Institutions, Markets and Economic Co-ordination: Linking Development Policy to Theory and Praxis

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ABSTRACT

This article explores policy applications of ‘new institutional economics’ theory in relation to markets and economic development. It argues for application of an analytical framework which instead of looking at institutions primarily in terms of their contributions to making competitive markets work better, sees such markets as one form of institution fulfilling exchange and co-ordination functions in an economy. A key element in this is recognition of the importance of processes of change in non-standard market arrangements in economic development, and there are strong theoretical, practical and historical grounds for more consistent policy in this area.

INTRODUCTION

In the last fifteen years or so, development economics has increasingly recognized the importance of institutions in economic behaviour (see, for example, Harriss et al., 1995; Nabli and Nugent, 1989; Poulton et al., 1998). This has included micro-economic analysis of transaction costs and contractual arrangements (such as Binswanger and Rosenzweig, 1986; Stiglitz, 1986) and recognition of the importance of institutions in processes of economic growth (including North, 1990). This has led to increased acknowledgement of the importance of institutions in World Bank thinking, an example being the 2001/02 World Development Report, entitled Institutions for Markets (World Bank, 2002), arguably bringing institutions into mainstream development policy thinking. Welcome (and overdue) though this increasing emphasis on institutions may be among policy analysts, we argue in this article that it does not yet go far enough in its consideration of the role of institutions in development and, consequently, that policy arrangements in economic development need to be consistent with this recognition.

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prescriptions fail to address critical constraints to development. Unfortunately these shortcomings in the mainstreaming of institutionalism are most acute when applied to problems of poor rural areas where the challenges of poverty are greatest.

The rest of the paper is arranged in four sections. After this brief introduction we explore ‘new institutional economics’ (NIE) theory in relation to markets and economic development, and argue for a conceptual framework which instead of looking at institutions primarily in terms of their contributions to making competitive markets work better, sees such markets as one form of institution fulfilling exchange and co-ordination functions in an economy. This leads to an examination of the types of institutions that development policy should promote in different situations. The third section of the paper puts forward three different examples that illustrate the theory. We conclude with a brief discussion of policy implications.

For many readers, some of the arguments made here will not be new. An important aim of the article, however, is to present and interpret these arguments to make them more accessible to those coming from a conventional neo-classical economics background, a dominant school of thought in development policy but one where these arguments are less well known and understood. The article therefore seeks to both challenge the application of the more simplistic institutional assumptions of neo-classical economics to development policy analysis, and to use and extend its own analytical tools in this task. In this we appeal to two different intellectual communities in development concerned with promoting poverty reducing growth. To those sceptical of the ability of markets to deliver such growth, we argue for a realistic understanding of their potential roles at different (particularly later) stages in the development of societies, and hence for the need to foster their own development. To those who argue that market development and access are a fundamental force needed to drive growth, we offer a pragmatic and theoretical but accessible explanation of fundamental problems of market development in poor economies, and suggest ways that these may be addressed.

MARKETS AS INSTITUTIONS: THEORY

Following North (1990), we define institutions as ‘rules of the game’ defining the incentives and sanctions affecting people’s behaviour. A key concept relevant to our arguments is the distinction between the institutional environment and institutional (or contractual) arrangements (Davis and North, 1971). We interpret this as a distinction between the particular sets of rules and structures governing particular contracts (the institutional arrangements) and their context (the institutional environment — which consists of general property rights, enforcement mechanisms and costs, expected human behaviours, power relations, communications infrastructure and
information flows). The institutional environment, together with particular characteristics of the contracted goods or services and the contracting parties, determines both the structure and terms of the institutional arrangements for particular contracts or sets of contracts and the processes whereby institutions change (Dorward, 2001; Jaffee and Morton, 1995; North, 1990; Williamson, 1985, 1991). A key point that emerges from an examination of institutional and economic development using these concepts is that low-income economies are characterized by high transaction costs and risks, weak information flows, and a weak institutional environment. Actors, particularly those with little in the way of financial and social resources or political leverage, then face high (all too often prohibitive) costs in accessing information and in enforcing property rights. These costs inhibit both market development and access to existing markets, in turn inhibiting economic and technological development. Low levels of economic activity can themselves lead to thin markets, inadequate co-ordination, high transaction costs and risks, and high unit costs for infrastructural development. The result can easily be a ‘low level equilibrium trap’ as shown in Figure 1 (Dorward et al., 2003). We are therefore left with critical questions about how institutional, technological, social and economic development can proceed, and how different stakeholders can promote development paths that will involve and benefit the poor.

One important approach to follow in addressing these questions is to consider the political economy processes of institutional change. North provides an historical perspective on the influence of different paths of institutional change on economic development (Davis and North, 1971; North, 1990, 1995; North and Weingast, 1989). Institutional change is explained in terms of responses of powerful groups to changes in relative prices, technologies and transaction costs. These groups respond by modifying institutions in ways that they perceive to be in their interests, and in different countries the same sets of changes in relative prices and in transactions technology may stimulate radically different types of institutional change. Much depends upon (a) the perception by different groups of

