r)B$ when (3) holds as an equality, it follows that the said frontier is downward-sloping everywhere. Also, as R_2' approaches $(1 + \hat{r})$ as B approaches zero, it follows that the borrower would be indifferent between an arbitrarily small loan that carried no collateral at the rate of interest $\hat{r}$ and no loan at all. Thus, the point $(0, \hat{r})$ is the limit point of the borrower's reservation frontier as B goes to zero.[3] At the other extreme of the frontier, at $r = 0$, the value of B satisfies $R_2(B) = B$. In Figure 12.1, the reservation frontier is drawn as DF, to which an iso-expected profit contour is tangent at point M, which is the lender's optimum in the absence of moral hazard. K^o is equal to zero in accordance with Proposition 1.

When moral hazard does intrude, $K^o > 0$. It is clear from (5′) that with $K^o > 0$, the contours of the borrower's indifference map in the space of (B, r) are identical to those for the case in which $K^o = 0$, save for a renumbering of the contours. Hence, as $Eu(y)$ is decreasing in K

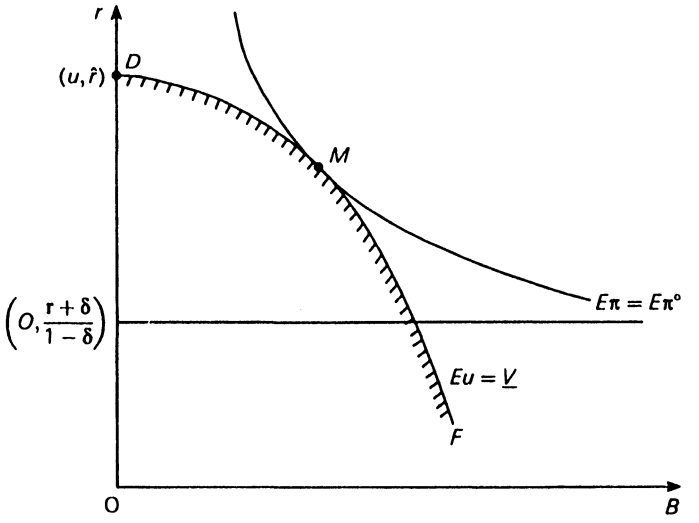


Figure 12.1 *The lender's optimum in the absence of moral hazard*

for given (r, B), the borrower's reservation frontier now lies below DF, and is drawn as GG' in Figure 12.2. Observe that the notional demand schedule now has a discontinuity where DD' intersects GG', at point Q say: notional demand is zero for all $r > r_Q$.

The other consequence of the intrusion of moral hazard is that the incentive constraint binds, that is, (15) holds as an equality. With the amount of collateral fixed at its optimum, K°, it is clear that V^* is increasing in B. Hence, as one moves along the locus defined by $Eu(y) = V^*$ in the direction of increasing B, one ascends the contours of the borrower's indifference map. Differentiating (15) totally, we get

$$\frac{dr}{dB} \mid V^* = \frac{R_2' - (1+r)}{B} - \frac{V_B^*}{B(1-\delta)u'(y_2)} \tag{25}$$

Comparing (24) with (25) and recalling the concavity of $R_2(\cdot)$, we see that the locus $Eu(y) = V^*(B, K^\circ)$ is downward-sloping everywhere in the region to the right of DD', and that in that region, it intersects the borrower's indifference contours from above. Since V^* is increasing in B, it also follows that the two loci cross just once.

In Figures 12.2 and 12.3, the locus $Eu(y) = V^*(B, K^\circ)$ is drawn as HH', which intersects $Eu(\cdot) = \underline{V}$, which is the contour labelled GG', at E. Figure 12.2 depicts the case where only the incentive constraint binds: an iso-expected profit contour is tangential to HH' at L, and the borrower does strictly better than $\underline{V}$. Likewise, Figure 12.3 depicts the case where both constraints bind; so that the optimum lies at E.

12.2 AN ALTERNATIVE MARKET STRUCTURE

In Section 12.1, the lender was treated as a monopolist who had the power to set the terms of the contract, subject only to the borrower's utility-equivalence and incentive constraints. We now consider, at the other extreme, the situation in which there is free entry into moneylending. For simplicity, we retain the assumption that contracts are exclusive, in the sense that a borrower can deal with only one lender. Thus, the market may be thought of as a system of contestable monopolies, in which each lender offers a menu of contracts satisfying the condition

$$E\pi(r, B, K) \geq 0 \tag{26}$$

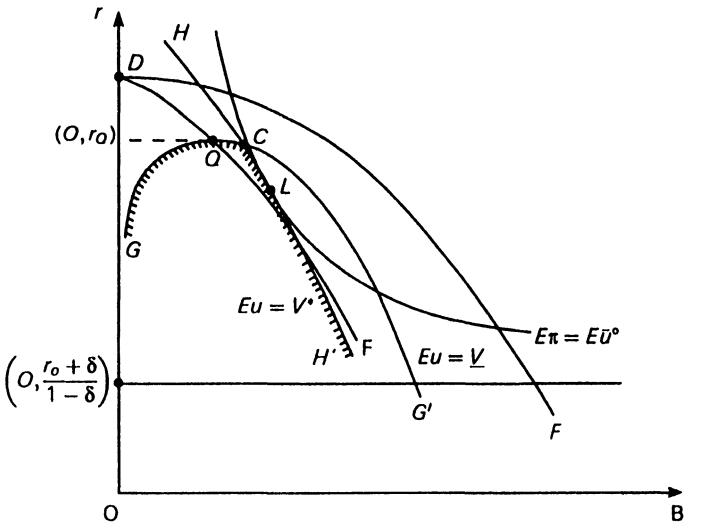


Figure 12.2 *The lender's optimum in the presence of moral hazard: only the incentive constant binds*

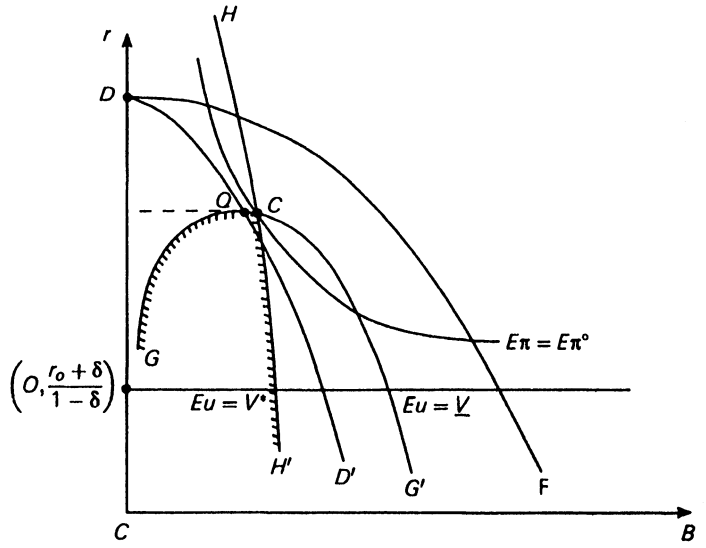


Figure 12.3 *The lender's optimum in the presence of moral hazard: both the incentive and reservation constraints bind*

12.2.1 No Moral Hazard

As in Section 12.1, we begin with the case in which the lender is able to monitor what the borrower does with the loan. Then, faced with the feasible set defined by (26), the borrower's problem is to

$$\text{maximize } Eu(y) \tag{27}$$

by choice of $(r, B, K) \geq 0$ and subject to (26). The first-order conditions are:

$$\begin{matrix}[-u'(y_2) + v]B \leq 0 & \text{compl.} \\ r \geq 0 & \end{matrix} \tag{28}$$

$$\begin{matrix}(1-\delta)[R_2' - (1+r)]u'(y_2) + v[(r - r_0) - \delta(1+r)] \leq 0 & \text{compl.} \\ B \geq 0 & \end{matrix} \tag{29}$$

$$\begin{matrix}-u'(y_1) + v \leq 0 & \text{compl.} \\ K \geq 0, & \end{matrix} \tag{30}$$

where v is the dual variable associated with (26).

As the indifference maps are unchanged by the reversal of roles of the two parties, one would expect proposition 1 to continue to hold, *mutatis mutandis*.

Proposition 5. In the absence of moral hazard, the borrower's optimum (r^o, B^o, K^o) satisfies

(*i*) $E\pi = 0$,
(*ii*) $K^o = 0$, and
(*iii*) $R_2'(B^o) = (1 + r_0)/(1 - \delta)$.

Proof:

(*i*) Suppose, on the contrary, that $v = 0$. Then, from (28) and (30), $r^o = K^o = 0$, which contradicts (26). Thus, the lender will indeed make zero expected profits under conditions of free entry.

(*ii*) Suppose, on the contrary, that $K^o > 0$. Then $r^o \geq 0$ implies, from (28), that $v \leq u'(y_2)$, while $K^o > 0$ implies $v = u'(y_1)$; so that $v = u'(y_1) \leq u'(y_2)$.

If $K^o > 0$, however, then $y_1 < p_1 A_1 < p_2 A_2 < y_2$ for a loan to be at least as attractive as not taking a loan. This contradicts $u'(y_1) \leq u'(y_2)$ if the borrower is risk-averse. Hence, $K^o = 0$ and $r^o > 0$.

(*iii*) Substituting for v from (28) in (29), we obtain (11). Given B^o, the rate of interest follows at once from $E\pi(r^o, B^o, 0) = 0$. QED.

The intuition underlying Proposition 5 is identical, *mutatis mutandis*, to that underpinning Proposition 1. The striking aspect of part (*iii*) is that it reveals that the optimum size of loan is *independent* of who plays the role of the principal. Thus, the contract locus in the space of (B, r) is a segment of the vertical line through $B = B^o$.[4] The rate of interest is lowest when the borrower is the principal, and highest when the lender is. The segment in question is depicted in Figure 12.1 as CM, where C is the borrower's optimum contract.

12.2.2. Moral Hazard

If monitoring the borrower's actions is prohibitively costly, the borrower's problem, as defined by (27), must be augmented by the incentive constraint $Eu(y) \geq V^*$. The immediate task is to establish under what conditions, if any, this constraint will bind. Suppose it does not, so that Proposition 5 will hold. Then, $\delta u(p_1A_1 + B^o) + (1 - \delta)\, u(p_2A_2 + B^o) < \delta u(p_1A_1) + (1 - \delta)u(p_2A_2 + R_2(B^o) - (1 + r^o) B^o)$, where B^o satisfies part *(iii)* of Proposition 5. Hence, a necessary condition for $Eu(y) > V^*$ at the borrower's optimum is $R_2(B^o) > (2 + r^o)B^o$.

In the case where the lender's fixed costs are zero, $E\pi = 0$ and $K^o = 0$ imply that

$$(1 + r^o) = (1 + r_0)/(1 - \delta).$$

Since $R_2'(B^o) = (1 + r_0)/(1 - \delta)$, the following condition on the elasticity of returns in the good state with respect to the size of the loan in the neighbourhood of the optimum is necessary for the incentive constraint not to bind:

$$\frac{B^o R_2'(B^o)}{R_2(B^o)} < \frac{(1 + r^o)}{(2 + r^o)}$$

If the lender's fixed costs are positive, then $(1 + r^o) > (1 + r_0)/(1 - \delta)$; so that the critical value of that elasticity will be smaller still. Indeed, we can be more precise: the larger is B^o, the more likely it is that the incentive constraint will bind. Hence, the function $R_2(B)$ must be strongly concave everywhere for that constraint not to bind.

Having established a necessary condition for the borrower's optimum to be characterized by Proposition 5 even in the presence of moral hazard, we now turn to the case where moral hazard does affect his choice of contract. In this case, the borrower is unambiguously worse off than he would be in absence of moral hazard; for the feasible set has become smaller in the relevant neighbourhood. The first-order conditions now become:

$$\begin{aligned} &[-(1+\phi)u'(y_2)+\nu]B \leq 0 \quad \text{compl.} \\ &\qquad\qquad r \geq 0 \\ &\nu[(r-r_o-\delta(1+r)] \end{aligned} \tag{31}$$

$$\begin{aligned} &+(1+\phi)u'(y_2)(1-\delta)[R_2'-(1+r)]-\phi v_B^* \leq 0 \quad \text{compl.} \\ &\qquad\qquad B \geq 0 \\ &-\delta p_1(1+\phi)u'(y_1)+\nu\delta p_1-\phi v_k^* \leq 0 \quad \text{compl.} \\ &\qquad\qquad K \geq 0 \end{aligned} \tag{32}$$

where ϕ is the dual variable associated with the condition $Eu(y) \geq V^*$; and, by hypothesis, $\phi > 0$.

With $r > 0$, substitution for ν from (31) into (32) yields

$$(1+\phi)u'(y_2)[(1-\delta)R_2(B)-(1+r_o)]-\phi V_B^* = 0; \tag{32'}$$

for by assumption, there exists a contract satisfying $E\pi \geq 0$ and $Eu(y) > \underline{V}$. As $\phi > 0$ and $V_B^* > 0$, it follows at once that the value of B satisfying (32') is smaller than its counterpart in the absence of moral hazard [see Proposition 5, part *(iii)*]. This result is as expected; for, *ceteris paribus*, a decrease in B will reduce V^*, and so relieve the incentive constraint. It should be noted, however, that this result is quite independent of whether collateral is pledged as part of the optimum contract. If K^o does remain at zero, then the reduction in B and the condition $E\pi = 0$ with positive expected fixed costs together imply that the rate of interest will be higher than its counterpart in the absence of moral hazard.

Noting that

$$\frac{-V_B^*}{V_K^*} = \frac{\delta u'(y_1^*)+(1-\delta)u'(y_2^*)}{p_1\delta u'(y_1^*)+p_2(1-\delta)u'(y_2^*)},$$

(32') and (33) yield

$$\frac{u'(y_2)[(1-\delta)R_2'(1+r_0)]}{\delta p_1[u'(y_1)-u'(y_2)]} \geq -\frac{V_B^*}{V_K^*} \quad \text{compl.} \qquad (34)$$
$$K \geq 0$$

Any vector $(r, B, K) \geq 0$ satisfying $Eu(y) = V^*, E\pi = 0$ and (34) will yield a local extremum of $Eu(y)$; and the assumption that there exists a feasible contract ensures the existence of a solution.

The results of this sub-section may be summed up as follows:

Proposition 6. In the presence of moral hazard, the borrower's optimum will satisfy Proposition 5 only if the returns function $R_2(B)$ is strongly concave. Otherwise, the incentive constraint will also bind, and the optimal size of loan will be smaller.

For the remainder of the chapter, we shall confine the analysis to the case where the lender is the principal, as in Section 12.1.

12.3 DIFFERENT PRIOR BELIEFS

Thus far, it has been assumed that the two parties share the same beliefs both about the relative price of assets in each state of nature and about the probability that a particular state will occur. This assumption of common priors is arguably rather strong. The lender may, for example, take a more sanguine view of the price of assets that will rule in the adverse state of nature, when the collateral (if any) will change hands.[5] The price of assets in the favourable state of nature does not, of course, directly affect the lender's expected profit; for the loan is paid off in full when that state occurs. Hence, the lender does not need to form an expectation of p_2; for himself. As in previous sections, he does, however, need to know the borrower's expected value of p_2, since this enters both the reservation utility and the incentive constraints.

We require one change in notation: let p_1^e denote the lender's prior for the price of assets in the adverse state.

12.3.1 No Moral Hazard

The statement of the problem is identical to that in Section 12.1, except that p_1^e replaces p_1 in (5). Thus, the first-order conditions (7) and (8) are unaffected, whereas (9) becomes

$$p_1^e - \lambda p_1 u'(y_1) \leq 0 \quad \text{compl.} \qquad K \geq 0 \tag{35}$$

Proceeding as before, it is easily shown that $\lambda > 0$ at the optimum and that (10) and (11) continue to hold. Hence, B^o is unaffected by the fact that the two parties have different prior beliefs about p_1.

Substituting for λ from (10) in (32), we get

$$p_1^e - p_1 u'(y_1)/u'(y_2) \leq 0 \quad \text{compl.} \qquad K \geq 0 \tag{35'}$$

Since $y_2 > y_1$, it follows that if the divergence in beliefs is sufficiently small, it will remain the case that $K^o = 0$. Hence, (12) will also continue to hold. Using $K^o = 0$ and (12) in (2), we obtain an exact condition on the priors from (35'):

$$(p_1^e/p_1) \leq u'(p_1 A_1)/u'(p_2 A_2). \tag{36}$$

The intuition here is clear. If the two parties have different priors about the price of collateral in the bad state, there may be a basis for mutually profitable trade when that state occurs, in the form of some collateral changing hands. The difference in their priors must, however, be large enough to overcome the borrower's risk-aversion, from which the result $K^o = 0$ springs when the priors are identical. Condition (36) expresses precisely how large that difference may be before the lender will insist on having the loan (partly) secured by collateral.

Suppose, therefore, that (36) is not satisfied, so that K^o is positive and $y_1 < p_1 A_1$.Then, since $Eu(y) = \underline{V}$, and noting that B^odepends only on δ and r_0, it follows at once from (2) that r^o must fall as K^oincreases, both induced by an increase in p_1^e. This is, in effect, a compensating change; for the borrower will lose his collateral in the bad state. To sum up, we have

Proposition 7. In the absence of moral hazard, the lender's optimum will continue to satisfy Proposition 1 for all $p_1$and p_1^e satisfying

$$(p_1^e/p_1) \leq u'(p_1 A_1)/u'(p_2 A_2).$$

For stronger divergences in prior beliefs over p_1, K^o will be positive and r^o will be smaller than its counterpart in Proposition 1, while B^o will be unchanged.

12.3.2 Moral Hazard

Again, the only change in the lender's problem (16) is the substitution of p_1^e for p_1 in $E\pi$. Hence, the first-order conditions (17) and (18) are unchanged, while (19) becomes

$$\delta p_1^e - (\lambda + \mu)\delta p_1 u'(y_1) + \mu V_K^* \leq 0 \quad \text{compl.} \qquad (37)$$
$$K \geq 0$$

In comparison with Section 12.1.2, there is the complication that when the two parties do not share the same priors about p_1, mutually profitable, contingent trading opportunities may exist. If the lender is more sanguine about p_1 than is the borrower, these opportunities will make it attractive for the lender to increase the amount of collateral stipulated in the contract, and so ease the incentive constraint. The following counterpart of Proposition 2 reflects this consideration.

Proposition 8. In the presence of moral hazard, condition (36) is sufficient to ensure that the incentive constraint binds at the lender's optimum.

Proof:

Suppose, on the contrary, that $\mu = 0$. In that case, we have returned to Section 12.3.1, and condition (36) implies that Proposition 1 holds. The proof of Proposition 2 now applies, contradicting the hypothesis that $\mu = 0$. QED.

If the difference in the two priors is sufficiently great to violate (36), but not so great as to make K^0 large, it is clear that the proof will still hold. For $\underline{V} < V^*(B^0, 0)$ and, by Proposition 7, B^0 is unaffected by a violation of (36). Hence, (36) is a somewhat stronger condition than is needed to ensure that the incentive constraint will indeed bind in the presence of moral hazard. If p_1^e is much larger than p_1, however, the attractiveness of the contingent trading opportunity will relieve the incentive constraint altogether.

In a further departure from Section 12.1.2, it also turns out that Proposition 3 may not be valid even if (36) does hold. It is instructive to reexamine the proof of that Proposition. Suppose the contract is such that $p_1^e K$. Then,

$$y_1^* = p_1 A_1 + (B - p_1 K) \leq p_1 A_1 + (p_1^e p_1)K$$
and
$$y_2^* = p_2 A_2 + (B - p_2 K) \leq p_2 A_2 + (p_1^e - p_2)K.$$

Now $p_1^e - p_1 > 0$ is compatible with (36) if the difference is not too great. Thus, it no longer follows that $y_1^* < p_1 A_1$. Hence, even though it is plausible to assume that $p_1^e < p_2$, it cannot be asserted that $\underline{V} > V^*$ under a policy in which $p_1^e K \geq B$; so that the proof of Proposition 3 breaks down. If the difference between p_1^e and p_1 is sufficiently large, the lender's optimum may indeed involve a *zero* rate of interest coupled with a large amount of collateral, to be profitably disposed of (as the lender hopes) in the event of a default.

Having established that moral hazard may not be a relevant consideration when the parties' priors about p_1 are sufficiently different, we conclude this section by examining the case where both constraints do bind. It is readily shown, as in Case (b) of Section 12.1.2, that $K^0 > 0$. As $(p_1^e - p_1)$ cannot be too large if $\mu > 0$, it is also assumed that $r^0 > 0$.

We are interested in what happens as p_1^e rises while p_1 remains constant. Differentiating $\underline{V} = V^*$ totally and rearranging, we obtain

$$\frac{dB^0}{dK^0} = \frac{\delta p_1 u'(y_1^*) + (1-\delta) p_2 u'(y_2^*)}{\delta u'(y_1^*) + (1-\delta) u'(y_2^*)} \equiv -V_K^*/V_B^* > 0, \tag{38}$$

as intuition suggests. Since $p_1 < p_2$, it follows from (38) that $p_1 < dB^0/dK^0 < p_2$. Recall that when $p_1^e = p_1, p_1 K^0 < B^0$. It is plausible that both K^0 and B^0 should increase with p_1^e, given p_1. In that case, the finding that $dB^0/dK^0 > p_1$ implies that at the borrower's expectation about p_1, the value of the collateral never fully covers the loan when default actually occurs.

It remains to be shown that K^0 does indeed increase with p_1^e. Since $K^0 > 0$ and $r^0 > 0$, substituting for μ and $(\lambda + \mu)$ from (17) and (18) in (37) yields, after some manipulation,

$$\delta p_1^e - \{\delta p_1 u'(y_1)/u'(y_2) + [(1-\delta)R_2' - (1+r_0)] V_K^*/V_B^*\} = 0, \tag{39}$$

where V_K^*/V_B^* is given by (38). Let p_1^e increase and, contrary to the result we seek, suppose that K^0 decreases. From (2), it follows that y_1 must increase; hence, by $\underline{V} = Eu(y)$, y_2 must decrease. Thus, by the concavity of $u(y)$, the first term in braces in (39) becomes smaller on the hypothesis that K^0 decreases as p_1^e increases.

Now, on the hypothesis that K^0 decreases as p_1^e increases, B^0 will also decrease, by (38). Since $R_2(B)$ is strictly concave in B and $V_K^*/V_B^* < 0$, the second term in braces will also decrease if V_K^*/V_B^* does not become algebraically larger. Since $dB^0/dK^0 < p_2$, it follows that y_2^* must incre-

ase; hence, by $\underline{V} = V^*$, y_1^* must decrease. It is then readily shown that V_K^* / V_B^* will indeed become algebraically larger if $p_1 < p_2$. For $p_1 = p_2$, however, $V_K^*/V_B^* = -p_1$, which is a constant. Hence, the second term in braces will also become smaller in this case. By continuity, therefore, it follows that for all p_1 sufficiently close to p_2, the entire expression in braces in (39) will become smaller as p_1^e increases. As this contradicts (38) holding as an equality, we have proved that K^0 increases with p_1^e.

The results of this section are summarized as:

Proposition 9. If both the reservation utility and the incentive constraints bind, and if the borrower's priors on the price of assets in the two states of nature are sufficiently close, then as the lender's prior on the price of assets in the bad state increases:

(*i*) The optimal amount of collateral will also increase, and with it, the optimal size of the loan, where $p_1 < (dB^0/dK^0) < p_2$; and

(*ii*) If the borrower's expected price is realized, the value of the collateral will not fully cover the principal of the loan.

12.4 CONCLUDING DISCUSSION

It is clear that the presence of moral hazard has a very important influence on the character of the main results. When the lender can observe what the borrower does with the loan and can force him to employ those funds in a productive way, all without cost, then the lender's only remaining problem of contractual enforcement is that of recovering the loan on the due date. We have assumed that such recovery is costly, but always certain. Thus, the cases dealt with in Sections 12.1.1, 12.2.1 and 12.3.1 may be thought of as situations in which property rights are completely defined and enforceable. There is then no role for collateral as an instrument of enforcement.

That leaves the desire to trade across states of nature as a possible reason for collateral to be pledged as part of the contract. Since the collateral would change hands only in the bad state, when the marginal utility of wealth to the (risk-averse) borrower is relatively high, there might exist mutually profitable reductions in the amount of collateral – if any were pledged. This is indeed the case when the two parties have the same prior beliefs about (relative) asset prices in the bad state and the probability of that state occurring. The optimal amount of collateral is then zero, whether the lender is the principal, as in Section

12.1.1, or whether there is free entry into moneylending, with the borrower choosing the terms of the contract, as in Section 12.2.1.

In the former case, which provides the benchmark for this study, the condition of the borrower is scarcely a happy one. The contract is such that his payoffs are identical to those he would receive in the absence of a loan, so that he obtains just his reservation level of expected utility. He simply conducts operations for the benefit of a fully informed and powerful lender, who pockets the entire proceeds when the projects are successful and absorbs the entire loss when they are not. In contrast, when there is free entry into moneylending, lenders will make zero expected profits, and all gains will accrue to borrowers. The contracts in these two cases will differ only in the rate of interest.

Thus far, the results provide indirect support for the claim that the stipulation of collateral in credit contracts is a response to moral hazard, in keeping with the empirical evidence that was presented in the Introduction. One must, however, beware of going too far. As noted above, there is also the possibility that the two parties will desire to trade across states of nature. If this desire induces the use of collateral, such a contractual provision may be interpreted as a forward transaction contingent on the state of nature.

This possibility was examined in Section 12.3.1. Here, the lender must be sufficiently more optimistic about the price of the asset in the adverse state of nature than is the borrower if the asset is to be demanded as collateral. For the borrower's aversion to risk, which militates against the pledging of collateral, must be overcome. When it is overcome, we have a counter-example to the notion that collateral will be stipulated only in the presence of moral hazard, or related informational problems.

When moral hazard intrudes, in the form of the possibility that the borrower may abscond with the loan and his other assets, matters become more complicated. Even if the lender has clear rights to the collateral in the event of a default, the loan will still be smaller than in the absence of moral hazard. Yet it is possible that the borrower will do strictly better than his reservation level of expected utility; for the option of absconding is an additional opportunity, which the lender must take into account when setting the terms of the loan. When the borrower's endowment of assets is sufficiently small in relation to the attractiveness of his investment opportunities, he will indeed do better.

A further consequence of moral hazard in this form is that, in the setting of Section 12.1.2, the lender will generally require collateral as part of the contract, with the collateral to be lodged with him. Here, the

main motive is to ease the pressure of the 'absconding' constraint by making absconding less attractive. When default does occur, as it will if the projects financed by the loan are unsuccessful, ownership of the collateral will pass into the hands of the lender. It turns out, however, that the value of the collateral in the bad state cannot cover the loan in full without violating the reservation utility constraint. In the good state, the returns from the project will exceed principal and interest; but the value of the collateral will also exceed the principal. Hence, the contract is not fully self-enforcing, for the lender may still have to work hard to recover what is due.

If the lender is more optimistic about the price of collateral in the bad state than is the borrower, then under certain conditions, both the size of the loan and the accompanying collateral will be somewhat larger than in the case where they share a common prior. More collateral will therefore change hands in the bad state, the source of this result being an implicitly profitable opportunity to trade contingently when expectations differ.

These results are consistent with the intuitively plausible idea that the use of collateral springs from moral hazard or related problems. Yet we have also found a counter-example to the stronger claim that moral hazard will always lead to the stipulation of collateral. When there is free entry into lending and the borrower's returns are strongly concave in the size of the loan, the borrower will choose not to tender any collateral.

A main conclusion of this paper is, therefore, that one cannot link the use of collateral to the existence of moral hazard in any simple way. There are circumstances in which collateral will be stipulated even in the absence of moral hazard; and there are others in which no collateral will be stipulated despite the presence of potential moral hazard.

There remains the question of whether, and if so under what circumstances, lenders actively pursue borrowers' assets and advance loans secured by those assets to accomplish their aims. That does not arise in the model analysed here.[6] The reason is that with the possibility of trading in perfect spot markets, lenders have a direct way of getting their hands on a particular type of asset. Collateral is valued at the going spot rate when default occurs, and a lender who wants an asset has no need of subterfuges through the loan contract. Thus, if there is to be a credible story about 'predatory' lending, it would appear to involve imperfect markets for the assets that lenders desire. As we have seen, it is not enough for lenders and borrowers to have different priors on what asset prices will rule in each state of nature. It appears that

there must be a difference also in the parties' valuations of the assets in those states of nature when default occurs. For now, that is left as an open question.

Notes

1. An early contribution is Benjamin (1978). There is also a useful discussion of collateral in the context of rural markets in Binswanger and Rosenzweig (1986). For a recent survey of the literature on credit markets in the presence of asymmetric information, see Clemenz and Ritthaler (1991).
2. In state i, K cannot exceed Ai. Thus, if a borrower pledges all his assets as collateral, the lender will receive A_i in state i.
3. It should be noted that B may not take the value zero, since $R_2(B) - (1 + r)B = 0$ implies that r becomes indeterminate when $B = 0$. Thus, we can speak only of the behaviour of (r, B) in the limit as B approaches zero.
4. The result that the contract locus is a verical line segment in the space of (B, r) is not unusual in models of the credit contract in which collateral plays no role. See, for example, Milde and Riley (1988).
5. This is equivalent to assuming that the lender places a higher value on the asset than the borrower. if the credit market is imperfect, the lender's greater reserves will put him in a stronger position to wait for better times before selling off the asset in question. This interpretation, however, takes the analysis into at least three periods, and hence beyond the scope of the model used here.
6. This question has been pursued by a number of authors, including Bhaduri (1977), Borooah (1980) and Rao (1980), who focus on the possibility that the collateral may be systematically undervalued. None of the named authors, however, formulated the borrower's alternatives satisfactorily.

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13 Land Reform as Commenced Business: The Evidence Against Stopping

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13.1 INTRODUCTION AND OUTLINE

Economists have approached rural institutions, such as those of land tenure and distribution, in three ways. Each suggests distinct modalities for 'land reform', and the role of the state in it. This chapter explores the modalities suggested by the third way – the 'new paradigm' of this book. It argues that these are likelier to succeed if they learn from, and selectively use, older modalities too.

For *standard neoclassical economics*, rural institutions are 'givens'. 'Knowledge, organization and technique' remain constant. Subject to these, individuals maximize utility – *inter alia* by producing commodities for self-consumption or for sale, operating through one of the 'givens', the form of organization known as the firm (including the farm), so as to maximize profit. The outcome is Pareto-optimal, so long as externalities and other market failures can be treated by some combination of (*a*) substitute-markets (Binswanger and Rosenzweig, 1981); (*b*) Arrow–Debreu contingencies markets; (*c*) additive separability of locally optimal outcomes, i.e. no problems of general equilibrium; and (*d*) absence of transactions costs, so that externalities do not prevent maximization in the choice of *production* outcomes, in the spirit of Coase (1960).

For *structuralists*, including most Marxists, rural institutions arise from the past power of groups or classes to appropriate resources, especially land and labour-power, through 'extra-economic coercion'. Such institutions survive as long as they continue to be perceived by the gainers as advantageous ways to exploit the (changing) set of tech-

*Fuller expositions and evidence for much of this paper will appear in Lipton (forthcoming). Diana Hunt, Alain de Janvry and Merle Lipton commented valuably on an earlier draft.

niques, and so long as the gainers can brainwash, bribe, compensate or coerce the losers into acceptance.

In the *new paradigm*[1] (Section 13.5 below), rural institutions – especially property rights – are endogenous outcomes of actions, partly to reduce transactions costs, by (*a*) individuals seeking to maximize net gain (subject to risk-reduction constraints) from property rights and other initial resources, in the given state of governance and technology; (*b*) coalitions (groups, perhaps including classes), seeking to use, or alter, that 'given' to their advantage. New paradigmatists tend to emphasize (*b*) if their intellectual background is structuralist, and (*a*) if it is neoclassical.

Neoclassical economists face a dilemma about state actions to change rights in land. On the one hand, neoclassicals not only *assume*, but also tend to *approve* of, constancy of institutions of ownership. It is seen as necessary to preserve confidence in the fulfilment of legitimate expectations, notably contracts: to reduce the perception of risk, and thus to stimulate profit-maximizing firms to invest, utility-maximizing households to save, and hence economies to grow.

On the other hand, most neoclassical economists oppose the award of claims upon GNP based on ascription. Inherited land, in particular, comprises an ascribed, monopolistic claim on (economic) rents. Yet claims on GNP, neoclassicals assert, should in an efficient economy (with some exceptions for poverty relief) depend on economic achievement alone. Such achievement should be measured – this is the central normative proposition of neoclassical economics – by actual receipts, i.e. by market assessments of a person's marginal value-product. Inheritance of highly unequal land-rights – claims on rent – sits uneasily with claims on GNP based only on economic contribution. If I get 20 per cent of GNP because my grandfather worked to buy land, then your claims on GNP per unit of effort, skill or enterprise – your incentives – are reduced accordingly.

At a more down-to-earth level, neoclassical cost theory, with U-shaped curves and optimal cost-minimizing size of firm (and farm), sits uneasily with hypostatized, very unequal, especially inherited, property rights. Since J. S. Mill suggested an 'inverse relationship' (IR) between farm size and output per hectare – viz. a very long right tail for the 'U' – this dilemma has been acute. Perfect and instantaneous land markets might deal with it. Yet they are hardly conceivable, especially in the context of specific inheritance laws.

Hence neoclassicals are drawn towards land redistribution, partly so as to optimize farm size. Individual maximizing behaviour, given the

new 'organization', can then lead to a better Pareto outcome. Much more important, if the main inherited barrier to market-based incentive structures is weakened, ascription can give way to achievement. But neoclassicists also 'want' secure property rights. They feel that the state should hold the ring, not move the ropes.

Structuralists face the opposite dilemma. They see rural institutions as products mainly of constant-sum power struggles, and want 'the state' to re-mould land tenure and distribution more efficiently and equitably. Yet structuralists also deny that the state can be neutral among interest-groups or classes. Its land reforms, therefore, will reflect power, not efficiency or equity. Structuralists have sometimes sought to resolve this dilemma by advocating that the state, or a collective or co-operative of somehow 'equalized' members, should manage the post-reform farms. This approach has, putting it mildly, led to new problems (see below).

Advocates of the 'new paradigm' – endogenous, transactions-cost-reducing rural institutions – regard not only tenurial forms such as sharecropping (see below), but also the distribution of farm sizes, as endogenous in the long run, and as dependent on factor scarcities, product demands, and perhaps initial power structures.[2] Does such determinism render land-reform policy (or advice) powerless? Even if, over the centuries, land distribution and tenure are determined by factor scarcities and technology (and perhaps power structures), the speed of change is affected by policy, both as implemented and through incentives to avoidance.

The arguments about land reform were themselves a source of the 'new paradigm'.

1. *The case against* the Marshallian condemnations of sharecropping stemmed largely from the evidence that it replaced otherwise missing markets for risk-sharing, and that it allowed landowners to avoid the transactions-costs of supervising hired labour: in short, that it is a largely endogenous institution.
2. On the other hand, avoidance costs of search, screening and supervision in labour markets are the main explanation suggested (Sen, 1966) for the alleged IR, and hence of *the case for* redistributing large holdings to create small family farms.
3. The 'new paradigm' has also been enriched by efforts endogenizing *explanations of* collective or co-operative farming, which claim that it is dependent on (very restrictive) conditions upon its efficiency as it alters the incentives for labour use, shirking, and employment of outsiders (Putterman, 1989).

The 'new paradigm' – in four words, that *transactions costs endogenize institutions* – creates problems, too, for land reformers. This chapter argues that they can be resolved: that land reform, in the sense of redistribution of land rights to the poor, can accelerate and to some extent 'equalize' the (long-run endogenous) institutional outcomes of agricultural factor and product markets, technologies and power structures. But land reform, to achieve its aims, requires institutions that render those aims *incentive-compatible*. The new institutions, therefore, need to replace (or dispense with) the endogenously required economic functions of the old structures ('rural tyrants' as sources of loans, security, technologically innovative risk-taking or 'informal magistracy'), as the new paradigm suggests. Reforms also need to find *'power-compatible' paths* to the new structures, in the context of newly democratized frameworks for civil society. Such frameworks may permit poor mini-farmers and farmworkers to organize politically around their genuine economic strengths in labour-intensive, small-scale agriculture.

These strengths were identified correctly by the claim that the IR often justified land redistribution towards private, family smallholdings. But the 'new paradigm', also persuasively, claims that the persistence of large holdings shows that they too are endogenous, incentive-compatible institutions.[3] The problem then is

1. Do those large holdings fulfil economic functions, providing activities (e.g. processing, transport, marketing) with actual or incipient economies of scale via the reduction of *capital-market transactions costs*; and if so can these functions be combined – via 'activity splitting', such as contract services by large combine-hirers, irrigators, processors, etc., to small farmers – with an increasing allocation of land operation to small family farms, so as to exploit the IR and to reduce *labour-market transactions costs* in appropriate activities? Or
2. Do the large holdings fulfil 'political economy' functions – provding security, informal magistracy, or other institutional prerequisites for efficient farming, especially by the smallholders; and, if so, can land redistribution become easier as these prerequisites are met by other means, in the context of changing states and civil societies?

This chapter argues that there is complementarity between new-style and old-style, but genuine (Section 13.2), land reform. New-style

reform involves burden-sharing, credible compensation; combination of small-scale farms with larger-scale services to reduce unit transactions costs; and decentralized political and market incentives to small-scale farming. Genuine old-style reform involves direct measures to get land to small family-farmers – not forced collectivization; and only with great caution intervening in tenancy markets. The chapter also reviews how land reform will interact with the growing majority of the poor who depend, not on farming, but on farm labour, rural non-farm activity or urban work.

The rest of this chapter is organized as follows. Section 13.2 examines whether changes are needed in the definition of land reform that prevailed in the mid-1970s. Then, the IR was widely accepted; tenancy restrictions and compulsory collectives were already largely discredited; and 'new wave', decentralized measures to redistribute land rights were little discussed. The standard model was a central land authority that acquired land above the ceiling, and later distributed it to 'the poor'. The new paradigm stresses that legislation, if it seeks to change institutions, needs to affect the set of incentives and technologies (and perhaps power structures) in respect of which institutions are endogenous outcomes; and that it is by such outcomes, and their impact on economic goals, that the legislation must be judged.

The evidence increasingly suggests that collectivization and tenancy restrictions are land *de*form, but mostly still supports the IR. Yet the new paradigm (of endogenous institutions) compels us to ask the 'Chicago question' (Carter and Mesbah, 1993): if the IR is valid, why do big farms persist? All this does suggest some redefinitions of land reform. Also, new possibilities (and arguments) for changed land institutions have emerged, especially in ex-Communist countries and in Africa. Overall, attention has shifted, towards other ways of getting land rights to the rural poor – back, to settlements, land taxes, consolidation, and privatization of state and common-property lands (and of pseudo-collective lands); forward, to 'market reforms', titling, and non-land methods of empowering or enriching the rural poor, such as public works, non-farm asset creation, etc. These shifts of emphasis will be examined later; Section 13.2 considers only whether they require any redefinition of land reform.

Section 13.3 examines one possible interpretation of the view that land institutions are endogenous: that exogenous land reform is a failure, unnecessary or harmful. Six arguments are touched on: (1) that

land inequality is (was) overestimated; (2) that land reforms have done little, especially for the poor; (3) that the poor rely increasingly on urban, or (4) rural non-farm, incomes as routes to extra welfare, and that land reform is at best irrelevant to such routes; (5) that the rural poor depend increasingly on employment incomes and/or semi-proletarian status, again reducing the relevance of land reform; and (6) that both the IR and other alleged links of smallness to growth are – or always were – fictional, so that, if the rural poor depend largely on agricultural growth for better lives, land reform does more harm than good. Although some of the arguments valuably emphasize the role of expectations, risk and information in farmers' decisions, and the limitations of partial-equilibrium comparative statics, they do not significantly weaken the case for distributive reform in developing agricultures.

Section 13.4 summarizes new theory and evidence on the labour-market impact of reform. This involves considering the labour-market effects of big *vis-à-vis* small farms; of collective versus individual holdings and reforms; of tenancy and its reforms; of reform impacts on agricultural growth and surplus; and of the indirect effects of reform – via evasion, avoidance, or adaptation by those affected. Can each of these be handled by land reforms so as to improve the livelihood-generating effects of implementation?

Section 13.5 explores new approaches to land reform: titling, market reforms (including infrastructure, tax or other incentives that encourage latifundistas to turn into contractors and processors, and to sell farmland to tenants or labourers), etc. *The new approaches have much to offer, but as complements, not alternatives, to more direct measures to get land to small farmers.* To be 'power-compatible', a package of new and old reforms must attend to the revealed weaknesses of the over-centralized land-authority model; to the need for urban–rural burden-sharing through a somewhat more consensual pattern of compensation; and to the proper phasing of reforms. For its aims to be 'incentive-compatible', the post-reform structure needs to meet the requirements (including 'informal magistracy') that, however badly or even brutally, the pre-reform structures addressed. This raises the issue of post-reform institutions for small beneficiaries – the balance between public provision, and incentives to competitive private provision, to them of commodities (from loans and extension to markets and magistracy) supplied largely by rural 'big men' prior to reform.

13.2 QUESTIONS OF DEFINITION

A conference in 1974 elicited wide assent that

> land reform . . . comprises (1) compulsory take-over of land, *usually* (a) by the state, (b) from the biggest landowners, and (c) with partial compensation; and (2) the farming of that land in such a way as to spread the benefits of the man-land relationship more widely . . . (3) I]ts primary motivation is to reduce poverty by reducing inequality (via] distributist or collectivist means (Lipton, 1974: 270).

Components (2) and (3) are more important in defining 'land reform' sensibly than (1). The emphasis on the land authority model is less acceptable now than in 1974, because it neglects (*i*) 'candidates' implausibly rejected on the 1974 definition – in particular, numerous reforms that have substantially reduced overt sharecropping, or improved its legal terms, without a land authority to legislate changes of ownership; (*ii*) evidence (Section 13.4) that some accepted 'candidates' on the above definition, especially collectivist reforms, have often missed or harmed the poorest; (*iii*) new, decentralized ways of getting land rights to the poor (Section 13.5); (*iv*) evidence that land authorities are slow and rent-seeking.

Before we assess the candidates claiming to fall under an improved definition of 'land reform', we review the five main institutional environments.