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1. The concept of a ‘low level equilibrium’ trap has a history in the development economics literature going back to Rosenstein-Rodan (1943) who had the insight that at early stages of development the market may not succeed in co-ordinating the activities needed to ensure development, because of the implications of spill-overs (externalities). Hoff (2001) describes modern versions of the low level equilibrium trap, where development fails to occur, despite a few positive individual changes in technology, institutions and prices. Less in line with the sense in which the term is used in this paper, Nelson (1956) advances a theory of the low level equilibrium trap which explains stagnation largely in terms of resource constraints, savings behaviour and the state of technology. Nevertheless he concludes that even if production techniques are not improved and there is no crash investment programme, the trap may be escaped if social and political conditions become more favourable.
possible opportunities and threats posed to their interests by alternative paths of institutional change or stagnation, and (b) their political effectiveness (locally, nationally and internationally) in influencing the paths and pace of institutional change. Institutional change can take a broad ‘anti-development’ form (structuring transactions to create rents), or a ‘pro-development’ form (structuring transactions to reduce costs and thus promote trade and investment). There is a strong path dependency in these processes, as initial conditions play an important role in determining both the relative perceptions and power of different groups on the one hand, and the institutional and technological options that they face on the other.

In addition to considering the processes of institutional change, we also need to look at the types of institutional change that may be required if economies and communities are to climb out of the ‘low level equilibrium trap’ described above. The emphasis of the current dominant policy consensus (as outlined, for example, in IFAD, 2001; World Bank, 2000, 2002) is largely on the institutional environment (lacking formal attention to institutional arrangements), through government and civil society action to improve communications, property rights, the macro-economic environment, and access to information to support competitive markets. Although these are very important and eminently worthy of policy attention, nevertheless if the institutional analysis stops there its principal outcome is a growing list of often unrealistic demands on governments. In consequence, the liberalization agenda of the 1990s that emphasized and tried to escape the serious problems of state failure in market interventions has again run

Figure 1. Institutions and the Low Level Equilibrium Trap

Source: from Dorward et al. (2003)
up against the buffers of significant state failure — but now these failures are in providing the institutional support required for privatized competitive markets to become effective in the challenging conditions where poverty is most intractable.

Chaudhry (1993) provides a further twist to the problem of state failure. He argues that in ‘late developers’ (poor economies) the weakness of the state bureaucracy means that it does not have the capacity either to gather information or to act on it to regulate private sector development in key economic sectors to meet its own goals — which in a reasonably stable polity would involve expansion of the private sector tax base (a process which we loosely describe as ‘rent farming’), delivery of critical goods and services to politically influential (or potentially influential) stakeholder groups, and the widening of profitable participation in the market economy beyond foreign and ethnic minority ownership. Left to itself, a stable and weak but rational state bureaucracy overcomes its weaknesses in regulating private sector development by engaging directly in key economic sectors itself, simultaneously controlling growth, participation and information in those sectors.² Liberalization policies limit or prevent the state from following this course of action, but, together with processes of globalization, they also undermine the state’s already limited ability to pursue its objectives through private sector development, as it loses even the potential use of regulatory mechanisms to extend local participation in the economy.³ A further element in Chaudhry’s analysis is the influence of large aid flows which, in the absence of economic growth, become the major potential source of rents for the state and the patronage around it — and therefore ‘aid farming’ becomes more important than ‘rent farming’.

Taking Chaudhry’s analysis of the state’s interests (or lack of interest) in private sector development in liberalized late developers together with our earlier analysis of the lack of incentives for the private sector to invest in development suggests a particularly nasty combination of two mutually reinforcing vicious circles or traps: the ‘low level equilibrium trap’ and what we term the ‘aid and rent raiding trap’. The latter involves a shift in bureaucratic incentives from rent farming to ‘aid and rent raiding’ and may be particularly damaging when increases in political instability (as a result of

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² Effective engagement generates wider benefits or ‘spill-overs’ in the economy as private investors benefit from state-supported, broad-based growth that pushes against the low level equilibrium trap and increases the coverage and reliability of economic information in the economy.

³ Even without liberalization policies, the processes of globalization tend to undermine states’ ability to intervene in national markets due to the increasing permeability of national borders — for example due to improved telecommunications and roads connecting small landlocked ‘late developers’ in Africa.
state failures and/or external interventions) also shift ruling politicians’ incentives from rent farming to rent raiding.\footnote{The concepts of aid and rent farming and raiding draw heavily on Olsen’s distinction between stationary and mobile bandits (Olsen, 2000). There is perhaps little distinction between aid farming and renting.}

How can we move beyond this impasse? We focus our attention more on addressing problems of the low level equilibrium trap, touching only lightly on the generally complementary implications of this analysis for the actions to escape from the ‘aid and rent raiding trap’. Fundamentally, institutional analysis needs to be taken forward in a number of ways, to be made more prominent, and to integrate analysis of political, bureaucratic and economic development.

First, we need to recognize an inherent contradiction in the dominant policy consensus discussed above, between the broader conceptual framework which emphasizes neo-classical competitive markets and an important, pragmatic thread that runs through conventional development wisdom, calling for support for bottom-up non-market organizations (producer groups, Community Based Organizations, microfinance groups, and common property resource management groups, for example). These are not parts of a competitive market structure, but they can work well. Policy analysis needs a conceptual framework which incorporates these insights from development praxis to provide a wider NIE understanding of the role of non-market institutions beyond narrow applications to the management of conventional common property resources and public goods. This can be achieved by deploying a broader conceptualization which starts from the point that markets are institutions (and hence part of the process of institutional development). This in turn leads to two practical policy conclusions: first, that competitive neo-classical markets should be seen as only one set of institutional arrangements (albeit very important and often effective) by which resources, production and consumption are allocated, co-ordinated and exchanged in an economy; second, that economic development entails the emergence of appropriate transaction-enabling and cost-reducing institutional arrangements as well as improvements in the institutional environment. These points merit further consideration.