1. First comes traditional, mostly African, *'communal' tenure* of grazing land (or of bush cyclically cropped and fallow).
2. Typical of South and East Asia[4] is *smallholder tenure*. This has over 70 per cent of farms mainly family-cultivated on below 3 ha. or thereabouts of irrigated land (or 6 ha. of unirrigated land); less than 10 per cent of land in holdings above ten times that size; and 5–30 per cent of land leasehold, the rest freehold. Such systems can be highly egalitarian and can receive substantial collective support, as in China.
3. *Latifundia-minifundia systems* are mostly found in Latin America. Large private farms (200 ha.+) are worked mainly by employee families that also rent a tiny holding (mostly 0.2 to 2.5 ha.), usually from their employer.
4. *Decolonizing systems* are currently confined to parts of Africa, but are relevant to the former USSR. The ex-colonists are latifundis-

tas, big commercial farmers, or state/collective managers. The indigenous people are minifundistas, landless, or communal farmers.

5. Large-scale *state or collective* tenure systems are mostly confined to the former USSR.

There appear to be eight candidate 'land reforms'. (1) Conventional *ownership ceilings* followed by distribution to the poor, as per the 1974 definition, have been used mainly in smallholder and latifundia-minifundia systems, as have (2) *laws against tenancy*, including rights of purchase for tenants, and (3) *restrictions upon tenancy*. Assignment of (4) *titling or freehold rights*, even against the will of those with interests vested in other forms of property right, is typically used in 'communal' systems but also applicable to state or collective systems. (5) *Patrialization* – transfer of land rights from non-nationals – has typified decolonizing African countries such as Algeria, Kenya and Zimbabwe. Compulsory (6) *state or collective farming* has been imposed on latifundia-minifundia, smallholder, and (in the last 15–25 years, and bizarrely) even 'communal' tenure systems. Its reversal is (7), *privatization or parcelization* of former collective or state farming. Finally, (8) market *incentives to 'private land reform'* now loom large.

What should be included in an up-to-date definition of land reform, stressing its primary goal of increasing income and power for the rural poor via changes in land rights? Clearly, (1) ownership *ceilings (and land redistribution* of individual smallholdings to 'the poor') remains in that definition. Evidence on its favourable efficiency and equity effects remains persuasive (Section 13.3).

The 1974 discussions already recognized that new evidence and theory (e.g. Cheung, 1969): the emerging 'new paradigm') weakened the case, on efficiency or equity grounds, for (2), *legislating against tenancy*. This is even clearer now (Otsuka *et al.*, 1992). Yet most implemented 'land reform' had in 1974, and has since increasingly, been tenancy reform but has often shifted power and income from old to new (and poorer, though not the poorest) rural groups – especially when accompanied by ceiling laws, even if these were poorly implemented.

As for (3), *restrictions on tenancy*, theory – especially for share-cropping – suggests several reasons (risk spreading, labour monitoring, etc.), for naturally emerging tenurial arrangements. Their range is expressed in their environment- (and crop-) specificity. Hence there can be no 'land reformist' presumption that laws to alter rules of tenancy

will reduce poverty (or raise output). However, some laws to improve *security* of tenure may usually have such results.

Titling (4) has proved harmful to the poor on 'communal' lands in Kenya and Malawi (FAO, 1991: 25; Sahn and Arulpragasam, 1993). In Africa (though not in Thailand (Feder, 1989) it appears to arise endogenously when person/land ratios 'require' it, and therefore not to impede farmers without it from acquiring credit (Migot-Adholla *et al.*, 1991, esp. p. 171). The limits of artificially imposed titling laws are also clear from other studies (Hirschman, 1984, on the Mapuche lands in Chile; Thiesenhusen, 1989: 494, on wider Latin American experience). Except to secure the holding of recent poor beneficiaries of true land reforms – they lack the 'pro-poor' presumption required of something *defined* as land reform.

Patrialization (5) is a land reform if, but only if, its aim and likely result is to raise income or power for poorer groups by transferring land rights to them. Moving land from rich whites – Kenyan settlers or white Zimbabweans or South Africans – to poor and landless persons is land reform. Moving such land to similarly rich and powerful people of any colour – Kenyan or Zimbabwean yeoman politicians, or South African businessmen – is not.

State or collective farming (6) has been shown to carry general biases against employment, and in favour of rent-generation for farm managers. Where it covered only part of the farm population, as in Ethiopia, it almost always attracted public-sector agricultural resources away from more efficient uses, supporting poorer people, in smallholder or 'communal' systems. There are some farm activities – and possibly some crops, or farm environments – most efficiently handled by collective and/or larger-scale action. But small farmers normally collaborate to do such things jointly anyway. Sometimes, outside support can overcome barriers to such voluntary cooperation, e.g. to farmers' savings for joint irrigation in the Mexican *ejido* (Burke, 1979). In particular, for free-rider or contributors'-dilemma (Olson, 1982) reasons, farmers sometimes do not choose cooperative solutions, especially if a prisoner's-dilemma game is unlikely to be repeated in similar form, so that a tit-for-tat cooperative equilibrium (Axelrod, 1984) does not emerge. Then, a genuine public-goods case for support of cooperative institutions may well exist. Yet land collectivization or nationalization do not now carry the *presumption* – of transferring substantial income or power to the rural poor – needed for definition as land reform.

Privatization or parcelling (7) of state or collective lands has been a major source of redistributed income and power in Latin America in

the 1980s, and will almost certainly be increasingly important in Africa and the USSR. In Latin America, it has often both responded to the wishes of potential smallholders, and reversed tendencies to concentrate rights *vis-à-vis* the collective in the hands of favoured groups of beneficiaries – including farm-managing bureaucrats – at the cost of others, especially marginal workers. However, the opposite can happen too. In Chile, land privatization under Pinochet deliberately created inequalities and damaged many of the poorest (Jarvis, 1989). The inequalities of privatization and collectivization were driven by the same illusion of scale economies: the privatized holdings were set at 10 basic irrigated hectares or equivalent, too much for every qualified family to benefit. The definition of 'land reform' should include privatization if, and only if, it moves control of land towards poorer groups.

There remains the question of 'new wave' reforms (8) (Bell, 1990; Carter and Mesbah, 1993; de Janvry and Sadoulet (see Chapter 16); Tendler, 1991). These genuinely seek to get income or power to the rural poor, but wholly or partly reject the land authority model – and often the central government – for doing this. As elsewhere, there are two tests. Does a 'candidate' land reform enrich or empower poor rural people? Is this achieved by directly transferring land, to them, from other people? Dealing with 'other people' via compulsion, seizure, or land authorities is not essential to meet this second criterion; some degree of directness is. Progressive land tax, or overall poverty-orientated rural development, can – sometimes need to – support land reform, but are not themselves land reform. Yet one thing not usually considered land reform may have claims to be such. Measures *effectively* concentrating on small farms, infrastructure (especially controlled water supply) or input support, may raise their share of land in efficiency-units.

A redefinition of land reform, taking into account the conclusions on types (1)–(8) above, is proposed below Table 13.1, which summarizes the above section. It starts with the main purpose of reform: land transfers to the poor that shift rural income, or power, towards poorer (not necessarily the poorest) rural groups. Ceilings and transfers (type 1) are the clearest case.

The impact of some tenancy reforms and controls, e.g. in Kerala (Herring, 1983), in moving land rights to the poor suggests that types (2) and (3) cannot simply be excluded. Such tenancy reform irrespective of size (or poverty) of landlord or tenant holding – 'land-to-the-tiller' legislation – is substantially discredited as a source of *extra output*. Nor

Table 13.1 *Land rights and land reform: paradigms and definitions*

Type of change	*Main locations*	*Initial land system*	*Theory and evidence:*		*Land Reform?'*		*Comments*
			Old paradigm	*New paradigm*	*Old definition*	*Revised definition*	
1. Ceilings and redistribution	S,E,W Asia, Latin America	Very unequal Smallholders, or latifundia/ minifundia	Inverse relationship; land base of power, disimpoverishment	'Chicago question'; off-farm base possible for power, disimpoverishment	Yes	Yes	Inverse relationship often survives. Implementation difficult
2. Tenant's purchase	"	"	Sharecrop Marshall-inefficient; land-lords exploit poor; interlinked markets,	Sharecrop often efficient (generally equal, risk share, labour monitoring); and often raises	No	Sometimes	Change in definition because most land-rights change is in this category; often pro-poor
3. Restrictions on tenancies	"	"	Laws can reduce 'exploitative' rents and conditions	Rents, conditions, reflect diverse crop, etc., equilibria; evasion of laws means they often do harm	No	Small-tenant security only	Land user gains from *option* to obtain reform rights at market price; efficiency effects at best neutral; but sometimes tenants richer than landlords
4. Titling, freehold laws	Sub-Saharan Africa	'Communal tenure'	Secure ownership needed for land improvement, credit	Property rights endogenous, dependent on person /land ratios	No	Only if voluntary, on request of poor user	

5. Patrialisation	"	Lat/min *and* smallholders ('Communal'; 'tribal lands')	Transfer from colonisers to poor rural populations	Transfer from colonisers to rent-seeking yeoman politicians	Yes	Only if rural poor get land rights	
6. State/collective farms	USSR; parts of E. Europe, Africa, Latin America	Smallh. or lat/min.	Some scale economies; equalized rights, incomes	Few or no scale ecs,; disincentives to work or employ; poor lose, managers gain	Yes	Not if compulsory. Seldom for many farm activities	1974 df. *reported* old paradigm, though *advising* new
7. Privatize state/ collec.	"	State/collec.	'Counter-revolution'	*Sometimes* moves land and power from managers to poor and/ or employees	No	Only if rural poor get land rights	
8. 'New Wave'	Latin America; soon elsewhere?	Very unequal Smallholders *or* lat/min.	not applicable	(i) Many indirect arrangements can move land rights non-confrontationally to rural poor	n.a.	Only if rural poor get land rights	Big diversity of approaches
				(ii) Rural poor can get power and income via laws with no major change in land rights	n.a.	No	Measures may be optimal but not land reform; complements?

Note: Land reform is defined as state action to induce substantial transfers of land rights to, and consequent rises in real income or power for, the rural poor. The 'Chicago question' (Carter and Mesbah, 1993) is: if there is an inverse relationship, surely land and labour markets would get land into smaller *operated* holdings?

is such legislation a source of an *automatically progressive redistribution*, not because some landlords are poor and some tenants rich (this is true but atypical), but because evasion – via eviction – has so often had perverse anti-poor results. Nevertheless, we classify tenancy legislation as 'land reform' provided it is – or appears, on the case-by-case evidence, likely to be – a source of *probably progressive redistribution* of land rights. As a rule, under (2), tenants' rights of purchase – or first refusal – would qualify as land reform only alongside land ceilings with some prospect of enforcement. As for (3), the only tenancy restrictions clearly to qualify (i.e. where the sum of enforcement, responses, evasions, etc. is likely to leave poorer groups better off as a result of enhanced rights in land) are laws increasing security of tenure.

Type (4), titling and privatization of 'communal' land, can be classified as a reform only if it is invoked at the option of small users, seeking rights against powerful chiefs. The history of type (5), patrialization, requires a limiting definition before classification as land reform is admissible.

In 1974 I reported that type (6), collectivization or nationalization of land, was seen as one of two models for land redistribution, despite evidence of its damaging effects on both output and poverty. The growing power of such evidence now creates a *presumption* that (7), privatization (on popular demand, not imposed) of state or collective farmland, and not (6), transfers land, and hence income or power, to the rural poor. Many privatizations, however, do not; and some moves to remove 'free-rider' or information barriers on voluntary collective ownership or action, in some farm activities, well may. As for (8), 'new wave' reforms, they are too diverse to generalize. *A change is a land reform if and only if it enriches or empowers the rural poor by transferring substantial land rights to them.*

This revised definition requires six comments. First, many state (and other) actions help the poor by means other than increasing their power or income. Second, in some circumstances – e.g. in some instances of labour-intensive 'green revolution' (Indian Punjab) or rapid off-farm growth (Botswana) – the poor can gain substantial extra power and income without state action and/or without extra land rights. Third, in some cases the poor may gain power and income, via extra efficiency-units of land, through selective irrigation, settlement or consolidation (Oldenburg, 1990); these involve no *transfer* of land and are usually less confrontational (though often even more costly) than land reform, but they are not land reform. Fourth, state actions may

proclaim, intend, or achieve land reform; these are three different things. Fifth, the moderately poor can gain income or power via transferred land rights while the very poor, e.g. landless labourers, lose – or vice versa.

Sixth, most land reforms transfer land rights to the poor *directly*. Indirect effects, as rural people respond to new incentives created by the legislation, have sometimes enhanced the direct pro-poor impact (e.g. when rich owners subdivided their farms, or sold off part of them, so as to avoid ceilings legislation), but sometimes have subverted it (e.g. when landlords evicted tenants so as to escape tenancy restrictions). Most 'new wave' reforms aim to get land to the poor *indirectly*, using incentives rather than laws. As with reforms (1) through (7), the total consequences for the poor must be judged by the results.

13.3 DEATH OF LAND REFORM?

Political changes apart, six main arguments have recently led some analysts to downgrade land reform as a route to income and power for the poor. Five of these arguments have little validity. The IR debate needs fuller treatment.

First, while land inequality is overstated by most of the data, it remains huge. The data show that, among *households*, a large proportion *owns* only a small proportion of *acres*. Usually, however, such *households* support fewer people than others (Singh, 1990; Julka and Sharma, 1989); operate a larger proportion of land than they *own*, because of net renting-in (Lipton, 1985); and tend to operate *acres* of higher quality (Bhalla and Roy, 1988).[5] Yet the inequality of unreformed land, per person engaged in farming, remains huge, and a major cause of poverty – especially in Latin America and the Middle East (Amid, 1990; Brown, 1989; Singh, 1990; Stringer, 1989; Thiesenhusen, 1989; Thiesenhusen and Melmed-Sanjak, 1990; and, for summary data, Bell, 1990; el-Ghonemy, 1990; FAO, 1991).

Second, while land reform is often under-implemented, much land has been redistributed, not just throughout East Asia, but in Latin America (Bell, 1990; Jarvis, 1989; Stanfield, 1989; Strasma, 1989; Thome, 1989; Zevallos, 1989), and even in India (Manor, 1989; Saxena, 1990; Singh, 1990; Vyas, 1976). The process has slowed down since 1980, but has continued in several countries, e.g. El Salvador,

Nicaragua and Iran (FAO, 1991). Results, though substantial, are often denigrated because they fall short of expectations, due to evasion and avoidance (Amid, 1990; Carter and Alvarez, 1989; Lastarria-Cornhiel, 1989; Powelson, 1984). Yet avoidance can sometimes help reform; threats of ceilings can induce substantial sales to poorer farmers (Lipton, 1985; Vyas, 1976). Tenancy reforms seldom shift land to landless labourers, normally the poorest people (Hayami *et al.*, 1990); but these gain if rural power (and demand for labour) becomes diffused and competitive.

Third, while urbanization may reduce the pressures for rural reforms, it is greatly overstated by many data sets (Lipton, 1977; 1982a; 1982b; Polak and Williamson, 1993); is voluntarily – and probably desirably – deterred by more equal rural landholdings (Connell *et al.*, 1976); and leaves many poor dependent on *urban* farmland, itself possibly reformable (Freeman, 1991; UN, 1984: table 31; 1988: tables 38–9). Fourth, rural non-farm growth is similarly supposed to reduce the need for land reform; but such growth is accelerated by more equal landholdings (Harriss, 1991; Islam, 1986), and by farm growth (Hazell and Roell, 1983; Hazell, Ramasamy *et al.*, 1991), which these induce (Vyas, 1979). Fifth, even if non-farm growth – or farm growth concentrated on big farms – turns small farmers into 'semi-proletarians' (de Janvry, 1981), their incomes and power can depend heavily on reservation incomes from remaining holdings (Bhalla, 1987), which non-farm incomes help them to retain and develop (Forster, 1989).

More important than these five weak intellectual underpinnings of scepticism about land reform is challenge to the IR. Evidence since the mid-1970s increasingly suggests that the dynamics of the 'green revolution' do not undermine the IR: smallness of farms, with or without reform, does not significantly impede adoption of, or success with, improved cereal varieties or related inputs (Lipton and Longhurst, 1989). The critical question is: do the statics of the IR work?

The central IR argument is that, because small family farmers avoid most transactions-costs in labour markets (search, screening, supervision), it pays them to use more labour per hectare, and thus to produce more gross output per hectare-year.[6] However, even if the IR is valid at market prices, this implies that land redistribution need increase efficiency only if land, or farm output, is worth more, relative to labour, at shadow than at market prices. 'Price twists' against farm output, and unemployment of unskilled casual labour (Lipton, 1983),

suggest that this condition is normally fulfilled. Hence the validity of the IR at market prices is central to any case for redistributive land reform.

Even after 'green revolutions' (Bhalla and Roy, 1988; Boyce, 1987; Asaduzzaman, 1980), a big majority of empirical work in developing countries supports the *unadjusted IR*, or UIR: a 'meaningful'[7] inverse relationship of gross annual output-per-hectare at market prices to farm size in hectares (Berry, 1984; Berry and Cline, 1979; Boyce, 1987; Cornia, 1985; FAO, 1991; Hayami *et al.*, 1990; Hunt, 1984; Parthasarathy, 1979; Sahn and Arulpragasam, 1993; Stanfield, 1989; Thiesenhusen (ed.), 1989; Thiesenhusen and Melmed-Sanjak, 1990). The UIR remains meaningful – though it is weakened – if land is measured in 'efficiency hectares', allowing for the fact that farms tend to be smaller upon land of higher inherent quality.[8] Economic logic – but little evidence – suggests that the UIR is strengthened if (*a*) size is measured in hectares per household member or worker (reflecting the IR's basis in access to family labour-per-hectare at low transactions-costs); (*b*) only farms with similar non-land, non-unskilled-labour inputs per hectare are compared, or else their costs[9] are deducted from value of gross output; (*c*) gross output (and inputs) are measured at shadow prices,[10] especially if socially weighted.[11]

A properly *adjusted IR*, or AIR, would measure per hectare gross output, *minus costs* other than land and unskilled labour, all at *shadow* prices, as a function of *efficiency*-hectares of farmland *per person*. This AIR would, in most cases, show that, if farmland were more equally distributed in terms of efficiency-hectares per person, it would produce more annual output, net of appropriate costs. It is presumably efficiency-hectares per person, not land per household, that a poverty-reducing reform seeks to get to poor people.[12] And it is appropriately shadow-priced and 'netted' output, not gross output at market prices, from land that is maximized by an optimal distribution of operated land. Therefore the AIR makes an even stronger case than does the UIR for getting owned (and therefore operated[13]) land from largeholdings to private smallholders, whether by classical land reform (ceilings plus redistribution), 'new wave' reforms, or otherwise.

The AIR, though strongly rooted in evidence and logic, need not always hold. In small samples, and in the universe of a single village, the UIR, at least, is invariably bumpy, sometimes non-monotonic, partly reflecting differences among farmers (Hill, 1982). If more skilled, or more experienced (e.g. older), farmers tend to acquire – by purchase or renting-in – and/or to operate, more efficiency-hectares, that could

offset the IR, though such a tendency would be weak where, as is normal, most land is inherited.[14] If small farmers tend to be part-time villagers, that *might* offset the powers of labour overview – and hence the lower per-hectare transaction-costs – associated with small full-time farmers; this might destroy the (largely consequential) IR.[15] Above all, and perhaps generalizing the above observations, the IR does not apply to all farm outputs, at all factor/price ratios, across all activities from ploughing through weeding to marketing, or selecting any technique. To enforce family-farming principles for combine-harvesting wheat in Russia today would be as crazily inefficient as was Stalin's enforced collectivization, though far less humanly damaging and disgusting.

Where does all this lead us? The support given to land reform by the transactions-cost logic of the IR is powerful, the evidence convincing (though not unanimous), and the family farm impressively persistent, from Montana through Burgundy to Poland. Yet efficient and persistent *large* farms are not illusions either.

This may be due to *land-related* transactions costs. Even if unit production costs were less on smaller farms, the cost or risk of land sales or rentals could be high, leading to bipolar land operation, with rather efficient large farms and more efficient small farms. Then, policy could seek to move land towards efficient poles, e.g. by reducing information costs in rental markets. More interestingly, small farms might not prevail even if the land market were perfect. They do reduce unit *labour-related* transactions costs (searching, screening, supervising, shirking) by providing nearby, informed, rapid, flexible family overview of labour – and by building on intra-family altruism,[16] and on 'extended fungibility' of family members between the household and the family firm or farm (Lipton, 1984). But large holdings may reduce unit *capital-related* transactions costs, especially for credit, and for input and output marketing; and may exploit 'economies of scale', seldom in farming itself (from which they are normally absent), but in transport and post-harvest operations. This leads to combination, by smallholders, for appropriate activities (Amid, 1990; Burke, 1979; Stanfield, 1989) – but also to big farms that devolve other activities to smaller scales of operation (Carter and Alvarez, 1989; Tiffen and Mortimore, 1990).

Combining these advantages of large and small holdings – and reducing transactions-costs within and between them – is an important aspect of land reform in the 'new paradigms' reviewed in Section 13.5,

and often involving, in part, contract farming or tenancy. However, two problems arise. First, the above transactions-cost logic helps in the design of incentive-compatible post-reform packages only to the extent that big and small pre-reform farms were sustained by *direct* incentive considerations, including farm-specific transactions-costs, which can be replicated or improved after the reform; it is effective prices – market prices minus *farm-specific* transactions costs – that determine farmers' actions (de Janvry and Sadoulet, 1989). If, before reform, *indirect*, including non-farm, services were supplied by big farms to small farms (e.g. credit), or vice versa (as in the Indian *jajmani* system and its descendants), then – to the extent that participation in such pre-reform relationships was non-coercive – the mutual advantages, perceived as resulting from such exchanges, need to be less than (or subsumed under) those of a land reform for its results to be potentially Pareto-superior.

Second, it does not suffice to achieve the *aims* of a reform, in the circumstances arising from its actual outcome (including results of evasion and avoidance), that those aims be incentive-compatible. Also, the intended reform *process* must be 'power-compatible'. This involves some combination of (*a*) actual Kaldor-Hicks compensation, and (*b*) a threat potential, against losers dissatisfied with the compensation. The threat may range from legally enforcible ceilings to revolt. Power-compatibility also requires that the reform process replace, preserve, or make redundant the role, in the pre-reform power-structure, for a large farmer (Joshi, 1981, cited in Bardhan, 1988) or a collective (Carter and Alvarez, 1989) as a needed source of stability and security, through reserve employment (Bardhan and Rudra, 1981), informal magistracy, or otherwise.

Third, before drawing on the IR to justify even an incentive-compatible and power-compatible reform, reformers need to consider general-equilibrium impacts.

1. Even if small *farmers* are more agriculturally productive than large, small-farm *systems*, villages, or regions need not be; the only available evidence (Vyas, 1979: 15, for 57 Indian agro-climatic zones in 1971–2), however, suggests that they are.
2. Despite the IR, might not small farms eat all they grow? Thornton (1969) already gave evidence that 'as the small farmer would obtain a much larger gross produce than the (big), he might retain for his own use as much or more . . . and yet have a greater

quantity for sale'. Confirming modern evidence includes Narain (1962) for India, Thiesenhusen (1989) for Korea, and Thiesenhusen and Melmed-Sanjak (1990) for Brazil.

3. There is scanty evidence on linkages of farm income and output, via consumers' and producers' expenditure, to 'secondary' growth and poverty reduction. Probably, secondary demand for labour-intensive non-farm commodities – and hence of poor people's income, and of output in price-elastic product lines – is relatively greater where land is more equally distributed (Islam, 1986; Harriss, 1991).
4. Land redistribution also redistributes supply of, and demand for, credit and labour. The former is largely unexplored. Reasons to expect the latter to be favourable are discussed in Section 13.4.

13.4 LIVELIHOODS AND LAND REFORM

So far, we have argued that land reform – defined as state action to raise substantially the share of the rural poor in rights to land – has a much more effective past, and a much bigger future, than the conventional wisdom now admits. The IR works well enough to indicate that output, as well as the welfare of poor farmers, will normally benefit, mainly because small farms reduce labour-linked transactions-costs. However, large units may retain advantages for some farm-related activities – economies of scale for transport, processing and storage, and the reduction of capital-linked transactions-costs overall. A 'Junker path', in which such advantages gain importance over time, is conceivable (de Janvry, 1981). In this context the proponents of a land reform need to ensure that the aims of their reforms are incentive-compatible, and that the processes (and post-reform rural structures) proposed are power-compatible. This may well require new paradigms for reform; but the efficiency and equity gains, usually arising from classic land redistribution, suggest that its typical outcome, viz. more land rights for the poorest farmers, will remain the 'acid test'.

All this, however, approaches the problem mainly from the standpoint of small farmers. To free them from 'rural tyrants' (Bell, 1990), rather than to increase available rural livelihoods – to reduce gross inequality rather than gross poverty (Joshi, 1987) – is typically the main goal of land reform; growth-consistency via the IR, not

livelihood-consistency via higher employment, is typically the main challenge. Yet a growing majority of the poor in rural Asia and Latin America (and many in Africa[17]) depend on labour, mostly farm labour, for livelihoods – not on operating farmland. Most of these people, in most land reforms, get no extra land; it goes to the small farmers instead. The key questions are: how will a reform affect (*a*) demand for labour per hectare per season, and the share of hired labour in that demand, for each main product line; (*b*) similarly for labour supply; (*c*) product-mix; (*d*) product (e.g. cropping) intensity; (*e*) area farmed; (*f*) wage-rates; (*g*) food prices, including in-kind wages, to workers; (*h*) farm employer, and employee, organization; and (*i*) stability and (*j*) sustainability of all the above?

The data concentrate on the total impact of farm size on labour-per-hectare: the upshot of (a), (c) and (d) above. The results are dramatic. In Brazil in 1980, the 3 million hectares in the smallest holding-class absorbed 114 times as much labour as the 60 million hectares in the largest[18] (Thiesenhusen and Melmed-Sanjak, 1990: 397, 404). In such cases, hired labour must gain far more livelihoods, from any plausible redistribution, than are lost on account of a switch from hired to family labour. Even where land inequality is much smaller, as in Bangladesh, 'total use of hired labour per [ha.] declines monotonically as size of farm increases [, although] small farms . . . rely more upon family labour than larger farms' (Boyce, 1987). Hired-labour-intensity is sufficiently greater on small farms, even in Bangladesh, to indicate that this statement would survive if 'small' and 'large' were redefined in terms of efficiency-hectares per household member.

To assess the 'livelihoods' case for reforms, we need to know more about the other components of labour-market impact: (*b*) and (*e*)-(*i*). As for (*b*), land redistribution reduces the *supply* of hired labour. Mini-farmers, when they gain land, divert family effort to it, away from hired labour supply; and their total labour input also normally falls, because their real incomes rise.[19] As for (*e*), area farmed – and product (e.g. cropping) intensity, (*d*), the effect of which upon labour use is subsumed in the data cited above – many agricultural censuses and surveys show that total and hired per-hectare labour use increases as farm size falls; if this is due to smaller farmers' lower transactions-cost per worker, this should mean that they provide more work per hectare through channels (*d*) and (*e*) as well. As for (*f*), since smaller farms mean more demand for, and less supply of, labour for hire, real wage-rates should be higher after land redistribution. As for (*g*), relative effective food prices to farmworkers, these should be pushed down by

land redistribution, because the food/non-food production ratio is usually higher on small farms owing to risk aversion – and *perhaps* because small farms pay a larger share of wages as food. There is even less evidence on (*h*); numerous small farmers are less likely than a few big farmers to be able to set up cartel-like styles of labour organization, imposing changes to their joint advantage, upon labourers. On employment security, (*i*), evidence is mixed: smaller farms show less seasonal variation (because lower costs of labour transactions induce more double-cropping), but a higher ratio of casual to contract labour (Boyce, 1987; Thiesenhusen and Melmed-Sanjak, 1990). As for (*j*), land redistribution should improve sustainability of farmwork, as it usually reduces tenancy; it is costly for landlords to supervise the sustainability of tenants' practices, and concern for 'reputation' does not always deter tenants from soil-mining.

The effect on the labouring poor is the biggest question mark around land reform. The evidence on the above issues is perilously slight. However, the IR – since it occurs despite bigger farmers' better access to capital and inputs – reflects a much stronger 'inverse labour-use relationship' between labour-per-hectare and farm size. Probably reforms, the main result of which is to increase the proportion of land farmed in small units, will improve the position of farmworkers.

This does not apply to some other types of 'reform'. Large collective or cooperative (c/c) farms, like the large private farm, use substantially less labour per hectare than the typical smallholder – but, also like big private farms, choose a higher ratio of hired to member labour (Carter and Alvarez, 1989). But the latter helps genuinely landless hired labour even less than the similar, but stronger, tendency among large private farmers. C/c farms, faced with prisoner's-dilemma problems of shirking and collective overview in providing work incentives for members (Putterman, 1989) – including incentives to managers, to organize hired labour well – tend to hire the relatives of members for permanent tasks, and to keep outside employees casual and in fear. Also, such problems encourage members to retain benefits by purchasing labour-displacing equipment, and hence to reduce labour hire over time (Brown, 1989; Jarvis, 1989; Thiesenhusen, 1984; Thome, 1989). The effects on labourers of the treatment by collectives, etc., of non-member labourers do not seem to be offset by long-term gains to members (including former labourers). World wide, where permitted, these regularly vote for egalitarian privatizations with their feet, ballots, or cash (FAO, 1991; Howard, 1988; Otero, 1989; Stanfield, 1989; Thiesenhusen, 1989; Zevallos, 1989). Exceptions do arise, for

those activities or assets with clear scale-economies in unit (production plus transactions) costs of operation, but almost never for farms as a whole. Employment losses due to c/c (and state) farming are increased by a political-economy externality. Such units, even more than big private farms, have tended (as in Ethiopia) to obtain hugely disproportionate shares of state agro-rural infrastructure and subsidies, diverting them from 'unreformed' small farmers, less organized but more labour-intensive.[20] State and c/c land ownership, from Chile to Mozambique, has destroyed livelihoods, by reducing both farm output and its labour intensity. This is not to attack c/c activities in general. They can create livelihoods, and enhance output, where voluntarily chosen. That often happens, to exploit scale-economies or transactions-costs, but hardly ever for the total farm operation.

On tenancy reform or restriction, the evidence is more complex. Hayami *et al.* (1990) show that, while many small tenants gained in the Philippines, some land was resumed for personal cultivation. If so – and such resumption is, in general, incentive-compatible in the absence of enforced ceilings – tenancy reform or restriction makes operational holdings more unequal. Since more hired labour is employed per ha. on smaller holdings, this would harm labourers, unless offset because hired employment per ha. were greater on tenant-purchased farms than on sharecropped farms. There is no clear evidence for the latter; certainly output per hectare of owned holdings does *not* systematically exceed that of relevantly similar sharecropped holdings, in general equilibrium or in practice. However, standard theory would predict some gains to landless labourers from the facts that (*a*) reform enriches tenants, and (*b*) their *supply* of hired labour is normally, i.e. negatively, income-elastic. Nevertheless, without enforceable ceilings alongside tenancy restriction, it may tend to harm employment. With such ceilings (e.g. to some extent in West Bengal) the effect should be better.

The transactions-costs perspective on land reform needs to be extended, by fieldwork, to cover the impact on landless and near-landless labourers – the growing majority of the world's rural poor. Present limited evidence, and fairly convincing theory of what is incentive compatible, suggests good impact from classic 'big-to-small' redistributions, and reforms simulating their results; bad from compulsory cooperative, collective and state farming (and hence good from their *voluntary* dismantling); and good from tenancy reforms and restrictions only alongside enforced land ceilings, or other measures that deter resumption.

13.5 NEW PARADIGMS FOR LAND REFORM?

The supposed 'new paradigm' encompasses both neo-neoclassical (Colander, 1985) and analytical-Marxist (Roemer, 1986) 'new political economy' (NPE). This seeks to explain both institutions and macro-economic outcomes as results of individually optimizing (usually utility-maximizing) behaviours, including coalition formation, and their iteration towards a general-equilibrium outcome. That outcome is Pareto-optimal locally, but not necessarily globally; and this can coexist with 'unacceptable' interpersonal or intertemporal income distributions. State action to change the outcomes – or the institutions, in the long run largely endogenous, that affect them – can succeed, according to NPE, only if (*a*) its aims are incentive compatible, (*b*) its processes and outcomes are power compatible.

Indeed, one strand of NPE asserts that there is a strong presumption that state action, ostensibly to improve global outcomes or correct income distributions, will make matters worse, and that state economic action should be largely confined to provision of clearly public goods. On this view, the state itself is largely endogenous. Its members, and clients, use state power to seek rents (Krueger, 1974). On the other hand, *private* monopoly power is claimed to be constrained by 'contestable markets' (Baumol, 1982). Such theorizations, alongside observations of the performance of many Third World governments, especially in Africa (World Bank, 1991), underpin the 'Washington consensus' (Williamson, 1992).[21] This asserts that much state activity, even if allegedly taken to reduce private accretions of economic power, is so harmful (via incentives) to growth and equity that donors should condition aid upon the reduction of such activity.

The use of NPE theorizing to justify state compression, and to reject Keynesian and structuralist interventions as incentive incompatible for want of 'micro-foundations', is questionable (Lipton, 1991). There is no more reason to demand 'micro-economic foundations' for analyses of public policy than to censure analyses of large private projects for lack of 'macro-economic foundations'! Yet the Washington consensus, and more extreme state-minimalist uses of NPE, need disentangling from more valid, though superficially similar, applications of NPE to reject state intervention in land policies *unless* it is incentive- and power-compatible. For example, laws to restrict share-rents – once seen as helpful to output, and to the poor, on Marshallian lines – are now widely rejected as providing incentives to resumption, thereby both enlarging farm sizes (at the cost of output and employment) and

hampering an institution, sharecropping, that arises endogenously to reduce supervision costs; that spreads risk; that helps the landless poor to sell management to the landed non-poor; and that – given appropriate alternative tenures, e.g. owner-farming with the option of hiring labour in or out – involves, in general equilibrium, rental transactions between landed and landless to a Pareto-optimal extent.[22] Also in the spirit of NPE, laws enforcing state or c/c ownership of farmland – with the alleged aims of reducing poverty and inequality, and raising efficiency or growth – are seen as retarding these aims, owing to the effects on incentives to manage, work, hire labour or equipment, and seek rents.

Classical land redistribution, however, is (thanks to the IR) seen even by NPE as largely incentive compatible with such aims – whether the resulting smaller farms arise from implementation, or from evasion through sales or transfers. The main problem with classical land redistribution, for NPE, is power compatibility: big landowners, on whom urban élites depend for wage-goods (and rural order), may prevent such reform, writing loopholes into the laws or sabotaging them in the courts. A secondary problem is incentive compatibility for activities where scale economies exist, or where lower unit costs of labour-linked transactions on small farms are outweighed by other lower unit transactions-costs on large farms. Does the NPE of endogenous and transactions-cost-reducing rural institutions, then, end up advocating state abstention – let the rural tyrants tyrannize; the state is (or, rather, does) even worse? How *does* NPE differ from the 'Washington consensus' in its extreme, state-minimalist outcroppings of the early 1980s?

To sort this out, it helps to separate three senses of 'paradigm', in regard to which there may have been a 'paradigm shift'[23] from Keynesian and structuralist economics to NPE:

- A paradigm may connote *the scientific discipline's central procedure in explaining facts*: the main types of hypothesis normally used to predict or explain. This 'theory paradigm' has shifted, in the context of economics of land reform, towards the following judgements. (*i*) Information, risk and transactions-costs (including the costs of principal-agent overview) greatly affect micro-economic decisions. (*ii*) Aggregate economic outcomes are better explained through interacting micro-economic decisions, including coalition formation and bargaining, than through relationships among macro-variables. (*iii*) Cross-market, cross-regional, and other 'general equilibrium' linkages require to be included in this analysis. (*iv*) In

that context, analysts should explain rural institutions (including state land-reform agencies) as endogenous outcomes of individuals maximizing some aspect of self-interest ('rent', patronage, prospects of re-election) rather than the public good. All this implies that, for land reform to occur, a coalition of potential gainers has to be able to convince potential losers that they will be compensated, or will suffer worse if they resist change. Kaldor-Hicks compensation cannot remain hypothetical, even if the IR holds fully at shadow prices.

- A paradigm may also refer to the typical *states of the world*, which a discipline seeks to explain. In the economics of land reform, this 'world paradigm' has shifted to the following judgement. (*i*) Farmers' and landowners' 'property rights' comprise several, frequently separated, capacities, e.g. to farm, sell, bequeathe, or rent out a piece of land (Bell, 1990). (*ii*) Structures of property rights arise largely from rational, individual, micro-economic responses to factor scarcities (and to the costs, especially information costs, and benefits of managing property in various ways, e.g. rental, sale, family farming, or employer-employee farming). (*iii*) Therefore, these structures (e.g. sharecropping, or inequality of owned land) involve few local *farm efficiency* losses, absent major negative externalities. (*iv*) Though these structures may well involved *equity* losses, the main impact may not be on 'farmers' and 'landlords' but on (*a*) farmworkers – often a majority of the poor – via different worker/hectare and employee/worker ratios on small versus big or rented versus owned land, or (*b*) urban, and rural non-farm, workers and entrepreneurs, e.g. via the price and quantum of food, labour, spending, or saving flowing from agriculture to other activities. (*v*) The self-interest of state agents – which includes appeasing that of clients – partly determines the content and implementation of land legislation.[24] All this implies that equity and (non-local) efficiency gains from land redistribution are feasible but complex, often accruing to people *not* actively involved in (for example) latifundista-minifundista confrontations, and intersecting with the interests of other third parties, e.g. domestic and foreign politicians.

- Finally, especially in economics and other social sciences, a paradigm may serve as a *structure for recommendations* (consequential on the 'theory paradigm' and 'world paradigm'). On this 'policy paradigm', the NPE shift redirects attention from direct land redistribution. Because each structure of property rights reflects local factor scarcities, transactions costs, and power and self-interest of private *and state* agents, the scope for improvement via radical change in that structure may be smaller than was once believed. Nevertheless,

as in the older paradigm, extra equity (and sometimes global efficiency) can be achieved by redistribution of land rights towards smaller units. However, given the (endogenous) distribution of power – and given the success of landlords and lawyers in learning to evade (and of supposed state implementers in rent-seeking) on the old land authority model of distributist reforms – other methods are needed. The paradigm shift directs us to seek methods creating *incentives* to move farmland towards, and keep it in, smaller and more labour-intensive units – while encouraging larger units to provide services and inputs in activities with economies of scale in production-plus-transactions-costs. These 'other methods', reviewed below, are not themselves new *paradigms* of land reform. They are *illustrative recommendations*, emerging from a new 'policy paradigm' that is itself the outcome of new 'theory' and 'world' paradigms.

There is nothing new about attempts to achieve the results of distributist reforms by other means. Past attempts, however – most farm credit labelled 'for the poorest'; most settlement schemes; most restrictions on tenancy – in the absence of at least a serious prospect of enforced land ceilings, have done even less for equity or efficiency than ceilings themselves (Lipton, 1974).

- It will be shown that the new methods have demonstrated some potential. But they are most likely to be useful where large landowners' will to hang onto rural land (and associated power) is being sapped, by (*a*) alternative off-farm prospects, especially of providing services, profitably though competitively, to the new smallholders; (*b*) progressive land or bequest taxes; and/or (*c*) the threat of effective ceilings legislation. The latter 'stick' will surely be needed in cases of extreme land inequality (Brazil, South Africa), but the power structure there renders (*d*), the compensation 'carrot', especially important also.
- 'Other methods' of handling compensation can respond to the (valid) political-economy insights in the new 'theory' paradigms. They can increase prospects for enactment of ceilings-based land redistribution. By making ceilings feasible, good compensation policy can also make more useful 'other methods' which work best, or only, in the presence of such ceilings.

'New wave' land reform has three components. (1) It combines shifts towards small farms, for 'appropriate' parts of farming rights and activities, with larger-scale (cooperative or private) management of other parts, in which a 'Junker path' (de Janvry, 1981) – of capital-intensification in the wake of technical or financial change – appears to

have invalidated the IR (Carter and Mesbah, 1993). (2) Shifts towards smaller farms are to be achieved increasingly by market or tax incentives, rather than by the standard, partly confiscatory land-reform model (Binswanger and Elgin, 1988; Bell, 1990; de Janvry and Sadoulet, 1989). (3) To the extent that partly confiscatory reform is still used, it is to be done via NGOs or local authorities, rather than through a centralized state land authority (Tendler, 1991).

There are successful examples of each component, but there are three caveats. (4) The 'new wave' is probably likelier to succeed as a complement to 'old wave' reform, which may need to be seen by landowners as a serious risk. ('Old wave' reform means classic, less than fully compensated ceilings legislation – not the discredited compulsory state c/c farming approaches.) (5) *Some* objections to 'old wave' reform – notably the claim that the IR no longer holds (or is outweighed by hidden, perhaps external, costs from small farming) – would if true invalidate 'new wave' reform as well (Carter and Mesbah, 1993). (6) Finally, where extreme inequality (Brazil) or extreme need (Bangladesh?) mandates a substantial 'classical' ceilings component alongside the new wave, power-compatible reform requires a fair sharing of compensation costs. The obverse of such insistence on horizontal equity is, perhaps, a new view of bequests taxation.

(1) The attempt to combine appropriate small-scale and large-scale activities in a land reform package stems from the realization (see also Bell, 1990; Burke, 1979) that (Carter and Mesbah, 1993)

> the complex economics of agrarian structure do not fully support the economic case for [land redistribution, due partly to] intrinsically and informationally imperfect labor and capital markets.[25] [Hence, one should not] reduce the choice of the organizational model for agrarian reform to the two poles of what is really a continuum of models, ranging from fully collectivized to fully individualized. The Israeli *moshav*, the associated model in the Dominican Republic, different forms of semicollective production in Nicaragua, and models from Eastern Europe and China . . . resolve some of the problems confronting completely individualized and completely collectivized production.

This seems common sense, but raises problems. First, the IR is really rather pervasive; claims that some crops or conditions destroy the IR, and/or convey scale economies, sometimes turn out to be special

pleading (Hayami *et al.*, 1990). Second, even where developments (usually in financial markets or due to imported labour-displacing technical change) have tied some crops or activities into some sort of 'Junker path', why exogenously provide the large-scale/small-scale combination, as a package of institutions? Why cannot smallholders – as they often do – *choose* to carry out some activities (e.g. tractor ploughing), or to obtain some services (e.g. marketing, drying), on a larger scale if appropriate: to buy them from large farmers or input suppliers, or to provide them jointly? Third, even if there are good reasons for larger-scale components to be publicly provided or encouraged alongside distributist reform, this adds substantially to its costs.