We do not deny the many advantages, and frequent efficiency and effectiveness, of competitive neo-classical style markets in performing allocation, co-ordination and exchange. However, the conditions under which markets are efficient are quite restrictive even for resources, goods and services with private property characteristics (requiring, for example, a well-developed institutional environment for information flows, property rights enforcement, and low-cost, low-risk exchange of clearly-defined and standard goods and services). Even in the most developed economies a very substantial proportion of transactions are not conducted in competitive markets but
instead are conducted within firms and in long-term relationships between firms (see, for example, Coase, 1992; Hall and Soskice, 2001; Williamson, 1985, 1991). Globally, the proportion and amount of transactions occurring within firms (and therefore through non-market arrangements) is growing as two-thirds of world trade is either within, or associated with, transnational corporations (TNCs) (United Nations, 1999 cited by Yusuf, 2001). For transactions within developing countries (with much lower densities, smaller scales of economic activity, smaller transaction sizes and a less developed infrastructural and institutional environment) these conditions are much more restrictive. Under these circumstances, alternative sets of (non-market) institutional arrangements may perform better, and indeed neo-classical competitive markets may not perform at all.

Figure 2 (adapted from Dorward et al., 1998) provides a simple representation of this view of economic development (with regard to resources, goods and services with private property characteristics). The basic postulate is that technology and the institutional environment are two key,
interacting and endogenous elements in economic development. Highly productive technologies require intensive and effective mechanisms for complex co-ordination and exchange, to allow investment in and operation of different specialized activities. These mechanisms in turn require an effective institutional environment. Economic development is therefore shown in Figure 2 as a movement from the southwest to the northeast, with complementary progress in institutional and technological development.

Simplistic and highly stylized though it may be, this representation yields useful insights. First, it helps us to conceptualize a mapping of different combinations of institutional and technological development, and to ask how the exchange and co-ordination mechanisms for particular technologies may be provided in specific institutional contexts. A poorly developed or weak institutional environment cannot support highly advanced technologies, and therefore in the southeast of the diagram we encounter market failure. In the northwest corner, however, high levels of development in the institutional environment should allow effective competitive markets to support relatively simple technologies.\(^5\) Along the southwest to northeast diagonal there is a zone of ambiguity: the institutional environment may be insufficiently developed to support the competitive markets required for the co-ordination and exchange necessary for particular technologies. Market failure is not, however, the only alternative to well-functioning competitive markets. Where the institutional environment is not sufficiently developed to support these markets, actors will often develop specific arrangements for co-ordination and exchange. These may be non-competitive or non-market arrangements but may operate more effectively and efficiently than liberalized competitive markets. There is, therefore, no \textit{a priori} reason for expecting an optimal development path (that is, movement from the southwest to the northeast) to be restricted to situations with ‘all necessary markets effective’: it is much more likely to move through a mix of effective and ineffective competitive markets with non-market institutional arrangements. At certain (earlier) stages of development a mix with strong elements of non-market co-ordination will prove more effective. As elaborated later, this is mainly because, at the early stages of development, market participation is inhibited by diseconomies of scale plus the thinness (or absence) of reliable players at critical points within supply chains.

This leads on to questions about optimal (or at least viable) paths and processes for an economy, community or industry to move in a northeastly direction. Such a path can (in principle) be identified if we superimpose onto Figure 2 sets of isoquant and isocost (or possibility) curves mapping out the returns and costs for different technological development and

\(^5\) As noted earlier, our analysis is focused on resources, goods and services with private property characteristics. The difficulties with markets for public goods are widely recognized.
institutional environment combinations (see Figure 3). Again, this is a highly stylized and simplistic static analysis of what are in fact complex and changing relations, but as the discussion below demonstrates, it nevertheless contains important insights.

An important general point to make is that in any situation the ‘optimal path’ depends upon the shapes of the isoquant and isocost curves. Below, we discuss influences on the shapes of the curves, but the curves would have to display some very unusual characteristics and shapes if they were to lead to an ‘optimal path’ that climbed up the left hand side of the diagram where all markets are effective. The natural expectation would rather be for curves approximating to the shapes drawn, and therefore for the path to move across the middle of the diagram with a mix of effective and ineffective competitive markets and non-market institutional arrangements.