The logic suggests that larger-scale private or collective suppliers of non-public goods to post-reform smallholders require, not public financing, but competition or overview to limit monopoly power. Otherwise, new feudal waterlords may replace feudal landlords in India; or some poor land-reform beneficiaries, as in Chile, may find 'themselves locked into a continuing dependency relationship with their traditional patrons' (Brown, 1989), or, as in Atecingo (Puebla), Mexico, in 1938–47, having been 'donated' land, may be confronted by an effective processing monopsony (Otero, 1989). But even publicly arranged competition or overview is not a cheap, easy path to getting 'larger-scale' activities to post-reform smallholders. The alternative – collective or cooperative service provision – faces standard problems of labour-incentives, Olsonian 'contributors' dilemmas', etc. (Putterman, 1989; Carter and Mesbah, 1993). Yet if larger-scale provision of apprently 'appropriate' services is neither organized cooperatively by post-reform smallholders, nor privately supplied to and demanded by them, then it is probably because the costs of provision are prohibitive. Inclusion of such services as part of a publicly arranged 'new wave' package is not, therefore, *necessarily* an improvement on old-style reforms.

(2) Price distortions favouring large farms mean that IRs, strong at shadow prices, are suppressed at market prices, and even at effective prices including transactions-costs (de Janvry and Sadoulet, 1989). Correcting such distortions therefore helps to get land into smaller holdings (see also Binswanger and Elgin, 1988). This may be a route from the 'Washington consensus' – via desubsidized imports, capital, and other substitutes for labour – towards gains for the rural poor. But, while such measures can make land reform less painful to big farmers, they are too indirect to count as land reform. A very inter-

esting part of the new wave is the more direct use of market or tax incentives to redistribute land.

Historical evidence suggests some prospects for this approach, given a flourishing land market. Often, despite higher transactions costs, large 'landowners (prefer) selling to the peasantry' because of higher profits from sales in small parcels, as in Tungurahua, Ecuador, in the 1940s (Forster, 1989), or to avoid passing land to potential rivals.[26] The difficulty faced by small purchasers in borrowing money to buy land, however, may prevent this process, unassisted, from achieving much; Ecuador, as late as 1964, had a very unequal distribution of owned farmland (Zevallos, 1989). Can, and will, the state help?

Removal of legal constraints on land subdivision – enforced until the early 1980s in Zimbabwe and Botswana, and still binding in South Africa – is a minimal enabling device. Credit schemes, to assist purchases in small units, could also help in some circumstances. Without formal ceilings, however, such credit interventions raise the demand for, and hence the price of, land (Bell, 1990) – perhaps especially for land in small parcels – and may be self-defeating. Also, political-economy considerations may lead states to abuse such market reforms by using credit (or captive poor clients who must pass on purchased land to rich patrons) in order to acquire land for yeoman politicians, as in Kenya (Harbeson, 1984).

Progressive taxation of *large* land bequests, or transfers, plus removal of Brazil-style tax concessions (Thiesenhusen and Melmed-Sanjak, 1990) or input subsidies (Binswanger and Elgin, 1988) that favour large owners or operators – or their typical crops – over small, can be a valuable supportive device for credit, or land laws, to help the poor to buy land. Big farmers will oppose the tax and subsidy reforms, but may well support the assisted-purchase legislation. And fiscal crisis can help to push governments to desubsidize, or tax, very big farms. Meanwhile, democratic revival can increase pressures from smaller farmers for more equitable tax-subsidy treatment (de Janvry and Sadoulet, 1993).

Such a tax-subsidy rationalization, as a means to private land redistribution, has two advantages over credit for small purchasers. The supply of land to small buyers, not just the demand, is raised. Also, the problematic business of identifying genuinely small buyers is avoided. Yet, without credit or other direct support for small buyers, it is hard to see tax-subsidy reform *alone* greatly denting unequal, sluggish land markets in Latin America or the Middle East.

Lower subsidies on post-reform inputs and ancillary services went alongside greater success in steering land to the poor – i.e. in discouraging the rich from incurring costs to subvert reform – in NE Brazil (Tendler, 1991). There, however, the process was accompanied by assistance to purchasers, alongside actions to stop any land-price explosion: active search for land appropriate to potential beneficiaries; identification of labour-intensive crop-mixes, profitable only with closely supervised family farming; and small, dispersed purchases.

A final incentive to 'market reform' is a progressive land tax. This has many familiar economic advantages, but requires a reliable up-to-date land register, at least for larger holdings. Few developing countries have this. Also, 'the trick . . . of distributing the burden in a manner acceptable to the contending parties' (Bell, 1990) may be as tough for tax reform as for land reform.

(3) The third new-wave approach to land redistribution – the decentralization of responsibility for remaining non-market components, from a national land authority to local government or NGOs – can *in appropriate circumstances* do better, in moving more land to the poor, than was the case in the Kenyan transition (Harbeson, 1984). World Bank aid for rural development in NE Brazil was passed on to the local authorities, to support infrastructure, only after they obtained and distributed land. In two ways, this defused the 'political economy' problem. It rewarded local authorities, in an electorally tangible way, for grasping the land-reform nettle. And it enabled them to persuade big owners to make land 'donations' to the poor, in return for irrigation spin-offs on their substantial remaining holdings (Tendler, 1991).

Decentralized land redistribution is not new. Land reform in India, while centrally monitored, requires legislation and implementation – or lack of them – by the states. NGOs have organized land transfer since the 1950s in the *bhoodan* (land gift) movement in India, and via the *sarvodaya* movement, notably in Sri Lanka.

Landlords' initial religious motives, response to agitation, fear of shame and hope of prestige, can induce some transfers through NGOs. However, *sarvodaya* and similar movements are under great pressure to claim more than they perform. They induce transfer of land that is often of little value. Even that land often goes to the not-so-poor, especially to clients of the landlords. In other contexts, larger NGOs – those big enough to make real impact – appear as prone as governments to mixed motives, undue subservience to (and conceal-

ment from) funders, and top-down approaches (Griffiths, 1987). Nor is it at all clear that India's states have improved land rights for the poor more than would have been feasible with greater central powers. These powers, after all, carried through *zamindari* abolition in the 1960s. As for later and less pervasive reforms, some states – West Bengal, Karnataka, Kerala – have implemented some; others, hardly any. In yet others, notably the Punjab, changes in agrarian structure following population movements, and confirmed by new incentives created by technical progress in cereals farming, overwhelmed any changes associated with land reforms. In almost all states, the dominant reform model of tenancy control probably harmed the rural poor by inducing tenancy resumption, bigger operational holdings, and hence less work per acre – but this harm was often outweighed, in Gujarat (Vyas, 1976) as well as in more overtly successful land-reforming states, when tenancy reforms were underpinned by fears of ceilings implementation. Nationwide, the decentralized reform model accompanied a very modest improvement in land distribution, alongside a shift from recorded tenancy to recorded owner-farming too large to be wholly attributable to increased concealment of tenancies.

Thus decentralization and 'de-statization' of land reform, as of much else, may not make much difference. State, NGO and local authority all function in the same nation, society and, to some extent, culture. All contain 'idealistic' elements of Platonic guardianship, supported by the need for public reporting and rhetoric, and by associated career structures, often tending to push towards land redistribution. All, too, contain elements of rent-seeking, patronage, and corruption. All face pressures, internal and external, both from privileged landlords and from near-landless agriculturists. NGOs and local authorities can, but need not, operate in a more bottom-up manner than the political centre – Delhi or Brasilia – but seldom on a scale sufficient to produce major and widespread reform. Anyway, localized rural responses are to the *locally* articulate and powerful, whose interests a centralized state might more readily set aside.

A lot of classical land redistribution has happened, the glass of land reform, proffered by the central state and its land authority, may be half full. Similarly, the new-style glass offered by NGOs and local authorities may be half empty. Can the two together equal one full glass? This probably depends on the feasibility, unity and strength of organized pressure from below. In this context, democratization in

Latin America might improve the prospects for decentralized reforms – though these have not done all that well in democratic India.

The South Asian experiences with non-centralized reform efforts, however, have been larger-scale and more 'bureaucratized' than those beginning in Latin America; and also more confined to rural areas in organization, funding and motivation. These elements are consistent with the fact that in South Asia 65–75 per cent of populations are agricultural, in Latin America 20–40 per cent. Land reforms arranged by mayors carry new prospects of rural-urban alliances, trade-offs, etc.

(4) The prospects for state-NGO/local complementarities is illustrated by two cooperatives in NE Brazil (Tendler, 1991):

> The important lesson . . . is not that cooperatives [or NGOs or local authorities: ML] should replace the state . . . or that NGOs do better than government at serving the poor . . . Though the [two] coops were NGOs with local roots . . . their origins lay equally in the efforts of the Brazilian state over the past 40 years to extend its reach to rural areas. Central and [provincial] governments used cooperatives to create ties of political loyalty with rural élites by channelling development subsidies through them.

Turning such links to the benefit of the rural *poor*, by convincing the élite that it has an economic or precautionary interest in their prosperity and/or landedness, is a politically difficult trick, but sometimes a possible one. Crucial to its success may be the existence of ceilings legislation, even if little enforced. Large landowners fear it may be enforced some day. Often, they make use of local power, including violence (often police violence), as well as the courts – and the threat of denial of access to credit in interlocking markets – to deter or punish tenants, employees, or other land claimants who try to insist on their rights. The difference between villages in Bangladesh, where coercive resistance to any effort 'from below' to enforce land rights is normally successful, and villages in Andhra Pradesh (India) where it is much less so, is vividly documented by Cain (1981).

Local political figures or NGOs, often at great personal risk, can move land régimes away from customary, often 'illegal', sanctions and towards a rule of *central* law. A set of incentive and enabling devices created by new-style reforms, and old-style central ceilings legislation, are clearly complementary in achieving this (though collectivist reform laws and/or tenancy restrictions, by discouraging smallness, would usually be counter-productive). The prospect that (*a*) new-wave land

reform will help the poor depends substantially on (*b*) ultimate sanctions upon persistently very large holders through central law, available for implementation, usually including ceilings legislation,[27] and (*c*) reservation activities for the landless, if vengeful largeholders deny them credit or work in interlocking markets. Fear of ceilings, together with local political action from below – especially in an increasingly democratic framework – can then induce big landowners to accept Macaulay's advice: 'Reform, that you may preserve.' In NE Brazil, all parties have sometimes preferred locally mediated 'donations' from big to tiny farmers, compensated by access to irrigation on remaining land, to contentious litigation about enforcement of central laws (Tendler, 1991); but that preference exists largely because landlords fear those laws.

(5) Three ways of asset enhancement for the rural poor, all designed to raise the proportion of agricultural activity that happens in employment-intensive small farms, have been proposed: classical land reform (redistribution, not compulsory c/c or state farms); 'new wave', decentralized, or market shifts of land towards smallholdings (linked to provision of some activities in big units where appropriate); and region-based 'rural development' that steers inputs, infrastructure, health and education, agricultural research, and rural *non-farm* opportunities towards the poor. Carter and Mesbah (1993) point out that some of the objections to 'old style' reform apply to 'new wave' reallocation too: if there is no IR; if its advantage for smaller farmers is outweighed by their capital constraints (on private savings to buy land, on capital markets, or on the divisibility of infrastructures); if there are severe transactions-costs in land markets; or if the political pressure to keep landholdings very unequal cannot be either overcome, or appeased by economic compensation.

Similar objections could well apply to agricultural components of 'rural development'. Correction of price distortions has removed some artificial disadvantages of small farmers in Latin America (de Janvry and Sadoulet, 1993). Yet that will not help them to survive for long, *if* the 'Junker path' has indeed led most components of farming (at least in some crops and areas) away from the IR, towards supervening advantages to scale in financial or product markets.

The evidence on the IR, however, suggests that this is exceptional. If so, 'rural development' – especially outside agriculture – *supports* land reform. It offers the gainers alternatives if denied access to interlocking markets by resistant or vengeful largeholders. These, in turn, gain rural options as suppliers and processors, diverting them from exclusive

concern for income and status based on farm operation or rental. Steering health, education, non-farm activities and agricultural research towards poorer farmers (and areas), as a complement to land reform there, may come to make sense, as other expenditures meet steadily diminishing marginal returns. However, there is a political obstacle. Technological 'betting on the strong', for instance in setting crop and regional priorities in the early stages of India's Green Revolution, often arose 'not so much out of regard for rationality or the social interest (as from the) balance of political forces' (Joshi, 1987: 296).

Such gloomy determinism, however, overlooks the possibility that – especially in an 'opening' or democratizing polity – the self-interest of the powerful can be used to get more land to the rural poor. The rural rich, whose power depends overwhelmingly on land, will permit – even encourage – advancement among the rural poor only if, given their power, they regard the expected cost of stopping the advance of the poor as more than the expected gain. Old-style ceilings laws reduce that 'given power' of the rich to block advance among the poor (e.g. to block the *effective* steering of 'rural development', including agricultural research, towards labour-intensive small farms), since such power rests substantially upon the land base. New wave land reallocation will be more attractive to the rich – and old-style reform more tolerable – to the extent that an IR applies, and is not overridden by capital-type constraints. The IR can sometimes be re-established where it has collapsed, or relieved of capital-type constraints where they exist, by appropriate 'steering' of rural-development inputs – if the rich farmers see their interests in such a process and/or are too weak to stop it.

(8) New-wave reforms have become popular largely because of a dilemma posed to old-style land reform. Substantial compensation is seen as fiscally infeasible, substantial confiscation as politically infeasible. 'New-wave' voluntary or incentive-linked transfers, of course, reduce compensation costs. So does good timing of the takeover: before technical change, as in the Philippines (Hayami *et al.*, 1990); or before irrigation is installed, as in the Brazilian experiments (Tendler, 1991). Ultimately, the rural rich must be persuaded that their compensation will be adequate (and not inflated away), given the risk of violence or confiscation – or their costs of preventing it – if they resist reforms.

But there is an assumption here, which goes to the root of the problem of land reform. The problem is taken to be the opposition of the rural rich; but they oppose mainly because of the assumption that the costs must be borne almost wholly by them, and hardly at all by the

urban rich. In much of South Asia, proposed seizures of land above ceilings as low as 10–15 acres – with little real compensation, since bond values are *meant* to be inflated away – often threaten rural people with annual incomes lower, and much less secure, than those of junior civil servants or secondary schoolteachers, let alone urban businessmen; yet these are immune from threat or cost. True, agricultural incomes are often exempt from tax, and credit and input subsidy often goes selectively to larger farmers. That in some sense mitigates the injustice of placing the cost of land transfer on them. Yet it also sharpens their feared loss, and hence their resistance.

People act out of self-interest, but their public effectiveness and self-confidence are much enhanced if they can plausibly claim that their treatment is unjust. Potential losers from land reform see and transmit an image, far from a mere populist myth, of wealthy townspeople who, in order to reduce rural poverty at no cost to themselves, legislate land sacrifice – often by much less wealthy 'middle farmers' who, by dint of hard work and enterprise, have managed to get their heads above the parapet of poverty. The just principle would be that *either* rules of property, e.g. redistribution, apply in urban as well as rural areas, *or* costs are borne according to taxable capacity. Rural and urban people of identical taxable capacity should pay identical amounts to achieve a desired social change – including land reform. If the rural non-poor are to accept old *plus* new-wave reform, in the belief that they can subsequently profit by providing appropriate services to reform beneficiaries, the costs of compensation must be fairly shared.

This principle of horizontal equity is particularly important in any attempt to attack 'rural tyranny' at its weakest point: the fact that most rural 'big men' owe their position largely to *inherited* land and status. This is distinct from the question of *achieved* land inequalities, especially of owner-operated land. The chance to enlarge a good farmer's holding is a spur to farm effort, enterprise, and efficiency – and is often achieved by purchase of land from a neighbour who is a bad farmer, but uses the cash from the land sale to become an excellent builder or baker; that is one reason why post-reform 're-polarization', especially of operated holdings, should not be fought *à l'outrance*. But it is hard to see any economic case for big inequalities of farmland due to inheritance. Far from rewarding good farming with extra land, such inherited inequalities imprison huge areas in the hands of families that may not now farm them well, but retain the land as a source of status, power or security, or as a hedge against inflation – and thereby impede the efforts of good self-made farmers to get more land.

However, this raises a more general problem. Large bequests – not only of land – convey incomes (i.e. claims on others' labour and capital) *awarded through ascription*; this necessarily reduces the share of GNP available to be *earned through achievement*. By thus stifling incentive, huge inherited inequality not only creates a sense of injustice; it also impedes the development of modern, incentive-based economies. Almost all governments impose inheritance taxes (death duties) – but generally modest ones, because of (1) a Nozickian set of attitudes to absolute property rights, (2) a wish to maintain the bequest motive for saving, (3) fear of, or fellow-feeling with, the rich, (4) costs of collection, relative to revenues not evaded (e.g. via gifts *inter vivos*).

Despite their much greater role of inherited inequalities in land (and other) rights, poorer countries feature a much lower 'inheritance tax ratio' – i.e. ratio of taxes on inheritance, estates and gifts to total tax revenue. IMF (1990, Country Tables A: items IV and 4.3) allows us to calculate this ratio, around 1979–80 and again around 1988–89, for (*a*) 26 richer countries (23 upper income and four upper-middle, viz. Korea, Portugal, Singapore and South Africa); and (*b*) 59 poorer (lower and lower-middle-income) countries.[28] Of the 26 richer countries, in each year, 21 had 'inheritance tax ratios' of 0.05 percentage or above (almost all being above 0.3 percentage); the ratios averaged 0.60 per cent around 1979–80 and 0.75 per cent around 1988–89. Of the 59 poorer countries, 23 had ratios above 0.05 per cent around 1979–80 (average 0.22 per cent), and only eleven around 1988–89 (average 0.33 per cent), with a large majority of ratios below 0.2 per cent. There does seem to be scope, especially in evolving property-rights systems, to shift the burden of taxation in developing countries significantly towards large undivided bequests, including bequests of farmland.

Rising rural population densities in many poor countries will bring land redistribution increasingly onto the policy agenda for the 1990s. Also, democratization, the need to reward rural enterprise, and the changing structure of power will redirect such reforms specifically towards *inherited* holdings. However, such reforms are less likely to be feasible if self-interest in opposing them is made to burn more fiercely by a sense of injustice. Horizontal equity requires that bequests of farmland should not be taxed more heavily than bequests of shares, housing or jewels of the same value. Revenues of all sorts are fungibly applicable to poverty-reducing asset redistributions of all sorts. Notwithstanding Bell's argument (1990: 158) for announcing land reform 'only after the effects of tax reform are largely realized', there is a good case for combining progressive inheritance taxes with classical land redistribution.

Table 13.2 *Urban farm and rural non-farm labour: Census data, 1974–85*

Country	*Date*	*Total workforce (000)*				*Percentage of workforce mainly engaged in agriculture*					
		Urban		*Rural*		*Urban*			*Rural*		
		M	*F*	*M*	*F*	*M*	*F*	*T*	*M*	*F*	*T*
Ecuador	1974	588.0	222.7	1023.2	106.7	10.0	0.9	7.5	77.9	35.9	74.0
India[a]	1981	40751.2	5370.2	136830.9	3960.0	11.7	23.3	13.0	81.7	89.1	83.3
Iran	1976	3625.6	460.0	3934.8	752.0	6.0	2.3	5.6	64.7	28.9	58.9
Korea	1980	4420.5	1995.9	3623.5	2642.1	4.4	4.2	4.4	67.4	78.4	72.1
Liberia	1974	89.7	16.4	227.2	99.6	22.6	29.3	23.6	84.6	93.0	87.2
Morocco	1982	1983.5	638.2	2834.4	543.0	4.6	2.2	4.0	67.0	64.2	66.5
Mozambique	1980	371.9	187.9	2251.3	276.6	15.1	70.2	33.6	81.3	98.8	91.0
Pakistan	1981	5481.0	247.2	15671.3	525.3	7.5	3.4	7.4	69.2	56.2	68.8
Panama	1980	188.9	114.7	194.1	29.2	4.9	0.3	3.2	65.0	12.1	18.5
Sri Lanka	1981	73.3	58.0	2516.0	711.0	21.8	8.6	20.9	54.0	63.9	56.2
Uruguay	1985	631.6	357.6	152.6	30.5	7.3	1.0	5.0	76.3	43.0	70.6

Notes: Definition of urban: India, 5000+, with 75 per cent of workers not in agriculture; Iran, 5000+ and Sharestan centres; Panama, 1500+, with streets, electricity, piped water, and sewerage.
All others use political definitions
[a] 'Main workers' only, i.e. those who worked for the major part of the year preceding the day of census.
Sources: UN, *Demographic Yearbook*, 1984, table 31; *1988*, tables 38 and (Panama only) 39. For India, P. Padmanabhan, *Census of India 1981: Series 1 – Part II – Special: Reports and Tables based on a 5 per cent sample*, Office of the Registrar General, Government of India: New Delhi, 1983, pp. 12–15.

Four types of rural change have been identified: classical, privately redistributive, ceilings-based land reform; 'new wave' land reallocations; progressive taxes on large property holdings or (perhaps preferably) large bequests; and rural development steered towards small and labour-intensive farms. Each of the types of policy normally increases both the economic returns to, and the political feasibility of, the others.

Notes

1. However, a famous tested – but not proven – version of the 'new paradigm' with neoclassical origins (Binswanger and Ruttan, 1977; Hayami and Ruttan, 1985) seeks to make agricultural technology, as well as rural institutions, dependent endogenously on relative factor prices and scarcitites.
2. Some endogenizations of institutions and technology let factor scarcities determine long-run technical and institutional forms (see note 1). Reviving older traditions (Bardhan, 1989) incorporates 'power structures' too.
3. This is especially convincing if the government has genuinely removed the *artificial* incentives, via prices and technology policy, favouring capital intensity within farm activities. If such artificial incentives exist, then – even though there is an IR at shadow prices – it may be absent or reversed at market prices, over-stimulating 'largeness' in farming.
4. Most juxtapositions (of land institutions with areas) have exceptions. 'Tribal' and/or sparsely populated areas of Thailand, Burma, NE India ('jhum' cultivation in Assam) and several parts of Latin America (e.g. Mapuche areas in Chile, 'Indian' areas of Amazonia in Brazil and Ecuador) feature cyclic bush fallowing. Rwanda and substantial parts of Kenya and Nigeria are increasingly in smallholder mode, with emergent tenancy, as person/land ratios grow in Africa. Sugar, coconuts and many fruit crops in the Philippines approximate latifundia-minifundia systems (Hayami *et al.*, 1990), as – arguably – do parts of Pakistan.
5. However, I reject their conclusion, that in India higher land quality on small farms largely explains the apparent IR (Lipton, forthcoming).
6. 'The higher labour use and land productivity on small farms can take four forms: (1) higher percentage of cultivated to owned area; (2) higher cropping intensity on cultivated land; (3) higher value product mix in the cropping pattern; and (4) higher yields per acre for a given crop. Much of the early debate centred on (4), but this component is now recognized to be of relatively minor importance. (1) is of less importance in South Asia . . . than . . . in Latin America . . . In Bangladesh (2) and (3) are the dominant variables' (Boyce, 1987). See also Lipton and Longhurst (1989).
7. 'Meaningful' refers to a reasonably high (a) r^2, and/or (b) elasticity of output per ha. with respect to a *fall* in farm size, and/or (c) statistical signficance of beta coeffecient on farm size.
8. Despite Bhalla and Roy (1988); see Lipton (forthcoming).

9. Such non-land, non-labour input costs are normally higher, per ha., on larger farms. Costs should include appropriately forward-discounted parts of training costs (or else wage differential) of skilled labour.
10. Because price twists normally reduce the relative values of (*i*) farm output compared to other outputs; (*ii*) farm outputs compared to farm inputs; (*iii*) non-labour compared to labour inputs – in each case as compared with open-market, or else border, price-relatives. Hence if big farmers produce somewhat less per ha. (UIR), and use more inputs and a higher proportion of non-labour inputs, than small farmers, shadow pricing will strengthen the IR.
11. Such weighting favours small farmers, because their (food-orientated) outputs are relatively likely to be consumed by, and their (labour-orientated) inputs to raise incomes of, the poor.
12. Caution is needed to reduce dangers that the prospect of land reform on this basis does not discourage land improvement or birth control.
13. In practice – partly because rental markets are never perfect and instantaneous – more equal owned land leads to more equal operated land.
14. Inheritance delinks skills from farm size completely, to the extent that farming skills are environmental. To the extent that they are genetic, the delinking is partial (expected value 0.5), owing to Galtonian regression towards the population mean. Where claims on secure farm *tenancies* are hereditary as well as land ownership, as in Britain, the delinking is more powerful, as the tenancy market is less likely to correct it.
15. Accounts of the alleged productivity, or lack of it, of part-time farmers tend to be dogmatic, but inconsistent, and lacking evidence.
16. Caution regarding the lesser bargaining power of women and children is needed, however.
17. In more and more parts of Africa (already including Kenya, Malawi, Rwanda, Sudan, Tanzania and even parts of the Sahel), near-landless labour also comprises a large and rapidly growing proportion of the rural poor.
18. The size-classes are, respectively, below 1 ha. and above 10,000 ha. The 680:1 difference in labour-per-ha. far exceeds disparities in land quality.
19. This does not seem to apply to age- and sex-specific participation rates among the poorest 5–10 per cent of rural people, perhaps because extra income raises health status and hence capacity to work (Lipton, 1983). However, these people seldom gain much land from redistributive reform.
20. Lele and Agarwal (1989) point out, contrasting Kenya and Tanzania, that bigger farmers – and hence some inequality in land ownership – can offset urban bias by providing political pressure against extraction from, and deprivation of, rural areas. Big farmers, private or c/c, have the state's ear because of their great role in supplying urbanized surpluses of food, savings, etc. Where – as with most state and c/c farming – this role is reinforced by isolation from the rest of rural activity, especially private farms, and by ideological preference, the effects are less likely to be pro-poor.
21. This consensus, as summarized by Williamson (1992), comprises ten types of aid conditionality: fiscal discipline; redirection of public expenditure away from production and trading; a broader tax base, with lower

marginal rates; financial liberalization; competitive exchange rates; trade liberalization; freer entry for foreign direct investment; privatization; deregulation; and secure property rights.

22. Several excellent reviews of these arguments exist (most recently Otsuka *et al.*, 1992), so they are not rehearsed here.
23. Kuhn (1964) explicitly rejects the application of his work to social science. However, the concept of paradigm shift is very fruitful in economics.
24. Foreign advisers and funders, e.g. donors in the context of the 'cold war' and its winding-down, are also increasingly incorporated into (*v*).
25. Labour-market imperfections make the best case for small-scale *family* farming, to save on information, search, sceening and supervision costs. Capital-market imperfections are likelier to favour large-scale farming.
26. A similar motive probably accounts partly for the social acceptability in Bangladesh of water sales to larger farmers from tubewell cooperatives 'owned' by landless and near-landless workers (Wood, 1984).
27. An up-to-date central record of rights is usually a necessary part of such a process (Feder and Feeny, 1989: 12). At village level, a big landlord's power can too easily pressurize poor record-keepers into 'cooking the books'.
28. OPEC countries, dependencies, centrally planned economies, and countries with populations below 1 million in 1990 are excluded from these calculations.

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14 Institutions and Economic Linkages at Village Level in West Java, Indonesia

Irma Adelman and
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14.1 INTRODUCTION

The study presented here uses a Social Accounting Matrix (SAM) framework to focus on the relationship between household nutrition and village economic linkages in West Java; households are divided according to dietary energy consumption in order to determine the sources of income for each type of household, and likely sources of income increases for each group.

The study is based on survey data collected by Katherine Ralston in a village in West Java, called here Cibageur for protection of privacy. The survey covered the time period April 1988 to March 1989 and focused on household economic activities and nutritional status at the household and individual level. The sample included 49 households (about 5 per cent of the village population), and interviews were conducted with all working age members of the household (see Section 14.5 for more detail). The survey was supported as part of a Cornell Food and Nutrition Policy Programme technical assistance contract with the Indonesian Ministry of Health, funded by a World Bank Loan.

The Village Setting

Cibageur is located in the district of Sukabumi, West Java province; it is about one hour away by public transport from the district capital town, and about three hours away from the national capital of Jakarta. Its geography places it on the border between the productive wet lands and high population densities that characterize the corridor running through the middle of Java, and the more sparsely populated dry

highlands of the southern coast; the village contains both kinds of land, with dry hilly land dominating.

The lowland area of the village is closest to the local market centre, which lies at the intersection of two paved roads. The upland area is more difficult to reach, involving a one to two hour hike up a narrow path. Thus, transportation within the village is slow, but for an economy with a very low wage rate, this is not a rigid impediment to economic transactions. In fact, a surprising range of commodities are transported in and out of the village on foot, including food, building materials, bicycles and furniture. Motor transportation to larger population centres is then available at the crossroads. The crossroads market centre serves two other villages as well; the three villages surrounding the crossroads were in fact part of a larger village which was subdivided administratively in 1982. Thus, the administrative boundaries of Cibageur are not economic boundaries; households near the village borders trade extensively with neighbouring villages. The village received a large number of immigrants following the 1965 anti-communist purge when a tea plantation in the village was confiscated from its owner and partially opened for settlement. The remainder of the tea plantation's land was taken over by a cacao plantation, which rents out unplanted land to village residents and employs labour from the village.

Economically, the village relies mainly on agriculture, including both wet rice and dry land crops such groundnuts and cassava. Fruits, vegetables and timber are also important supplementary activities. Many households also engage in non-farm enterprises such as small retail shops or door-to-door sales, prepared foods, and production of furniture, brooms, and woven bamboo walls. A small number of households operate more capital-intensive enterprises such as mechanical rice milling and minibus routes. Other employment can be found working on other farms, carrying harvested crops, construction materials and other goods in and out of the village, and working for the plantation adjacent to the village and local factories. A small fraction of village households have more formal employment in the civil service and some receive pensions from military service.

Cibageur as a Representative Village

While every village has its unique characteristics, Cibageur reflects the same patterns facing much of rural Java, and to a lesser extent, other parts of Indonesia.

Studies of the rice producing lowlands suggest a steady movement from agricultural labour into off-farm labour, including commuting or migration to the cities (Hart, 1986). Hart notes the difficulty in determining from national-level data whether this movement reflects the 'push' of lower employment opportunities in agriculture or the 'pull' of higher wages in non-agricultural jobs. Studies by Hayami and Kikuchi (1982) and by Collier *et al.* (1988) based on repeated surveys of several villages in lowland Java provide a village-level view of trends in labour demand.

Both studies note that not only has labour demand in rice production failed to keep up with population, it has actually decreased due to technological changes such as the use of hand tractors for land preparation and the use of the sickle in harvesting. Labour institutions have shifted away from an open-harvest system where anybody could assist in the harvest in return for a share, to various closed-harvest arrangements, where only specifically invited workers were allowed to participate. While Hayami's study suggests a decline in the share of harvest received by harvesters during 1968–78, Collier's study shows that the real agricultural wage (in kilogram of rice per hour) increased during 1980–87. Given increases in yields, Hayami suggests that actual payments to labour may have increased during the earlier period as well. The rise in wages could be taken as evidence that increase in non-agricultural labour demand has outpaced the release of labour from agriculture. However, the existence of unemployment and under-employment suggests that the slack has not been absorbed, and that labour market imperfections maintain wages above the market-clearing level.

Cibageur lies closer to the dry upland southern coast than to the lowland rice belt. While mechanization in rice production and land consolidation are not widespread, rice production is a relatively small part of village agriculture. Thus, agricultural opportunities are even more limited in this upland area than in the rice belt. By contrast, Cibageur is close enough to the urban economy to send surplus labour to the rapidly growing town of Sukabumi, and to the capital city of Jakarta. The real wage measured in 1989 is comparable to the level found in many villages by Collier for 1987. Off-farm employment includes activities with higher returns such as urban employment, shopkeeping and light manufacturing, as well as activities with lower returns, such as some food processing operations. The high-return activities are evidence of links to the urban economy, while participation in the low-return activities suggests that the slack labour is

not completely absorbed by off-farm activities: not everyone who gets pushed out of agriculture succeeds in getting pulled into an equal or better off-farm labour opportunity.

More detailed information on the village economy is provided in the following sections; the point here is that Cibageur, because of its intermediate proximity to urban markets, is typical of the environment of a large fraction of the population of Java. The development of links to the urban economy probably lags behind the trends in villages closer to larger cities; these conditions will spread to an increasing number of villages as the urban-oriented economy expands. Cibageur's upland geography and its later entry into the urban-oriented economic sphere are representative of parts of Indonesia outside of Java as well, either currently, or in the near future.

Household Classifications

In this chapter, households are classified according to dietary energy consumption. The three household groupings are based on average daily energy consumption per adult equivalent unit over a three-month period. Total household energy consumption is estimated from the energy content of foods purchased, grown on the household's own farm or received as gifts. The number of adult equivalent units per household is calculated based on the energy requirement scale from FAO (1973). The use of adult equivalent units rather than simple household size accounts for the fact that households of different age-sex composition have different energy requirements. The lowest group averages below 80 per cent of the FAO standard of 2350 Kcal per day for a reference male. The middle group averages slightly above this standard, while the highest group falls much above this standard (see Table 14.1).

Table 14.1 *Daily energy intake by household group*

	Per cent of sample (per cent)	*Average (Kcal/day)*	*Range (Kcal/day)*
Low calorie households	29	1823	1278–2211
Medium calorie households	35	2478	2282–2649
High calorie households	36	3379	2717–4776

Some basic comparisons between these groups can be seen in Table 14.2. While female-headed households are only slightly more prevalent among the low calorie households, low calorie households are younger, have more children living at home, and are least likely to live in the lowland rice growing area of the village close to the road. Medium calorie households are somewhat older, with fewer children living at home, and are fairly equally distributed throughout the village geographically. The high calorie group are most likely to live in the lowland area and least likely to live in the isolated upland section of the village. Households with the lowest dietary energy consumption are the poorest households, the medium energy group is the wealthiest, and the high energy group consists of middle income households. The reasons for this pattern are based on the relationship between households' income sources and energy expenditure. The high energy consumption households derive their income from heavy physical labour on their own farms. This group has a high demand for energy and is wealthy enough to meet those needs. The medium energy group includes wealthier households whose incomes are derived more from returns to physical capital, as well as from government jobs and from pensions; they can afford to eat as much as they like, but, because they engage in less physical labour, they do not require high levels of dietary energy. The low energy consumption households may have high levels of physical labour, but they are not successful enough to meet their energy needs.

Table 14.2 *Village demographics*

	Low calorie households N = 14	*Medium calorie households* N = 17	*High calorie households* N = 18
Family Size	5.3	4.1	2.9
Per cent of households:			
Female headed	6.7	5.5	5.2
Heads under 40	71	47	39
Heads over 40	29	53	61
In lowlands	14	35	50
In moderate uplands	57	30	33
In isolated uplands	29	35	17

14.2 VILLAGE FACTOR AND COMMODITY MARKETS

Food

The village markets are relatively diverse and well developed; yet subsistence food production encompasses a non-negligible fraction of total production. Further, not all households are equally linked to the market. Table 14.3 gives the marketed surplus ratio (fraction of production not consumed directly by the household), self-sufficiency (total production divided by total consumption) and self-supply (direct own farm consumption divided by total consumption) for rice and other crops. Households which are lowest in dietary energy consumption have the lowest marketed surpluses for rice. Thus, they benefit least from a producer price increase in rice.

While the low calorie group has the lowest self-sufficiency, representing the level of total consumption which could be met by own production, they have the highest level of self-supply, which is the level of total consumption which is actually met by own production. Other households are selling and repurchasing rice to a much higher degree, perhaps to take advantage of quality differences.

On average the interaction with the market for rice is high, with a marketed surplus rate of 77 per cent for the whole village, and a self-

Table 14.3 *Consumption as a fraction of own production*

Rice	*All households*	*Low calorie group*	*Medium calorie group*	*High calorie group*
Marketed surplus ratio (per cent)	0.77	0.33	0.85	0.8
Self-sufficiency ratio (per cent)	1.39	0.65	1.65	1.58
Self-supply ratio (per cent)	0.32	0.44	0.24	0.32
Non-rice crops				
Marketed surplus ratio (per cent)	0.94	0.91	0.97	0.92
Self-sufficiency ratio (per cent)	6.62	2.52	10	6.62
Self-supply ratio (per cent)	0.39	0.23	0.35	0.52

Note: See text for explanation of indicators.

supply rate of only 32 per cent; even the poorest households are not completely withdrawn from the market.

Labour

The labour market offers some limited diversity, but few chances for income security. Land preparation tasks are generally performed by men, who receive a daily wage and a meal. The wage paid for land preparation was approximately 1000 Rupiah (about 60 cents in 1989) for a five-hour day; with the value of the meal included, the wage was about 1300 Rupiah. Transplanting and weeding are performed by women, who are paid a share of the crop after it is harvested; for the survey year, workers compensated by a share of the harvest earned the equivalent of about 200 Rupiah per hour. While the cash hourly wage is comparable to the grain equivalent of earnings from shares of the harvest (and may be higher for women in a more productive year), the women receive no meal, must wait for payment, and must share the yield risk with the operator.

Labour tying, through lending to workers in exchange for reliable availability, has been reported in other parts of West Java (Hardjono, 1987). In this village, households did not report any credit arrangements with employers, although the survey was not designed to focus on this arrangement, and Hardjono noted that her respondents were reluctant to discuss this institution. It may well be that the well-developed markets for credit and labour in this village do not leave room for labour tying as an institution. Credit is available from local traders, so that households are not dependent on employers for loans. Further, the small amount of rice land in this village, relative to labour availability, reduces the peak labour demand problem for employers.

Other local opportunities for wage labour include local construction, the nearby plantation, and local factories. There are also a broad range of self-employment activities: small-scale food processing, such as snack preparation and palm sugar production; light manufacturing of woven bamboo walls, furniture, brooms and baskets; and marketing through small shops, door-to-door sales, and town–village trade. Implicit wage rates for these activities average close to the agricultural wage, but are highly variable over time, depending on fluctuations in sales. During the survey year, returns to labour in small-scale food processing ranged from 40 Rp. per hour to 220, and monthly earnings ranged from 9000–40 000 Rp. ($5.40–$24.00 in 1989). In light manufacturing hourly returns ranged from 113 Rp. to 285 Rp., and

monthly earnings from 5000 to 27000 Rp. ($3.00 to $16.20). Retail sales, which require some operating capital, averaged about 300 Rp. per hour, and anywhere from 6000 Rp. to 80000 ($3.60 to $48.00) per month, depending on sales.

Labour is also often provided on a volunteer basis, under two arrangements. The village government organizes volunteer labour, one or two days per week, for small projects. Families also draw heavily on volunteer labour for help with agricultural tasks and construction. Members of the extended family who volunteer their labour are usually rewarded with a meal, which often includes more 'luxury foods' than a standard meal provided to paid workers.

Table 14.4 gives the sources of labour income for each of the three household groups. Low-capital enterprises include the retail sector (small shops and door-to-door peddling), low capital food processing (cooking snacks), and light manufacturing (brooms, furniture and woven bamboo walls). High-capital enterprises include high-capital food processing (rice milling) and transportation (minibus). Agricultural labour includes work on other farms. Low-wage labour (1000–2000 Rp. per day) includes work in the plantation, work in nearby factories, and hired employment in local construction, retail, low-

Table 14.4 *Sources of labour Income by household group (per cent)*

Family Labour (Own Enterprise)	*Low calorie households*	*Medium calorie households*	*High calorie households*
Rice	1.5	5.6	14.9
Non-rice	11.8	27.7	36.5
Livestock	4	1.3	11.5
Low capital	11.2	4.3	14.8
High capital	0	14.9	0
Hired labour			
Agriculture	6.1	1.5	3.1
Low wage	25	13.8	1.5
High wage	26.5	10.9	5.8
Government	0	20.1	11.8
Total (1000 Rp.)	561.4	1129.2	717

Note: See text for explanations of labour categories.

capital food processing, light manufacturing and wood gathering. High-wage labour (3000–5000 Rp. per day) consists of work in the transportation sector (driving the minibus) and high-capital food processing. Government jobs include teaching, working in the clinic and working for the village or subdistrict government. The government category also includes pensions paid to retired soldiers.

Within own enterprise labour, non-rice crops play a much more important role for the medium and high calorie households than for the low calorie households. (Note that the non-rice category includes low return crops such as cassava with high return crops such as groundnuts.) In particular, the medium calorie group, which is the wealthiest, derive large incomes from high capital enterprises, which the other groups do not have the capital to participate in, and from government employment and pensions. The high calorie households derive little income from hired labour. Because they control the largest amount of total land, farming provides the major demand for their labour. Their low-capital enterprises provide the next most significant source of labour demand. The low-capital enterprises are less important to the medium calorie group, and less accessible to the low calorie households.

Table 14.5 shows the role of each household group in the direct labour market, not counting the employment effects of goods purchased. The high-calorie group is by far the most important in hiring agricultural labour and construction labour, while the low calorie group is more important in hiring in retail and wood.

Land

While simple land rental is rare, sharecropping is common, under several different arrangements, depending on the owners responsibility for inputs. Sharecropping from family members was common, but not

Table 14.5 *Proportion of labour hired by household group*

	Low calorie households	*Medium calorie households*	*High calorie households*
Agriculture	0.08	0.37	0.55
Wood	1	0	0
Retail	0.81	0.19	0
Construction	0.06	0.23	0.71

dominant: roughly one-third of sharecropping arrangements were conducted with the households' parents. The local plantation also sharecropped land out to households, although these arrangements carried no implicit tenure protection once the land was scheduled to be planted to cacao.

A small amount of land, one hectare out of the total of 400 hectares in the village, was available to village officials for use in lieu of salary. A small amount of communal land, about two hectares, was also available for use by households.

Landownership in the village is skewed, although landlessness is less severe than in other parts of the country. Only 2 per cent of the sample households own over one hectare of rice land, while most households own less than a quarter hectare. Holdings of the less valuable dry land are larger, but the pattern is similar: 8 per cent of households owns more than one hectare while over half own less than one-quarter hectare. Ten per cent of the sample households own about 57 per cent of the rice land and 55 per cent of the dry land owned by village residents. Note that this does not include land owned by the plantation which accounts for a large fraction of the dry land in the village. Eighteen per cent of households own no land, but only one household in the sample does not have access to land at least in the form of a sharecropping arrangement; this one family is headed by a teacher.