So what is likely to determine the shapes of these curves and hence the optimal path? Different stakeholders will face different curves, as they bear different costs and gain different returns from different technological and institutional options. These stakeholders will therefore have different
optimal paths, which will be contingent upon the behaviour of other stakeholders. For some stakeholders we may also expect situations with local optima, and hence incentives for institutional stagnation and regression (as discussed earlier). The situation is further complicated by the way that the costs and returns of different paths (described by the shapes of the isoquant and isocost curves) vary with existing institutional and infrastructural development (that is, are path dependent), with the structure of asset distribution (for example between smallholder and estate agriculture), and with the ‘techno-economic characteristics’ of different commodities for different stakeholders (Jaffee and Morton, 1995: 14; see also Dorward, 2001).6 This is partly illustrated in Figure 4, which shows how we may expect two different starting positions (A and B) to lead to different isocost curves in subsequent ‘steps’, leading to different theoretical ‘optimal’ paths, which proceed largely in parallel.7 As a result, different economies and different communities and industries within an economy will develop different sets of institutional arrangements, with institutional comparative advantage in different types of technological activity in which they have specialized (Hall and Soskice, 2001).8 In practice, however, it will not be possible to map out in advance a desirable or optimal development path for an economy, community or industry: its path will be determined incrementally by (path dependent) political processes and trade-offs between different stakeholder groups as they act to change or preserve the institutional environment and institutional arrangements to suit their perceptions of their interests. These ideas can be developed further, and related to policy choices in developing countries, if we consider in more detail the relations between institutional arrangements and the characteristics of the institutional environment in Figures 2 to 4.

6. These techno-economic characteristics include perishability, quality standards, seasonality, asset specificity, technical sophistication, specialization and scope for economies of scale, and will vary for different stakeholders in a supply chain.

7. To simplify the diagram and its exposition, Figure 4 is drawn with points A and B representing different situations (economies, communities or industries) facing different isocost curves but a similar set of isoquant curves. We would, however, expect the isoquant curves to differ too, particularly between different industries and between different stakeholders in the same industry. In the latter case, each step will involve trade-offs between the different stakeholders, not separate development paths. Even for different industries and economies, their position within a shared and evolving institutional and economic environment may lead to complex and important interactions between otherwise apparently independent paths — an important point when considering the effects of globalization on national development.

8. An important part of Hall and Soskice’s (2001) argument is that different types of productive or service activity have different co-ordination and institutional requirements — thus the definition of ‘strong’ and ‘weak’ institutional environment may be to some extent industry and activity specific — although there are fundamental requirements for communications infrastructure and for robust and clear property right systems.
Earlier expositions of Figure 2 (in Dorward et al., 1998; Kydd et al., 2001) were illustrated by and used to analyse the rise and fall of parastatal agricultural marketing systems in many sub-Saharan African countries over the last thirty or so years. Many of these countries set up monopolistic marketing parastatals in the immediate pre- or post-independence period to support the introduction and spread of more intensive methods and crops in smallholder agriculture. There were strong political and economic reasons for newly independent governments to establish, or continue with and extend the activities of, these parastatals. Governments needed to take action, and to be seen to take action, to promote agricultural and rural development, but the private sector was weak (as regards access to capital and human resources, and in organizational capacity) and the under-developed market and infrastructure in rural areas presented highly risky and unattractive investment opportunities. At the same time there were major co-ordination challenges in getting agriculture and rural economies moving: simultaneous investments (or investment commitments) were needed in communications infrastructure, in input and output trading, in research and extension, and in farmers’ input purchases and production. All the private sector players (traders and farmers) faced severe constraints in
accessing long-term and seasonal capital, and national and rural financial markets were poorly developed. At the same time, private investors face very high risks. Dorward and Kydd (2004), for example, identify four components of what they call ‘the systemic investment risks of poor rural areas’: risks of natural shocks; price risks; economic co-ordination risks; and risks of opportunism.9 State intervention, then, was seen as a means of addressing all these problems: it could provide a co-ordination mechanism across trading, infrastructural, research and extension investments and activities; it could access official finance sources; it could co-ordinate with farmers; it could both reduce and take on systemic investment risks in ways that the private sector could not; and it could invest in the organizational and human resource development necessary to develop working systems.10

These economic arguments for establishing parastatals can be illustrated in Figures 2 to 4. Subsistence agriculture is located in the extreme southwest corner of these diagrams, with a very weak institutional environment, and technologies involving few linkages outside the village economy from which inputs can be accessed and to which small surpluses can be marketed. Any sort of increase in productivity involves an increase in linkages: at its most basic this might involve only sales of extra produce (requiring only output market development), but higher productivity is likely to involve purchased inputs (seeds, fertilizers and, with increasing complexity, chemicals and sprayers, hand and ox-drawn tools, and so on) and seasonal and longer term finance. The seasonal, dispersed and weather dependent characteristics of agriculture pose particular challenges in developing these linkages (particularly with regard to financial services for farmers), as they demand very

9. While there is large literature on natural shocks and price risks, economic co-ordination risks and associated risks of opportunism have received less attention. Dorward and Kydd (2004) define economic co-ordination risk as the possible risk of failure of one player’s investment due to the absence of complementary investments by other players in different stages in the supply chain, and risks of opportunism arise where returns to one player’s investment are highly dependent upon the subsequent behaviour of another player, who is then able to capture an undue share of the revenue in the supply chain. Economic co-ordination risks and risks of opportunism arise where there are thin markets, weak institutions protecting contractors from opportunism, or strong information asymmetry — all features of poor economies.

10. In addition to these very practical problems facing private sector led agricultural development, wider political motives were very important for the development of parastatals. There was often a deep mistrust of private companies seen to be dominated by or associated with former colonial interests, and often a socialist philosophy suspicious of the private sector and of markets, with a belief in the need for the state to actively intervene to direct the economy to achieve both productive and welfare objectives. At the same time, there was great confidence in the ability of the state, and economic development theories that stressed the importance of industrial sector development — and the taxation of agriculture to finance this — found state involvement in agricultural marketing activities a convenient tool for such taxation.
timely delivery of services, impose high costs, and increase risks for all parties.

Under these circumstances governments faced, and still face, severe challenges in promoting the institutional environment required to support the linkages needed for increased agricultural productivity. As outlined earlier, the parastatal option can be seen as a particular ‘institutional fix’ to a specific set of linkage problems, providing the institutional arrangements necessary to support the linkages required for a given technology. This then allows a movement from subsistence to a higher isoquant curve (in Figure 3), but through weak markets with non-competitive arrangements rather than through the development of competitive markets. As we have argued elsewhere (Dorward et al., 1998; Kydd et al., 2001) these parastatals had a very mixed record. However, the criticisms that they faced as often inefficient, ineffective monopolies and state organs of patronage and of agricultural taxation should not mask the institutional challenges that they were initially set up to address, nor the successes that they sometimes achieved in addressing these. Given the failure of liberalized competitive markets to overcome these problems (notably for staple food crops), and the current agricultural stagnation in much of Africa, we need to learn more about the successes of these parastatal systems, and see what lessons they have for us today.

With regard to the emphasis of current institutional policies on developing the broader institutional environment rather than institutional arrangements, it is important to note that the parastatal institutional fix was not an investment in the broader institutional environment, but an investment in specific institutional arrangements. In a poorly developed economy, we can expect efforts to create and sustain appropriate institutional arrangements to generally yield higher returns than investments in the institutional environment, whereas in more developed economies the reverse may often be true. There are three principal reasons for this. First, the cost of making particular changes in the institutional environment may, in many circumstances, be higher in economies with less developed institutions, as institutions are generally established through existing players and institutions. This affects changes in the institutional environment more than it affects changes in institutional arrangements, as the latter can often be more targeted and localized (for example, within particular sectors, geographical areas or transaction types). Indeed, historically, many changes in the institutional environment result from increasing spread of particular institutional arrangements (an example of this, which we discuss later, is the way that the spread of microfinance

11. We recognize that this is by no means always the case, and some institutions are very difficult to change in more developed economies, due, for example, to institutional mechanisms allowing a wide variety of different stakeholders to block change.
systems has led to changes in the institutional environment for financial services). Second, the returns to improvements in the institutional environment will be lower in less developed economies as the volume of economic activity affected will be smaller, whereas efforts to improve institutional arrangements can generally be targeted on higher volume activities. In effect, changes in the institutional environment carry high fixed costs, and in less developed economies these fixed costs are likely to be higher but will often yield lower returns as compared with more developed economies. Changes in institutional arrangements, on the other hand, carry lower fixed costs and are therefore more suited to economies with low volumes of economic activity. Third, and linking the first two points, effective constituencies for change in the institutional environment are less likely to emerge at low levels of economic activity, as the costs in pushing for change are likely to be high as compared with low perceived benefits from change. Changes in institutional arrangements are, however, likely to yield more concentrated and tangible benefits for defined groups. Additionally, these are often easier for individuals and groups to promote, through negotiation between a more manageable group of stakeholders (in some cases with bilateral negotiations).

The distinction between institutional arrangements and the institutional environment is, however, not as clear cut as the foregoing somewhat stylized discussion might suggest. Institutions are nested, and as one set of institutional arrangements is nested within another, the latter becomes part of the institutional environment of the former. Similarly, the fixed costs and relationships between benefits and volume of economic activity vary between different types of change in the institutional environment, and some (for example macro-economic stability) are likely to be beneficial even at very low levels of economic activity. The effectiveness of institutional arrangements also depends upon their demands on their institutional environment, and must be appropriate to their environment. Nevertheless, the broad distinction and analysis presented here remain valid as we compare policy choices between, for example, strengthening property rights or building contractual arrangements between farmers, traders and financial institutions.

12. This point has parallels with Chaudhry’s (1993) argument that in later developers the state does not have the capacity to regulate the private sector and finds it easier to engage directly in critical economic activities.

13. Clearly the validity of these points will vary with specific institutions, and the benefits from some changes in the institutional environment, for example in promoting law and order to reduce crime, or in land tenure systems, may be very tangible. However, even here it is noticeable that the wider institutional environment may be very closely related to institutional arrangements (and therefore have very ‘tangible’ perceived benefits, as is the case with land reform). Similarly, solutions to wider failures in the institutional environment may be sought in local institutional arrangements (as in the setting up of local groups to combat local crime).
service providers for a specific crop or locality. More nuanced policy choices need to be made, recognizing the costs, benefits and political forces involved in different changes in the institutional environment and in institutional arrangements, in the context of differences between national and local economies.

We draw four theoretical conclusions from this section’s examination of institutional issues in market development. First, current policy emphasis on institutional development to promote competitive markets is too narrow, and we provide a more complete conceptual framework that (a) recognizes liberalized, competitive markets as one form of institution fulfilling exchange and co-ordination functions (a form of increasing importance as development progresses), and (b) suggests that other institutions may be more effective in fulfilling these functions in economies with a weak institutional environment. Second, an over-emphasis in the policy literature on institutional development to promote competitive markets may be sub-optimal, that is, inefficient and ineffective in promoting economic growth and development, and particularly inefficient in promoting patterns of growth which offer opportunities for the poor. Third, current policy emphasis on promoting the institutional environment and discouraging non-standard institutional arrangements (apart from poor stakeholder groups) is similarly flawed. Following from this, if non-competitive and non-market forms are likely to be important and indeed desirable mechanisms for economic co-ordination and exchange, we need to develop a much better understanding of their operation, of the ways that they change, and hence of ways in which policy can promote pro-poor change. These theoretical conclusions have important policy implications, which we put forward at the end of the paper. First, however, we consider evidence supporting our analysis.