Differences in land ownership and land control among the three household groups are shown in Tables 14.6 and 14.7. Table 14.6 shows that the low calorie households own and control less wet rice land and dry land than the other two groups. The high calorie households own more wet rice land but slightly less dry land than the medium calorie

Table 14.6 *Average land owned, rented and controlled (hectares)*

	Low calorie households	*Medium calorie households*	*High calorie households*
	Wet rice land		
Owned	0.04	0.15	0.1
Rented/share-cropped	0.02	0.03	0.2
Total controlled	0.07	0.18	0.29
	Dry land		
Owned	0.23	0.38	0.29
Rented/share-cropped	0.1	0.18	0.22
Total controlled	0.33	0.56	0.51

Table 14.7 *Distribution of land owned and farmed (per cent)*

	Low calorie households		*Medium calorie households*		*High calorie households*		*All households*	
			Wet rice land					
	Owned	*Farmed*	*Owned*	*Farmed*	*Owned*	*Farmed*	*Owned*	*Farmed*
>1 Ha	0	0.0	5.9	5.9	0	5.6	2	4.1
0.25–1 Ha	0	7.1	0	5.9	22.2	16.7	8.2	10.2
0.1–0.25 Ha	21.4	21.4	29.4	41.2	16.7	27.8	22.4	30.6
0.05–0.1 Ha	14.3	14.3	11.8	11.8	11.1	22.2	12.2	16.3
<0.05 Ha	14.3	28.6	29.4	23.5	16.7	11.1	20.4	20.4
Own no land	50	28.6	23.5	11.8	33.3	16.7	34.7	18.4
TOTAL	100	100	100	100	100	100	100	100
			Dry land					
	Owned	*Farmed*	*Owned*	*Farmed*	*Owned*	*Farmed*	*Owned*	*Farmed*
>1 Ha	0	7.1	11.8	11.8	11.1	16.7	8.2	12.2
0.25–1 Ha	21.4	35.7	5.9	41.2	33.3	61.1	20.4	46.9
0.1–0.25 Ha	42.9	42.9	11.8	29.4	16.7	22.2	22.4	30.6
0.05–0.1 Ha	0	0.0	17.6	5.9	11.1	0.0	10.2	2.0
<0.05 Ha	14.3	14.3	17.6	5.9	11.1	0.0	14.3	6.1
Own no land	21.4	0.0	35.3	5.9	16.7	0.0	24.5	2.0
TOTAL	100	100	100	100	100	100	100	100

group. The distribution of households according to ownership and control in Table 14.7 adds further detail to this pattern. The medium calorie group contains the highest fraction of large landowners of both wet rice and dry land. The low calorie group has the highest fraction of households which control no rice land. (The only household which controls no land is headed by a schoolteacher.)

Credit/Savings

The local markets for credit and asset sharing are relatively well developed. Traditional credit sources offer small to medium loans: Small-scale purchase credit ($10–$20) is available from vendors who sell goods and then collect monthly payments. Households may also borrow rice for repayment after the harvest. The nominal interest rates on these loans are as high as 100 per cent, since each kilogram of rice borrowed must be repaid with two kilograms. However, the price of rice can decline by as much as 50 per cent following the harvest, leaving the real interest rate much lower. Larger-scale credit ($100 and up) is available through pawning of land or livestock. The implicit interest rate in these arrangements is equal to the productive value of the land

or animals which is kept by the lender until the loan is repaid. A traditional futures market also serves a credit function; a farmer may sell a crop before it is harvested at a discounted price. Commercial, state-controlled, banks offer credit for agricultural inputs, as well as larger loans for investment in land, vehicles or equipment.

Savings still tend to be invested in traditional instruments such as livestock and land. Another traditional form of savings is the local 'savings lottery'; members contribute savings each week, and each week one member takes the pot to use for larger purchases such as furniture. While this form of savings pays no interest, it does protect members from theft, and substitutes for self-discipline in the same way that 'Christmas Accounts' once functioned in United States. Savings may also be deposited at the subdistrict bank branch which accepts deposits of any amount, but pays interest only on certificates of deposit, with a minimum balance of $500 to $600.

The availability of small credit is an effective tool for increasing demand for durable goods such as clothing and furniture. Likewise agricultural credit plays an important role in facilitating input use. However, the inaccessibility of larger investment loans is a barrier to small enterprise formation by the poor. A government rural development programmeme does provide loans and assistance with marketing for specific small operations such as poultry production; funds for these projects are limited and the projects are targeted to individual villages.

14.3 VILLAGE INSTITUTIONS

Families

The family structure has important distributional implications for the village economy. While a nuclear family unit consisting of two parents and their children was the most common in the village, roughly 20 per cent of the households fell into other categories, including polygamous families, female-headed households and extended families living together.

Polygamy is permitted, and this village included an estimated 4 per cent of husbands with two wives (up to four are permitted, but no one with the inclination was wealthy enough for more than two). Under

these arrangements, the wives and their children live separately, and the husband divides his time and income between his families. The division of a husband's income places an extreme burden on the first wife, and one such wife in the survey sample reported that she could remain in the marriage only because she had inherited land from her parents; otherwise she would be forced (and permitted by local interpretation of Islamic law) to divorce her husband to seek a husband who could support her.

Female-headed households may result from death of the male head, although in this village it appeared to be rare for a family to remain in this state: only 6 per cent of the sample households were headed by women, and there was no difference in this rate across household groups.

Young families often live with the bride's parents until they can afford to build their own home, they also live with the bride's parents when the bride delivers her first child, even if they have their own home. Surveyed households in such an arrangement stressed as a point of pride that they maintained separate budgets and cooked food separately, although this division is undoubtedly flexible. In another multi-generational living arrangement, older parents sometimes live with their grown children; the parent (often widowed) provides baby-sitting and other household services, and sometimes allows the younger family to farm his or her land. Extended families living together made up 14 per cent of the village households, and were more frequent in the low calorie group, representing 28 per cent of those households. Some of these households overlap with the female-headed households: almost one-third of the extended families were headed by widowed daughters living with their widowed mothers. Even when not living together, extended families provide a great deal of mutual assistance in the form of labour and food; gifts of food are common, and while usually not large, may play an important role in assisting poorer members of the family.

Rules for inheritance and divorce leave women in a much better position than in other parts of Asia; daughters inherit land equally with their brothers, and are granted possession of their home in a divorce. Further, families of brides receive bride price payments from the groom's family; these payments go largely towards the expense of the wedding and establishment of the new couple's household. Daughters are hence not seen as a large future expense as they are in South Asia where dowry payments are required from the bride's family.

Village Government

The official village organizations are generally part of a hierarchy designed by the central government and replicated in every village, although their charitable and labour-organizing functions are older cultural traditions. They provide a vehicle for implementing programmes designed and funded by higher levels of government. While they could also serve as organizational structures for locally designed projects (within some limits), their capacity for self-finance is very limited.

Village and higher level government functions are divided as follows: The village government collects land taxes from village residents, which are used to purchase materials for small infrastructure projects. The estimated tax collections for the village during the survey year totalled 5 million Rupiah (3000 $US in 1989), for an average of 5000 Rupiah per household. Village residents contribute volunteer labour for these projects.

The provincial government, working through district and subdistrict governments, is responsible for larger infrastructure funding for roads and school buildings and for salaries for village officials and schoolteachers. The provincial government collected an estimated 4 million Rupiah in school fees and spent over 34 million Rupiah for schoolteacher salaries. Thus village education is heavily subsidized by higher level government, by an average of about 50 000 Rp. per primary-school-age child. Village government salaries are also subsidized: the salaries of village officials, totalling an estimated thirteen million Rupiah, far exceed the village tax revenues.

The village also has three administrative subvillages, each with an appointed head. These officers are responsible for maintaining lists of residents, keeping track of 'black-listed' residents (former members of the Communist or Islamic fundamentalist parties), identifying poor families for targeted public works employment, and initiating requests for emergency assistance.

Religious Institutions

The local mosques play an important role in village life. Each subvillage had its own mosque, and this building serves not only as a religious gathering place, but also as a meeting place for local discussion. Residents make weekly contribution to the mosques, which are used for furnishing the building with mats and an ampli-

fier, for building new buildings (with matching funds from higher level government), and for emergency assistance for families.

Religious leaders govern marriage and divorce, and have been drawn into cooperation on family planning. In this village prospective brides were sent by mosque officials to the health clinic for an injection, the content of which was unknown to the women, but which was in fact a contraceptive dose good for several months.

Other Institutions

There is a village chapter of the Family Welfare Organization, composed of women volunteers who assist in the health clinic's visits to the village for nutrition activities, and other activities, such as encouraging women to accumulate savings for small-enterprise capital. In this village there are also wealthy individuals who have no official status in either the village government or the mosque, but who were consulted by officials, and gave powerful motivational speeches on behalf of government policy. These individuals had stronger links with business and culture outside the village (one had children attending college in the United States).

14.4 THE VILLAGE SAM STRUCTURE

The Social Accounting Matrix (SAM) provides a detailed accounting of purchases from each sector of the economy from every other sector; it expands on the input–output matrix by adding accounts for payments to value added, households, investment accounts and exogenous accounts to show the flow of the funds through the economy in more detail. The SAM presented here divides the village economy into five accounts, labelled Activities (1), Value Added (2), Institutions (3), Investment (4), and Outside (5) (see Table 14.8). Each column contains purchases from the column's account from other accounts; each cell of a given column represents the payment by the column account to the row account.

In this SAM, activities which are outside the market are included in the SAM as if households purchased these activities from themselves. The volume of these activities is included in the account flows, and households are shown as purchasing these activities from themselves, so that both the imputed expenditure and the imputed income are included in the relevant accounts.

Table 14.8 *Social Accounting Matrix outline*

	1. Activities	2. Factors	3. Institutions			4. Capital accounts						5. Outside					Total
	1.1 . . . 1.18	2.1 2.2 2.3 2.4 2.5	3.1 Migr	3.2 3.3 3.4 Households	3.5 Rel	3.6 End Gvt	4.1 Phys	4.2 Land	4.3 Humn	4.4 Anim	4.5 Finan	4.6 Invent	5.1 Ex. Govt	5.2 Plant	5.3 Local	5.4 Indonesia	5.5 World	
1. Activities	(1,1)			(1,3)					(1,4)						(1,5)			(1,6)
1.1 Rice																		
1.2 Dry rice																		
1.3 Maize																		
1.4 Tubers																		
1.5 Soybeans																		
1.6 Groundnuts																		
1.7 Vegetables																		
1.8 Tree crops	Village			Consumption			Phys			Anim		Crop			Local	ROI		Total
1.9 Livestock/fish	input-output						cap.			purch.					exports	Exports		sales
							stocks											
1.10 Construction	Table						inv.											
1.11 Retail																		
1.12 Low-cap fdproc.																		
1.13 Hi-cap fdproc.																		
1.14 Light Mfg.																		
1.15 Transportation																		
1.16 Primary resources																		
1.17 Education				Teachers														
1.18 Health																		
2. Factors	(2,1)			(2,3)														
2.1 Land																		(2,6)
2.2 Physical capital	Value-added														(2,5)			Total land,
2.3 Animal capital	in village																	labour and
2.4 Hired labour	production			Relig.									Civil	Plant.	Local			capital
				labour									servants	labour	labour			value
2.5 Family labour																		added
3. Institutions		(3,2)		(3,3)					(3,4)						(3,5)			(3,6)
3.1 Migrants																ROI Mig. remittance	ROW Mig. remittance	Total migr. remittance

3.2 Low calorie households		Payment to	Migr.		Land purch		Saving/ borrow				Total household income
3.3 Medium calorie households		households	rem.					Pensions			Total receipts
3.4 High calorie households		for factors	to HH								
3.5 Religious			Rel.tax			Educ					
3.6 Government		Use of govt land	Govt.tax			Expdr.					
4. Capital			(4,3)								
4.1 Physical			HH Sav								(4,6)
4.2 Land			HH Human								Total saving
4.3 Human			Cap. sav								
4.4 Animal											
4.5 Inventory											
4.6 Financial											
5. Outside	(5,1)	(5,2)	(5,3)						(5,5)		(5,6)
5.1 Exogenous government											
5.2 Plantation		Use of plant. land									
5.3 Local	Local imports	Payments to	HH local imports						ROI-> town		Local imports
5.4 Rest of Indonesia	ROI imports	Outside factor owners	HH ROI imports							World -> ROI	ROI Imports
5.5 World											
6 Total	Total payments	Tot factor payments	Mig rem.	HH exp	Tot Rel and Gvt	Total investment	Tot Ex gvt	Tot plant	Tot local	Tot ROI	Tot ROW	Row = Col

The accounts are divided into sub-accounts to reflect the particular activities, factors, institutions, investment patterns and exogenous agents which interact within the economy of this village. The first nine activity sub-accounts are agricultural, covering wet rice (1.1), dry rice (1.2), maize (1.3), tubers (1.4), soybeans (1.5), groundnuts (1.6), vegetables (1.7), tree crops (1.8) and livestock and fish ponds (1.9). The next seven activity sub-accounts cover non-agricultural household enterprises, including construction (1.10), retail (1.11), small-scale food processing (1.12), large-scale food processing (1.13), light manufacturing (1.14), transportation (1.15), and wood products (1.16). Livestock includes chickens, ducks, goats and sheep, as well as larger animals such as cattle and water buffalo. Almost all households at least raise chickens, and most raise small ruminants as well. Only one sample household owns water buffalo. Construction includes home building as well as construction of small livestock shelters. Retail activities include door-to-door trading, marketing of goods outside the village and small village shops. Small-scale food processing includes palm sugar production, as well as production of snacks and meals for sale in local shops. Large-scale food processing consists of a mechanical rice milling operation. Transportation includes two minivans which are licensed to run a route to and from the nearest town (Sukabumi). Wood products include both firewood and lumber for local construction and export. The last two accounts, education (1.17) and health (1.18), are service activities covering teachers and traditional health providers.

The Value added account is broken down to reflect payments to land (2.1), physical capital (2.2), animal capital (2.3), hired labour (2.4), and profits (2.5). Payments to land are primarily through share-cropping. Payments to physical capital include rental of pesticide sprayers, in the case of agriculture, and rental payments for a minivan in the case of transportation. Payments to animal capital consist of rental payments for animal traction. Payments to hired labour include both wage labour and labour compensated with a share of the harvest, where the harvest share is evaluated at the farmgate price. Profits represent returns to labour from a household's farm or other enterprise; it also includes returns to the household's own land in the case of agriculture.

Institutions include migrants (3.1), three household groups (3.2, 3.3 and 3.4), endogenous government (3.5), the mosque (3.6) and the plantation (3.7). Migrants include both migrants to other parts of Indonesia (mainly the capital, Jakarta) as well as international migrants to Saudi

Arabia and Kuwait. In order to assess the impact of different household transfers on household nutrition, households are disaggregated into three groups according to their dietary energy consumption. Economically, the low dietary energy group (3.2) tends to include the poorest households, while the highest dietary energy group includes medium income households which rely on heavy physical labour for their income, but are successful enough to meet their dietary energy requirements. The methodology for this division is discussed in Section 14.3, and the economic characteristics of the household groups are discussed in Section 14.2. The exogenous government sub-account (3.5) covers fee-for-services activities, such as education. Since both revenues and expenditures for these services increase with household income, this sub-account is placed in the endogenous section of the SAM, as another village institution. (The remainder of government activities, such as taxation and development expenditures, are reflected in an exogenous government sub-account within account 5.) The religious institution (3.6) collects contributions from households and uses them to build new buildings and to purchase a public address system. In addition, this institution collects fees for religious education and crop prayers and hires from the education sector and from hired labour. The plantation (3.7) hires labour from the village, rents unplanted land to village residents, and exports cacao to the rest of Indonesia.

The investment account includes investment in physical capital (4.1) animals (4.2), human capital (4.3), savings (4.4), and inventory (4.5). Physical capital includes buildings, vehicles, agricultural tools and large food-processing equipment. Human capital includes all expenditures on education. Inventory refers to storage of crops by the households, as well as crops which have not yet been harvested.

Since the village trades with areas in Indonesia as well as the rest of the world, the outside account is disaggregated as well. The first outside sub-account, Local (5.1), encompasses the nearest villages, the second, Indonesia (5.2), covers the remainder of Indonesia and the final account, World (5.3), includes all other countries. In general, local imports are used to meet the gap between consumption and production in some sectors, and local exports are the channel for village surplus. Imports from the rest of Indonesia consist of imported inputs such as agricultural chemicals, and exports to the rest of Indonesia include crop surplus, and lumber. There are no direct imports from the rest of the world to the village, but several migrants from the village send remittances from other countries, such as Saudi Arabia and Kuwait.

14.5 THE VILLAGE SURVEY AND SAM ESTIMATION

The data which serve as a basis for the Social Accounting Matrix were collected in a survey conducted during January–March of 1989, in conjunction with a study of economic determinants of intra-household food distribution. The survey sample consisted of 49 households drawn from a stratified random sample, so that each of three subvillages was proportionally represented.

The survey included a current recall component in which households were interviewed every 15 days for three months. A second component, spread over interview opportunities, was a retrospective survey in order to obtain enough information to estimate economic flows for a full year. The bi-monthly recalls covered expenditures on inputs and household goods, time allocation of all household members, earnings from employment and household enterprises, and payments for all inputs and taxes. The retrospective survey covered the nine-month period preceding the start of the survey; the year represented in the SAM begins in April 1988, following the rice harvest in 1988, and includes special purchases for the Moslem holiday of Idul Fitri. The end of the rice harvest and Idul Fitri purchases serve as useful boundary points for the village economic cycle, and are more easily remembered by households in reconstructing their economic history.

The nine-month history included information on inputs, production and labour use for all agricultural plots, changes in livestock and crop inventory, debt, and asset ownership. For histories of earnings from wages and non-farm enterprises, households were asked to describe major changes in this income for the previous nine months, for example, which months they worked at which job, whether enterprises had been started or stopped, and whether prices of intermediates for enterprises had changed. For household expenditures, one form was used to enumerate purchases of clothing and other durables, as well as spending on construction; a separate form was used to record major changes in spending patterns for food and frequent non-food purchases such as lantern fuel and soap. Household expenditures were then totalled by multiplying three-month expenditures on frequently purchased items by four and adding durable purchases recorded in the three-month current survey as well as those recorded through the nine-month retrospective survey.

Because of the high level of integration with the surrounding economy, the calculation of flows in and out of the village required some assumptions. Imported inputs were assumed to come from the

rest of Indonesia, since they are not produced locally. Imports of commodities required to match reported supply and reported consumption were assumed to be imported from the local area, since they are all produced locally. The survey sample covered about 5 per cent of the total village population. Thus, the reported transactions were multiplied by 20 to estimate flows for the entire village. Estimates of plantation sales were not inflated, since this information was available for the whole plantation from the plantation manager.

14.6 THE ESTIMATED VILLAGE SAM AND VILLAGE-WIDE LINKAGES

The estimated SAM (reproduced in Ralston, 1992) clearly illustrates the three dominant characteristics of the village economy, which influence all other economic linkages: the economy is very open, production is dominated by agriculture, and household income is dominated by returns to hired labour and family labour.

The linkages within the village economy are first of all constrained by the openness of the village economy. While exports serve as an important source of income, the high import content of many activities reduces the total impact of exogenous changes on the economy. Overall, imports account for 39 per cent of total final demand, with imported commodities making up 14.6 per cent and imported intermediates making up 24.5 per cent. Rice imports are the most important item in commodity trade, making up 50 per cent of total commodity imports and 52 per cent of final demand for rice. The estimated SAM values indicate the magnitude of the role of agriculture in the economy: the total of final demand for all crops and livestock is 822 million Rupiah ($ 493 000 in 1989) or 48 per cent of final demand in all sectors. Within agriculture, wet rice alone accounts for 14 per cent of total final demand, tubers account for 6 per cent, groundnuts for 11 per cent and livestock for 7 per cent. Within non-agricultural activities, the major activities are retail, with 19 per cent of total final demand, large-scale food processing with 6 per cent and transportation with 8 per cent.

It is also clear from the SAM how important labour is in the economy: returns to family labour and hired labour make up fully 90 per cent of the village total value added, with returns to family labour accounting for 61 per cent and returns to hired labour accounting for 29 per cent.

An important implication of the large role of agriculture is that agricultural growth is likely to be limited due to land constraints. Wet rice land is already completely utilized in the village, so increases in production can only come from yield increases, which may not be associated with large increases in employment. Dry land sharecropping from the cacao plantation can be increased only temporarily while the plantation is not yet fully planted. In the sections that follow, the linkages among sectors of the village economy are explored in more detail, and their implications for sources of economic growth are discussed.

Production Linkages

As is typical of agricultural villages, the input–output matrix (Table 14.8: columns 1.1–1.18, rows 1.1–1.18) for the village is sparse, with few linkages between activities: crops activities purchase seeds from themselves, as well as a small amount of dung from livestock, but make no other purchases from other activities. Similarly livestock purchases animals from itself and a small amount of medicine from the local retail sector. Of the non-farm activities, construction is slightly more strongly linked to other village sectors, purchasing local lumber, woven bamboo walls from light manufacturing and nails from the retail sector. The input–output coefficients associated with these purchases total over 0.35, with purchases of lumber alone representing almost two-thirds of that total. The retail sector purchases from a greater number of other activities, including rice, tubers, tree crops, livestock, small-scale food processing, light manufacturing, transportation, and lumber. However, the total input–output coefficients for purchases from these sectors is only 0.18, even less than the total for construction. Small-scale food processing is the most highly linked sector, purchasing from rice, tubers, groundnuts, tree crops and livestock; the input–output coefficients associated with these purchases total over 0.51. Of the remaining non-farm activities, purchases from other activities are virtually nil, with only light manufacturing purchasing from lumber and firewood.

While agriculture's linkages to other activities are weak, payments to labour are high, as shown in SAM columns 1.1–1.18, rows 2.4–2.5. Coefficients for payments to hired labour are moderate to high for rice (0.19), dry rice (0.40), maize (0.16) and tubers (0.23), while returns to family labour are very high, as a fraction of total output, for all crops other than rice and dry rice, with coefficients between 0.58 and 0.97.

Payments to land are highest for rice, as are payments to animal capital.

Import coefficients for imported commodities (row 5.2) as well as imported inputs (row 5.3) are high for many activities. In addition to the high import ratio for rice mentioned above, other high leakage sectors are transportation and rice milling, which import fuel from the rest of Indonesia.

Factor Payments and Other Household Income

Columns 2.1–2.5 of the SAM show the payments from each factor to household groups; migrant remittances (column 3.1) and pension payments (column 5.1, row 3.3), also contribute to household income. Returns to family labour make up the bulk of these payments, accounting for 61 per cent of total village value added. Returns to hired labour comprise another 29 per cent, adding up to 90 per cent of total value added. Returns to animal capital, physical capital and land make up 3.7 per cent, 3.5 per cent, and 1.4 per cent respectively of total value added. However, only 20 per cent of land payments are captured by other village households: most of the remainder is paid to the local plantation under share-cropping arrangements. Migrant remittances, while not included in village value added, contribute to household incomes an amount equivalent to an additional 7.2 per cent of village value added. Table 14.9 shows the proportions of each source out of total household income.

Table 14.9 *Household incomes by source (per cent)*

Factor Incomes	*Low calorie households*	*Medium calorie households*	*High calorie households*
Land	0.5	0.2	0.4
Physical capital	0	6	0
Animal capital	2.3	0.2	5.2
Hired labour	60.7	24.1	12.1
Family labour	31.8	53.2	59.6
Transfers			
Migrant remittances	4.8	6.2	22.7
Pensions	0	10.1	0
Average (1000 Rp.)	523.7	1535.6	1020.8

Household Expenditures and Investments

SAM columns 3.2–3.4 give the fraction of household income paid to each sector. Expenditure patterns of each household group reveal some significant differences in linkages to the village economy. The most important distinction of medium calorie households is that, during the survey year, they were the only group with positive savings. While all households invested in physical, human and animal capital and crop inventories, low and high calorie households drew down on assets while medium calorie households accumulated savings over and above investment in other instruments.

After savings and investment are accounted for, the two largest expenditure categories are retail (at 32 per cent, 20 per cent and 40 per cent for low, medium and high calorie households) and rice (at 27 per cent, 12 per cent and 15 per cent), although for high calorie households construction appears as a large item (15 per cent). Other significant categories overall are small-scale food processing and livestock. The high calorie group outspends other households on retail, both as an average total and as a fraction of total income. This expenditure category is weakly linked to the village economy, since over 70 per cent of retail volume is imported. The medium calorie group spends more on rice on average, although the low calorie group spends more as a fraction of total income. This category also has a high import content (52 per cent), and the contributions to hired and family labour (19 and 7 per cent respectively) are low, but higher than retail.

Household groups' marginal propensities to consume from each sector were estimated from quadratic consumption functions; the impact of changes in income of household groups is more accurately captured by marginal coefficients rather than average coefficients. Because the marginal propensity to consume rice for the poorest households is higher than the average propensity, increases in income for the poorest households not only improve their energy consumption, but have a stronger link to the rest of the village economy through rice production. Further, returns to hired labour from rice accrue more to the poorest households, who in turn consume more rice, thus further linking this group to the village economy.

Columns 4.1–4.6 of the SAM show the distribution of each investment account. While the high savings rate of medium calorie households (30 per cent) is clearly desirable, these savings have limited impact on the village economy, since they are deposited in a bank outside the village. These funds are available to some extent for loans

to village residents, but profits from those loans do not stay in the village. Of investment accounts, the financial sub-account thus represents an important leakage from the village, when compared to other savings instruments and investments such as crop inventory, and livestock, which purchase from the village.

Village Exports and Other Exogenous Accounts

Columns 5.1–5.5 of the SAM show purchases by each exogenous account, including the government, the plantation, local exports, exports to the rest of Indonesia, and exports to the rest of the world.

Total commodity exports from the village to the local area and to the rest of Indonesia sum to 537.7 million Rupiah (about $322 000 in 1989). This amounts to 32 per cent of total final demand. The major export activities are groundnuts (with 29 per cent of commodity exports), large-scale food processing (with 20 per cent), transportation (with 23 per cent), and tubers (with 14 per cent). Other smaller exporting sectors include maize, soybeans, retail, lumber and health. An additional 17 million Rupiah enters the village as remittances from migrants in the rest of Indonesia, and another 106 million Rp. is remitted from migrants to the rest of the world.

The plantation hires village labour, as does the government. The government also pays pensions to households of retired soldiers; these payments are shown going directly to the account for medium calorie households, the only group receiving such pensions. The linkages between the exogenous accounts themselves include the estimated exports of the plantation to the rest of Indonesia, as well as payments to balance exogenous accounts. The exogenous government allocates 34 per cent of its receipts from the village to subsidize the endogenous fee-for-service government account to cover the gap between fees and services. Local imports from the rest of Indonesia balance the gap between local imports and local exports. The rest of Indonesia imports from the rest of the world. Finally, the exogenous government requires a balancing payment from the rest of Indonesia to cover the gap between taxes collected and payments to hired labour, pensioners and the endogenous government. The export patterns point to some of the difficulties in stimulating growth in an economy structured around supplying urban centres: the scope for increases in agricultural exports is limited by land constraints. In this village, dry land for maize and tuber production will be available for a few years until the plantation is fully planted to cacao, and then production increases will be limited to

yield increases. Non-agricultural exports such as large-scale food processing and transportation are capital intensive and have high import contents. These sectors are controlled by wealthier households with expenditure patterns with higher direct and indirect leakages.

Prospects for growth are more likely to come from increased hiring by the plantation and from increased migrant remittances. The village's proximity to Jakarta gives residents access to a large market for unskilled labour in construction, although residents from other villages will be competing for the same jobs. Import substitution may also provide a source of growth. The village is currently exporting wood and importing light manufactures, losing the additional value added which could be captured by increasing production of light manufactures such as furniture to substitute for imports.

14.7 SIMULATIONS

Simulation Methodology

The present section looks at how market changes and government interventions impact on a local-level village economy. The technique for these simulations is to construct a vector of changes in the exogenous account (ΔX), and pre-multiply this vector by an appropriate multiplier matrix to derive a vector of changes in the total final demand for each sector (ΔY).

Three modifications are made to the standard SAM multiplier technique in order to more accurately reflect the interactions in the village economy.

Marginal Expenditure Coefficients

First, the average expenditure coefficients in the household column of the SAM were replaced by marginal coefficients. These coefficients more accurately reflect the impacts of incremental income changes on household expenditures. Pyatt and Round (1979) refer to the coefficients obtained by dividing each cell by the column total as the 'accounting' coefficients (A), and the resulting multiplier ($(I - A)^{-1}$) as the accounting multiplier. They refer to the multiplier obtained from a coefficient matrix containing marginal coefficients for some or all of the accounts (denoted in their work as C) as the 'fixed price multiplier'. We assume (as do Pyatt and Round) that average coefficients are close

enough to marginal coefficients for accounts other than the household accounts. The marginal coefficients for each household group were computed from quadratic regressions based on individual household data.

Constraints on Agricultural Production and Exogenously Determined Output Changes

Second, some production activities were assumed to be constrained by land limitations. We assumed that, with existing technologies, wet rice, soybeans, groundnuts, vegetables, tree crops, and wood were constrained at their initial values. Wet land limitations impact not only on wet rice, but also on soybeans, vegetables and groundnuts, which are grown on wet land during the dry season. Tree crops and wood were constrained because supplies cannot be increased in the period relevant to a SAM experiment. When treating agriculture as constrained, the total output of constrained accounts is exogenous, and the exports (or imports) required to rebalance the SAM are endogenous.

The main problem when a sector is constrained is to ensure that the SAM rebalances, so that the leakages from the SAM equal the injections. When the SAM contains only one exogenous account, the conventional multiplier technique results in an automatic rebalancing of this account following an injection, because the endogenous accounts are automatically rebalanced. Once the SAM contains one or more large constrained (and hence exogenous) accounts as well one or more 'outside' accounts (such as Rest of the Country and Rest of the World) the multiplier technique will leave the exogenous accounts rebalanced in the aggregate, but not individually, and these imbalances are too large too ignore.[1]

Two closely related approaches to rebalancing the constrained accounts individually are used by Subramanian and Sadoulet (1990) for a village SAM from India, and Lewis and Thorbecke (1992) for a village in Kenya. The differences in these approaches may be summarized as follows: Subramanian and Sadoulet (1990) present an algebraic method for rebalancing their particular SAM, which includes both activity and commodity accounts, and which includes only two non-agricultural exogenous accounts. Lewis and Thorbecke use a more general matrix algebraic solution for a SAM which does not separate commodity and activity accounts. Their approach (taken from Miller and Blair, 1985) gives an explicit expression for the multiplier relating

endogenous changes in unconstrained sector output and agricultural exports, and exogenous changes in unconstrained sector exports and agricultural output. This method automatically rebalances the constrained accounts by solving for the changes in agricultural exports required to meet agricultural demand.

To obtain their solution, partition the output change vector (ΔY), the "outside" account change vector (ΔX), and the marginal coefficient matrix (C) into non-constrained (subscript n) and constrained accounts (subscript c). Based on the fact that the sum of changes in intermediate and "outside" demand must sum to total change in output for both on-constrained and non-constrained accounts, the formula for this solution is:

$$\begin{bmatrix} \Delta Y_n \\ \Delta X_c \end{bmatrix} = \begin{bmatrix} (I - C_{nn}) & 0 \\ -C_{nn} & -I \end{bmatrix}^{-1} \begin{bmatrix} I & C_{nc} \\ 0 & -(I - C_{cc}) \end{bmatrix}$$

$$= \begin{bmatrix} (I - C_{nn})^{-1} & (I - C_{nn})^{-1} C_{nc} \\ -C_{cn}(I - C_{nn})^{-1} & (I - C_{cc}) - C_{cn}(I - C_{nn})^{-1} C_{nc} \end{bmatrix}$$

The rebalancing problem also arises when supply changes are made exogenously to accounts that are not actually constrained by land limitations. If the simulation specifies a change in supply due to technology or price rather than demand, than this change is exogenous; changes in the outside account required to rebalance then become endogenous.

For simulations where the constrained sector output changes, we use the Lewis and Thorbecke (Miller and Blair) methodology. In addition, we use Lewis and Thorbecke's methodology in simulations which exogenously change output in sectors which are not constrained; we treat them as constrained at their present output level and then construct the multiplier as in equation 2.

For simulations in which output of the constrained sector does not change, we use a simpler algorithm which gives identical results. We modify the coefficient matrix so that it contains zeros in the columns of the constrained accounts, reflecting the fact that additional supply can only be met by imports. The partitioned coefficient matrix looks like:

$$\begin{bmatrix} C_{nn} & 0 \\ C_{cn} & 0 \end{bmatrix}$$

Since output in the constrained sectors does not change, our solution for changes in output in the non-constrained accounts and changes in net exports in the constrained accounts looks like:

$$\begin{bmatrix} \Delta Y_n \\ \Delta X_c \end{bmatrix} = \begin{bmatrix} (I - C_{nn})^{-1} & 0 \\ -C_{cn}(I - C_{nn})^{-1} & I \end{bmatrix} \begin{bmatrix} \Delta X_c \\ 0 \end{bmatrix}$$

The change in output for the non-constrained sectors ΔY_n is equal to $(I - C_{nn})^{-1}\Delta X_n$. The change in net exports in the constrained accounts, ΔX_c is equal to $-C_{cn}(I - C_{nn})^{-1}\Delta X_n$. These results are identical to the Lewis and Thorbecke result for the case where the constrained sector output does not change, so that $\Delta Y_c = 0$.

Standardization of Experiments

Third, the experiments were standardized, in order to make them comparable to each other. In principle, there are two ways in which one can standardize experiments. One can either make the budgetary cost to the government comparable, or one can make the injection into the village comparable. Since our experiments involve both market-induced change and government-intervention-induced change and since market-induced changes carry no direct budgetary cost, at least in principle, we chose to standardize the experiments to the same total injection. We performed the price experiment, in which prices for rice and maize were allowed to rise to world market levels, first, and then standardized all other experiments so that they entail the same total injection into the village. As a result, only the form of the injection varied among experiments. The total injection we applied in each of our simulation experiments is 16 million Rupiah ($96 000 in 1989), or 2.2 per cent of village value added.

Simulation Results

The first two simulations illustrate the effects of growth in the surrounding economy and an increase in the prices of commodities exported from the village. The next three simulations focus on government programmes, such as public works employment, small enterprise loans and increased use of high yielding varieties for rice. The design of the simulations and their results are discussed in more detail below.

Market Change Simulations

Growth in the Indonesian Economy: It is assumed that the growth of the overall economy impacts on the village by increasing its exports. To perform this simulation we increase outside demand for all non-constrained exporting sectors by 3.4 per cent. These include maize, tubers, retail, high food-processing, transport, health, migrant remittances, and labour hired by the nearby plantation. The results of this simulation are summarized in column 2 of Table 14.10. There is a 0.91 per cent increase in village production, with the largest percentage increases in high food-processing, transport, and tubers, reflecting the increase in exports of these activities. These increases in production generate almost 1 per cent increase in village value added, with the largest percentage increase in payment for physical capital, followed by family and hired labour. The increases in value added are distributed to households. The total increase in household incomes is 1.20 per cent. The distribution of income gains is somewhat regressive: the low calorie households benefit least but the high calorie (middle income) households, rather than the medium calorie (high income) households, benefit most. This is because the low calorie households have no marketable surplus of crops to export, do not participate in high-capital enterprises, and are the least likely to send migrants out of the village.

Price Increase Simulation: This simulation (Table 14.10, column 3) allows the prices of groundnuts and maize to rise by 8 per cent and 25 per cent respectively. In the case of maize, this price increase would bring the price up to the world price, after adjusting for transport and trade margins, based on the Indonesian National SAM for 1985. In the case of groundnuts, the price increase would require an increase in the world price, since the price of groundnuts is already at the world market level.

The resulting change in production was modelled as a combined injection: a supply response, which was modelled as an exogenous output change in the maize and groundnuts column, and a pure price effect on the net production of each household group, modelled as injections into household incomes. The supply responses assumed a supply elasticity for maize of 0.1 and for groundnuts of 0.2. The income equivalent of the price increase was computed for each crop by multiplying the price difference by each household's net production, calculated as profits plus in-kind hired labour earnings less household consumption.

Total household incomes rise over 50 per cent more than in the previous experiment. However, the increase in market price leads to an increase in per-household income which is distributed so that the poorest households gain least; the absolute per-household income gains of the medium and high calorie households are nearly the same, at 26000 and 25500 Rp. respectively, while the gain to low calorie households is only one quarter as great, at 4000 Rp. The increase in household income due to an increase in agricultural prices is thus distributed in a regressive manner. This is not surprising, since the poorer households produce less.

Government Intervention Simulations

All government programmes simulated in these experiments are assumed to be targeted so as to favour the poorer households.

Public Works: This simulation (Table 14.10, col. 5) assumes that the government initiates a targeted public works programme. This is modelled as an income injection. Two-thirds of the total increase in income from the public works programme is assumed to accrue to the poorest, low calorie households; one third is assumed to accrue to the high calorie, medium-income households. Implicitly, we assume in this experiment that there is considerable underemployment in this village, so that the increase in labour for public works does not reduce the income from hired labour.

Household incomes in the village increase by almost 2 per cent. Due to the targeting of public works hiring, the poorest households benefit over twice as much as the medium households and nearly ten times as much as the richest households in per household absolute terms.

Small Enterprise Promotion: The government is assumed to lend money to poor farmers for poultry and furniture-making (Table 14.10, column 6). It is assumed that half the total increase in output value is in the livestock and poultry sector and half is in light manufacturing. These changes are modelled as exogenous supply shifts to these accounts. The marginal coefficients for distribution of returns to family labour and to animal capital were changed to reflect the targeted nature of the programme.

This programme raises village production and value added by twice as much as the public works programme, but has only half the impact on household incomes; this reflects the fact that the public works programme injects income directly to the households, while the enterprise projects involve considerable leakage through imported

Table 14.10 *Market and government simulations (per cent change)*

Sector	*Base*	*Market*			*Government*			
	(million Rp)	*Growth*	*Price increase*	*Average*	*Public works*	*Enterprise*	*Crop technology*	*Average*
1.1 Rice	239	0.00	0.00	0.00	0.00	0.00	3.55	1.18
1.2 Dry rice	49	1.55	2.22	1.89	4.90	2.00	3.16	3.47
1.3 Maize	14	1.48	2.50	1.99	0.00	0.00	0.00	0.00
1.4 Tubers	108	2.98	0.28	1.63	0.48	0.18	0.30	0.33
1.5 Soybeans	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.6 Groundnuts	189	0.00	1.46	0.73	0.00	0.00	0.00	0.00
1.7 Veg etc	48	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.8 Tree crops	52	0.00	0.00	0.00	0.00	0.00	0.00	0.15
1.9 Livestock	121	1.2	1.65	1.43	3.26	6.59	2.06	4.47
1.10 Construction	80	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.11 Retail	334	0.24	0.00	0.12	0.00	0.00	0.00	0.00
1.12 Low food proc.	81	1.43	2.11	1.77	3.96	1.51	2.45	2.73
1.13 High food proc.	110	3.38	0.00	1.69	0.00	0.00	0.00	0.00
1.14 Light mfg.	10	0.03	0.00	0.01	0.00	74.49	0.00	24.83
1.15 Transportation	127	3.24	0.00	1.62	0.00	0.00	0.00	0.00
1.16 Wood	94	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.17 Education	40	0.01	0.01	0.01	0.01	0.00	0.20	0.07
1.18 Health	1	2.53	1.08	1.80	−13.92	−8.26	−11.44	−11.69
2.1 Land	21	0.18	0.25	0.21	0.19	0.08	6.69	2.31
2.2 Physical cap.	31	3.15	0.00	0.58	0.00	0.00	0.09	0.03
2.3 Animal cap.	33	0.59	0.81	0.70	1.61	3.19	5.94	3.81
2.4 Hired labour	259	0.87	0.24	0.55	0.32	0.11	0.83	0.43
2.5 Family labour	543	0.89	0.71	0.80	0.36	0.89	1.41	0.94

3.1 Migrants	122	3.40	0.00	1.70	0.00	0.00	0.00	0.00
3.2 Low-cal. HH	146	0.99	0.78	0.89	7.62	4.11	5.90	6.12
3.3 Med-cal. HH	522	1.09	1.70	1.39	0.27	0.03	0.23	0.18
3.4 High-cal. HH	367	1.44	2.50	1.97	1.79	0.01	0.44	0.75
3.5 Religious	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.6 Endogenous govt.	39	0.01	0.01	0.01	0.01	0.00	0.20	0.07
4.1 Phys inv.	6	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.2 Land inv.	18	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.3 Human inv.	55	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.4 Animal inv.	275	1.52	2.18	1.85	4.80	1.96	3.10	3.40
4.5 Inventory	825	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.6 Financial	344	13.94	21.77	17.86	3.50	0.35	2.99	2.32
Total production (base prices)	1709	0.91	0.48	0.70	0.58	1.07	0.86	0.88
Total production new prices)	1.54	1.22						
Total value added (base prices)	889	0.94	0.54	0.74	0.38	0.70	1.50	0.90
Total value added (new prices)	2.40	1.76						
Total household income	1036	1.20	1.85	1.53	1.85	0.60	1.11	1.22

inputs. The targeted small-enterprise programme is relatively even more effective in redistributing income to the poor, since the impact on the middle calorie groups and low calorie groups is almost nil.

Crop-Technology Simulation: This simulation extends the use of high-yielding rice varieties (HYV) among poor households (Table 14.10, column 7). Twenty-eight per cent of poor households already use HYV. This is modelled as exogenous changes in rice output and payments to land, animal capital and family labour. The technology vector in the SAM is amended to reflect the input use pattern of the village households that use HYV. In addition, the targeted nature of the programme is reflected in new marginal shares for the distribution of profits among household groups.

There is very little income leakage to the higher-income groups, so that the entire benefit of the programme accrues to the poor even after the indirect effects of the programme are taken into account. The income of the low calorie households rises by almost 6 per cent. The increase in total value added is the highest out of the three government programmes, but the impact on total household income falls between the other two simulations, at 1.11 per cent.

Government versus Market Programmes

To compare the programmes, they were scaled so that the total injection generated by the two market-based programmes is the same as the total injection generated by the three government-intervention programmes. Each combined programme generates the same total injection as the individual programmes. The results are reproduced in Table 14.10, columns 4 and 8. In the case of the growth and market simulations, the combined programme gives results that are equal to the average of the two component simulations. The results of the combined government programme, however, are calculated by adding the results of scaled-down versions of each simulation. This is required because the SAM coefficients are adjusted in the crop technology simulation based on the number of households using high yielding varieties; thus, the results of the one-third scale simulation are not equal to one-third of the original results. The government programmes have a larger production effect than the market programmes but they also have a smaller impact on the total household income of the village. The distributional effects of the two types of programmes are also quite different. On the aggregate, the market-based programmes are quite regressive while the government programmes are quite progressive, in

both relative and absolute terms. Thus, our simulations suggest that the choice of market-based versus government-induced programmes also involves a tradeoff between income-growth and distribution.

14.8 CONCLUSION

The village Social Accounting Matrix provides a useful framework for analysing the linkages among sectors of the economy. In particular, the SAM decomposes the sources of income for households of different types, and the likely mechanisms for increased incomes for each type of household, through interactions among activities, factors and households. While the village is a fairly open economy, it is by no means irrelevant as an economic unit, since the majority of labour hired for agriculture and other enterprises comes from within the village.

The SAM highlights some of the difficulties in stimulating growth in an economy structured around supplying urban centres when the scope increases in agricultural exports are limited by land constraints. In this village, dry land for maize and tuber production will be available for a few years until the plantation is fully planted to cacao, and then production increases will be limited to yield increases. Non-agricultural exports such as large-scale food processing and transportation are capital intensive and have a weaker multiplier effect on village value added.

We have presented simulations of several village growth strategies, including market-oriented strategies and government investment strategies. We estimated the effects of each strategy on income of three classes of households, with household divisions based on average dietary energy consumption. We also estimated the effect of each strategy on total village production, total imports, total value added and total household income. All simulations were scaled to the same level of total injection into the economy.

Simulations of market-oriented village growth, through growth of the surrounding economy and increases in prices, give the greatest benefits to the high calorie (middle-income) households. Growth in the rest of Indonesia stimulates exports from the village; the major export sectors are controlled by medium calorie (high-income) and high calorie households. Benefits from price increases for rice and maize accrue to these groups as well, because these groups are net producers of these crops, whereas the low calorie (low-income) households are net consumers. Government investment programmes (public works

employment, small enterprise credit and increases in use of high yielding rice varieties), give much higher benefits to the low calorie households. This is to be expected, since these interventions are specifically targeted to the low calorie group.

While total village production is higher under the targeted simulations, total value added is higher under the market simulation. Thus, there appears to be a trade-off between growth and distribution. However, comparing individual simulations suggests more mixed results; the village value added increase resulting from the crop technology simulation is higher than that for the growth simulation. This suggests that some targeted strategies, particularly those aimed at relaxing the output constraints on agriculture, can perform well both for growth and distribution.

Notes

1. Individual exogenous accounts will be imbalanced even if there are no constraints, as long as there is more than one exogenous account. This is often the case in village SAMs which have at least both a Rest-of-Country and Rest-of-World account, well as other government and other 'outside' accounts. Changes in these accounts are unlikely to balance at the village level. However because these accounts are relatively small, the imbalances are usually ignored. See Subramanian and Sadoulet (1990, p.148) for a good discussion of this.

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15 The Political Economy of Economic Decline and Reform in Africa: The Role of the State, Markets and Civil Institutions

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INTRODUCTION

Post-independence economic developments in most sub-Saharan African countries have retrogressed from an early period of rising expectations and optimism, to growing difficulties in the 1970s and early 1980s, culminating in an economic crisis of stagnating growth and untenable internal and external account imbalances. This in turn gave rise to the era of stabilization and structural adjustment from the mid-1980s to the present. A large part of the blame for these unfavourable developments, and especially the depth crisis, can be attributed to the nature of the African states.

The role of the state in African economies has undergone a series of dramatic changes from independence to the present. Expectations of the role the state should assume in the economy, the perceived and actual authority of the state in influencing the economy, and of course the image of the state that follows from its interventions, have evolved over the years. Telling a story and drawing lessons from these evolving notions of the state's developmental role and capacity for a continent as large and diverse as Africa, are difficult tasks. Nonetheless, there are certain themes about the state's intervention in the economy which emerge in examining Africa's post-independence history that are applicable to a large number of countries.

The first theme concerns the contradiction between indigenous rural institutions that had evolved in rural areas in response to underlying technological, social and economic conditions, and the institutions espoused and promoted by post-independence African states. It is our hypothesis that this contradiction was one of the root causes of the African crisis.

The second theme concerns the nature of economic and political power balance in Africa. While in most western countries political power and the nature of the state emanated from accumulation of private wealth which was in turn based on changing technologies and the conditions of production arising therein, in post-independence Africa, it is the state that has been the principal mechanism of creating and maintaining political power as well as wealth. It is our hypothesis that another of the main causes of the crisis is that the predatory role of the state reached and surpassed its limits in extracting surplus from the rest of the economy.

The third theme concerns the role of western donors. It is our hypothesis that the nature of western development aid has also been partly responsible for maintenance of inefficient state institutions and the ensuing economic crises. It is also our hypothesis that the current nature of donor technical assistance and finance in the form of stabilization and structural adjustment is slowing down the emergence of new civil institutions in many instances.

A fourth theme concerns the nature of adjustment-induced reforms. We will argue that the implemented reforms have not led to drastic institutional changes. Moreover, the reforms have led to significant commercial but not as much productive response.

Our final theme is a normative one. The experience of state involvement in post-independence Africa suggests that the new balance between the state and the economy in Africa must be found through better understanding and support of indigenous institutions, and not through blind transfer of western technology and ideas. This has implications about both the nature of western aid and the pace of African development, as well as implications for future research.

The purpose of this chapter is to elucidate these themes, drawing on the experience of four countries: Guinea, Malawi, Mozambique and Tanzania.[2] On most counts, the differences between these countries outweigh the similarities. Geographically, Guinea is in West Africa, although not part of the Communauté Financière African (CFA) zone. It has an extremely rich natural resource base, with its mineral wealth responsible for Guinea's GNP per capita far exceeding that of the other

three countries.[3] This higher national product should not, however, be confused with a higher level of living standards for the population. Poverty in Guinea is on the same order of magnitude as in the other three countries highlighted in this chapter. While Malawi, Mozambique and Tanzania have common borders, they share little in common other than their acute poverty: Mozambique is ranked as the poorest country in the world, Tanzania fourth from the bottom, and Malawi seventh. The divergence between them ranges from the behaviour of their colonial predecessors, to the land-scarcity in Malawi as juxtaposed with Mozambique's and Tanzania's land abundance, to the political stability and the absence of internal agitation that characterizes Malawi's authoritarian conservative regime and Tanzania's one-party state, as contrasted with the Soviet-style Marxist government in Mozambique that has been engaged in a civil war to establish its legitimacy since independence. Tanzania, undoubtedly the best-known and most studied of the countries, stands out in terms of its purported commitment to the socialist ideal that arguably made it the object of admiration of a large number of donors and scholars. Tanzania too, however, has failed to live up to even the most modest expectations for social and economic development, despite the eloquence of the espoused ideology of its leadership.

While space does not permit recounting the details of the countries to be discussed, we will instead address three phases of their political economy, focusing on the role of the state relative to civil institutions. To amplify, the first phase to be discussed is the emergence of the state from the struggle for independence, with high ideals and with great hopes and expectations. Nationalism, the search for rapid economic transformation, and the faith in centralized decision-making and control over assets, production and marketing were characteristics of all four countries. In the case of Guinea, Mozambique and Tanzania, this further involved a faith in the command economy as the means to promote growth with equity. The corollary of this posture was a suspicion of market forces and rejection of neoclassical prescriptions such as reliance on international trade to promote growth.

The second phase that will be discussed in the chapter may best be characterized as the corruption and decline of *dirigiste* governance. Simply, state intervention in the economy failed to achieve stated objectives. Instead, rent-seeking, waste, bureaucratic inefficiency, corruption, stagnation, coupled with disincentives to production, led to economic and social decline.

The third phase of the political-economic history to be discussed in this chapter may best be characterized as the process of state disengagement. This process has proceeded with varying degrees of speed, commitment, and thus success. It is this process of state disengagement, a key component of structural adjustment, that is perhaps least well understood and most relevant to the future of Africa. In particular, a number of salient issues emerge. These issues include: has adjustment removed opportunities for rent-seeking or simply changed the beneficiaries?; what institutions, if any, have and will emerge to replace the role played by the state?; and how can policy be formulated not only to reduce the state's role, but to redefine a more constructive role that will foster growth and equity?

Our exposition is complemented with a brief theoretical discussion of the evolution of rural civil institutions in Africa based on the induced institutional innovation approach, and a discussion of the interaction between the state and agricultural policies. It is the blend of the theory with the historical experience that will provide the support for the themes outlined above.

RURAL INSTITUTIONS AND THE STATE IN PRE-INDEPENDENCE AFRICA

The term 'institution' has numerous connotations (Uphoff, Chapter 7, this volume), and remains difficult to define and plagued by ambiguity in its use. Here we take the broad view of the concept of institutions adopted by Ruttan (1978) and more recently elaborated by Bardhan (1989). According to this view, an institution is either a set of rules that governs a particular set of actions and relationships or a decision-making organizational unit (firm, family, bureau), that exercises control over resources.

What are the rural institutions that are expected to prevail in the setting of African agriculture, and how are they affected by population pressure or other forces? Binswanger *et al.* (1989) have outlined a theory of institutional relations in semi-arid Africa that is firmly based on the new concepts of market failure, transaction and information cost, and risk. According to the theory, in a context of environmental risk, a dispersed low-density population, semi-arid climate, large transport costs and simple technology, land will be abundant and have no sales price, rural labour markets will be undeveloped, cultivated

area per working household member will be invariant to wealth or household size, livestock production will occur mainly through transhumance by specialized units, and capital accumulation mainly in the form of livestock will form the main insurance mechanism. In this system commercialization will be very low, and hence rural credit markets will be absent. The above setting we deem provides a reasonable description of rural institutions and production relations in Africa in the absence of colonial interference.

The main exogenous forces of change in such a system in the absence of colonialism are population growth and the opening up of external trade opportunities. These lead to production specialization, the creation of labour and credit markets, and the creation of opportunities for organized exchange. Hence, product markets emerge and with them specialized intermediaries, the traders, many of whom combine the trade with the credit function.

Colonialism opened up African agriculture to external trade opportunities, and hence induced commercialization. However, it also interfered (often brutally) with the orderly pattern of induced institutional change outlined above. The fact that the colonial period played a powerful role in defining the economies in Africa, and in particular their relations with the outside world, is well documented. Most pronounced, of course, was the exploitation of mineral and human resources that was characteristic throughout Africa. In Mozambique, it was gold and ivory that were of primary importance, although the slave trade in the nineteenth century became the most important activity in terms of the international economy. Subsequently, the twentieth century saw tourism and transportation links providing a large share of Mozambique's foreign exchange, further evidence of the transformation of the economy that would be inherited after independence.

In a similar vein, the colonial era in Malawi introduced a system of individualized tenure parallel to the traditional customary tenure. Customary land was appropriated under treaties with local chiefs, and the colonial governor was given the right to issue certificates to European settlers to legitimize their claim on freehold land. As land became scarce with the Europeans gaining access to large tracts, there was the increasing imperative for smallholders to enter into tenancy relationships. The settlers gained access to the cheap African labour through *thangata*, an arrangement that required villagers to pay for the use of land with their labour. The result was that tenants had little time to cultivate their own land for subsistence, and that export-oriented,

large-scale agriculture became firmly entrenched in keeping with British colonial objectives.

A similar story of colonial influence can be told for Tanzania where, as in Malawi, Tanganyika was maintained as a cheap-labour plantation economy without a large settler population. The early imposition of taxes payable in cash forced many peasants to commercialize by selling foods, or to become labourers on estates. Like Malawi, at independence there was virtually no industrial sector, and, other than the good road and rail network, little other infrastructure was built. Plantation agriculture was also the core of the French exploitation of Guinea, although mineral resources, especially bauxite, quickly became the most important export commodity from the resource-rich prize colonial possession.

All of the countries thus share two common threads. First, to various degrees, the exploitation of Africa's resources during the colonial period diminished the role and delayed or changed the development of indigenous institutions. For example, in Mozambique, policies forced many Africans to work as contract labourers rather than tend their farms, and those that remained on their own land were often forced to produce cotton and rice intended for Portugal. Hence the labour market developed not through population growth and external trade, as outlined by the theory, but through coercion. The same thing happened in Tanzania. In Malawi, the legalities of land rights of settlers from Britain eroded the traditional roles of indigenous institutions, including the family, the community and the chief, as land became scarce and tenancy in European estates became prevalent.

Second, as the indigenous institutions that, for example, defined land tenure rules and community relations began to weaken, in their place one observed the emergence of central authority in the form of the colonial authorities. Authorities outside the community, tribe and household organized the structure and location of production, defined the rules of exchange, and, in general, limited the choice of what to produce, where to produce it, and the terms under which it could be sold or consumed at home. The foundations were laid for the state to assert control over civil institutions that heretofore were essential in defining economic relations in rural Africa.

However, while the colonial influence affected the evolution of indigenous institutions, it never managed to supplant them. In regions within countries producing little or no cash crops or other raw materials for export, indigenous institutions evolved more along the induced change route predicted by Binswanger *et al.* (1989). Even in

regions that were most affected by colonial power, one can notice a dual setting of production and market institutions. Indeed, there were some native farmers, but mostly settlers, who adapted to the new technologies and land tenure systems, and developed some wealth. For the most part, however, traditional peasants, even when producing commercial crops, kept their production and exchange relations along traditional lines. We will argue later that this preservation of traditional institutions is what maintained the African economies during the crisis.

It must be emphasized that the production and marketing systems promoted by the colonial powers, while efficient from the material and institutional perspective of the 'north', were quite alien to the indigenous cultures and conditions. Thus the notion of a centrally run bureaucracy, such as the one needed to administer a marketing board, can be regarded as a descendant of the centralized feudal conditions in Europe, but was quite inconsistent with the much less authoritarian chief-based tribal governance systems in Africa. Similarly the idea of a centrally managed estate with hired labour was alien to the traditional family-based self-sufficient farming system of Africa.

THE STATE AND RURAL INSTITUTIONS AFTER INDEPENDENCE

The political and economic philosophy of independence movements in Africa were divergent and perhaps best understood in the context of a desire to respond to the perceived inequities of the colonial authorities, as well as often being rooted in the socialist paradigm that was in good currency at the time. The leaders of the post-independence period also had to come to terms with the legacy of the colonial period which left the new nations dependent on international trade. The system of international trade, in fact, was often perceived to be unfair and a source of vulnerability that in some cases led to a rejection of trade as a path to growth. Furthermore, the new governments had to create resources for running a state apparatus, and had to establish a political base of support.

A related matter that conditioned the policies of the emergent state were the terms of separation with the colonial powers. At one end of the spectrum, the departure of the colonial regimes in Guinea and Mozambique was abrupt and represented a complete cessation of cordial relations. In contrast, the separation between Malawi and

Tanzania, and their colonial rulers, the British, was considerably more amiable.

To amplify, when Guinea turned down General de Gaulle's proposed French Community, and instead became the first country in the region to gain independence, the French felt compelled to teach their other colonies a lesson. All expatriates were withdrawn within 24 hours. This not only stripped the country of all technical and administrative capacity, but all equipment, medication, and even lightbulbs were taken, effectively trying to punish leaders who dared defy de Gaulle. The objectives of the French, in fact, were largely achieved, as most of the infrastructure left behind could not be used.

Likewise in Mozambique, the drive for independence was fervently resisted by the Portuguese. They built the country's infrastructure with the objective of having a large settlement there. The violence of the fight for independence contributed to 90 per cent of the Europeans departing. Like the French in Guinea, the Portuguese endeavoured to disrupt the economy to the maximum extent, once again going to the extremes of sabotage and destruction of facilities that were left behind.

One would expect that the disruption to the economy caused by the violent separation would lead governments to adopt inward-looking self-sufficiency policies. This indeed appears to be what happened, although these policies were to be carried out through a centralized state-controlled power base. In Guinea, Sekou Touré's response to the abuses of the colonial rulers was his own perverse version of African socialism. It dictated that, 'Every citizen had to be a party member, and every village, neighborhood, factory, and office had its party committee' (Azarya and Chazan, 1987). Furthermore, the size of the Party grew to such proportions that ultimately there was one elected official for every 11 citizens (Yansané, 1990).

The Guinea case exemplified the extreme of state *dirigisme*. The post-independence government endeavoured to organize virtually all production in the form of state-owned enterprises. This included the state taking over banks, trading companies, supply of inputs and marketing of output, and so forth. Both manufacturing and agriculture were to be equally targeted for state control. Land rights in the post-independence Guinea period were redefined by the state, as was the structure of production. All land traditionally held by the village chief or elder became the charge of the Party's village-level council. Furthermore, government control not only redefined land rights based on the Party exerting political leverage over the villagers, but large tracts of land were reorganized into state-owned farms that were

to be the technical vanguard of Guinean agriculture. These state-operated farms, many of which in fact were on land appropriated from colonial plantations, and others appropriated through the Party exerting its control of land tenure rights, were given access to subsidized inputs and were heavily capital-intensive, including the extensive use of mechanization. Workers were, by and large, civil servants, and the government was obliged to employ all agricultural graduates on these enterprises.

In addition to the state farms, post-independence agricultural policy also set up agricultural cooperatives. Communal land within the village was set aside and the Party once again assigned mandatory labour to work the land. But perhaps the most devastating aspect of the state attempting to control the agricultural sector was that an array of rules and regulations was set up that impeded smallholders, who always remained the backbone of the rural economy, from producing and marketing their crops. The central government gave regional Party authorities production and marketing targets for food, export crops, and livestock. In turn, each active rural household member was required to provide the state with a determined amount of agricultural output at official prices, a policy that implied a high rate of taxation. But even worse was the fact that private trade was considered anti-social behaviour, and in fact was completely prohibited by the state until 1981. Attempts at enforcement through, for example, setting up road blocks to preclude private shipping between regions or simply through the local Party apparatus keeping a watchful eye on local farmers, were strenuous, albeit not completely effective.

Mozambique also adopted a state-farm focus after independence in 1975. In 1977 alone, 1200 tractors and more than 500 combines were purchased. Prior to 1983, 90 per cent of the centrally planned agricultural investment went to the state sector. In addition to the state farms, the government also attempted to organize 'communal villages'. Nearly 20 per cent of the farm population lived in these villages by 1982 but, as in Guinea, the response of the resettled farmers was to concentrate their efforts on family plots instead of communal land (Kyle, forthcoming).

The heavy hand of the state unfortunately did not end with organizing production. Instead, the combination of Marxist ideology, coupled with the departure of much of the rural trading network following Mozambique's independence, contributed to the adoption of a system where exclusive responsibility for marketing all food and export crops was with the state. Prices were set centrally and the

concept of pan-territorial prices was considered sacrosanct, supposedly designed to ensure equity for all. Oddly, concern over equity did not seem to compel the state to raise producer prices in accordance with inflation, as the terms of trade turned against agriculture. Prices offered by the state for the three major smallholder export crops – cashew, copra and cottonseed – for example, fell by between one- and two-thirds between 1980 and 1986. In fact, the only discernible role left for the private sector in the rural trade was at the retail level; but even that was extremely limited as the shops were sanctioned by the state, and the margin between the state-determined wholesale price and retail price was decreed (Kyle, forthcoming).

In contrast, the relatively peaceful independence movements, and the cordial post-independence relations between Malawi and Tanzania and Britain started them both on a path of economic policy that was not appreciably different than during the colonial period. Both countries initially adhered to the principles of a mixed economy approach to development. In the case of Tanzania, the First Five-Year Plan (1964–1969) was based on analyses done before independence, and focused on commercialization of agriculture and the creation of import-substituting industry. Likewise, Malawi adopted an agro-based, export-oriented development strategy, although placing much less emphasis on import-substituting industrialization than Tanzania.

Unlike Malawi, which stayed the course, Tanzania soon abandoned its original post-independent development strategy. The Arusha declaration of 1967 called for a revolutionary transformation of society, where the fundamental tenets, as in Guinea and Mozambique, involved attacking virtually all aspects of the private sector. 'Tanzanian socialism' also emphasized dramatic institutional change being orchestrated by the Party, using the government as the means to nationalize the economy. Once again, nothing escaped the Party's grasp, whether it be the private estates and trading companies, the village retail shops, or private property. This zeal, in fact, often took on ugly proportions, as in the targeting of Asian and Arab commercial classes, as well as outlawing simple rural wage labour.

As with Guinea and Mozambique, the most damaging intervention by the state came in agriculture. Private marketing was prohibited, private estates were taken over by the state, and communal farms were established. The marketing system which relied on village-based cooperatives was replaced by an inefficient system of centrally managed crop authorities. Pan-territorial pricing was adopted and efforts to reorient the structure of production was emphasized. This

took the form of the much-discussed villagization programme (von Freyhold, 1979). Socialist villages and consolidated communal farms were set up, populated by peasants forcibly moved off their former homesteads and plots. Once again, while the declared purpose was different, in practice this effort was in many respects a revival and expansion of the ideas of the British colonial powers.

Malawi did not follow the model of collectivization and mechanization of the other three countries, and did not exert such extreme and overt methods in trying to control the peasantry. The government, nevertheless, managed, as in Mozambique, to perpetuate the exploitative and ineffectual structures that were in place at the time of independence.

To amplify, post-colonial Malawi reinforced the strategy of estate-sector-led growth that in fact ossified the dualistic structure in agriculture. In fact, in conforming to a pattern that Noronha (1985) suggests was indicative of sub-Saharan Africa in general, the state in post-colonial government Malawi exerted greater control over the land. This was indicated in the Land Act of 1967 that somewhat ambiguously both reaffirmed the existence of customary land, but also declared that all customary land was 'vested in perpetuity in the President'. This gave the state the right to control communal lands, including alienating such holdings for conversion to private lands.

The preceding narrative illustrates the fact that in all four (and in most other) African countries analysed, the state, rather than building on the indigenous rural institutions, tried to build and adapt the colonial institutions of centralized control from the west, or borrowed authoritative socialist models from Eastern Europe. It is interesting to question this mode of institutional development. The socialist centrally planned model, much like the capital-intensive labour dependent capitalist production model, were both borrowed from very different social and economic contexts, and were quite alien to the underlying conditions of Africa.

Why was there such uniformity in neglecting indigenous institutions? The answer seems to be, first, the need to create centrally controlled financial resources, and second, the imperative of maintaining a contented political base, defined as the urban elite, rather than the peasantry that was the backbone of the economy. Consequently, the colonial institutions such as the export marketing boards that were quite efficient at surplus extraction from the peasants, were adopted and adapted by the newly independent governments. However, while there are many direct and indirect ways to tax agriculture (Newbery,

1987), it is interesting to observe that in all countries, traditional agricultural production and marketing were targeted for direct interventions, rather than indirectly taxing exports, or sales of food in markets, or transport of produce that could conceivably generate as much state revenue as a monopolistic market authority.

This observation in turn raises the related issue of why all four countries (and other African states) opted for such direct interventions? In our opinion the answer lies in the power of direct interventions to create invisible transfers and rents that could be used by the state for building a political base. It is this influence that was the most powerful determinant of post-independence rural institutional development in Africa, and has been explored by Bates (1981, 1988). This political base, in the form of Party functionaries, civil servants, and largely urban-based parastatal employees, became the new elite in post-independence Africa.

Another reason for the rather uniform adoption of 'wrong' institutional models seems to have been the influence of donors who were instrumental in, for example, setting up parastatal grain-marketing agencies throughout Africa. This in turn was heavily influenced, first, by a complete lack of appreciation for the strengths and potentialities of indigenous institutions, and second, by the adherence of donor agencies at the time of independence to import substitution industrialization, and rural surplus labour models which dictated heavy taxation of agriculture and inward-looking protective policies. While from a theoretical, non-institutional perspective such models were not necessarily wrong, it is interesting to note the complete absence at the time among development circles of discussions concerning the problems of institutional implementation of the espoused policies. This, coupled with the general distaste of local, indigenous institutions by western-educated elites, who instead manifested admiration of the 'western civilized' organizational models, seems to also have contributed to the particular modes of control that were adopted.

THE FAILURE OF THE STATE AND THE RE-EMERGENCE OF INDIGENOUS RURAL INSTITUTIONS

The emerging power of the state in the rural economy proved devastating in all four countries, both in terms of economic growth, as well as

in terms of equity. State-mandated and state-sponsored systems of production, which ironically built upon the exploitative colonial legacy, failed dismally. Production and yields plummeted in some cases, and stagnated in others.

In Guinea the state farms were an unmitigated failure. By 1982 only one-quarter of the machinery was operational, and yields of paddy were generally half that of smallholders where no fertilizer, credit, improved seeds, or any other inputs other than a hoe and occasional plough were used. As the level of taxation soared to 50 per cent or greater, and the power and corruption of state-owned export monopolies increased, officially recorded exports plummeted. Between 1970 and 1985 pineapple exports fell by 94 per cent, coffee exports by 98 per cent, palm kernel exports by 99 per cent, and banana exports by 100 per cent, as agriculture's share of total official exports fell by 71 per cent between 1970 and 1981. But the bad news was not confined to export markets. Farmers even stopped producing food crops for the official markets. It was only through coercing farmers to make available obligatory marketing quotas that any food was provided to the state trading companies. But as the state's ability to exert authority waned, sales to the state fell rapidly. By 1980, for example, sales of paddy to the state were only 1.8 per cent of total production, and in volume terms they were 57 per cent lower than three years earlier.

The decline in marketed output in Mozambique was equally severe. It is impossible, however, to sort out to what extent state controls, rather than war, were responsible. Nonetheless, there is little question that the concentration of productive capital on low-productivity state farms, and the active discrimination against the smallholder sector through enforcing low producer prices and related policies that discouraged traders from providing rural households with consumer good and agricultural implements, all contributed to the dismal state of Mozambique's rural economy.

The state-sponsored and -controlled villagization effort as well as the publicly run estates in Tanzania also failed on numerous accounts. For example, the assumptions that state-run farms would promote the adoption of improved agricultural technology, that economies of scale would be achieved, or even that the process of villagization would facilitate the delivery of social services proved to be fallacious. Instead, declining yields, ecological degradation, eroding quality of social services and so forth were the results at the community level. For instance in 1980 the volume of sisal exports was 23 per cent of its level in 1967, cashew nuts export volume was 49 per cent, while coffee and

cotton were at roughly the same levels. It is interesting that many of the rural policies of Tanzania were supported extensively by external donors, the nordic countries featuring prominently among them. In fact many projects involving publicly run estates were financed by foreign aid, and the design of the villagization programme was done by a western consulting firm, financed by donor aid.

In Malawi, as intimated above, the nature of state control was much more subtle, perhaps more heinous. Ironically, the World Bank and other donors heaped praise upon Malawi for the market-oriented, export-oriented agriculture sector. This led, in fact, to the inaccurate characterization of Malawi's political economy as a 'free market', when in fact the description by Harrigan and Mosley (1990) of a 'centralized, efficient, personal dictatorship' is much more accurate. The reality was that the investments in and growth of the estates were part of a complex of parastatals 'intertwined through interlocking directorates' largely designed to benefit the elite. And while the admirers of Malawi's free market were extolling the benefits of export agriculture where estate owners received remunerative world market prices, such analysts failed to address the fact that the short-term success of the estates was in fact the result of explicit land, and wage and incomes policy, designed by the Party and the state apparatus controlled by Banda to facilitate the expansion of the estate sector at the expense of the peasants.

In particular, state policy promoted the expansion of the estate sector by encouraging appropriation of customary land. This was achieved by, first, setting the rent associated with leaseholds to a negligible level. Second, the estate sector was favoured in terms of marketing and pricing arrangements. While the state decreed that estate crops would receive f.o.b. auction prices for their output, smallholder export crops were being heavily taxed. At the same time, the state actually deemed it illegal for smallholders to even produce the most lucrative crops, such as burley and flue-cured tobacco, tea and sugar. The result was that estate producers not only had monopolies on the high-return export crops, but the active discrimination against smallholders ensured a plentiful supply of cheap labour. Thus, the state succeeded in enforcing rules that further marginalized the peasantry, the benefits from which accrued to leasehold estate owners and operators, many of which were high-placed Party members and civil servants.

Important responses to state control over the rural economy in Africa included the development of parallel markets, reliance on

barter, and inward-looking strategies as revealed through high subsistence ratios. It was the emergence of these parallel markets and related coping mechanisms that sustained the producers and consumers during the years of disintegration and decline. And in fact, evidence would suggest that the more pervasive state controls, the more vital and pervasive a role played by such indigenous institutions. In the absence of the ingenuity that households and producers showed in their reliance on the informal economy, there would have been far worse dislocation than actually experienced.

At one end of the spectrum is Guinea where the oppressive hand of the state decreased the monetization of the rural economy. Fewer goods were available for farmers to purchase and the state-run financial system was a travesty. Barter trade became the order of the day, rather than handling of money. This applied to internal and external transactions. For example, salt in Guinée Maritime was traded for cola and palm oil in Guinée Forestière, which was traded with the Fouta Djallon for consumer goods imported from Senegal and the Gambia (Filippi-Wilhelm, 1987). Furthermore, a parallel currency in the form of coffee developed, especially for the burgeoning, unrecorded cross-border trade (Chemonics, 1987).

Perhaps the most visible aspect of the state's loss of control in the rural economy, and the commensurate ascendancy of indigenous institutions, was to be seen in terms of the urban food supply. The government set up a ration system where subsidized official prices were to protect the urban elite from the policy-induced distortions and scarcity prices. While access of the poorest households to the low-price shops was limited, in practice even the urban elite in the capital were soon forced to purchase upwards of 75 per cent of their cereals from official sources (World Bank, 1984). In fact, the breakdown of the ration system, and its replacement by indigenous marketing institutions was thus due to the inability of the government to enforce the '*normes de commercialisation*' that required farmers to sell to the state, coupled with the fact that 'officially' purchased rice was leaked by government officials to parallel markets at a goodly profit (Chemonics, 1986).

In Mozambique, there is less clear-cut evidence of illegal cross-border trade to circumvent the oppressive role of the state. This, however, probably represents in part the lack of security and decay of the physical infrastructure associated with war. Thus, by all appearances it seems that peasants turned inward, with subsistence production being the means of survival, along with the arduous and often lethal trek to refugee centres. The ramifications of the repression

of the rural farm economy by the state, coupled with war, for net food consumers, especially in urban areas, however, is in one sense an equally interesting story. Food aid came to represent the majority of the food supply, and rural and urban markets were hardly integrated at all. At the same time, as will be discussed further below, as a complement to the food aid, illegal private-sector imports flourished. Food was transported and sold at a high risk to those who dared to drive their small truck back and forth from Swaziland. This, coupled with diversion of food aid, became the source of an expansive parallel market, which once again sustained consumers in the face of shortages in ration shops. In its early years such parallel markets actually were the object of considerable punitive efforts by the government. Markets were regularly burned and destroyed. However, when it became apparent that the illegal parallel markets were in fact feeding the poor and rich alike, its acceptance was assured in the name of political expediency.

In Tanzania, despite the state-controlled official marketing system for staple foods, and the prohibition of private trade, parallel markets in food also developed, where prices were at times as high as nine times official ones. Parallel markets for export crops such as coffee are also acknowledged by farmers and traders to have existed on a large scale during the late 1970s and early 1980s, especially with countries such as Kenya. The parallel export markets were not only motivated by higher prices, but also by the acute lack of officially supplied consumer goods which induced barter trade. It has been hypothesized and supported empirically that farmers withheld their supplies of cash crops to official entities in response to the shortages (Bevan *et al.*, 1989). They also withdrew from the cash economy and into barter. This is evidenced by the fact that the amount of real per capita currency holdings declined by 45 per cent between 1979 and 1985, the period of the most acute crisis.

Reflecting a combination of the less direct interference of the state in the economy, coupled with the fact that the pervasive power of the President limited the need for patronage in order to maintain the legitimacy and control of the state, rent-seeking was not as widespread, and parallel markets were therefore relatively less developed in Malawi. However, wherever controls were prominent, indigenous institutions did arise to compensate. For example, poor smallholder and other net consumers did resort to parallel markets, along with a focus on subsistence agriculture, to meet their food needs. As elsewhere in Africa, the growth of parallel retail food markets was a clear manifestation of

the state's inability to administer its ill-conceived policies of pan-territorial, pan-seasonal pricing of agricultural products. Consequently, a parallel retail system emerged along the official sales through the marketing board where normal seasonal price increases were observed. The share of marketed maize passing through official channels was in fact small, and raises the question as to why government even endeavoured to interfere in the consumer market. Given that most of the maize was distributed in relatively large-sized bags, and mostly in urban areas, one cannot help but conclude that the implied subsidy was politically motivated by, and largely directed to, civil servants and the urban élite.

A more interesting story is how indigenous institutions endeavoured to subvert the state's attempt to tax heavily the traditional customary sector and constrain it in terms of what it could produce, policies designed to help the favoured leasehold estate sector to prosper. First, a large number of smallholders illegally produce burley, and sell it to estate managers who serve as collectors and marketers of the tobacco under the pretence that it was grown on their estates (Duncan, 1990). Second, increasingly the larger smallholders or smallholder extended families on customary land are making deals with local village chiefs and government officials to have their land converted in leaseholds. This is in response to the desire to grow burley, but also in recognition of the fact that the appropriation of land by large-scale estates, civil servants, and others outside the community is increasing land pressures and land insecurity. Third, owing to these increasing land pressures for customary landholders, coupled with considerable underutilization of leasehold land, especially on estates owned by those from outside the community, smallholder encroachment onto estates is very common for fetching firewood and thatch, and actual cultivation. Overall, around 5 per cent of the estate land was reportedly cultivated by encroachers (Mkandawire, Jaffee and Bertoli, 1990). All of this is to suggest that the policy-induced cleavages that attempt to preclude the best use of land and labour resources is giving way to secondary markets and other means of circumventing the original intent of state controls.

The evidence from all four countries of the informal sector and other indigenous institutions developing to circumvent the state controls is clear. However, the costs borne by producers, consumers, and the economy as a whole were nevertheless great. These costs arise from a combination of simple efficiency losses, to the failure to innovate in an environment lacking in incentives, to the high transaction costs of

parallel markets. For example, it is true that local traders figured out a way of providing plentiful food supplies to consumers on parallel markets in Mozambique. But the transaction costs of illegally importing food in small lots from retail shops in Swaziland over poorly maintained roads guarded by rent-seeking security police and bandits were high. Likewise, the diversion of food aid by rent-seeking officials to the parallel market had enormous opportunity costs to the treasury that did not receive countervalue for the food sold.

Similarly, the fact that the financial interests of the President of Malawi was the driving force behind the enforced rural dualism extracted a high price for both sectors. The growth of the estate sector was solely a consequence of expansion of land under export crop cultivation achieved through the appropriation of customary land. No improvements in productivity have occurred since independence. All indications are that much of the leasehold land was grossly underutilized and that farm and land management was inept, leading to a deteriorating resource base. Furthermore, the ineptitude of estate administration led to fewer and fewer estates being profitable, even with the cheap costs of labour and land rents being negligible. As expected, the toll in terms of human resources is even worse, with levels of chronic malnutrition among land-scarce and resource-deprived smallholders being virtually unparalleled elsewhere in Africa. The limitations of indigenous institutions and coping mechanisms to compensate for the excesses of the state are obvious for all to witness. And given that land scarcity is getting worse and agricultural innovation is virtually absent, the future holds little promise without major structural reorganization of rural institutions in Malawi.

The evidence from the four countries is consistent with the view that the state tried to tax the agricultural sector directly through monopolistic marketing. While taxation of the agricultural sector was something the colonial rulers had done, the evidence suggests that in fact the post-independence states tried to impose increasing rates of taxation in order to finance a growing and increasingly inefficient bureaucracy which, however, provided the political base of the government. Parallel markets, which were always present in the form of 'informal institutions' grew in response to this increasing rate of taxation. In essence, the tax base shrank as the tax rate increased. In a classic 'Laffer curve' consequence, control of the economies gradually slipped through the states' hands: not, however, without transferring huge invisible rents to the states' political bases, which explains the domestic urban acquiescence to the extreme controls.

We have made some very rough estimates of the value of the rents transferred through the period of consumer-good import rationing in Tanzania. Bevan *et al.* (1989) have presented numbers which suggest that during the 1980–84 crisis only a small share of officially produced or imported goods (less than 30 per cent) reached their destinations through official channels, the rest being diverted to unofficial markets. On a conservative estimate that half of the rationed imports of consumer goods were diverted to parallel markets, we can compute the rents by multiplying this dollar value of imports by the difference between parallel and official rates. The results suggest that from this source only the rents could have been as high as 5.9 per cent of official total GDP or 11 per cent of non-agricultural GDP. Under the assumption that these rents were distributed uniformly over all state employees, and given that these in turn accounted for about 5 per cent of all employment, it can be seen that these rents could have conferred a substantial income transfer to the new elite. In fact if it is assumed that the visible per capita income of formal public sector workers was the same as that for the rest of the economy, the above calculation suggests a doubling of per capita incomes for the favoured class. Given the restrictions on domestic marketing of foods, the state monopoly of domestic consumer goods production, and so forth, the rents might have amounted to much more than that.

An interesting question concerns the nature of the parallel institutions that emerged as a consequence of state controls. Are these institutions the same as would have emerged in the absence of controls or not? The answer seems to be that some of them were indeed there before the onset of the state and were just strengthened. Such institutions, for instance, are local markets and small-scale, non-agricultural producers of basic consumer and manufactured goods. Some institutions, however, were killed by the state and were not replaced by other forms of indigenous ones. In the case of Tanzania, for example, this occurred with the farmer-owned and -managed marketing cooperatives, which sprang up much before independence but were summarily dissolved in the 1960s. Finally, some of the institutions that emerged would not have been there were it not for the state. Principal among these in the cases of Guinea, Mozambique and Tanzania are the black marketeers, and the bureaucratic elite who emerged as intermediaries in the interaction of the other private sector and the state apparatus. Of major concern is the potential irreversibility of this phenomenon, and the consequences therein.

While the details of the institutional failures of the state, and the limitations of indigenous responses can be expounded upon in great detail, in recognition of space limitations let it suffice to say that all four countries exemplify, albeit to different degrees, the overt failure of state interference and policies. The need for economic reform became apparent. Often at the urging of donors, and in the context of the IMF- and World Bank-financed adjustment programmes, all four countries have embarked to different degrees on the process of state disengagement, the results of which we examine next.

STATE DISENGAGEMENT: ECONOMIES UNDER ADJUSTMENT

Economic adjustment has involved redefining the role of the state. In the case of Guinea, Mozambique and Tanzania this process of reform was undertaken in response to the virtual total collapse of the formal economy. Despite the obvious and overt need for economic adjustment, in practice it was only the growing internal and especially external imbalances that precipitated action, either on the part of the government or external donors, including multilateral financial institutions. The call for reform in Malawi, in contrast, was initiated in the context of a country plagued by economic stagnation after the initial post-independence period of relatively good growth. In the Malawi case, this relatively better economic performance early on was achieved because state control in the export sector was limited, although the overt discrimination against the smallholder sector through measures such as taxation and repressing wages was overt. This bias against smallholders contributed to both the faltering economy and great inequity and poverty.

As a consequence of macro disequilibrium being the compelling factor for action, it comes as little surprise that the first focus of donor-financed adjustment was on reducing imbalances in the internal and especially external accounts via expenditure-reducing and expenditure-switching policies.

Concerning expenditure-reducing adjustment policies, fiscal restraint, along with credit-reducing tight money supply are often elements of the basic package of policy prescriptions that are integral to adjustment programmes. One relatively straightforward indicator

that can be examined is the level of government spending, and the related issue of financing those expenditures.

The contention that adjustment will lead to government assuming a smaller share of the economy has in general not been substantiated for Africa (Sahn, 1992). In the case of Guinea, Malawi, and Tanzania, there is no evidence of a decline in the size of government subsequent to adjustment (see Table 15.1), while no reliable statistics are available for Mozambique. In Tanzania, the share of current public expenditures to GDP has grown significantly after 1986, and development expenditures showed signs of recovery back to levels prior to the crisis. In the case of Guinea, the process of contraction in development expenditures that began prior to the beginning of adjustment also shows sign of reversing, although recurrent expenditures have stabilized at a more moderate level than that which pre-dated and precipitated the econ-

Table 15.1 *Public current and development expenditures as share of GDP[a] (per cent)*

	Guinea		*Malawi*		*Tanzania[b]*	
	CE/GDP	*DE/GDP*	*CE/GDP*	*DE/GDP*	*CE/GDP*	*DE/GDP*
1976			12.4	7.0	18.3	11.3
1977			12.2	5.5	18.4	11.4
1978			16.1	9.1	19.9	12.6
1979			18.0	11.2	20.2	13.7
1980	21.4	11.0	17.5*	13.3*	20.1	11.8
1981	19.2	15.6	19.6	13.8	23.0	10.1
1982	40.0	10.0	16.7	9.3	23.3	8.2
1983	28.1	6.3	20.4	9.0	20.8	6.5
1984	23.3	4.4	19.4	8.1	20.6	6.0
1985	3.9	2.7	18.8	7.9	19.8	4.9
1986	12.7*	7.6*	20.1	6.0	21.4*	5.5*
1987	12.7	10.0	22.5	6.9	22.6	6.4
1988	13.7	11.4	14.6	4.6	25.4	6.2
1989	12.1	11.0	19.8	5.9	28.1	8.8

Sources: Guinea: Arulpragasam and Sahn (1991); Malawi: Sahn, Arulpragasam and Merid (1990); Tanzania: World Bank (1989, 1990).

Notes: CE denotes current expenditures. DE denotes development expenditures.

[a] An asterisk indicates the year of the first externally supported stabilization and adjustment programme.

[b] For Tanzania a year such as 1980 refers to the fiscal year 1978/80.

omic crisis, while in Malawi recurrent expenditures relative to GDP have remained high since the beginning of adjustment, although the volume of development spending has retreated from the temporary and unsustainable level that was observed in the years just prior and subsequent to the beginning of adjustment.

Ironically, the size of the state has been maintained in many sub-Saharan African countries, in sharp contrast to Latin America, because of the financial support of the World Bank, IMF and other donors. As adjustment lending, and consequently official development assistance (ODA) has increased, it is the state that is bolstered. In 1980, ODA comprised 3 per cent of GDP and 17.4 per cent of gross domestic investment. This increased to 8 per cent of GDP and 53.4 per cent of GDI by 1987. Thus, the donor support, especially from the World Bank and IMF, often sustained the same government structures that it has identified as the source of Africa's economic woes. This is, first, a reflection of the difficulty and virtual lack of experience of donors and the international financial institutions in working directly with the private sector. Second, it is recognition of the dependence on the state apparatus both to guide the process of reform and ensure access to its vital public services and goods that are above and beyond those that would be provided by private sector initiatives (Sahn, 1991).