**MARKETS AS INSTITUTIONS: PRAXIS**

The conceptual framework presented in the previous section suggests several hypotheses about the nature of institutions (including markets) we would expect to find in different economies, and the critical characteristics of institutional change in developing economies. We examine three: first, that different economies may successfully develop along different technological/institutional development paths (see Figure 4); second, that successful...
economic development will commonly require a path that depends upon non-standard market arrangements; and third, that development of specific critical institutional arrangements is particularly important in lifting poor economies out of the low equilibrium trap of Figure 1. In each case we demonstrate how one or more well-known economies or processes of change is compatible with the hypothesis. First we consider current differences in institutional structures among developed OECD economies, with brief reference to the development of the Asian tigers. We then examine two development revolutions of the last fifty years, the ongoing ‘microfinance revolution’ and the ‘green revolution’. We conclude that successful economic management and development praxis has involved a pragmatic mix of different types of institutional investment, and that the nature of that mix has varied within and between development paths, in line with the arguments developed earlier.

OECD Economies and the Asian Tigers

In recent work following broadly in the tradition of North and Williamson, Hall and Soskice (2001) have set out an approach they term ‘Varieties of Capitalism’, in which they examine cross country differences in political and economic organization. We do not pursue here the details of their arguments, but focus on their analysis of the ways that firms within different national political economies solve co-ordination problems. They propose two ‘types’ of national economy, at poles of a spectrum: Liberal Market Economies or LMEs (where activities are co-ordinated via intra-firm hierarchies and competitive market arrangements) and Co-ordinated Market Economies or CMEs (where there is more use of ‘non market relations to co-ordinate endeavours and to construct core competencies’). LMEs rely for co-ordination principally on competitive markets and hierarchies (firms), together with vertical hybrid arrangements between firms in a supply chain. In contrast, key elements of CME non-market relations are more extensive relational investment, more incomplete contracts, and network monitoring — based on the exchange of private information within networks. CMEs draw on a further set of organizations and institutions, supporting more horizontal or networked strategic interaction, both across and within supply chains. Of course, LMEs and CMEs are ideal types: in reality, in LMEs firms enter into relationships which are not fully mediated by

15. See Kydd et al. (2002) for a more detailed application of these arguments to developing country agriculture.
market forces, and markets and hierarchies are important to all capitalist economies, CMEs included.

Hall and Soskice use this categorization of CME and LME type economies to develop a theory of 'comparative institutional advantage' in which the institutional structures of a particular political economy provide firms with advantages for engaging with specific types of activity, as different modes of co-ordination condition the efficiency with which firms can undertake different categories of activity. This theory of comparative institutional advantage is then tested against data from OECD countries, and it performs well empirically. First, the LME/CME distinction within the OECD turns out to be a distinction between the English speaking countries and the rest. Second, the CMEs are specialized in activities characterized by continuous technical innovation, and the LMEs are in areas of radical innovation (with the exception of pharmaceuticals, where it is argued that LME institutions will lead to substantial investment as property rights are strong).

Hall and Soskice further distinguish three sub-types of CME: ‘industry based’ (or intra-sectoral) co-ordination (typically Northern European based on intense intra-sectoral co-operation); group-based co-ordination (Japan and Korea, where co-operation is based within a family of companies); and state-led co-ordination (France and Southern Europe, where senior industry managers have strong connections to the state). Governments may play three roles in all three sub-types of CMEs: facilitating deliberative and co-ordination processes between different actors; facilitating supporting strategies that emerge from these processes; and actively promoting particular co-ordinated strategies. Although the state’s facilitating roles are a pre-requisite for CMEs, Hall and Soskice are sceptical of states playing a more active role in co-ordination, as they lack the information needed to specify appropriate strategies. Strong state action can also be problematic because firms will be wary of committing themselves to strategic co-operation where they have grounds to fear that government may unilaterally change the rules of the game.

The arguments of Hall and Soskice link up with research which has shown that substantial state intervention helped produce the East Asian growth miracle. Wade (1990), for example, describes the crucial role of active state co-ordination in ‘governed markets’ in the development of the East Asian Tigers, with governments providing strong, stable and consistent leadership and co-ordination, and strong links between firms, financiers and government. Although the East Asian export promotion strategies of the 1980s may not work for developing countries in today’s global economy, and the financial crisis of the late 1990s exposed major organizational weaknesses in these economies, such weaknesses are not unique to CMEs (as Enron and WorldCom demonstrate), and the East Asian growth achievements over the last forty years still stand, in marked
contrast to the performance to date of South Asian and sub-Saharan economies.\footnote{16}

Our discussion of current differences in institutional structures among developed OECD economies and, more briefly, of development of the Asian Tigers, strongly supports the first two hypotheses we put forward at the start of this section, that ‘different economies may successfully develop along different technological/institutional development paths’, and, with reference to economies that have achieved the most rapid development and mass poverty reduction in history, that ‘successful economic development will commonly involve as an integral part of its success a path that depends upon non-standard market arrangements’. An interesting point to note here is that in historical terms the OECD LME countries have tended to be the pioneers in first agricultural and then industrial development. OECD and East Asian CME countries, on the other hand, are composed of countries that have achieved more rapid structural development and change, following and catching up with the LME countries. Are CMEs better suited to the process of ‘catching up’, and what are the implications of this for today’s developing economies?

The Microfinance Revolution

We now turn to consider our third hypothesis, that development of specific critical institutional arrangements is particularly important in lifting poor economies out of the low equilibrium trap of Figure 1, by examining first the ‘microfinance revolution’, one of two major, if often controversial, processes of change in developing countries in the last fifty years. We argue that in this, as in the ‘green revolution’ (which we examine next), it has been the externally (NGO or government) sponsored introduction of specific institutional arrangements that has provided the critical stimulus to change.

The microfinance revolution has at its root the interaction of two processes of change in the 1970s and 1980s: the development of the Grameen Bank in Bangladesh (see for example Jain, 1996), and the Washington critique of development finance (see for example von Pischke et al., 1983). Although these initially developed independently, the synergies between them soon became apparent: a particular set of non-market institutional arrangements was developed to address widespread market failure in

\footnote{16. We have cited here examples of success with CME approaches: there are of course also examples where both CME and LME approaches have not been successful, due to bad luck and/or bad policies. There has also been mixed experience with socialist planned economies, with some very significant successes in achieving rapid transition from low- to middle-income status, as well as abject failures. It is not, however, easy to find LME examples of rapid transition from low- to middle-income status.}
financial markets for the poor, and at the same time the failings of the hitherto dominant set of institutional arrangements for agricultural and rural lending were being increasingly recognized, in the context of growing dissatisfaction with direct government involvement in markets. The Grameen Bank and other microfinance initiatives expanded dramatically, in their spread and in the volumes of savings and loans that they handled. The achievements of the microfinance revolution remain the subject of much debate, in particular its sustainability, its ability to reach the poorest and to serve poor farmers, and the dangers of over-crowding and competition between microfinance suppliers. However, our point here is that it has resulted in improved access for many poorer people to financial services, and this has been achieved primarily by the development of new institutional arrangements for lending. These arrangements include a focus on small, short-term loans associated with compulsory regular (weekly, fortnightly or monthly) savings and repayments; building up of individual and group funds to act as loan collateral and meet emergencies; group lending to reduce transaction costs for the microfinance institution (MFI) and to encourage peer group pressure for loan repayment; graduated access to increasing loan sizes and a wider range of loan products; effective management information systems; and loan officers who are locationally and socially accessible to clients and have clear incentives and delegated authority.

The successes of MFIs have thus been achieved primarily by new institutional arrangements linking borrowers, groups and microfinance providers in ways that reduced transaction costs and risks in the provision of external finance to rural people. These have been supported by fairly narrow and low cost changes in the institutional environment that both permitted NGOs to engage in these activities and enabled them to access soft development finance to on-lend. With time these developments have led to, and been stimulated by, further changes in the institutional environment, in institutional arrangements, and in technology. Changes in the institutional environment have included, for example, new financial regulations bringing microfinance activities into mainstream financial markets, with greater access to commercial finance, greater protection for microfinance clients, and opportunities for microfinance organizations to offer a greater range of financial services. New institutional arrangements have been developed as the microfinance concept has spread to different areas and as agencies have developed mechanisms to match the needs of different clients. Changes in technology have involved the development of new products and increasing use of new information and communications technologies.

We conclude this part of our discussion with two observations relating to our third hypothesis (that development of specific critical institutional arrangements is particularly important in lifting poor economies out of the low equilibrium trap) and to the theory behind it. First, we reiterate the importance of innovation in institutional arrangements in the
microfinance revolution. This is seen globally (with the spread and adaptation of Grameen principles around the world) and nationally (as microfinance organizations have been established and expanded and spread within each country). Second, we observe that changes in the institutional environment have often then followed, once the volume of microfinance activity has built up (thereby providing a constituency of stakeholders pushing for significant and tangible benefits from change). Some of these have been very specific, low-cost/high-payoff changes directly enabling specific institutional arrangements (for example, laws regarding NGO involvement in financial intermediation). They have also involved wider changes in the international ‘culture’ of development finance, in national financial architecture and legislation, and in the structure, culture and procedures of international and national organizations. These changes have then had spillover effects internationally and nationally, as late adopting countries, organizations and districts or communities have benefited from changes in the institutional environment ‘won’ by earlier adopters.

The Green Revolution

Dorward et al. (2004) examine irrigated and non-irrigated agricultural transformations in the twentieth century and argue that:

There are certain necessary conditions for intensive cereal based transformations to occur: appropriate and high yielding agricultural technologies; local markets offering stable output prices that provide reasonable returns to investment in ‘improved’ technologies; seasonal finance for purchased inputs; reasonably secure and equitable access to land, with attractive returns for operators (whether tenants or land owners); and infrastructure to support input, output and financial markets. (ibid.: 20)

The key question, then, is how these conditions can develop; Dorward et al. put forward evidence that external (government) action played a role in this in almost every case. With regard to development of finance, input and produce markets, this involved the establishment of specific institutional arrangements, not supporting liberalized competitive markets, in a process summarized in Figure 5.