But of greater interest to this paper is not the size of the government measured in terms of its share of GDP, but the extent to which indirect and direct government control of the economy has been reduced through institutional reform. More specifically, how have markets in general, and producers and consumers in particular, been affected by the process of state disengagement?

Of the four countries examined in this chapter, once again, the experience in terms of state disengagement from rural markets is quite different. The case where the state has been most serious about disengagement is in Guinea. The dismantling of the extensive state controls took a number of forms. First, there was the reform of commercial policies in general, and the exchange rate devaluation in particular. Second, all existing quotas for forced marketing to the state were eliminated. Third, police barricades on roads were removed. Fourth, monopolies of parastatals on fertilizer and on exporting fruit and coffee were eliminated. Fifth, markets for consumer goods were liberalized, allowing food imports by private traders, and removing the urban food ration system that had favoured the privileged. Sixth, a new agricultural research centre was established with a focus on adaptive agronomic research for smallholders.

In combination, these measures have dramatically increased prices to farmers. Production has improved, and exports have increased, although, they still compose only 5 per cent of total exports compared to 30 per cent before the ruinous policies of the state during the First Republic. At the same time, an abundance of consumer goods have reappeared in the market, and open market prices for staple foods have moderated as a consequence of increased imports and increased efficiency of food markets. The latter is attributable to a combination of the reduction in transaction costs of private-sector marketing agents along with the reduction of shortages and rent-seeking possibilities that were so pervasive during the period of state control.

Despite these improvements, the absence of a greater response by producers raises the issue of the role of non-price and related institutional factors. For example, only 2 to 3 per cent of the farmers in Guinée Maritime and Upper Guinea used fertilizers and only a small share use improved seed varieties. These problems illustrate shortcomings inherent in the process of liberalization such as the lack of extension, shortage of improved technology packages, and weak physical infrastructure for transporting and marketing inputs. The implications of the reluctance of the new commercial banks to extend credit in rural areas is not clearly understood, as indigenous savings and lending institutions such as the '*tontines*' have been shown to function quite well in terms of extending credit in small amounts. It thus seems that state disengagement brought about a short-term improvement in the plight of smallholders, although the limited marketed supply response suggests that improved price incentives were of limited effectiveness. Likewise, reforms have had tangible benefits for many urban consumers, the exception being those whose ability to seek rents was diminished. It is less clear, however, that eliminating the state's role will be sufficient to promote sustained development. This of course raises the issue, which will be addressed in further detail below, of redefining a new role for the state in providing important public goods, recognizing the perils of doing so based on past abuses.

While Mozambique's reforms have been much less dramatic than in Guinea, some similarities are noteworthy. First, the failure of the state farms was acknowledged, and the family farm sector has become the new focus for promoting agricultural development. Gradual, albeit substantial progress has also been made in restoring agricultural incentives and reforming markets, as the state has given up a considerable amount of the pre-reform administrative controls. For example, at the end of 1986, 44 agricultural products had fixed prices.

This dropped to 28 by mid-1988 and then to less than 20 a year later. The consequence has been a shift of incentives, especially towards the production of export crops. This has resulted in a sharp rise in recorded exports, especially for the smallholder crops, cashew and cotton. No improvement is seen in the sale of tea and sisal, as these crops are still grown on the inefficient, high security risk, state farms (Kyle, forthcoming).

Despite some progress in improving the incentive framework for rural producers, the pace of disengagement has been slowed by a number of factors. Some of these are justifiable. First and most important is the security situation. Government and donors continue to play a key role in terms of coping with the ruinous consequences of war that dislocates large numbers of people, decimates large tracts of crops, and destroys infrastructure and markets. The reality of war makes necessary measures such as continued public-sector involvement in trading, which at the extreme even involves air supply, to avoid famine.

A second factor that slows the pace of reform is the difficulty of bureaucrats, traders, and farmers to grasp the concept that the state controls are giving way to market-clearing prices. To illustrate, in mid-1990, the government liberalized maize marketing. This included abandoning an administered procurement price for maize in lieu of a market-determined price. Concurrently, a floor price was set, although realistically there was no way for it to be defended or enforced. While this was announced in the *Government Gazette*, during a visit to Beira, the largest provincial capital, discussions with government officials and farmers in the rural areas revealed an inability to comprehend the policy change. Simply, all those we talked with asserted that there was only one price for maize – the floor price. No farmer we talked with had been, or expected to be, offered a higher price; and government officials in the Province all suggested that it was inconceivable that a trader would offer a higher price, given that the state had approved a lower one.[4]

In a similar vein, the liberalization of marketing for most other goods in theory implied that the state-controlled system of allocating district-specific monopsonist power to traders was eliminated. In practice, however, the system of one trader to one district seems firmly entrenched. This was probably a reflection of a constellation of factors, including the power of old ideas, and the plethora of difficulties of entering new markets, including the issues of access to working capital, the limitations of market infrastructure, the shortage of knowledge, the thinness of markets that may not support true competition, and so

forth. The end result, regardless of its cause, is that market reforms have not dramatically changed the structure of markets in rural areas. Those institutions that in the past were sponsored by the state, still remain in control of rural markets, even if it now be by default rather than design.

While the circumstances that retard the pace of market development in Mozambique are arguably somewhat beyond government control, on the other hand there is little question that policy-makers' lingering suspicion of markets, and the reluctance to forgo access to privileges, have slowed the pace of state disengagement, often to the detriment of the poor and the economy alike. The most overt example of this concerns the state's continuing to operate a food rationing system in the two major urban areas, Maputo and Beira. The good news is that the state no longer engages in burning open markets and harassing those entrepreneurs who in fact provide access to food for a large segment of the population.

In particular, the continuation of the food subsidy, nonetheless, illustrates some of the reasons for the slow pace of state disengagement, even when parallel markets are pervasive and the original rationale that commended some sort of ration system, i.e. food shortages, is no longer applicable. To amplify, the ration system provides a direct income transfer to recipients, if one measures that transfer as the difference between the ration and open market price. However, a number of factors suggest that the continuance of state control over urban food markets is not justifiable. First, the poor are already heavily reliant on the parallel free market for their food purchases, where marginal purchases (i.e. purchases of food beyond the ration amount) are almost universally made. Second, owing to the gross inefficiency of the government food distribution system, the official prices are far above import parity when denominated at the official exchange rate (which is the rate used for government imports, and for assessing countervalue for food aid consigned to the government).

A policy that would allow commercial imports by private traders using the official foreign exchange window would certainly result in prices dramatically lower than those at the official rate. However, given the overvalued currency, such a policy would represent a clear disincentive for domestic producers, and is therefore not advised. A better policy would be to allow commercial imports by private traders using the parallel exchange rate, thereby eliminating the implicit subsidy that would result from importing using an overvalued currency. Under such a regime, market prices of some commodities

would still actually be lower than, and other prices would be comparable to, existing official prices. Indeed, prices would also be considerably lower than existing parallel market prices since these include a high risk premium and high transaction costs associated with overvalued imports from Swaziland.

In Tanzania, where agricultural markets were monopolized by the official crop authorities, reforms started very timidly in 1984 when the limits for privately traded quantities of foodgrains as well as the roadblocks were removed. However, pan-territorial purchasing prices remained, despite enormous differences in transport costs between rural regions and urban centres. Trade liberalization, in the form of allowance of own-funded imports since 1984, and devaluation permitted the importation of much needed trucks and spare parts, as well as consumer goods, and led to both declines in marketing costs as well as improved farmer incentives. In 1986, with the signing of the first agreement with the IMF, substantial further devaluation took place. The response was considerable and by 1987/88 Tanzania became a net exporter of maize, ending its status as a foodgrain importer since the mid-1970s. It was not, however, until 1988 when the National Milling Corporation (NMC), the official food marketing parastatal, lost its formal monopoly on grain trade, albeit private traders had been implicitly allowed since 1984. Still the government kept the NMC, despite overdrafts so large that between 1985 and 1988 they accounted for almost 40 per cent of total bank lending to the private sector, hence contributing significantly to domestic money creation and inflation. Maize marketing was not liberalized until September 1989 when private traders were allowed to buy directly from primary village cooperatives and September 1990 when traders were officially allowed to buy directly from farmers. The result of food trade liberalization is most apparent in the relation between open market and official prices. While during 1980–85 open market prices exceeded by huge amounts (300–800 per cent) official prices, by 1986–87 the premia have been substantially reduced and in some cases have even turned negative.

In terms of export marketing the government has kept control of the export parastatals. The inefficiencies of those, in turn, result in very high marketing costs which are passed to the farmers since they receive residual prices. In fact since the early 1980s the price to coffee farmers as a share of the f.o.b. world price has declined (Sarris and van den Brink, 1994). Given that explicit taxation of exports is minimal, implicit taxation in the form of higher parastatal marketing costs has thus increased.

Despite the reluctance of the Tanzanian government to make institutional reforms, the underlying economy has evolved through old and new indigenous institutions. In terms of agricultural production, despite the disruptive impact of villagization, farmers started moving back to their old land extensive and spread out production systems before the onset of the crisis and reforms. This process appears to have accelerated after 1986. In terms of marketing, new institutions have emerged. For instance during the height of the crisis in 1983 a new form of marketing intermediary, the '*madalalis*,' appeared in Dar es Salaam. They finance incoming traders with short-term interest-free loans. Their number after liberalization has increased sixfold indicating increased competition. Private credit, which is totally monopolized by the state banks, which in turn serve largely the parastatals, seems to have expanded through an increase in small-scale rotating savings and credit associations. It therefore appears that on the one hand indigenous institutions developed irrespective of the crisis, and on the other that their evolution has been speeded up under the general spirit of liberalization.

In contrast to the other three countries, Malawi represents a situation where on the one hand the state was much less ambitious in trying to control the rural economy directly but on the other hand the state continues to maintain extensive control over factor and product markets to the detriment of the poor and at a cost to aggregate economic growth. This is despite the fact that Malawi is generally regarded by the World Bank as being a strong reformer, having received a series of adjustment credits beginning in 1980. The fact remains, however, that the major agricultural reforms called for during the 1980s in Malawi were the removal of the fertilizer subsidy, the benefits from which accrued to a combination of the estate sector and the larger of the smallholders, and reducing the taxation of smallholders. In practice, the terms of the subsidy removal programme were in fact ignored, and smallholders remained heavily taxed.

More troubling was that the fundamental control of the rural sector exhibited by the state through the enforced bias in favour of estate leaseholds and at the expense of the smallholders cultivating customary land, was totally neglected. In fact, it was not until the discussions of SAL III in 1990 that the issue of eliminating the structural impediments to growth and equity, the production and marketing restrictions that have perpetuated what is among the highest rate of chronic poverty in Africa, were even put on the table by the World Bank. Quite simply, the issue of the state and the Party forgoing the ability to dole out

favours associated with the issuance of leaseholds and related licences for the production of tobacco was so entrenched in Malawi's political economy that addressing the issue would have brought into question the entirety of legitimacy of the country's leadership. Consequently, a decade of adjustment failed to address the fundamental issues.

We thus have a case where the lack of political pluralism in a repressive political context, coupled with a posture of successful accommodation with the international financial institutions on issues such as meeting budget deficit targets and other macro-reforms, have left the fundamentals of the political economy unchanged. Indeed, marginal reforms have been made in Malawi's economy. These have even occurred in agriculture. However, many such changes, such as condoning the private trade in maize, or even the isolated and not very meaningful efforts at land registration, have been half-hearted. More specifically, take the issue of liberalization of grain marketing. The government's rule that private traders apply for licences, that the activities of private traders be limited to specific market sites, days of the week, and even hours of the day, clearly reduced the meaningfulness of reforms. These constraints were further reinforced by the reality of a lack of private storage facilities, transportation, and access to credit, which in combination were barriers to entry and efficient operation of traders.

As the process of reform of agricultural marketing continues, a number of important issues arise. For example, the marketing parastatal was supposedly charged with retaining a role as the buyer and seller of last resort. It is difficult to see how these functions could have been served without some sort of state subsidy. This is especially true when meeting localized maize shortages, especially in more remote areas, would inevitably have high costs. But perhaps more challenging were simply the technicalities of operating the type of price stabilization system envisaged. All of this suggests that there is a need to reconcile the differences between ideal and realistic expectations as to defining the new role of government in a market-oriented economy.

The brief recounting of the process of disengagement of the state in the four countries shows considerable variability, both in terms of commitment and consequences. Guinea with its rapid pace of reform is contrasted with Tanzania where change has been much slower. In Malawi, where distortions were less and the state less obvious in its action, meaningful change has been strongly resisted. All of this is to suggest a number of propositions, albeit tentative, that are worth

further consideration. For example, there is some indication that the more predominant the earlier role of the state in controlling markets, the greater the need for, and the more crucial the subsequent appearance of parallel markets and other mechanisms to cope with the state's repression. In this case, disengagement is in one sense more easily managed and accepted since it is simply an acknowledgement and legitimization of the informal institutions that already existed.

The fact that parallel markets and related coping mechanisms had emerged in Africa to compensate for the ineffectual action of the state in rural areas had a few further implications. As the disengagement of the state proceeded, formerly illegal transactions not only came into the open, but seem to have flourished. One need only have visited many African capitals prior and subsequent to reform to witness the astonishing growth of commercial activity, and the fact that markets once empty were now filled with every type of consumer good imaginable. While the same is true, albeit less dramatically so in rural areas, the fact is that at least in terms of commercial activities, the private sector has responded swiftly to the new-found freedoms it enjoys.

This of course implies greater incomes for traders and entrepreneurs engaging more freely in commercial activities. In addition, the greater availability of consumer goods also encourages rural producers to generate a surplus. The lack of such goods had been argued in both Tanzania (Bevan *et al.*, 1989) and Mozambique to be a serious constraint to increasing output.

At the same time, removing state-imposed impediments to trade, and thus legalizing parallel markets, will lower transaction costs. This will generally benefit both consumers and producers alike, although not always equally. As for consumers, lower prices for open-market grain, for example, were observed in Guinea and Tanzania commensurate with reforms. This benefits the urban poor, as well as a large number of rural poor who tend to be net consumers of staple foodgrains. The same is expected in Mozambique, if the government continues to loosen the reins on access to foreign exchange, import controls and domestic food marketing.

With regard to producers, not only will lower transaction costs tend to have a beneficial impact on rural incomes, but it is reasonable to expect that the incomes of rural households will increase as adjustment shifts the terms of trade in their favour. For example, as the overt taxation of farmers in Guinea and Mozambique has been reduced, the farmers benefit. On the other hand, the slow pace of change in

Tanzania has impeded the rate of increase in rural incomes, while the case of Malawi is a perfect example of how the continued state interference in land and product markets is further marginalizing the chronically poor smallholders.

The strong indication that the elimination of state controls and rationing has brought about the flourishing of commerce, is indeed encouraging. So too are the early indications of increased production and exports in countries like Guinea and Mozambique which have taken important steps to restore producer incentives. But two questions remain. First, who are the losers from state disengagement in Africa? While the answer is once again context-specific, it is clear that the impact of state disengagement on various income groups is often not what it first appears. A great deal of concern was voiced, for example, over the market reform to reduce the smallholder fertilizer subsidy in Malawi. In practice, however, a large portion (estimated to be between 24 and 50 per cent) of the subsidized fertilizer is in fact leaked to estates, with the remaining virtually all concentrated in the hand of the farmers with larger holdings. Likewise, the concern raised over the poverty impacts of removing the official price of rice in Guinea, or maize in Tanzania, neglected to recognize the rationing and consequent rent-seeking that accompanied these subsidies. The fact is that if consumer subsidies were in fact universal, thereby benefiting the poor in absolute terms less but in real terms more than the rich, they would warrant some support for their continuation. But the cases reviewed in this chapter suggest that universality did not apply for most subsidized products or services, but rather the rich benefited more in proportion to their incomes as well as in an absolute sense. Thus it is the rent-seekers, who have so successfully perverted and exploited the state's interventionist role in the economy, that are the biggest losers of reform.

The second and more pressing question is whether simple disengagement of the state will suffice to foster sustainable and rapid rates of growth. While there is strong evidence that the absence of the state would be better in several areas of economic activity, there nevertheless remain appropriate areas for state involvement in promoting economic growth. These actions have heretofore either been neglected or not well understood. For example, legitimate roles in terms of agricultural research, market information collection and dissemination, extension, targeted transfers to the poor, infrastructure development and maintenance, and so forth, need to be assumed by the government. The challenge, therefore, is to transform the role of the

state into performing these types of appropriate tasks efficiently, and with limited corruption.

The need for redefining the role of the state perhaps faces no greater challenge than in identifying and financing 'crowding-in' investments, that encourage complementary investments by private sector agents. This is especially crucial since economic reform in Africa has met with little discernible success in fostering any form of large-scale capital investment by the private sector. While part of the reason might be the general tightening of credit, another equally significant reason might be that there is a pervasive distrust of the state, and uncertainty about its future actions. Political instability is certainly a major problem in countries such as Guinea, Malawi and Mozambique, where radical short-term changes in government, and consequently policy, are quite possible. But perhaps more problematic is that there is uncertainty of the future path of reform in countries like Tanzania and Malawi, or its sustainability in countries like Guinea and Mozambique. This suggests that sustainability and clarity as to the pace and direction of state disengagement is extremely important, although in practice the process of reform has proved to be extremely unpredictable throughout Africa.

Many of the appropriate tasks and roles for the state in fostering growth outlined above do not involve direct regulation of production and hence do not inherently generate rents. In fact, reorienting the role of the state to such activities would mean that rents are greatly reduced. This is nowhere more apparent than in the case of state and parastatal employees who will lose jobs and attendant privileges. In the context of adjustment, however, along with the need for retrenching unproductive and redundant workers, and eliminating access to special subsidies, there has been the recognition in countries like Guinea and Mozambique of the need to raise public sector wages for those who remain, despite the importance of fiscal restraint. However, higher wages for state workers that remain will not compensate those who lose from the abolition of rents that will occur concurrent with the fundamental institutional change. Therefore, reforms leading to reduction of rents have been strongly resisted. This is especially so since it is inevitable that lower living standards will result for a segment of the urban population that has provided support for the regimes in power.

A related issue is whether the legitimization of many parallel indigenous institutions can alter the balance of economic power so as to induce further institutional change and alter the behaviour of the state to coincide with the appropriate roles outlined above. Roe

(Chapter 5, this volume) has suggested that changes in the distribution of income can lead to institutional reforms by changing the underlying political alliances. However, it is difficult to paint a clear picture of the pattern of distributional changes in Africa following adjustment. For instance, before adjustment, large producer–consumer margins implied significant transfers to both black marketeers and civil servants. While these margins have now declined, total commercial activity has increased, benefiting traders. Many of these traders are probably those previously engaged in extracting rents through diverting goods from official to parallel markets. Likewise, and ironically, external support in the form of adjustment loans and other donor assistance may help maintain the status quo and is relieving the pressure for more rapid institutional reforms. It is thus not obvious how and to what extent adjustment is leading to a new distribution of income that will accelerate the breakdown of the former political alliances. Nonetheless, it does seem fair to conclude that adjustment is helping to legitimize and presumably raise incomes of those engaged in 'informal' activities, as well as the rural smallholders, both of which have traditionally been underprivileged and disenfranchised. It may not be too long, therefore, before this is translated into increased incomes and political power, as the undermining of the legitimacy of governments derived from the urban elite may create political change. As a matter of fact, calls for multi-party systems have become much stronger since the onset of adjustment in many countries, and Guinea, Mozambique and Tanzania are among those that are making tangible progress in that direction. It might be the case that political change is in fact a necessary prerequisite for real institutional reforms, and Malawi is a good case in point.

CONCLUSIONS

In this chapter we have looked at the emergence and decline of the state in four countries in sub-Saharan Africa. The countries chosen were diverse, as indicated by their natural resource endowment, their location, the role that exogenous factors played in their economic performance, and most important, the policy-making process. Nonetheless, a number of common threads emerged which serve as the basis for making some tentative generalizations.

The harmful effects of state intervention are difficult to contest. In the cases of Guinea, Mozambique and Tanzania, the state assumed an

active role in organizing and distributing production. Whatever market structures that were in place at independence were not perceived by the emergent states as an adequate basis to build a strong economy and achieve espoused objectives of growth with equity. This led to the emergence of the state in all aspects of production and marketing. In turn, the nature of the involvement contributed to a virtual collapse of the formal sector of the economy. One could reasonably argue that the greater the state involvement in the economy, the worse the legacy. Malawi, the only country where the socialist ideal was not espoused and did not result in the complete reorganization of the rural sector, in fact, was the most successful economically. But even there, the rules and regulations of government production and marketing were counter-productive to growth and equity.

The state's failure does not come as a surprise for those equipped with the wisdom of hindsight. However, we must put the interventionist policies in the context of the nationalist movements, with their socialist ideals and rhetoric, coupled with the belief of development economists at the time that the state had the ability to effectively and actively intervene in the economy. The repression of the market and indigenous institutions and structures, and the state assuming the responsibility for everything from where people live, to who gets access to what land, to the provision of inputs and marketing of output was thus a mix of reaction to the frustration over the exploitation of colonial powers, and at the same time viewed as a valid approach to rapidly transforming and modernizing the economy.

In practice, rent-seeking and corruption became the rule of the game. The state in essence existed to perpetuate itself, even if it be at the costs of economic efficiency. The path chosen by the political elite was difficult to change radically, but easy to pervert, especially when bureaucrats became the powerful interest group that redefined the state roles in order to generate rental incomes. At the same time, these self-serving interests blocked efficiency-improving and redistributive institutional change through their attempt to control the surplus and gain access to rents. This resulted in economic inefficiencies and technological stagnation, which on balance was not as detrimental to the elite who were the beneficiaries of the rationing systems, untargeted subsidies, privileged access to foreign exchange, and so forth. Instead, the poor, especially in rural areas, paid the highest price for state intervention.

In response to the failures of the state, the neoclassical critique of the experience in Africa (and elsewhere) during the 1960s and 1970s

assumed the posture that the less government intervention in the economy the better, that all would be well if market forces were left unencumbered. This viewpoint is generally overstated, albeit much less so in Africa than elsewhere. Indeed, it is likely that economic performance and welfare in Africa would have been better simply if government had assumed a lesser role. This we would argue even if market failures had occurred in the absence of government intervention. We would also agree with Bauer (1984) that the bureaucratic failure observed was worse than any market failure that would have occurred with a hands-off policy.

However valid this assertion, it ignores some basic truths in terms of what it will take in the future to generate sustained and rapid economic growth in Africa. First and foremost is that government has an important role in guiding economic growth and fostering institutions that promote increased productivity. Similarly, it would be facile to suggest that this role ends with assuring that prices are right. Prices alone cannot induce the types of innovations required for technological progress. Instead, the need for costly and lumpy investments in agricultural research, infrastructure, human resources and related areas go beyond what markets alone can signal. Likewise, markets cannot be relied upon to protect the environment, at least without considerable creative legislation that shapes the structure of incentives to private-sector users and abusers of natural resources. The case for government intervention is especially strong in rural Africa where large investment projects need to be financed, and new markets (i.e. for non-traditional exports) need to be identified and developed.

Even if market failure was not a serious problem in the period prior to the rise in state control, or after these controls have been or will be relaxed, markets themselves inevitably engender their own sort of rent-seeking that would probably continue to redistribute incomes to those already in positions of power. Thus, as we examine with horror the predatory state in Africa, we should not rush to suggest that the unfettered free market contains all the solutions to Africa's developmental disasters. Rather, we must move synchronously to enhance the capacity of the state, recognizing the complementarities, for example, between private and public investment. The purpose of state intervention then must be transformed to facilitate the efficient functioning of private markets and guard against their exploitation by rent-seekers and interest groups. In practice, however, this may involve an increase in the size of government in many areas, particularly in agriculture and human resource development. That is,

in agriculture, the small amount of resources previously dedicated to achieving the distorted pre-reform objectives, which proved not to be enforceable, will likely need to be increased to contribute to moving producers closer to the production possibility frontier through promoting technological advances and increased technical efficiency. Likewise, building the social and physical infrastructure that is prerequisite to development of human capital will not come cheap and will require that the public sector make such a priority.

The most difficult challenge facing both governments and donors in Africa is how to foster and build on indigenous institutions which have evolved mostly in response to local market failures and conditions. There seems to be a vast technological distance between indigenous and western institutions, and it is not clear whether institutional development should or could jump-start from one extreme to the other, rather than evolve slowly. Considering credit, for instance, it is clear that the institution of rotating savings and credit association is very different than that of a western-style bank. There must be a sequence of credit institutions that evolve in moving from the former to the latter. The challenge will therefore be to slowly build upon the small indigenous systems (as has been done successfully by, for example, the Korean migrants to the US), rather than move rapidly to more complex and technologically demanding systems found in the west.

Structural adjustment has made only tentative steps in legitimizing and supporting the traditional institutions alongside the formal ones. This progress has by and large been in response to the recognition that the pre-adjustment era of economic crisis was basically a consequence of forced institutional change, which is now widely recognized to be wrong. It also demonstrated that top-down development cannot succeed. Given the disastrous experience of the past, creating the conditions for speedier evolution of indigenous institutions needs to be paramount on both the agenda of a newly framed government mandate and the international institutions that legitimize and support their action.

Notes

1. The authors would like to acknowledge that the underlying support for this research is the Cooperative Agreement between the Cornell University Food and Nutrition Policy Programme (CFNPP) and the Africa Bureau of the US Agency for International Development.
2. The data and specifics that follow in the remainder of this chapter are based on the authors' previous research, as discussed in the following sources: Alderman, Sahn and Arulpragasam (1991); Arulpragasam and

Sahn (forthcoming, 1991); Sahn and Arulpragasam (1991a, 1991b), and Sarris and van den Brink (1993).

3. Guinea's GNP per capita of US$430 in 1989 is nearly 2.5 times that of Malawi, with a GNP per capita of US$180. The per capita GNP figures for Tanzania and Mozambique are US$130 and US$80, respectively.
4. This experience was based on David Sahn's trip to Mozambique in October 1990.

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16 Market, State and Civil Organizations in Latin America beyond the Debt Crisis: The Context for Rural Development

Alain de Janvry and Elisabeth Sadoulet[1]

The relative roles attributed to the market, the state and civil organizations can be used to characterize alternative development strategies. The Latin American experience is particularly interesting as it reveals major swings in this balance. While the liberal period between 1850 and 1930 gave preponderance to the role of the market, the global economic crisis of the 1930s and the post-Second World War reordering put into place a new development model that attributed a major role to the state. This was the period of strong populist and authoritarian governments pursuing catching-up strategies in the framework of import substitution industrialization (ISI) and the welfare state. The gradual exhaustion of ISI, ideological shifts, and the responses to the debt crisis put an end to this model and pushed Latin America into a second period of liberalism, with extensive descaling of the size and role of the state, opening of the economy, and a gradual shift to popular democracy. In some cases, economic liberalization preceded political liberalization (Chile, Argentina, Uruguay and Mexico) while in others political liberalization came first (Brazil, Bolivia, Ecuador, the Dominican Republic and Peru), putting into place transitional democracies which had to deal with stabilization as a first test of their resiliency.

With most Latin American countries slowly coming out from the depth of the debt crisis, and thus recuperating the possibility of looking

beyond the short-run management of foreign exchange and inflationary crises, a new balance between market, state, and civil organizations is also emerging. It is the characterization of this emerging balance which we pursue in this chapter, tracing out its implications for rural development. To do this, we first analyse the economic and social transformations of Latin America during the last decade. We then characterize the changing roles of the market, the state and civil organizations, and the nature of the balance between them. Finally, we derive from this implications for a renewed effort at rural development.

ECONOMIC AND SOCIAL ACHIEVEMENTS OF THE 1980S

Stabilization and Adjustment: Differential Performances Explained

While the economic shock was largely similar across countries, economic outcomes have been vastly different. Looking at the period 1980–89, countries can be classified in three groups with respect to success in stabilizing and renewing economic growth by 1988–89 (Table 16.1). Brazil, Argentina, and Peru (and the Dominican Republic not in the Table) had, by the end of the period, not been able to bring inflation under control. Mexico and Venezuela (and Bolivia) had stabilized in the sense of inflation control, but had not renewed any significant economic growth. Chile, Ecuador, Costa Rica and Colombia (and Paraguay) had all stabilized and renewed economic growth, even if generally at a modest pace. In 1990–91, Argentina and Peru have finally stabilized and Mexico, Argentina and Bolivia renewed modest economic growth.

Countries that have been the most successful at stabilizing are logically the ones where the groups most inevitably hurt by the stabilization package were not excessively large and politically strong and where supply response in a tradables sector could be rapid and significant. This suggests that the key structural determinants of successful stabilization were the following:

1. An initial debt burden that was not too large relative to the capacity to repay. There is here an important difference between the large countries (Brazil, Mexico, Argentina, Venezuela and Peru) which, with extensive domestic markets, had gone further into ISI and which, by 1982, had a proportionately weaker trade

Table 16.1 *Latin America: stabilization and growth, 1980–89*

	Group I Failure to stabilize				*Group II Stabilization and failure to grow*			*Group III Stabilization and growth*				
	Argentina	*Peru*	*Brazil*	*Average*	*Venezuela*	*Mexico*	*Average*	*Colombia*	*Costa Rica*	*Ecuador*	*Chile*	*Average*
Initial Conditions												
Population (million, 1982)	28.4	17.4	126.8	57.5	16.7	73.1	44.9	27	2.3	8	11.5	12.2
Debt/GDP (%, 1982)	24.5	36.7	42.1	34.4	15.6	29.5	22.55	17.5	12.5	30.8	18.8	19.9
Ag exports/GDP (%, 1982)	12	8	12	10.7	6	7	6.5	26	25	11	6	17
Agriculture exports/Total exports (%, 1982)	67	17	43	42.3	0	10	5	68	71	33	27	49.8
Share of labour in industry (1981)	28	19	24	23.7	27	26	26.5	21	23	17	19	20
Government expenditures/GDP (1981)	21.6	18	21.8	20.5	29.6	31.7	30.65	14	21.6	16.7	37.6	22.5
Stabilization policies (Annual percentage growth rates)												
Real exchange rate (1980–88)	8	2.6	−0.7	3.3	2.7	4.8	3.7	5.2	1.1	11.7	6.4	6.1
Central govt. deficit/GDP (1982–87)	−3.5	−8.9	375		45	8.2		−19.5	−6.3	−71.7	−55.1	
Current expenditures/GDP (1982–87)	4.4	−2.3	29.6	10.6	−1.5	−6.7	−4.1	4.6	1.9	−6.7	−5.5	−1.4
Capital expenditures/GDP (1982–87)	−10.6	−4.9	49.1	11.2	−5.4	−8.5	−7	−3	−5.9	−2.5	0.3	−2.8
Money supply/GDP (1982–87)	3.1	−3.8	−0.8	−0.5	−0.7	−3.3	−2	8.6	−3.6	−4.1	−2.8	−0.5
Real minimum wage (1980–86)	2.7	−7.8	−6.2	−3.8	0.4	−8.4	−4	2.2	4.2	−4.8	−8.8	−1.8
Economic outcomes (Annual percentage growth rates)												
Inflation: 1980–8	286	120	186	197	14	78	46	22	26	30	21	25
1988–89	1711	2032	983	1575	57	67	62	27	19	67	16	32
GDP: 1980–88	0.4	1.1	3.8	1.5	0.4	0.5	0.5	2.9	1.9	2.2	2.3	2.3
1988–89	−3.7	−9.6	1.8	−3.8	−0.7	2.2	0.8	3.5	4.6	6.7	8.7	5.9
Agricultural Production: 1980–88	1	2.8	3	2.3	2	1.3	1.6	1.9	2	2.6	2.5	2.2
1988–89	−1.6	2.5	0.9	0.6	−0.3	−3.2	−1.8	3.7	4.4	4	5.1	4.3

Sources: IDB and CEPAL.

sector, and the smaller countries (Costa Rica, Ecuador, Paraguay and Chile – Colombia is the exception as a relatively large country, but then it never stopped gaining access to substantial illegal foreign exchange inflows that limited the magnitude of the needed adjustment) which were much more open. As seen in Table 16.1, debt service as a share of exports of goods and services in 1982 was higher in these large countries – the very same countries that, by 1989, had yet failed to stabilize and grow.

2. A small non-competitive ISI sector and, consequently, a small organized formal labour force, the typical power base of populist forces in Latin America, that would oppose fiscal austerity and trade liberalization. In the successful countries, the share of labour force in industry in 1982 was indeed lower than in the other two groups of countries.
3. A bureaucratic sector that was not too large, itself the by-product of a populist approach to government or of the appropriation of large and sustained export rents, debt accumulation or inflation tax. This sector was to be the main direct victim of reduced government expenditures, current expenditures particularly as they create skilled labour employment. Except for Chile, the successful countries all had a share of government expenditures in GDP which was lower in 1982 than in the other countries.
4. A large share of the economy and a high supply response in the tradable goods sector, in Latin America principally the agro-exporter sector and agriculture for import substitution, both of which could benefit from real exchange rate depreciation and the descaling of ISI. In the successful countries, the shares of agriculture in GDP and of agricultural exports in total exports were indeed higher in 1982 than in the other countries (except for Argentina regarding agricultural exports).

If we inspect the instruments that were used to achieve stabilization, we can see that all countries, successful or not, have used real exchange rate depreciation, restrictive monetary policies and wage repression. The main differential characteristic of those countries which successfully stabilized is in the management of fiscal austerity, sometimes accompanied by an incomes policy (Costa Rica, Mexico). The successful countries have reduced the central government deficit (including debt service) and cut current and investment expenditures as a share of GDP. The measures applied in the successful countries have not, however, been purely orthodox. Complementary wage and

price controls have been effective in reducing inertial inflation and in lessening distributional struggles in the stabilization period, thus enhancing political feasibility (Haggard and Kaufman, 1989).

Continued access to external resources was also important to reduce the burden of stabilization. Chile received ample and sustained IMF support, Costa Rica benefited from USAID assistance as a neighbour to Nicaragua, and Colombia continued to receive foreign exchange earnings from the drug trade.

Beyond the period of stabilization and with the recovery of growth in the successful countries, we observe that real wages started to rise in Costa Rica and Colombia and remained constant in Ecuador, three democratic countries, but that they continued to fall in Chile, as of yet under authoritarian rule (Figure 16.1). All countries continued to apply restrictive monetary policies and strong depreciation of the real exchange rate. Fiscal expenditures gradually recuperated as a share of GDP (Costa Rica, Ecuador, Colombia), but only modestly, indicating a descaling of the role of the state in the economy compared to the pre-crisis period, but a recovery compared to the bottom of the stabilization period.

From a political standpoint, management of the fiscal instrument is more difficult than management of the exchange rate and monetary instruments. While the latter two involve only a few decision variables that are set centrally, fiscal policy involves a wide variety of programmes that are exposed to congressional and public scrutiny, giving the opportunity for intensive lobbying while state autonomy is limited by democratic rule. For that reason, the countries which had the structural conditions identified above – a large formal sector labour force in ISI sectors and large bureaucracies – generally did not have the political power to implement or sustain fiscal austerity, at least not until learning the hard lessons taught by hyperinflation and social violence.

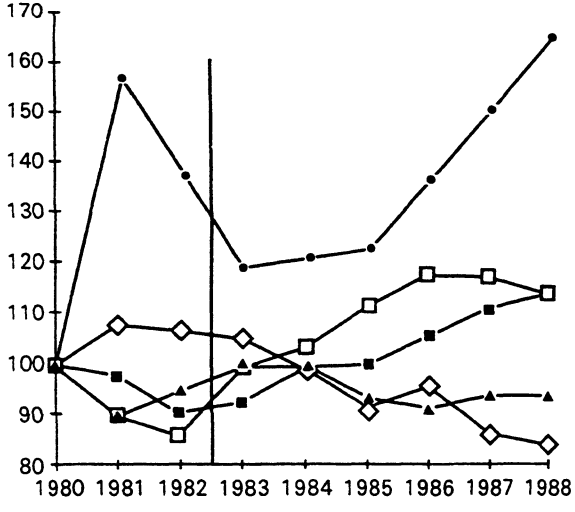
While the initial structural conditions in the economy, the balance of social forces, and external resource flows were important in explaining stabilization and growth outcomes, the political management of crisis response was also fundamental. Observing the successful Latin American experiences suggests at least the following elements of success:

1. A high level of state autonomy under either authoritarian (Chile, Mexico) or democratic regimes. For the latter, it was achieved by confidence in newly elected governments with strong popular

support and broad legitimacy, for example the Paz Esstensoro government in Bolivia, a national hero with considerable prestige, and the Alberto Monge government in Costa Rica elected with landslide popular support (Nelson, 1990).

2. The promise of high short-run expected gains from stabilization, for example the end of the international boycott on Bolivia, expected recognition of model behaviour by the international financial community (Mexico, Ecuador), and immediate gains for the agro-exporter and merchant-financial sectors (Costa Rica, Chile, Ecuador).
3. Careful explanation to the politically relevant public of the nature of the crisis and the expected future returns from initially recessive and regressive stabilization policies, thus inducing that public to (de Janvry, Sadoulet and Fargeix, 1991): (*a*) judge the policy programme against the counterfactual of policy inaction, as opposed to judging it against the pre-crisis standards of living; (*b*) judge the programme with a lower social rate of discount and thus allow for a gradualist approach as well as for a choice of instruments that shelter long-term growth, i.e. maintain public investment as opposed to current expenditures; and (*c*) allow the public to understand causation and thus not place on the government in power the blame for the crisis if the shock had external origins or was created by a previous government (Costa Rica and Ecuador). The Latin American experience shows that successful stabilization can indeed be achieved under democratic regimes – even though the early transitions to neoconservative regimes were all achieved under authoritarianism (Foxley, 1983) – but with the new democratic regimes (Ecuador) facing greater difficulties in sustaining reforms than established democracies (Colombia, Costa Rica).
4. Learning by hardship that bouts of hyperinflation and violence are devastating on the social fabric and on individual welfare for the middle class and the poor (Argentina and Peru in 1991). Having thus experienced with the factual of no stabilization, these hardships were surprisingly effective in helping build a consensus to accept economic austerity by the politically powerful urban middle and lower classes, even though they were to be seriously hurt by these measures in the short run.
5. Politically motivated leakages of welfare programmes such as those dispensed through targeted food subsidies and Social Expenditure Funds. In Mexico, for instance, the targeting of

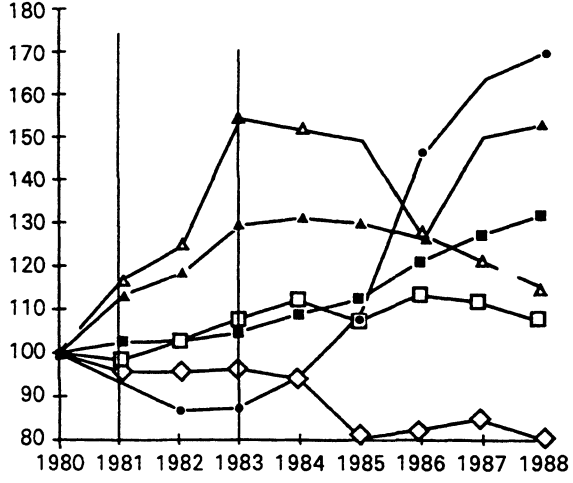
Costa Rica



KEY

- Real exchange rate
- Real wage
- GDP
- Current expenditures
- Money supply

Colombia



KEY

- Real exchange rate
- Capital expenditures
- Current expenditures
- GDP
- Real wage
- Money supply

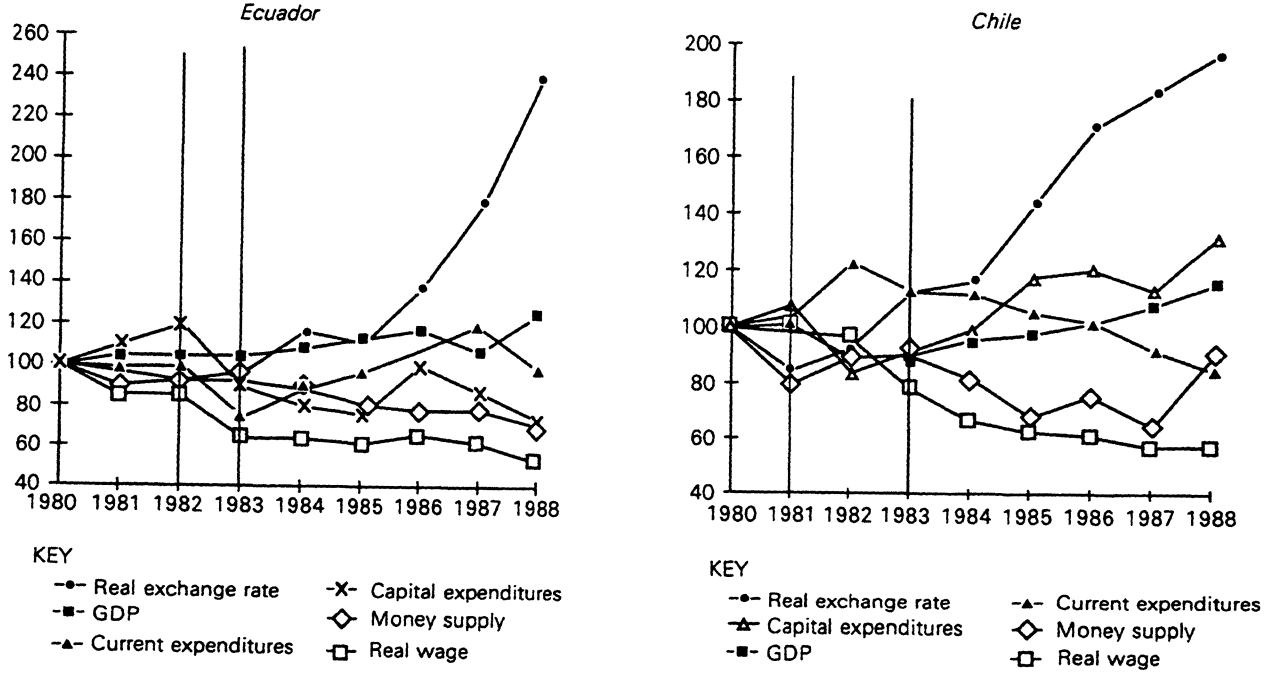


Figure 16.1 *Stabilization policies, Latin America*

food subsidies through the Tortibono programme was partially left to the discretion of the labour unions, catering in this fashion to a political clientele of impoverished workers but not of extreme poor. In Bolivia, similarly, the Emergency Social Fund was broadly targeted, including special assistance to displaced public sector workers, i.e. the new poor which are the seat of democratic political power.

In general, it is clear that Latin America is emerging from the debt crisis, although not from the debt problem, and that growth is being modestly renewed in more and more countries, allowing the myopia of the 1980s to be overcome at last and enabling a reconsideration of alternative medium-terms development strategies.

Social Implications of a Decade of Crisis and Adjustments

The decade of crisis and adjustment has had very high social costs and has profoundly restructured Latin American society. The main social transformations that occurred during the 1980s are the following:

1. A sharp rise in the incidence of poverty. While the number of households in absolute poverty had been declining from 40 per cent in 1970 to 35 per cent in 1980, it rose to 37 per cent in 1986 (Altimir, 1987; Feres and Leòn, 1990). The highest incidence of poverty remains in the rural areas, affecting 54 per cent of the population and showing no decline since 1980. In the urban areas, the incidence of poverty increased sharply, from 25 per cent in 1980 to 30 per cent in 1986. The result is that, for the first time in the history of Latin America, the mass of absolute poverty is no longer rural but urban. Of the total number of poor in 1989, 57 per cent are in the urban sector.

2. A deepening dualism in the types of employment (precarious versus formal) and forms of economic activity (informal versus formal). The peasant and the urban informal sectors have played an increasing role as refuge for surplus population. With the outbreak of the debt crisis, labour absorption in commercial agriculture fell from an annual growth rate of 0.8 per cent in 1950–80 to 0.5 per cent in 1980–89. The peasant sector's rate of labour absorption hardly fell. As a result, the share of the peasant sector in agricultural employment rose from 58 per cent in 1980 to 60 per cent in 1989, stressing the continued importance of rural development for poverty reduction. The role of the urban informal sector as a reservoir of surplus labour was also enhanced by

the crisis. Labour absorption in the formal sector fell from an annual growth rate of 3.9 per cent in 1950–80 to 3 per cent in 1980–89 (PREALC, 1990). By contrast, labour absorption in the informal sector rose from an annual growth rate of 3.9 per cent to 6.7 per cent. As a result, the share of informal sector employment in total non-agricultural employment rose from 25 per cent in 1980 to 31 per cent in 1989. Finally, the small enterprise sector became the dynamic sector of labour incorporation, reflecting the collapse of formal sector import substitution industries and the 'informalization' of the Latin American economies as mechanisms of escaping government controls, mobilizing cheap labour, sharing the burdens of unemployment, and capitalizing on the devalorization of labour relative to capital implied by real exchange rate depreciations. Their share of non-agricultural employment rose from 27 per cent in 1980 to 42 per cent in 1989.

3. A sharp rise in inequality. The main victims of the decade of debt and adjustment, have, in a relative sense, been the urban middle-income groups.[2] Those among these groups who have become unemployed, who have been affected by collapses in real wages, and who have lost access to food subsidies constitute the large group of 'new poor'.

The structural poor have lost less than the middle income groups in relative terms, but even a small loss has been devastating on their welfare and quality of life. Among them the extent of social degradation is truly staggering, even if it has remained relatively unnoticed due to lack of organized violence originating in the slums (Aguirre, 1991). Surprisingly, the poor have retreated to the household instead of voicing political demands. This is in part due to perception of poverty by the poor as being a symptom of individual rather than systemic failure. It is also due to the strong control exercised by governments over popular and labour movements. Emergence of the new poor is not neutral on the structural poor who are being crowded out by the new poor, both on the income and expenditure sides.

The rich, confined to the top decile of the distribution of income, have been able not only to protect themselves remarkably well but sometimes to gain from the crisis.[3] This is in part because international capital outflight allows them to not only shelter their wealth but also to capture speculative gains on the massive real devaluations that followed capital outflight. Three policy initiatives have also created large-scale redistributions of income and wealth towards the rich. One was the transformation of privately held foreign debt into local currency (Chile and Ecuador), shifting to government the rising cost of

servicing the debt as the real exchange rate depreciated (Meller, 1990). The other was the process of privatization initiated in Chile and recently pursued in other countries such as Mexico, Argentina, Honduras and Costa Rica. In most cases, assets have been sold at bargain prices. The result has been massive transfers of wealth, creating a regressive impact on the distribution of income that will only become fully visible when the recessive conditions of the economy are overcome.

4. *The greatest victim of austerity policies has inevitably been the softest part of government budgets, namely their social expenditures, particularly in education, health, social security and public housing.* On a per capita basis, these expenses have fallen in all countries by more than 20 per cent between 1977–81 and 1982–85. This has applied to both current and investment expenditures, with the latter falling by much larger amounts than the former as their cuts meet with less political resistance. Falling current expenditures have usually had devastating implications on the salaries of civil servants and the availability of materials and supplies for the health and educational systems.

A sobering observation is that, even in the countries that have stabilized and restored a modicum of economic growth, the extent of poverty remains as high as it was at the beginning of the decade while the level of inequality has become higher (Castañeda, 1989, on Chile; Trejos, 1991, on Costa Rica). This continued incidence of absolute poverty presses the point that the structural problems of Latin America, with its enormously unequal distribution of assets and skills left unattended during the 1980s as focus was on short-run management of crisis, remain unabated, a powerful source of voice for government intervention, and a challenge for the future stability of democratic regimes.

The Agricultural Sector

Both in the crisis and in the early stages of recovery, agriculture has fared better than the other sectors of the economy. The annual growth rates of value added in manufacturing and agriculture were 6.2 per cent and 3.3 per cent in the 1970s and 0.6 per cent and 2 per cent in the 1980s, respectively, showing a clear reversal in relative growth performances. This has been due to the tradable nature of agriculture and to the carry over of past investments in the decade of generous public expenditures. It is this differential performance of agriculture

that has sheltered the rural poor from the burdens of stabilization compared to urban households. Agricultural exports have been importantly diversified with the rapid growth of non-traditional exports such as fruits from Chile, fresh vegetables from Mexico, frozen vegetables from Central America, and flowers from Colombia. In some cases, rural development efforts have been successful in assisting peasants participate to the boom in non-traditional exports (von Braun *et al.*, 1989).

This relatively better performance of agriculture is, however, precarious. While price incentives have improved in most countries, the aggregate supply response of agriculture to the real exchange rate is significant but small (de Janvry and Sadoulet, 1990; Rao and Caballero, 1990). Supply response depends interactively on non-price factors of a public goods nature, principally public investments in technology, infrastructure and human capital. Fiscal austerity has been disproportionately directed at these investments and agriculture has not received the priority which it deserves as a sector with emerging comparative advantages in the context of changing domestic terms of trade. While shifts to high value-added products is a logical reorientation for agriculture (CIAT, 1991), primary exports and agriculture cannot, however, offer the economic basis for long term sustained growth and employment creation for most countries: these sectors are now too small and not sufficiently labour intensive. Beyond recovery where agriculture has an important role to play, a strategy for growth and welfare must be based on the active search and promotion of internationally competitive sectors beyond agriculture.

THE MARKET: LIBERALIZATION AND REDEFINITION OF POLICY INSTRUMENTS

Liberalization and Regional Integration

There is no question that one of the most momentous and systematic policy reforms has been exchange rate and trade liberalization, particularly in the countries that have more successfully stabilized (Williamson, 1990). Clearly, the philosophy of ISI and large exchange-rate overvaluations are irreversibly part of the past. As Figure 16.1 shows, there have been dramatic depreciations of the real exchange rate in Costa Rica, Chile, Colombia and Ecuador. Basically all countries have introduced explicit crawling pegs or floating exchange rates.

Similarly, on the side of trade, quantitative import restrictions have been significantly replaced by tariffs and these have been homogenized and descaled. Credibility about the irreversibility of these policy changes has been sought through progress in delegating to international institutions control over trade (GATT and the proposed five Latin American regional free trade schemes: NAFTA, Central America, Caricom, Andean Pact and Mercosur) and exchange rate (IMF conditionality) instruments. This has several important policy implications.

The first is that it is important to recall that, historically, no country except Britain has ever industrialized under free trade (Gerschenkron, 1964; Shapiro and Taylor, 1990). Loss of control over trade and foreign exchange as policy instruments requires instead formulation of an industrial policy where non-trade instruments are used to induce emergence of a competitive industry. Politically and administratively, this is clearly much more demanding than use of trade distortions which, at the same time, provided an easy fiscal base. It will involve public expenditures in targeted subsidies and the delivery of specific public goods and services directed at the expected winners. It requires clear identification of the sectors that have dynamic comparative advantages and of effective ways of promoting them without creating rents that cannot be removed once in place. Achieving this clearly places high demands on the developmental abilities of the state (Wade, 1990).

The second is that entering into regional integration schemes can create much more than the expected gains from trade. Attempts at regional integration are of course not new in Latin America, and they have systematically failed. What is new this time is that countries are no longer integrating to achieve ISI in broader but similar markets, but to gain access to the markets of countries at different levels of development, developed countries markets included. As this occurs, integration has powerful implications for institutional change, as countries have to adapt their institutions to those of the most efficient country and delegate many regulatory functions to regional institutions (de Melo, Panagariya, and Rodrik, 1992). More than gains from trade, integration thus creates gains from institutional change.

Finally, regional integration has powerful effects on mental constructs, most particularly on the perceived national survival imperative which integration with more powerful partners suddenly implies. In the Latin American countries where economic interests have historically been highly fragmented by regional differences, portfolio

specializations and huge gaps in wealth, regional integration creates a motive for social partnership that had previously been lacking. Ecuador, for instance, in having to face to Colombia and Venezuela in the Andean Pact – its own giants to the North – was able to engage in a broad corporatist dialogue to adjust many of its economic institutions, achieving a social partnership unobserved before. More than gains from trade, regional integration thus triggers cooperation and the potential achievements of a variety of social gains that had been held in check by prisoner's dilemma behaviour.

The Key Role of Foreign Direct Investment

The single most important determinant of growth recovery is the resumption of private investment. An important complement to the stabilization-liberalization package has thus been to try to attract foreign direct investment (FDI) in order to compensate for the lack of access to international financial capital and for the short-run liquidity crisis that seriously constrains credit availability and domestic private investment. This liquidity shortage originates in the tight monetary policy made necessary to control inflation and maintain a highly depreciated real exchange rate. Indeed, while maintaining a depreciated real exchange rate is needed to give incentives to the tradable sector in the context of trade liberalization, this may be compromised by the inflation induced by rising prices of all commodities not previously protected, and in particular non-competitive imports, unless counteracting tight monetary and fiscal policies are applied.

Another reason to call on FDI is to make up for the loss of control over trade policy instruments to stimulate infant industries, as implied by trade liberalization. FDI offers the possibility of skipping the maturation period to achieve economies of scale and learning-by-doing as it transfers skills, management and technologies from already mature investments in other countries.

Finally, it is evident from the data on the falling share of Latin America in international trade that the continent has been marginalized from the technological dynamism of the last decades. Given the state of disarray of the educational and research institutions, competitive integration in the world economy and access to the technological advances in electronics and biotechnology will require close cooperation with international capital, United States and Japan most particularly. The *maquiladora* system in Mexico, which symp-

tomizes this integration, is dominated by electronics and electrical equipment, clothes and textiles, and automobiles, in all of which advanced technology is fundamental for success (Castells and Lasena, 1989). FDI for both the export and the domestic markets under open economy conditions is thus essential for technological catching-up.

Calling on FDI is however necessary but not sufficient. In the same way as countries have historically never caught up under free trade, neither have they done so on the basis of foreign capital alone. Sources of FDI are fickle and highly sensitive to a fragile political situation. FDI needs to be complemented by domestic capital, including repatriation of the very large amounts of flight capital. Credibility in the reform package and complementarity with public investment are essential for this purpose. As told by the Taiwanese experience, acquiring technology and management techniques through foreign investment, and building domestic linkages with these investments, require aggressive behaviour by local entrepreneurs and timely developmental initiatives by the state, both of which are serious challenges for Latin America, given the limited capacities of local entrepreneurship and bureaucracies.

Liberalization and Agriculture

The impact of liberalization on agriculture has been dramatic. In analysing how the Latin American agricultures are relating to international markets, it has been observed that indirect distortions for agriculture (the exchange rate and import substitution industrialization policies) had overwhelmingly dominated direct distortions through the 1970s and the early 1980s. The main conclusion of the Krueger, Schiff and Valdés study (1990) was thus that agricultural policy was really not made by the ministry of agriculture, but by the central bank and the ministry of economics through broadly distortive instruments. Lipton's urban bias is based on the same logic (see Chapter 13). This conclusion has been turned upside down with stabilization policies and the new economic orthodoxy which have largely eliminated exchange rate overvaluations and large-scale protection to industry.

We calculate in Figure 16.2 the direct and indirect price distortions for agricultural commodities at the farm level in Argentina, Brazil, Chile, Colombia, and Mexico between 1960 and 1987. The indicators are calculated as:

$$\text{Total } RRP = \text{direct } RRP + \text{indirect } RRP = \left(\frac{p^d - \hat{p}^b}{\hat{p}^{b*}}\right) + \left(\frac{\hat{p}^b}{\hat{p}^{b*}} - 1\right),$$

where RRP = real rate of nominal protection,
p^d = farm level producer price,
$\hat{p}^b$ = estimated farm level reference price at the official exchange rate,
$\hat{p}^{b*}$ = estimated farm level reference price at the equilibrium exchange rate.

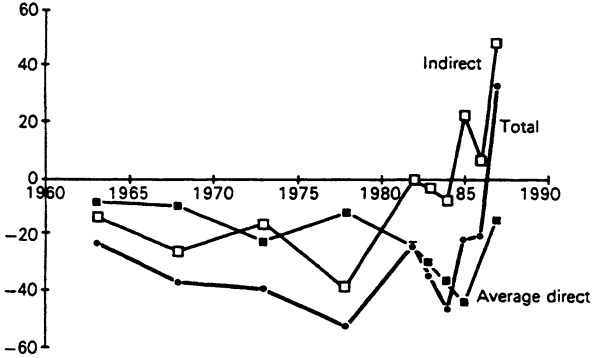
The results clearly show how the dominance of indirect taxation in the 1960s and 1970s has been replaced by indirect subsidies for agriculture in the 1980s. While, between 1980 and 1985, depreciation of the real exchange rate was generally compensated by increased direct taxation, after 1985 direct taxation has been reduced. As a result, the taxation on export crops has generally fallen and import tariffs on food crops have been increased. Price-wise, agriculture has thus benefited on both sides, giving important opportunities for that sector to play a role in economic recovery, if appropriately assisted by public investment and structural policies, and setting the stage for potentially effective rural development strategies.

THE STATE: DEMOCRACY AND PRESSURE GROUPS

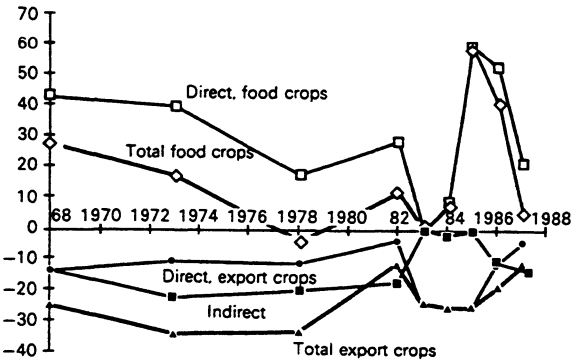
Credibility and Overshooting

Either by ideological choice (Chile) or in response to external shocks, a new economic orthodoxy has clearly emerged that has been largely accepted by the governments in power throughout Latin America, whatever their ideological bents. In some cases (Argentina, Peru), this has emerged after having experimented with alternative approaches, including heavy doses of populism, or seeking an expansionary adjustment and witnessing the extraordinarily destructive consequences of hyperinflation and social violence. In others, this has come as part of conditionality lending in spite of protracted resistance and repeated delays in amending fiscal expenditures, pushing the economy to the brink of collapse and increasing the magnitude of the recessive impact of stabilization (Dominican Republic).

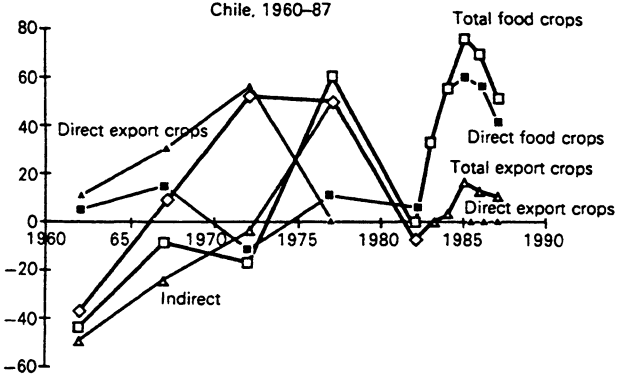
Argentina, 1961–87



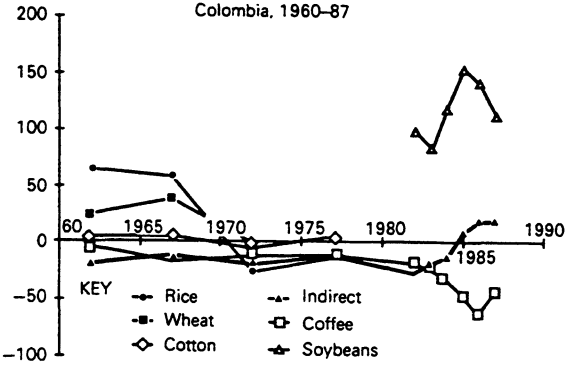
Brazil, 1968–87



Chile, 1960–87



Colombia, 1960–87



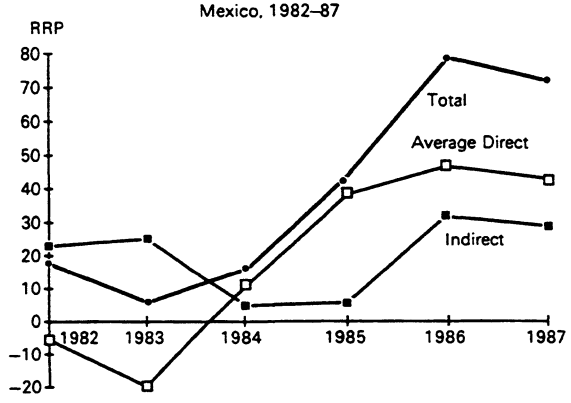


Figure 16.2 *Indirect and direct price distortions, Latin America*

Significant progress has been achieved in increasing the efficiency of policy-making by gaining credibility through delegation and commitment. Delegation to bureaucratic organizations (e.g. autonomous central banks) and regional or multilateral institutions (GATT, regional integration) reduces discretion in policy-making at the gain of greater credibility. Delegation has increasingly been embodied in the emergence of a new group of technocrats, a move that started under bureaucratic-authoritarianism in countries pursuing neoconservative reforms (Collier, 1979; Foxley, 1983). The result has been to remove from short-run political struggles the management of some of the fundamental instruments of economic orthodoxy, in particular monetary, foreign exchange, and the broad levers of trade policy. Commitment devices include abiding by the new democratic rules, where political platforms can be held against performance for the permanence in power of politicians and political parties.

In a first phase of stabilization and adjustment, it is clear that there has been considerable overshooting in policy adjustment. This has been both in reaction to the excesses of the past that have cumulated in price distortions, fiscal and foreign deficits, licensing and regulations, corruption and the appropriation of rents, and direct involvement of the state in productive activities of extraordinary pervasiveness and magnitude, and as part of a 'cold turkey' strategy of confidence-building in demonstrating commitment to the discipline of the market. In particular, attacks on the state and descaling of its role in economic and social affairs have been extensive. While rational, this overshooting had high costs as it resulted in large and indiscriminatory contraction of absorption and social expenditure programmes, instead of seeking greater supply-side adjustment (Helleiner, 1990), the smoothing of consumption, defining and managing a strategy of transition to state disengagement, and defining explicitly the new constitutionality, rules and scope of state intervention.

In other instances, however, overshooting in descaling of the state has had the purpose of using the context of crisis and the legitimacy of conditionality lending to get rid of surplus employment in the public sector, to combat entrenched rent-getters, in the organized labour sector in particular (Argentina, Mexico), and to dismantle ineffective institutions before eventually reconstructing alternative ones fit for the new roles of the state. Increased state autonomy that accompanies crisis management can indeed be used to implement reforms that could not occur in normal times (Nelson, 1990; Haggard and Kaufman, 1989).

Democracy and the New Institutionalization of the State

Politically, Latin America evolved from 'oligarchic democracies' in the liberal period, to populist and bureaucratic-authoritarian regimes in support of import substitution, and finally to popular democracies in the context of the debt crisis. Some countries have had longer experiences with democracy than others, but these democratic regimes were often either authoritarian regimes in disguise (Mexico) or modern extensions of oligarchic democracies (Colombia).

The shift to popular democracy was the outcome of the emergence of an urban middle class built on import-substitution industrialization, the rapid expansion of non-tradables under commodity and debt booms, and the public sector, which created the most rapidly expanding source of white-collar employment in countries where the state captured large export revenues (oil in Mexico, Venezuela, and Ecuador), accumulated foreign debt, or was financed by a sustained inflation tax. In all cases, this new middle class was clearly built on a precarious economic basis. Not surprisingly, the decade of the 1980s was devastating for it. The 'new poor' are largely formed by contraction of employment and falling real wages in those sectors. From the standpoint of consolidating the transitional democracies (Ecuador, Peru, Uruguay, Argentina, Brazil, Paraguay and Bolivia) this could not have occurred at a worse moment. The crisis implies that the state has very little to deliver and that it cannot accommodate the demands for economic shelter voiced by its most important supporters. As a result, the yet remarkably resilient transitions to democracy, Haiti excluded, largely remain to be consolidated, but the grace period to achieve this consolidation, which is extended by international support to liberalization and privatization, may only last for a few years if there is no rapid economic recovery.

Transitional democracies create an environment that is prone to policy weakness, policy instability, and policy reversals. Emerging from oligarchic and authoritarian polities, political organization tends to be on a corporatist basis. Typically, these organizations are highly fragmented, exclusive of large segments of the population, and better prepared at defensive than proactive initiatives. By tradition, they seek direct participation in government instead of delegation of representation to elected officials. The result is that the Latin American societies tend to be hyper-politicized and the executive overburdened with predatory demands. Atomization and direct participation make it difficult to achieve either an hegemonic block or national consensus.

The recent shifts to popular democracy have institutionalized populist demands on elected representatives, both presidency and congress. The result is a sharp clash between the populist exercise of democratic rights and the corporatist management of policy-making. With the executive acting as the main policy actor, and the economic team frequently divided by direct corporatist representation, policy weakness tends to follow. Inability to negotiate policy initiatives with a populist congress and under new democratic rules that are not fully established results in policy-making with little dialogue. The consequence is a tendency for sharp policy conflicts, weak policy implementation, and eventual policy reversals. Transitional democracies have indeed had substantial difficulties in staying the course of policy reforms, achieving as a result incomplete stabilization and weak recoveries (Grindle and Thomas, 1991).

From Overshooting in State Contraction to Redefinition of a Strong State

There is, as Fishlow (1990) observed, a new consensus holding across Latin America that the size and role of the state needs to be reduced, be it only because fiscal deficits can no longer be covered by foreign debt and because fiscal austerity, after experimenting with alternative approaches, has proved to be the surest remedy to stabilization. There are, however, several good reasons why the state will not wither away in Latin America, even if there is short-run retrenchment. This is because the rising political power of pressure groups – originating in both the organization of civil society to achieve social incorporation and new rules of democratic access – creates a strong voice for the re-emergence of an active state. The origins of these demands are the following:

1. While more advanced in some countries than in others, the ISI project is far from completed in the sense of converging to ISI-created industries that can be turned into tradables without further protectionism or subsidies. In the small agrarian economies where ISI was hardly advanced (Ecuador, Paraguay, Costa Rica) and in Chile under ideological shock treatment, that sector could be left to the assaults of liberalization without major economic and political costs. This is not the case in the large countries where a considerable industrial base already exists, fruit of more than 40 years of protectionism. In this context, enormous sunken costs and the associated social structure dictate rapid completion of the

project, not its abandonment. As we have argued, substantial loss of control over the exchange rate and trade as policy instruments requires definition of an industrial strategy based on the use of more complex policy tools. For this purpose, a strong and active state is necessary and there will be powerful demands in the corporate sector for the state to assume this function.

2. Latin American entrepreneurship remains weak and insufficiently competitive in non-resource-based activities. This is because entrepreneurs have generally been socialized to the wrong behavioural patterns, seeking higher profits through monopoly positions, policy rents, and cost reduction on the basis of exploitative labour practices as opposed to productivity gains and international linkages. As such, there will be continued demands by the corporate sector for the state to assume an important promotional role in conjunction with corporatist organizations, exemplified by the support of the Chilean government for agro-exporter organizations.
3. The high concentration of economic and political power, the hallmark of Latin American economies and societies, now embedded in democratic rules, will create calls for a strong regulatory role by the state in the market place and effective political rules to confine predatory rent-seeking.
4. Descaling the productive role of the state may not be as promising as announcements of massive privatizations would suggest. While highly attractive in the short run to generate public revenues that can help ease fiscal adjustments, it is a one-shot affair. More important is to reform the policies that are often the causes of losses (e.g. regulations, price controls, and commodity taxes) and to change the incentive structure for managers to perform as effectively as the private sector. In sectors where there are important economies of scale and externalities, continued presence of public enterprises operating under the appropriate incentive structure is thus likely.
5. From an ideological standpoint, the doctrine of neoliberalism is widely accepted as an economic but not a social philosophy. This is due to the tremendous income inequalities that call upon an active role of the state to manage social peace and to engage, to varying degrees, in populist social welfare programmes. The Salinas government in Mexico offers a good illustration of a mix of neoliberal policies and extensive liberalization of the economy with permanence of populist measures to co-opt political support. This

is particularly visible in housing programmes in illegal settlements on *ejido* land around the metropolis. While these lands legally cannot be developed, government tolerance of invasions and allocation of housing by Party brokers are used to reproduce political patronage and control. This is complemented by rent freeze for the middle class and subsidized public housing programmes for civil servants and union workers (INFONAVIT).

6. The extent of deterioration in public goods and services, created by the legacy of a decade of severe fiscal austerity, cannot be underestimated. Recovery will require large-scale investments for the reconstruction of infrastructure, education and public health systems. Voice for this active role of the state will be motivated by the need to enhance the productivity and hence the profitability of private investment, and to deliver health and education to political constituencies.

The question, in the end, is whether the state will be able to assume developmental functions in the tradition of Hamilton and List and the East Asian newly industrializing countries without being perverted by the same clientelistic forces that had earlier blocked imposition of market discipline on import substitution industries and induced populist binges in welfare spendings. The answer hinges crucially on enhancement of the bureaucratic capacity of the state and of its credibility and connectedness with private capital, and submission of the interests of the traditional elites to the growth imperative (Evans, 1989). The fundamental contradiction of the current juncture is precisely that this need for enhanced developmental leadership is being challenged by the switch in policy instruments and by the organization of civil society leading to enhanced activism by lobbies with the power of grabbing policy leadership away from the state. In a period of economic reconstruction, when the restoration of growth and employment is high on the social agenda, demands for developmental interventions may, however, well dominate over predatory behaviour. Pressure groups may thus play an effective developmental role complementary to that of the state.

CIVIL INSTITUTIONS: ORGANIZATION OF THE GRASSROOTS

The rise to power of authoritarian regimes led to weakening or dismantling of the traditional forms of organization under populism

and ISI: the labour unions, the political parties, and the farm cooperatives (Chile). Loss of effectiveness of these traditional organizations induced an extraordinary proliferation of decentralized civil organizations: neighbourhood associations, Christian-based communities, parents' associations, producer organizations, youth clubs, community movements, and a host of 'new social movements' (Touraine), NGOs (Annis and Hakim, 1988), and GROs (Uphoff, Chapter 7, this volume). Because of the context of political hostility in the 1970s and economic hostility in the 1980s where they emerged, these organizations have largely defined themselves as surrogates for what the state and the market failed to offer to their specific constituencies.

In the struggles for the return to democracy, these movements often had important roles to play (Brazil, Chile). And once democracy had returned, they provided a flow of leaders who had sought refuge in these organizations under the authoritarian regime. Transition to democracy, however, creates serious dilemmas for organizations which had emerged to perform against, or in spite of, the state (Hirschman, 1984; Foweraker, 1990). A key question is whether these movements will resist the return to democracy, i.e. whether they will be dissolved by the return of the traditional centralized forms of organization, or whether they will remain and provide new democratic bases for these organizations that will, therefore, more effectively represent special interests.

In some situations, such as the Neighbourhood Committees in Mexico City, a movement that originated in the will of neighbourhoods to take into their own hands the organization of relief and reconstruction following the 1985 earthquake, this political role is well established. In Colombia, producers' associations are notably powerful: the federation of coffee growers (FEDECAFE) not only largely sets the policy agenda for coffee but also directly manages, through export tax revenues, programmes of rural development for the poor in the coffee-growing regions, exemplifying the privatization of rural development. In Chile, the NGOs are an integral component of the democratic government's social programmes, with a public administration (FOSIS) channelling funds to NGOs on a competitive basis (Loveman, 1991). In Brazil and Colombia, NGOs have played an active role in the drafting of the new constitutions. From organizations used for self-help and the voicing of demands for social justice, they have frequently become institutionalized channels for influencing national public policy, thus providing the instruments for social incorporation and participatory democracy.

This, however, raises a host of issues that are yet to be worked out, the primary of which is the relationship between NGOs and political parties. While political effectiveness requires participation in partisan politics, this is not the purpose for which these organizations had emerged and it exposes them to instability as parties' fortunes change. In some countries, governments have sought to gain control over NGOs (Argentina, Peru), leading to the dissolution of many and the incorporation of others. In others, the decentralization of government with greater autonomy given to the regional and municipal levels (Brazil, Colombia, Chile) offers the possibility of interactions that are better tailored to the narrow demands of NGOs. Yet in other instances, grassroots organizations are notably weak or directed at mutual help and not at institutional recognition to place demands on the state.

In any case, the joint happening of proliferation of grassroot movements and NGOs and return to democracy is probably the most important occurrence in Latin America from the standpoint of institutional change. While definition of complementarity between grassroot organizations and political parties is far from resolved, this joint evolution is the most hopeful symptom of a society getting institutionalized, providing what de Tocqueville had identified to be the necessary structural basis for effective participatory democracy (Breslin, 1991).

IMPLICATIONS FOR RURAL DEVELOPMENT

In principle, the conditions for a renewed phase of interest in rural development would appear to be highly promising for an unusual combination of reasons:

1. Descaling of the anti-agriculture bias in exchange rate and trade policies offers peasant households incentives for import substitution in staple foods and for participation in agro-exports, particularly in non-traditional, labour-intensive products (as in Guatemala, see von Braun *et al.*, 1989);
2. Real exchange rate depreciation and the expenditure switching which it induces on the factor side should favour peasant farming since it is more intensive in non-tradable inputs (labour and natural resources) than commercial farming;

3. The technological basis for small farmer production has been improved with research on peasant farming systems, agro-ecology, and social forestry, much of which was initiated by NGOs (Altieri and Yurjevic, 1990);
4. Through learning-by-failing, approaches to rural development have been substantially redefined since the McNamara era of integrated rural development (IRD): The great heterogeneity of rural poverty and the corresponding multiplicity of necessary approaches have been extensively mapped and the set of instruments used in rural development have been greatly diversified, in particular towards non-agricultural sources of income, taking on a regional approach as opposed to an agricultural production emphasis (de Janvry *et al.*, 1988). This includes successful programmes of home-based non-agricultural production and proliferation of microentreprise and rural informal sector activities;
5. Return to democracy and decentralization of governance imply the possibility for peasants to deliver their votes directly and to place on local authorities their own demands for rural development initiatives;
6. The proliferation of grassroots movements and NGOs and their increasing institutionalization in the political process reinforce the bargaining power of peasants at the level of the state and policy-making;
7. The increasing opportunity cost of the ecological and social externalities created by failed rural development enhances the possibility of devising systems of tax and subsidies to transfer resources towards rural development as a competitive social investment; and
8. The end of Cold War geopolitics and descaling of guerilla activities allows both for a greater range of experimentation with alternative approaches to rural development and a decline in insecurity in the rural areas as a limiting factor to rural development, Peru excepted.

In spite of the extraordinary coincidence of circumstances which makes a renewed approach to rural development promising, it is clear that rural development is not high on the political agenda of most Latin American governments. Fiscal austerity and the end of welfarist ideology have led to a sharp loss of resources for publicly funded rural development programmes. This implies that: (*i*) rural development

projects will increasingly have to generate their own resources through the sale of services and the collection of user fees; and (*ii*) public funds going into rural development will have to be competitive with other productive social investments. In addition, rural development, short of addressing the issue of access to assets in a massive fashion, which is beyond the current political agenda of Latin American governments, will have to assume a broader approach than traditional IRD in order to seek the necessary sources of income by looking beyond agriculture.

A considerable amount has been written on rural development and we only point out here some implications for a new approach which directly derives from (*i*) the emerging balance between market, state and civil institutions identified above and (*ii*) the lessons derived from the new theoretical advances in agrarian institutions (Bardhan, 1989) and the political economy of the state (Sadoulet, 1991). These suggest a number of approaches rethinking rural development from the angle of strategic response as opposed to the traditional policy and planning approaches.

From the Angle of Rural Households

1. Democratization, decentralization of governance, and the new scope for lobbying initiatives stress that the cornerstone of rural development is to seek social incorporation of rural households within the new institutional rules. This implies primacy for the promotion of grassroot organizations which must seek to be effective not only at self-help but also at collective action, with the difficult tradeoffs which sustained effectiveness in these two functions imply. Success in this function is, however, essential to push rural development up on the political agenda.
2. With decline of the state as a source of subsidized credit and insurance, rural households need rely for these services on either formal private institutions or the informal sector. The former are often ineffective in servicing peasant households due to lack of collateral, asymmetrical information and costly monitoring. The latter can avoid these problems through face-to-face transactions, but offer high-cost services due to lack of portfolio diversification and high risk in finely segmented markets. Local cooperative organizations which can assume the responsibility of supervision and enforcement of rules are thus essential in mediating access to formal institutions (Nugent, Chapter 8, this volume). In Latin America, as opposed to Asia (Bardhan, 1989) and Africa (Faf-

champs (Chapter 11, this volume), the logic and role of these local organizations remains largely unexplored.

From the Angle of the State and Rural Development Agencies

1. The question of property rights needs to be reopened as it has become increasingly evident that they are fundamental in reducing transactions costs and creating incentives (Lipton, Chapter 13, this volume). Many forms of titling remain inadequate (the *ejido*, state farms, production cooperatives) and the legal right of contractual arrangements (e.g. sharecropping which remains illegal in many countries as a by-product of land reform legislations) needs to be revised. Local land deals, that exploit the decentralization of governance and the new rules of political influence, open avenues to provide access to land in a less grandiose, but also less conflictive, fashion than traditional land reform (Tendler, 1991).
2. Credibility in the management of rural development programmes needs to be achieved via delegation to semi-autonomous agencies with maximal budgetary autonomy. This implies the right of these agencies to levy service fees and local taxes. When externalities are to be internalized to sustain a scheme of taxes and subsidies (e.g. rural development as watershed management programmes), the sustained flow of transfers must be legally committed (e.g. surcharges on hydroelectricity to subsidize reforestation and soil conservation practices). At the receiving end of the transfers, institutions for incentive compatibility and verifiability in the use of subsidies must be designed by the rural development agency.

In general, both the unusually favourable context for rural development and the more effective tools derived from significant progress in understanding the dynamics of rural poverty, the logic of agrarian institutions, and the political economy of reform indicate that renewed possibilities exist to attack rural poverty that should not be ignored by Latin Americans and the international community.

CONCLUSION

As Latin America emerges from the debt crisis, so does a new balance in the relation between market, state and civil organizations. Most

particularly, the role of the international market as the undisputed economic test has been firmly established in a pervasive new ideology, formal democracy has been introduced throughout the continent, and civil organizations have assumed important functions as complements to the market and the state. Policy reforms have been profound and have been generally successful at stabilizing the economies. Whether reforms will stick or not depends on their ability to produce economic gains for a political constituency with the power of opposing the demands for counter-reforms. For this to happen in a democratic context, these gains need to be not only sufficiently rapidly forthcoming, but also sufficiently widely distributed. This is the great challenge for Latin America at the present juncture. For this to occur, the package of policy reforms needs to be fully implemented so it becomes effective, real democracy needs to be introduced to achieve policy stability and a better distribution of net social gains (including through rural development), and external circumstances need to be favourable to renewed growth. Until this is achieved, the extraordinary achievements in policy reform will remain precarious at best.

Notes

1. We are indebted to Per Pinstrup-Andersen, Oscar Altimir, and Eduardo Bustelo for access to information and to Lance Taylor and Nora Lustig for pointed criticisms.
2. In Mexico, the groups that lost relatively the most real income in 1983–88 are in the 6th, 7th, and 8th deciles of the distribution of income (Lustig, 1991). In Ecuador, the groups that lost the most in the 1982–87 period are the medium and high education urban households (de Janvry, Sadoulet and Fargeix, 1991). In Costa Rica, the industrial workers were the main losers in the adjustment period 1980–82 (Trejos, 1991). In Peru, the urban households with the sharpest fall in incidence of adequate diets belong to the 4th income quintile (Abugattas and Lee, 1991).
3. In Buenos Aires, for instance, the share of income received by the lower eight deciles fell while it rose in the upper two deciles, by 25% in the 10th (Bustelo). Between 1980 and 1986, the Gini coefficient for the urban areas of Brazil and Venezuela rose from 0.50 to 0.54 and from 0.32 to 0.37, respectively (CEPAL, 1990).

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17 State–Market–Civil Institutions: The Case of Eastern Europe and the Soviet Republics

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17.1 INTRODUCTION

The transition task facing Eastern Europe and the Soviet republics is monumental in economic, political and socio-economic terms, with commensurate risk posed by unanticipated developments. These risks will be exacerbated to the extent that policies adopted by governments ignore potential important details relating to the transition process. The advice and counsel offered by economists to policy-makers will inevitably fail to take into account certain important aspects of both the design and implementation processes. Moreover, these lacunae can be expected to be more serious when the advice is formulated in the absence of any vision of the transition process as a whole.

Little direct evidence is available on the transition from a central planning communist regime to a pluralistic, democratic market-oriented regime. The clarity that does exist relates to the end points of the transitional process. At one end, the evidence is overwhelming that communism throughout Eastern Europe and the Soviet republics has failed miserably. The extraordinary events of the last two years have left the ideological appeal of the communist political system irrevocably damaged.

At the other end of the transition process, much evidence has accumulated on the prerequisites for achieving the sustainable economic growth of the western industrialized world. These distinctions have led to a vision for Eastern European countries of where each country wants to arrive; unfortunately, the path that should be travelled to get from 'here' to 'there' is less obvious. One most import-

ant task is to develop a market-oriented and anti-monopolization economic structure. Yes, but how? Unfortunately, some individual policies that have formed the basis for successful market economies, if introduced with the wrong timing in isolation from other reforms, can make an inefficient economy perform even worse.

The clues that do exist on designing and implementing a transition path emerge from empirical evidence in both the developed and developing world. This evidence is drawn from countries which differ, not only in the details of their economic policies but also in their underlying constitution and institutional framework, the extent of freedom and liberty, and their entire approach to growth and development. Serious inspection of this evidence reveals a number of lessons that must be kept in mind:

1. The design of the underlying constitution that establishes the guidelines and mechanisms for the 'rules by which rules are made' must be credible;
2. The legal and regulatory infrastructure (LRI) that emerges from the underlying constitution must provide an environment that is conducive to a vibrant market economy;
3. The political-economic configuration must admit a public sector and political agents that are able, for crucial matters, to rise above immediate self-interest;
4. The policies that encourage anti-monopolization forces (privatization, antitrust policy, trade policy and foreign investment policy) must be jointly designed to attain sustainable economic growth; and
5. Sectors which have a comparative advantage must be given every opportunity for achieving sustainable economic growth.

In addition to these fundamental guidelines, the nagging problem of slow growth or even decline in economic growth in predominantly rural economies presents a complicating factor in the timing and design of overall as well as sector-specific policies. And, unfortunately, there is no coherent and well-articulated universal theory of economic development. The consensus from the modern literature on the subject emphasizes tailoring policies and initiatives to the specific cultural, resource and political situations of a given nation. Yet, while sometimes conflicting, the core theories of economic growth can still provide insights which are useful in assessing the role of constitutions,

legal and regulatory frameworks and the political structure in the development process.

There are indeed many theories of economic growth and development. Institutions (Commons, 1934), technical change (Solow, 1957), human capital (Schultz, 1964), infrastructure (Mellor, 1976), economic policy (Balassa, 1971; and Johnson, 1973) and increasing external returns to knowledge (Lucas, 1988) are examples. All of these approaches advance hypotheses for explaining residuals not accounted for by capital and labour in estimated aggregate production functions. For the most part, these theories have taken 'as given' the aspects of national, political and economic systems that are the focus of institutional and constitutional economics (Buchanan, 1989). However, more recently, analysts have begun to pay attention to the issue of sustainability as well as the lessons from development experience noted above. Simply put, they ask what technical, political and economic aspects of economies are responsible for policies and initiatives that can result in sustainable growth at rates that can augment per capita income?

The movement to incorporate institutions and constitutional aspects of political and economic systems in the formal theory of economic growth has been supported by a growing set of empirical results (de Soto, 1989; Olson, 1982; North, 1990; Clague and Rausser, 1991; Williamson, 1991). These results address not only the behaviour of individual agents, but also the organization and functioning of interest groups. For example, economic functions have been dissected to understand the impacts of ownership and control on behaviour, rent-seeking, and the principal agent problems. Complexities of the operations of large multi-function economic units have been evaluated for impacts of associated bureaucracies and communication channels for their behaviour (Williamson, 1985). The incentives in different types of contracts and contracting arrangements have also been systematically explored (Tirole and Laffont, 1990).

Other results associate the political, social and economic conditions with differences in rates of economic growth (Scully, 1988; Barro, 1991; Grier and Tullock, 1989; McMillan, Rausser and Johnson, 1991). All of these avenues of enquiry point to further understanding of policies that can foster economic growth and development. Importantly, they do not provide full explanations for how nations can move from a set of institutions that produces a particular level of civil liberty, for example, to another. They do, however, illustrate the importance of understanding the roles of institutions and constitutions in the growth and development process.

CONSTITUTIONAL DESIGN

For the first lesson, prescription in the case of Eastern Europe and the Soviet republics should focus on the underlying constitution that establishes the guidelines and mechanisms for economic, political and civil freedoms. We must be concerned, for example, with more than simply the rule of law, but the choice of law and the extent of liberty, as well. In this choice, as with all constitutional economic selections, the political-economic landscape, the culture and the customs of the country in question must play a dominant role.