Figure 5 shows schematically how in successful irrigated green revolutions, non-market institutional arrangements supported financial, input and output market development in a particular development ‘phase’. A prior phase (Phase 1) involved basic interventions to establish technological,

17. This is not the place to discuss the positive and negative aspects of the green revolution, but its use as an illustration is based on a view that it has played a major role in poverty reduction and pro-poor economic growth in Asia, while recognizing that it has not solved the problem of poverty and that there are serious questions about its environmental and social impacts (see, for example, Lipton and Longhurst, 1989; Rosegrant and Hazell, 2000).
infrastructural and institutional conditions for productive intensive cereal technologies. Once these were in place, uptake was limited to a small number of farmers with access to seasonal finance and markets. Agricultural transformation was then ‘kick started’ by government interventions (in Phase 2) to enable more farmers to access seasonal finance and seasonal input and output markets at lower costs and risks. Subsidies were required primarily to cover transaction costs, not to adjust basic prices. Once farmers became used to the new technologies and when volumes of credit and input demand and of produce supply built up, transaction costs per unit fell, and were also reduced by growing volumes of non-farm activity arising from growth linkages. Governments could (and should) have then withdrawn from these market activities and let the private sector take over (Phase 3), transferring attention to supporting conditions to promote development of the non-farm rural economy. Difficulties arose in managing these interventions effectively and efficiently, and from political pressures to include price subsidies with transaction cost subsidies and to continue with these market interventions and subsidies when they were no longer necessary (and were indeed harmful). Furthermore, the deadweight costs of such interventions will have been high if they were introduced too early, or continued too long. On the other hand, since their benefits only applied during a critical but short period in the initial transformation, these benefits have been easily
overlooked by analysts. This may be one of the causes of their neglect in current conventional policy for poor ‘pre-transformation’ rural economies, which attempts (in our view unrealistically and mistakenly) to move straight from Phase 1 to Phase 3.

This analysis of the process of the green revolution shows that, as with the microfinance revolution, emergence from the low equilibrium trap needs investment both in key elements of the institutional environment and in specific institutional arrangements. We do not suggest that the same institutional arrangements should be replicated elsewhere, nor do we contest that the particular ways that the state became involved did not, even where initially highly successful, evolve over time into a monumental waste of resources. Our point is rather that institutional development is critical to economic growth and development in poor economies, and it needs to be more than simply improving the institutional environment supporting liberalized markets. Efforts to promote an agricultural transformation to support improved livelihoods for people living in today’s poor rural areas are likely to face much greater difficulties than those that were faced in the successful green revolution areas of the twentieth century (Dorward et al., 2004). There is therefore a much greater need today for an appropriate mix of targeted investments in institutional arrangements and the institutional environment to support agricultural growth in these areas.

The global cases presented in this section demonstrate how successful economic management and development praxis normally involves a pragmatic mix of different types of institutional investment, varying within and between development paths.

MARKETS AS INSTITUTIONS: IMPLICATIONS FOR POLICY

As will be apparent from the preceding sections, we suggest that our analysis of markets and institutions has important implications for research, policy and action. We conclude by reiterating some points made in the earlier discussion, and adding a number of new ones.

First, we need to move away from current policy preoccupations with neo-classical competitive markets, and instead of looking at institutions primarily in terms of their contributions to making competitive markets work better, see such markets as one (very important) form of institution fulfilling exchange and co-ordination functions in an economy, while recognizing that other institutions may often be more effective in fulfilling these functions in economies with high levels of poverty and low levels of institutional development. This will address an inherent contradiction in current policies emphasizing neo-classical competitive markets and discouraging on ideological grounds almost all non-standard institutional arrangements, while promoting stakeholder groups for the poor.
A more nuanced analytical understanding of institutions and markets should both demand and promote greater understanding (a) of the processes and types of institutional change needed for poor economies and communities to climb out of ‘low level equilibrium traps’, and (b) of the need for pragmatic, path-dependent and location-specific mixes of investment, in non-standard institutional arrangements as well as in the institutional environment. This in turn demands that we learn from existing and past institutional arrangements. We must not write off failures without considering in detail the institutional functions that they may have attempted to fulfil and without undertaking a more careful and informed examination of elements of both success and failure. We should rather learn to look for viable incremental changes that benefit the poor, are ‘politically viable’, and are consistent with longer term processes of pro-poor institutional and economic development.

Although our thesis presents major challenges to reform packages which embody a very strong emphasis on promoting market liberalization and on minimizing state intervention in markets, it also recognizes, and extends, questions about the ability of the state to effectively intervene in markets. Successful state intervention is difficult, demands challenging conditions, and is often achieved only for short periods before the dynamics of change (both in the economy and in the political economy within and around the state) make it ineffective. The widely differing and changing experiences across Africa and Asia demonstrate that the costs and risk of failure are high, but so are the potential benefits from even temporary success.

Many of the points made in this paper are not new; indeed they are a call for analysis to catch up with both theory and practice, the latter demonstrated by our discussion of development practitioners working with producer and other stakeholder groups, and by the critical role of development of institutional arrangements in the successes of the Asian Tigers, of the green revolution, and of the microfinance revolution. The arguments are, however, new in the way that they (a) provide a consistent analytical framework, (b) link wider changes in the institutional environment with specific institutional arrangements, and (c) set an explicit policy research agenda. The challenge is to take up, develop and act on this agenda so that theory, praxis and policy can work effectively and efficiently together.

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