Empirical evidence, not the tunnel vision of some theoretical constructs, has been the foundation for an emerging consensus on economic, political and civil freedoms. This means more than simply adjusting public policies, achieving stability and selling government-owned enterprises in an attempt to set countries off on a path towards broad-based economic growth. Rather, it means creating a vision of an open economy underpinned by an open political system; identifying and removing the obstacles to economic participation (obstacles that have often placed citizens in straightjackets); enhancing the availability and utility of information resources by shaping incentives, thus helping to establish the basic rules of social transactions; encouraging more efficient organization of economic activity in ways that lead to fundamental restructuring of an economy; and fostering institutional frameworks that expand the role of human choice and promote entrepreneurial energies.

The potential impact of constitutional rules can be quantified in terms of the expected transaction costs that arise in pursuing the public or collective interest (Rausser and Zusman, 1992). The selection of a particular constitutional design must address setting the rules by which rules themselves are established: voting rules, law and order, property law and property rights, laws governing exchange, and so on. The transactions costs that arise in pursuing the public interest, by construction, include the wasteful rent-seeking of special interests. At its core, any constitutional prescription (Rausser and Simon, 1991b) must essentially define the degree of centralization, the balance of power, those interests that have access to the policy-making process, the space of issues over which those interests can negotiate, the degree of consensus that is sufficient to conclude negotiations, and the appropriate course if the negotiations break down. To be sure, 'constitution-makers' cannot predict with pinpoint accuracy the response to their choices; rather, they must consider future responses

and understand the crucial relationships between the initial design and these consequences.

The issues of access and authority or admissible coalitions continue to dominate the landscape in Eastern Europe and the Soviet republics. Regional disputes over power-sharing threaten cohesion and impede the economic reform process. In the Czech and Slovak Federal Republic, the division of authority between the federation and the two republics over policy-making and budgetary control remains opaque. This problem is magnified in former Yugoslavia and the former Soviet republics, where reaching consensus on political relations and the distribution of power between the centre and the republics will continue to be a prerequisite for macroeconomic stability and large-scale reforms. In Poland, the 1989 round-table agreements that gave the Communists 65 per cent of the seats in the Parliament's lower house may have more to say about trade, macro-economic reforms, and privatization than any well-designed prescription that is offered for these particular areas of public-sector policy.

The constitutional design of access, the space of issues, admissible coalitions, and default options must have the capacity to identify policies that are robust and important not only economically but, in a fundamental sense, politically. As the Czechoslovakian Minister of Finance, Vaclav Klaus, noted,

> When I first became involved in the reform process in Czechoslovakia, I believed that the design and sequencing of reform could be controlled. Having been a part of the process for some time, I am now convinced that I was wrong.

Clarifying these remarks in a subsequent private discussion, Klaus explained that the process of negotiating a privatization programme involves so many diverse political forces – each with a different private agenda – that even if analysts and a political leadership were in basic agreement on how to proceed in theory, the ultimate outlook of the political process may well bear little resemblance to the leadership's original intentions. The implication of Klaus' remarks seem obvious. It is not sufficient for political reformers to perceive correctly what should be done; they must also be able to control – or at least understand – the process by which the reforms they initiate are transmuted as they navigate the turbulent waters of the political process. This navigation will be set largely by the design of the constitutional framework.

In recent studies, Scully (1988) and McMillan, Rausser and Johnson (MRJ) (1991) have quantified the links between various levels of freedoms and economic growth. Both studies employ the annual ratings available from Freedom House on various countries' political rights and civil liberties.[1] Both studies examine the directions of causality: namely, they distinguish whether political and civil liberties are the result of or the cause of economic growth. The MRJ study specifies a dynamic model which can be used to investigate the link between changes in freedoms and growth. Their research finds that constitutional reforms that enhance freedoms lead to significantly higher economic growth, but only after an initial period of decreased economic growth. Thus, while there is a payoff to constitutional reforms, it is a reward that accrues to those countries which are patient enough to persevere through the early, costly years of reform.

The MRJ study used annual data from 56 countries (both developing and developed) over the time period 1973 to 1985. As revealed in Figure 17.1, the effects of civil liberties reforms on economic growth are quite dramatic after a period of five years. This linkage has a far larger impact than changes in a number of conventional economic variables. In particular, to achieve the same impact on economic growth that a reform of civil liberties from a rating of 6 to a rating of 3 would motivate, an annual increase in the capital labour ratio of $1276 (US) would be required. Moreover, although political liberties have little direct impact on economic growth, probit estimates of the duration of reforms in civil liberties reveal that political rights are important in sustaining civil liberty reforms. Accordingly, the indirect effect of reforms in political rights on economic growth, through the effect of sustained reforms in civil liberties, is quite positive.[2]

Democratic pluralism can and does provide an important discipline in the performance of governments and officials. Democratic pluralism means a political and legal system that allows citizens to assemble and to speak out against and remove from office governments that do not serve their interests. Moreover, it means protecting their human and civil rights so that they can perform these responsibilities. Unless one is willing to believe that politicians and bureaucrats are inherently benevolent and wise, democracy is ultimately necessary for successful economic performance. In the final analysis, elections allow citizens (who may on occasion be confused about cause and effect) to replace inept and corrupt officials and governments that have pursued failed economic policies. An open polity may be the single most important

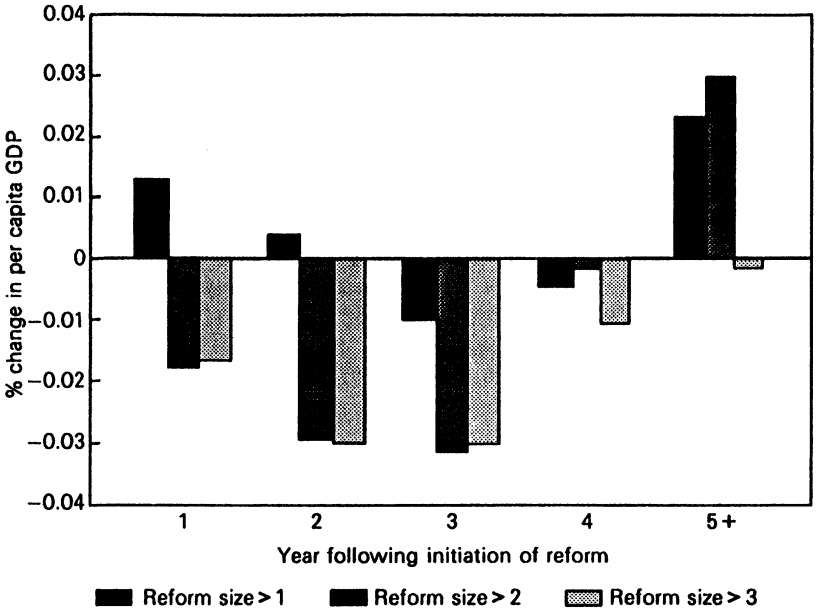


Figure 17.1 *Effects of civil liberties reform*

underpinning for an open economy in the sense that diffusion of political power, ease of entry and representation in the political arena by alternative economic factions, the fair rule of law, and clear limitations on the powers of and access to governmental officials all facilitate the growth of decentralized and private markets. Productive economic reforms and capitalism flourish best in an climate of freedom and diffuse political power. In turn, diffuse political power is alive and well in a world of ample mobility and widely diversified asset portfolios (Rausser, Foster and Gray, 1992). Operational freedoms, of course, depend on whether or not the general population respects the constitutional rules. Rules, or for that matter rules by which rules are made, only influence expectations and constrain behaviour to some degree. It has been argued that 'No constitution can be effective without the support of at least a majority of the electorate' (Bennett and DiLorenzo, 1984, p. 226).

17.3 LEGAL AND REGULATORY INFRASTRUCTURE (LRI)

Constitutional reform is a necessary, but not a sufficient condition for protecting and enhancing political, civil and economic rights. A judiciary must be designed that reinforces the constitution in a reliable, responsible manner, securing political, economic and civil rights. Clearly, legislation alone cannot create a favourable environment for enhancing resource allocation and entrepreneurial initiative; there must also be mechanisms and designs for infusing confidence in the underlying constitution and the rules by which rules are made. The three pillars of the legal system underlying every market economy lie at the core of any viable LRI: security of private property, enforcement of contracts and assignment of liability for wrongful damage.

One of the striking features of many developing countries is that LRI mechanisms are designed to protect monopoly, inefficiency and corruption. Mechanisms required to enhance credibility, confidence and market efficiency are ineffective or absent. Citizens not sharing in the locus of political authority have little confidence that their property is secure; that their legitimate interests will be upheld if another party violates a contract; that they will be able to collect damages from another party responsible for a tort; that they will be subject to approximately similar treatment under various types of regulations; or that they will have similar access to concessions offered by the public sector to encourage economic activity.

Throughout much of the world, an inadequate LRI has proved to be a major barrier to broad-based economic growth. Such barriers are many and are often subtle in their design. A thriving market economy requires, *inter alia*, institutions or the rules themselves that secure individual rights. Enforcement, security and protection of these rights via LRIs often distinguish one country's market economy and economic growth from another. Without the security of basic rights, compatible incentives will be impossible to achieve. Individuals can thus advance their interest only if they and the organizations they may create can secure rights that are undeniably enforceable. Any incentives to save and invest will not exist without private property rights.

Unfortunately, there is no private property without sufficiently strong government. Neither are there contracts or torts or patents. But just as governments through their underlying constitutions and implementable LRIs are essential for freedoms and liberties, so governments are also the greatest threat to these rights (Olson, 1991).

Throughout history it is governments that have expropriated property on a grand scale, systematically restructured advantageous trade among private citizens, as well as unilaterally changed the covenants of private contracts. Hence, to achieve sustained economic development, governments must be sufficiently powerful to implement LRIs but must also be limited and restrained by the judiciary so that individual rights are not abrogated. As Madison noted in 1798, 'In this country, the people, not the government, possess the absolute sovereignty.'

Constitutional guarantees for property and contract – as well as basic political, civil and economic freedoms – can only be achieved by an effective judiciary. An effective judiciary is measured by the confidence it instils throughout the citizenry. Confidence is enhanced by creating a judiciary as a separate branch of government; assigning ultimate appeal for disputes over property and contract to the courts; reducing the self-interest of judges by assigning long tenure; making judicial decisions transparent to the scrutiny of their peers and the press; compensating judges well and placing them in positions of honour within their respective societies; and judges must be subject to stringent conflict-of-interest laws, screened for their integrity, and required to make their wealth and sources of income transparent to the general public. Any legal reform that does not include these basic features is not likely to achieve sufficient credibility. A violation of any one or more of these features can be expected to lead to laws being ignored, masked or simply suppressed. Without credibility, LRIs will fail to take on substance and improve the underlying conditions for sustainable and effective public policy implementation. In the final analysis, the performance of the judiciary will turn on three categories of implementation: dispute settlement, executive enforcement and institutions promoting transparency.

The most fundamental element of the LRI package is the system of property rights. The economics of property rights play a crucial role in the institutional economics literature. In essence, a system of property rights is economically efficient if the rights are universal, exclusive, and transferable. As countries have learned throughout the world, including those in Eastern Europe, property that has no legal owner is likely to be abused. However, the experience of some countries has strongly suggested that the efficient use of resources needs to be qualified where concentration of land holdings, for example, passes certain limits. Empirical evidence in Japan, Korea and Taiwan shows that state-imposed land redistribution, apart from its merits on grounds of equity, can lead to more efficient use of factor resources.

In contrast to the theoretical and empirical work that has emerged on property rights, the economics of contract law has received much less attention. Nevertheless, contract law plays a crucial role in promoting market economies by spelling out the terms of implicit contracts, establishing procedures for implementing the terms of both implicit and written contracts, settling disputes about implementation, determining remedies for breach of contract, and responding to contingencies that naturally arise from incomplete contracts. Effective contract law maximizes predictability and enhances credibility, reducing significantly *ex post* opportunism. As Leonid Hurwicz demonstrated some time ago, efficient exchange can be realized if one of the parties to the exchange behaves in a rule-bound way that is reliably free of opportunism. If the judiciary reliably enforces a purposive approach to contract law, opportunism will not be a serious concern, nor will strategic threats.

Another component of the LRI that has proved to be a significant barrier to broad-based economic growth is tort law. Tort law covers the space of individual relationships that is not admitted by contract law. It identifies wrongful damages caused by action or inaction and sets procedures for assessing their value. To the extent that tort law leads to predictable consequences, the basis for insurance contracts to efficiently spread risk is established. The first economic test for tort law is that it should ensure that parties whose interests are wrongfully harmed receive adequate but not excessive compensation. Second, the law should provide incentives for agents to undertake efficient precautions to avoid causing damages. These two tests cannot be met if basic economic and civil freedoms are not maintained; otherwise, the court can be easily bent in favour of powerful operators.

After the three cornerstones of the LRI come the remaining components for the private sector: a commercial code; company laws; bankruptcy; various business regulations; and – in the case of the public sector – conflict-of-interest laws, safety-net institutions, and, in some countries, significant civil service reforms. The need for a sound commercial code is self-explanatory, while the essential function of company law is to limit the liability of shareholders to their equity position. Bankruptcy laws are crucial in automatically triggering conditions under which a firm will be liquidated or will undergo a significant reorganization, while contract law provides incentives for owners and management to self-enforce efficiency.[3] Finally, secured transactions are needed to facilitate the availability of credit and liquidity. Investments will not be financed in part by credit if lenders

are unsure of their ability to secure whatever collateral might be available in the event a borrower defaults.

As part of the LRI, regulations of the private sector cover the gamut: licensing and concessions, labour regulations, financial market regulations, environmental regulations, anti-monopoly or antitrust regulations.[4] In structuring each of these regulations, the tradeoff between serving special powerful interests versus the public or collective interest must be explicitly recognized (Rausser and Zusman, 1992). In many instances, these regulations can also serve to establish safety-net institutions. In effect, if major transformations and new regulations harm some individuals, the issue of compensation naturally arises. If the costs experienced by disadvantaged individuals and interested observers are slight, compensation is indeed unnecessary. However, if the costs are great and if losses can be easily ascertained, then compensation may be warranted. From a political-economic perspective, compensation may be required to maintain political support and stability. Otherwise, the transition may well reach a point where public dissatisfaction over unemployment and the cost of living forces the current political leaders to be removed from office.

As we shall argue in Section 17.5, anti-monopoly and competitive policies should be jointly designed with privatization policy. These regulations are also critically related to official conflict of interest laws. As witnessed in one country after another, the participation by public officials in business activities for their own account is a serious obstacle to the development of competitive markets. With such conflicts often come the establishment of monopoly rights in well-protected industries. The LRI must create and support the authority and means to ferret out such activities and impose stiff penalties.

Along similar lines, civil service reform is another necessary component of the LRI. These reforms are needed to promote the transparency that in turn enhances the integrity, timeliness and predictability of economic regulations. To support the effectiveness of the LRI in this respect, the public sector must provide accurate and timely data on the performance and current health of the economy. The accuracy and quality of the provisions of these public goods must be seriously investigated by external institutions such as the free press. Economic journalists should be rewarded for exposing corrupt and self-interested actions of governmental officials. The free press should also be actively engaged in assessing the investment in and production of useful statistical data on various sectors of the economy. Perhaps

more importantly, the free press has a role to play in the maintenance of civil, political and economic freedoms.

17.4 THE POLITICAL ECONOMY OF PUBLIC POLICY

Unfortunately, much of the economic advice and counsel that has been offered to Eastern European countries and the Soviet republics takes the constitutional economic landscape and the LRI as given. Accordingly, much of the economic intelligence has been devoted to the question of the design of economic policies rather than to the question of the appropriate institutional framework for establishing credibility, enforcing commitments and enhancing confidence in the public sector and judiciary's pursuit of the public interest. A few examples serve to illustrate the overemphasis on policy prescription.

The 'Balcerowicz Plan' in Poland consisted principally of macroeconomic measures such as credit restrictions, wage restraints, and reductions of subsidies designed to arrest inflationary pressures in the economy. These measures undertaken in January 1990, and similar measures undertaken in January 1991 in Czechoslovakia, were expected to create much of the necessary conditions for a market economy. As suggested by the discussion in Sections 17.2 and 17.3 and the actual experience of Poland over the last 16 months, this expectation has proved ludicrous. Without a well-structured constitutional and LRI set of prerequisites, it cannot be expected that more accurate measures of costs and revenues will place state enterprises at the threshold of sound, anti-monopolization norms. Moreover, the open-trade regime established in 1990 was reversed during the summer of 1991. Tariffs were raised on many imports, and the government has expressed real concern about companies that may need to be rescued.

Second, Western observers are virtually unanimous in advising that governments institute policies that promote free entry and use foreign competition as a device to discipline the domestic market place. Meanwhile, these same advisers pay very little, if any, attention to the process by which anti-competitive provisions may be introduced into the privatization plans that are negotiated for each enterprise. Yet, these enterprise-level negotiations, conducted behind closed doors and subjected to very little public scrutiny, may effectively derail the implementation of policies that have been legislated by the central authority. The recent agreement between Volkswagen and the

Czechoslovakian automobile company Skoda suggests what can happen. It seems self-evident that, if agreements like this one proliferate, the prospects for a successful transition towards anti-monopolization, efficient, market-oriented economies will be severely compromised. Such events are not avoided by the policy prescriptions of economic advisers. The probability of such events can, however, be minimized by an implementation process that emphasizes the public interest through the design of access; the space of issues over which those interests that have access can negotiate; the degree of concensus that is sufficient to conclude negotiations; or, more generally, the constitutional selection that enhances the quality of collective decision-making.

Third, given the pervasive bureaucratic structures that remain throughout Eastern Europe and the former Soviet republics, there is a natural propensity to 'overmanage' all economic and social policies, especially the privatization process. The bureaucratization conditions throughout Eastern Europe and the former Soviet republics suggest quite simply that a major feature of the political-economic landscape will continue to involve bureaucratic interest groups of one type or another. The only effective means of overcoming the obstructionist behaviour of bureaucratic interests is to move rapidly along the transition path. Only a successfully reformed economy will provide the incentives and conditions for breaking bureaucratic coalitions and reducing their effective power. Unless various interest groups secure a stake in the success of reform, the bureaucracy can be expected to strategically position itself to effectively delay and obfuscate policy reforms. Overmanaging is a powerful and insidious way to defeat reform.

Throughout Eastern Europe and the Soviet republics, centralized executive authority has been thoroughly discredited. As a result, the pendulum has swung towards greater decentralization and autonomy for provincial and local governments. This suggests that the bureaucratic propensity to overmanage economic and social activities during the transition must be avoided. Although a generic constitutional design must emerge from the centre of the public sector's organization, the LRI and specific policies can be designed and implemented at the provincial or local governmental levels. If powerful self-interests cannot be effectively opposed at the centralized level, they may well be countered at the provincial or local government level. In any case, the battle lines should be drawn wherever the political-economic landscape admits the possible implementation of significant reforms. If

one provincial or local government is able through its implementation of an LRI and specific policies to lead to a more sustainable path for economic growth than that experienced in some other province or locality, the demonstration effects may create beneficial spillovers that will lead to enhanced LRIs and growth-promoting economic policies in other provinces.

While traditional factions throughout Eastern Europe and the former Soviet republics may have a stake in opposing change, there often fails to emerge viable alternative factions within the political system that benefit from major reforms. Peruvian Hernando de Soto has detailed the enormous political and institutional hurdles that must be overcome by individuals and businesses when they are not a part of the dominant political-economic faction. His prescription is to mobilize alternative factions so they can represent their own interests. However, this may not be feasible without political and institutional reforms to remove the barriers to such advocacy. Even in a democracy, alternative constituencies must be enlightened as to what various policy options would imply. They must also be given the means to voice their concerns and interests within the constitutional process. Finally, there must be checks and balances that limit the ability of any single faction to gain and retain unchallenged political and economic control.

Available evidence suggests that, when domestic constituencies have emerged that favour and benefit from new policies, reforms have been sustained and credible. Occasionally, special inducements (e.g. export subsidies and export-processing zones) have succeeded in creating those new constituencies. Often the objective is not to achieve a trade-neutral regime but, instead, to bias the system in favour of exports, at least temporarily, in what might rightfully be called redistributive governmental policy-making. This policy in isolation, however, has not generally been successful. Once again, it is crucial that comprehensive economic reforms be designed covering the mix of policies across all sectors as well as fiscal, monetary and exchange-rate policies. When accompanied by appropriate exchange-rate and macro-economic policies, special inducements can assist in sustaining export-oriented policies in the initial stages of structural reform. Successful examples of this tactic in the 1980s include the Dominican Republic and Costa Rica.

Economic developments can shift the balance of political power, creating new institutions and strengthening the power of interest groups that want to defend these institutions. It is important to foresee these secondary developments and to anticipate their economic conseq-

uences. For example, in Czechoslovakia, relatively little attention is being paid to the problem of industrial concentration. The expectation is that foreign competition will discipline the domestic monopolies and that, in order to compete, the monopolies will have to restructure themselves into smaller, more efficient units. Indeed, from private interviews, the perspective seems to be, privatize, then evaluate and restructure; because, if you wait until after restructuring before beginning the privatization process, then the latter process will never get off the ground.

The problem may be that the political power of the managers of the newly created monopolies will be enhanced as the economy develops, and they will be in a position to defend their power by political means, i.e. they will apply pressure for legislation that protects their privileges. If their industries are threatened by import competition, they will apply pressure for protectionism. If foreign companies try to set up competitors within the countries, they will apply pressure for capital prohibitions. If competitors do become viable, they will attempt either to beat them by predatory pricing or collude with them, and they will resist attempts to regulate this activity through antitrust laws. The point here is that these political forces based on economic privilege are not currently in position, but they will be later, and this development should be anticipated.

In Poland, the planners are relying on minimal barriers to entry to ensure market discipline. But the economic situation will change, and with it the political configuration. The cultural ethic of free entry will have to withstand the threat of new forces. The forces will include not only the management and shareholders of new industries, who will fight to preserve their interests, but also the workers, who will fight to preserve their jobs. It should not simply be assumed that these forces will be resisted. Another example of the failure to fully consider the danger of feedback problems concerns the formation of holding companies in Poland. Several authors have suggested that the charters of these companies should include instructions to self-destruct after a certain time period (Blanchard and Layard, 1990, for example, suggest ten years). Nevertheless, it is most likely that even in the presence of such clauses, once the holding companies are established, they will develop into a new political constituency that will surely resist its own destruction.

Formally, political-economic feedback effects during the transition should be modelled within a dynamic, closed-loop framework. In static, political-economic models of transition, the current configura-

tion of political power is an 'input' of the model, and the 'outputs' of the model include the set of economic policy decisions that determine the entire process of transition. In a closed-loop, dynamic model, the transition is viewed as a multi-phase process, in which the outputs of earlier phases are the inputs of later phases. In particular, the early phases of transition will change the configuration of political power, as the beneficiaries of these early phases apply political leverage based on their newly acquired economic power and as the prime movers of the original privatization programme gain or lose political support depending on initial assessments of the success or failure of the programme. To the extent that the private objectives of these early-stage beneficiaries conflict with the public interest, these changes in the political configuration will tend to detract from the success – viewed from the perspective of the public interest – of the transition process. Whenever these 'feedback effects' are neglected, it can be expected that the prospects for a successful transition will be overestimated.

In the final analysis, the constitutional design and the LRI set the initial governance structure for the public sector. However, in any organizational structure that might be dictated by the underlying constitutional design and LRI, the public sector is naturally exposed to attempts by various interest groups to exert their influence. In this setting, since not all power resides with policy-makers pursuing only the collective interest, some degree of organizational failure will naturally arise. Economic policies can thus be viewed as the outcome of a political-economic process – conditional on the underlying constitutional design and LRI. This process is at work, regardless of how sound any particular policy proposals might be from a pure economic efficiency perspective. And while each governmental decision has impact on the evolutionary process, only if the underlying constitution and LRI is well designed can we reasonably expect policies that serve the collective interest to dominate policies that serve the self-interests of powerful groups.

17.5 PRIVATIZATION AND ANTI-MONOPOLIZATION POLICIES

Eastern Europe and the former Soviet republics have not been unique in their re-examination of the state role in promoting economic development. Throughout the 1980s much of the developing world

came to the conclusion that rapid economic growth requires rigorous private-sector development. This shift is apparent in the reforms and privatizations that have put Chile and Mexico on an economic path that seemed impossible even a few years ago, in the reduction of government economic controls in Indonesia during the 1980s that spurred the country's economic growth, and in the impressive response of Chinese farmers when economic reform provided them with powerful incentives to produce. These are only a few examples where governments reduced their control over aspects of economic activity. This change in focus has allowed some governments to turn their attention and resources to critical functions of the state in the economic sphere, including the provision of an enabling environment. The enabling environment relates directly to the underlying constitution and LRIs along with stable macro-economic conditions, essential social and physical infrastructure and poverty reduction and environmental protection.

Developing countries that have implemented policies which permit and facilitate the private sector to be the principal engine of growth have found themselves to be more flexible in adjusting to uncertain economic environments and have had greater access to private external capital. As a result, these countries are experiencing a new dynamism, reflected in rising private investment, including foreign investment, and a diversification and rapid growth in output and exports. Partly because of this experience, the war-cry throughout much of Eastern Europe has been to *privatize, privatize, privatize.*

In the case of the massive voucher privatization schemes that require no restructuring prior to the transfer, numerous observers hold the view that this process will simply involve replacing a state monopoly with a private monopoly with no regard for the underlying market structure in each country. For the case of the 'classical' British approach to privatization, restructuring is accomplished prior to the transfer. Here, the great concern is that the process would take far too long; in fact, the estimates in the case of Poland suggest that the implementation of the classical privatization approach would take as long as one century to complete.

More subtle reservations have been expressed by Murrell (1991) and Krueger (1991). Murrell argues in support of gradualism in the transition process in large part because of organization and economic system inertia. This view is supported by Kornai (1990) and McKinnon (1991). The institutional-evolutionary approach advocated by Murrell

focuses on the formation of new enterprises in the private sector, arguing that existing state enterprises are difficult, if not impossible, to reform. Krueger (1991) is also pessimistic about the privatization of state-owned enterprises, arguing that, in Turkey and South Korea, economic growth can be directly traced to the generation of new earnings streams sourced in the formation of new organizations, not to the privatization of state-owned enterprises. In fact, in the case of Turkey during the 1980s, Krueger argues that reforms focusing solely on privatizing state economic enterprises would have failed miserably.

While the above reservations reveal many worthwhile insights, it must be realized that they sweep aside many important issues. The concern should not be how long the privatization process might take but, instead, whether a credible, anti-monopolization norm for state-owned enterprises can be established. The concern should not be whether economic systems and organizations change slowly and that we must, as a result, be pessimistic about privatizing state-owned enterprises but, instead, what are the entry conditions facing the formation of new firms and organizations in the private sector and the exit conditions that face state-owned enterprises. The concern should not be whether Eastern Europe and the former Soviet republics have a misplaced fixation on old assets, occupying too much time and other scarce resources of governmental officials but, rather, what degree of privatization is necessary to lower barriers to the formation of new companies in the private sector. Under the 'right' LRI, state enterprises could be privatized quite slowly and yet the nascent private sector could flourish.

Privatization, in and of itself, cannot be expected to achieve efficiency. Only if a privatization policy is jointly determined with a anti-monopolization or antitrust policy, a trade policy, as well as a foreign investment policy, can we expect the proper environment for the emergence of a vibrant market economy. All of these policies must be designed and implemented hand in hand. Throughout Eastern Europe and the former Soviet republics, given the overwhelming portion of state-owned enterprises, a sound anti-monopolization policy cannot exist without an active and credible privatization policy. A credible privatization policy may be nothing more than the effective threat of 'exit'. In this setting, exit refers to transferring the state-owned enterprise to private ownership, thereby placing the current management at risk with respect to their current positions as well as future employment opportunities. Exit may, in fact, be triggered by anaemic

innovative activity, and there is no reason why, in principle, the same type of incentives cannot be offered to managers of state-owned enterprises that are available to their counterparts in the private sector. Moreover, once the government removes subsidies and institutes fiscal discipline, any amount of restructuring may still result in the same consequence, a shut-down of the enterprises' activities.

If state-owned enterprises have established monopoly rights and the corresponding political influence to maintain those rights, the barriers to entry in the formation of new entities supplying the same goods or services will indeed be formidable. Given that each of the Eastern European countries is a price-taker on world markets for most if not all sectors of their economies, a domestic anti-monopolization policy will be made more effective if it is joined by an open trade policy. Similarly, a policy for privatization will be far easier to implement and will be more effective if combined with an open foreign investment policy. Only by designing jointly all four of these policies will it be possible to achieve the right balance between the utilization of existing assets and the formation and investment in new assets. The effective integration of all four policies, if underpinned by a freedom-enhancing constitutional design and a credible LRI, can be expected to reinforce a decentralized and pluralistic determination of the transition to a market economy.

The joint design of privatization, anti-monopolization, trade and foreign investment policy can, in fact, result in a set of conditions where the speed of implementing privatization is no longer crucial. In particular, even if the bulk of the state assets remain in the public sector and are not transferred for many decades, economic efficiency may still be achieved. By credibly designing and implementing these four policies, a country is able to buy time and enhance the quality of its privatization process (Rausser and Simon, 1991a). The passage of time allows the population to accumulate savings, markets for corporate control to emerge, credit and capital markets to improve, prices and arbitrage opportunities to become more predictable, effective managers to be identified, and investors to develop confidence. Marketization, as defined by Clague (1991), can be expected under an appropriate design of these four policies to naturally emerge. Accordingly, the key to success is not to change enterprise ownership but, instead, to provide incentives for entry and exit that are credible. To be sure, if a government has little integrity or competence, this process will be ineffective and state-owned enterprises will not be at risk; soft budget constraints will once again be implemented. Under these circum-

stances, the speed of the privatization becomes crucial (Lipton and Sachs, 1990), but the quality of the process will be difficult, if not impossible to control.

All four policies must be effectively combined to set regulations that replicate those that would be enforced by the market pressures of entry and exit. These regulations must be designed for those economic activities that enjoy substantial economies of scale and scope, for infant industries, as well as for those economic activities that approximate the basic tenets of perfect competition. Regardless of whether a natural monopoly exists or a persuasive case can be made for an infant industry, all entities in the private sector must be disciplined by the threat of entry. Moreover, all enterprises in the public sector must be disciplined by the threat of exit. Obviously, economies of scale and oligopoly cannot be wished away or abolished by fiat. As a result, regulations emerging from privatization, anti-monopolization trade and foreign investment policy must effectively deny market power to both private and state-owned enterprises without, of course, hampering their ability to compete, their efficiency, or their growth in productivity.

The risks of entry and exit for both private and state-owned enterprises may, in fact, be the most effective incentives for entrepreneurs and firms to innovate, grow and take advantage of economies of scale and scope. For state-owned enterprises that are subject to diseconomies of scale, the threat of exit (which may involve nothing more than a change from state-owned to private ownership) will provide incentives to restructure these enterprises, eliminate unnecessary or unutilized factor resources, and attempt to meet a anti-monopolization norm. For natural monopolies, or those enterprises that can naturally take advantage of economies of scale and scope, some fairly straightforward rules reflecting the market pressures of entry and exit must be designed. Conceptually, these regulatory rules set upper and lower price bounds that are calculated so as to ensure that the market pressures of entry and exit are represented. Simply, the price floor protects the legitimate interest of competitors while the ceiling protects the interest of buyers or consumers. Moreover, as noted by Baumol and Lee (1991, p. 15), 'A sensible way of ending the inertia that permits continued X-inefficiency in the public sector is to encourage private-sector participation in various infrastructural functions and activities, ranging from production of services to distribution, operation and maintenance, and billing and revenue collection.'

As argued by Willig (1991), anti-monopolization policy dictates the formation of an antitrust agency to prevent collusion, predatory pricing, and other abusive business practices. Such an agency may well have to have powers that extend beyond those that are necessary in a mature market economy. Specifically, they may be concerned not only with the emergence of private monopolies but public monopolies as well. In particular, any public monopoly that abuses the public interest must be at risk for privatization or entry of other organizations that supply substitutable services or products. Legal protections that are afforded to public monopolies must be at risk if these monopolies violate the anti-monopolization norms set by the antitrust agency.

The holding companies that are advocated by some of the privatization schemes (Rausser and Simon, 1991a; Tirole, 1991) must also be subjected to antitrust regulations. As Tirole notes, 'Holding companies restructure firms; they make sure that labour hoarding is eliminated and that insolvent firms are shut down. They reallocate capital and eliminate inefficient vertical integration. They monitor the firms' managers in their attempt to organize production efficiently' (p. 42). This is one spin on the possible activities of holding companies. However, holding companies may have incentives for concentrating ownership and assets and attempting to establish monopoly rights. As a result, an antitrust agency must also have the power to regulate these holding companies. Another antitrust problem that could naturally arise in the context of holding companies is posed by interlocking directorates. Possible collusion arising from such arrangements must be prohibited by antitrust or anti-monopolization laws. In the final analysis, if state-owned enterprises face hard budget constraints as well as an active antitrust policy, there will be significant incentives to trim their administration, reduce their wage bills, rid themselves of unprofitable activities, and pursue profitable activities.

Throughout the western world, antitrust efforts to control monopoly through structural means (dissolution, divorce, divestiture) have only sometimes been effective. Accordingly, a more effective way of promoting competition is to rely not only on an antitrust bureaucracy but on an open trade regime as well. In fact, in the case of Eastern Europe (Clague, 1991), the extraordinarily high degree of industrial concentration calls for an opening of the economy to foreign trade. An open trade regime means that even a domestic industry whose activities require new domestic entrants to incur substantial costs may have at its disposal a good many firms for which entry and exit are easy. In effect, these firms are located elsewhere in the world and have already laid out

much of the sunk expenditures needed for entry and at the appropriate opportunity will supply the domestic market – provided, of course, that protectionist trade policies are avoided.

An open trade policy, of course, stands in sharp contrast to the desire to protect infant industries. Among governmental officials in Hungary, Poland and Czechoslovakia, as with managers of state-owned enterprises who believe their enterprises qualify as infant industries, there is much support for gradualism in moving toward the free trade regime. In fact, some have argued that free trade for the industrial sector may lead to wholesale collapse (McKinnon, 1991; Clague, 1991). As we all recognize, however, many infant firms grow up to be huge protected monopolies. Accordingly, a competitive and open trade policy transition path must provide clear signals that any qualifying infant industries will be one day exposed to foreign competition with probability one. Once again, the various Eastern European countries are unprepared to expose their industries to the unrestrained rivalry of established firms from other countries must design policies that reflect the market pressures of entry and exit. Without the virtue of such pressures, both economic and political power will be accumulated and an open trade regime for the activity in question will probably not be implemented.

Turning to the fourth policy, the quality of the privatization process may well suffer immensely if restrictions are imposed on foreign investment. A new-founded fear seems to have emerged in some quarters that windfall gains may accrue to foreign investors during the privatization process. As Frydman and Rapaczynski (1990, p. 24) have emphasized, politicians do not wish to face the threat of being accused of 'having given away the national wealth to foreigners'. Another force underlying the desire to impose formidable restrictions on foreign investment lies with those interests that will benefit from less active competition in the acquisition of selected state-owned enterprises. Both of these forces must be countered by the view that privatization is not a one-shot event, but a continuing process of which the original disposition of state-owned enterprises is merely the first step.

Complex voucher and auction schemes are designed in part to preserve domestic ownership of enterprises in both Poland and Czechoslovakia. The exact formula for stock distribution has been the subject of prolonged political debates in both Poland and Czechoslovakia. The resulting formulistic approaches to privatization (Rausser and Simon, 1991a) are naturally subject to centralized overmanagement. It is hoped that all the Eastern European govern-

ments will recognize the hazard that such formulaic approaches to privatization have on the speed and quality of reform. To be sure, the elimination of foreign investor restrictions can be expected to hasten the privatization process and counter the disincentive effects of formulaic allocations. Unfortunately, the active discouragement of foreign capital during the early stages of large-scale privatization eliminates one of the major sources for the infusion of capital so badly needed by many state-owned enterprises.

One of the other major benefits of active participation in the privatization process is that technical assistance with real incentives will be available to assist in setting up the governance structure of the newly privatized enterprises. The incentives for providing wise counsel and advice can be expected to include the design of low-powered incentives and the appropriate transition to their high-powered counterparts. The structure of voting or control shares versus ownership shares can also be designed more effectively with active foreign investors. For the culture that exists in Eastern Europe and specific enterprises, it can be expected that foreign investors will prove to be a positive influence on designing the appropriate separation of ownership and control (Fama and Jensen, 1983).

17.6 THE PERFORMANCE OF THE AGRICULTURE AND FOOD SECTOR

The agriculture and food sector may prove to be an important agent for growth in Eastern Europe and the former Soviet republics. Foreign investment will be insignificant throughout Eastern Europe and Soviet republic economies until some semblance of political stability emerges. As a result, Anderson (1991) has argued, agriculture may therefore be the *only* source of growth in output and foreign exchange available over the short term. This is especially true if, as expected, domestic financial markets do not provide the necessary debt capital for new entrants.

As most serious analysts have concluded, rapid agricultural production growth throughout Eastern Europe and the Soviet republics depends first and foremost on moving away from farm collectivization towards private property rights. As argued in Rausser and Simon (1991a), privatizing collective farms or, for that matter, farm cooperatives, has distinct advantages. Privatization of collective

farms, for example, is less subject to corruption because of transparency. As on a heavily populated, well-lit street, robbery is a low probability event. Accordingly, this is one sector of the economy where decentralized and pluralistic privatization processes can be more easily implemented.

The performance of the food and agriculture sector will depend critically upon whether privatization is effectively combined with anti-monopolization policies. As is well known, retail food markets were among and are among the most distorted throughout Eastern Europe and the former Soviet republics. Decollectivization and the distribution of property rights, without allowing prices to rise towards free market levels, without encouraging new entry in transport and distribution services to reduce farm-to-retail marketing margins, or without allowing sufficient competition to emerge for farm inputs are doomed to fail. Without effective anti-monopolization policies, price liberalization frees processors with market power to act like monopolists; many can be expected to respond by raising prices to consumers and pressuring producer prices. Producers are thus hostage to the pace of change in the processing, marketing and distribution of food and fibre. Moreover, even if effective anti-monopolization policies are put in place, partial liberalization must still be avoided. As economies in Eastern Europe have moved to an incentive structure more consistent with world prices, agricultural incomes have generally increased less than the general price level. This is, in large part, due to partial liberalization where input prices have moved more rapidly towards world levels than have producer prices.

Failure to achieve a rapid reorganization of processing and distribution can also be expected to have dire political-economic consequences. If producers are unable to achieve access to competitive markets, they can be expected to form interest group coalitions that will demand direct government subsidies in order to counter the monopsonistic forces. In essence, governments may be pressured to embark upon protectionist policies that subsidize the agricultural sector and detract from economic growth.[5]

CONCLUDING REMARKS

Orthodox prescription for the public sector focuses on the policy space: macro-economic instruments to control inflation, the removal of price controls, trade liberalization, currency convertibility, financial disci-

pline, privatization and demonopolization. Few would argue with these prescriptions. However, can they be effectively implemented and sustained without an underlying constitution and LRI? Available evidence suggests, with few qualifications, that the answer is no. In fact, the tradeoff between the speed of privatization and its quality can be significantly altered by the design of the underlying constitution and the implemented LRI.

A well-designed constitution and associated LRI instils confidence and policy credibility. In a world of perfectly rational expectations and confidence in the underlying constitution and LRI, the sequence of reforms matters little. In such a perfect world, reforms that will occur well into the future are perfectly anticipated today; and actions are taken by agents as though the reforms will occur with certainty. In other words, whether price reform comes before or after enterprise reform; whether large-scale privatization is immediate or slow and more careful; whether trade liberalization comes early and fast or later and slower; whether full-scale financial sector reform goes hand in hand with enterprise reform or it comes earlier makes little if any significant difference. In a world of total confidence and credibility in public-sector announcements, the sequencing of reforms is largely irrelevant.

Short of such confidence and credibility or the formation of rational expectations, reforms need to be simultaneously pursued on many fronts. The first and most important activity is to redefine the role of the state, setting a constitution that clearly defines and secures basic political, civil and economic freedoms and designing an LRI that creates a fertile environment for a vibrant market economy. Since credibility will not be complete, the sequencing of reforms becomes crucial. Sequentially, groups of complementary policy reforms must be introduced. Throughout Eastern Europe and the former Soviet republics a comprehensive set of reforms must be implemented, including macro-economic stabilization, tax reform, price reform, trade reform, enterprise reform, small-scale privatization, selected large-scale privatizations, new regulations for private investment, and the creation of emergency unemployment insurance. Nevertheless, only if a constitution is designed that defines basic rights and an associated LRI secures those rights can we hope to sustain economic policy reform on a number of fronts. Privatization, anti-monopolization, trade and foreign investment policy must be jointly designed to allow market pressures of *free entry and exit* and entrepreneurial innovation to be pervasive.

Notes

1. Freedom House annually rates two features of a country's institutional structure: its political rights and its civil liberties. Freedom House ratings are compiled by averaging ratings on a 20-point check list (7 for political rights and 13 for civil liberties). Each point on the check list is awarded a 0, 1 or 2, reflecting the degree of freedoms; these raw scores are then averaged and compared against a 7-point scale (1 being the most free, and 7 the least free). Freedom House has established weights it uses to transfer the average raw scores to the primary scale.
2. Unfortunately, Freedom House does not publish measures of economic freedoms over the same list of countries and the same annual time series from 1973 to 1985. To be sure, extending the empirical analysis to examine how reforms in economic rights interact with civil liberties and political rights is crucial in enhancing our understanding of how constitutional rules affect economic growth.
3. One of the distinguishing features of developing countries is their unwillingness to close down inefficient firms. In many of these countries, bankruptcy laws are actively debated and passed but implementation is grossly inadequate (Mitchell, 1990). Many developing countries are unable to achieve a sustainable path of economic growth simply because the link between actions and consequences is broken by various governmental interventions. The risk of failure does not exist in many of these countries and, as a result, irrational investments are undertaken (Woods, 1989).
4. The bureaucracy and centralized planning that continue to be pervasive throughout Eastern Europe suggest that excessive regulation may well be a serious problem over much of the transition process.
5. Brooks *et al.* (1991, p. 157), 'Given the inherent concentration in food processing, a considered demand for food tariff protection against imported food is a predictable feature of the political economy of agriculture during the transition. Producers may well be drawn into alliance with processors when their longer term interests are not well served by protection of processors' monopolies.' As an example, the authors cite the agricultural tariffs in Poland (May, 1991) designed to protect the troubled dairy industry.

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