DRAFT WORKING PAPER

'Institutions for Markets' or Markets as Institutions: Theory, Praxis and Policy in Institutional Development [1]

Andrew Dorward, Jonathan Kydd, Jamie Morrison and Colin Poulton [2]

Imperial College of Science, Technology and Medicine
Imperial College Wye
July 2002

This paper explores 'new institutional economics' theory in relation to markets and economic development. It argues 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 coordination 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.

1 Introduction

In the last 15 years or so development economics has increasingly recognised the importance of institutions in economic behaviour (e.g. Nabli and Nugent, 1989, Harriss *et al.*, 1995,Poulton *et al.*, 1998). This has included micro-economic analysis of transaction costs and contractual arrangements (e.g. Binswanger and Rosenzweig, 1986; Stiglitz, 1986) and recognition of the importance of institutions in processes of economic growth (eg North, D.C., 1990). The most recent contribution to this is the 2001/2 World Development Report, entitled 'Institutions for Markets' (World Bank, 2002), arguably bringing institutions into mainstream development policy thinking. Welcome (and overdue) though this increasing analytical emphasis on institutions may be, we argue in this paper that it does not yet go far enough in its consideration of the role of institutions in development, and consequently, that policy prescriptions fail to address critical constraints to development. Unfortunately these shortcomings are most severe in poor rural areas where the challenges of poverty are greatest.

The paper is arranged in four sections. After this brief introduction we explore 'new institutional economics' 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 coordination functions in an economy. This leads to 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.

---

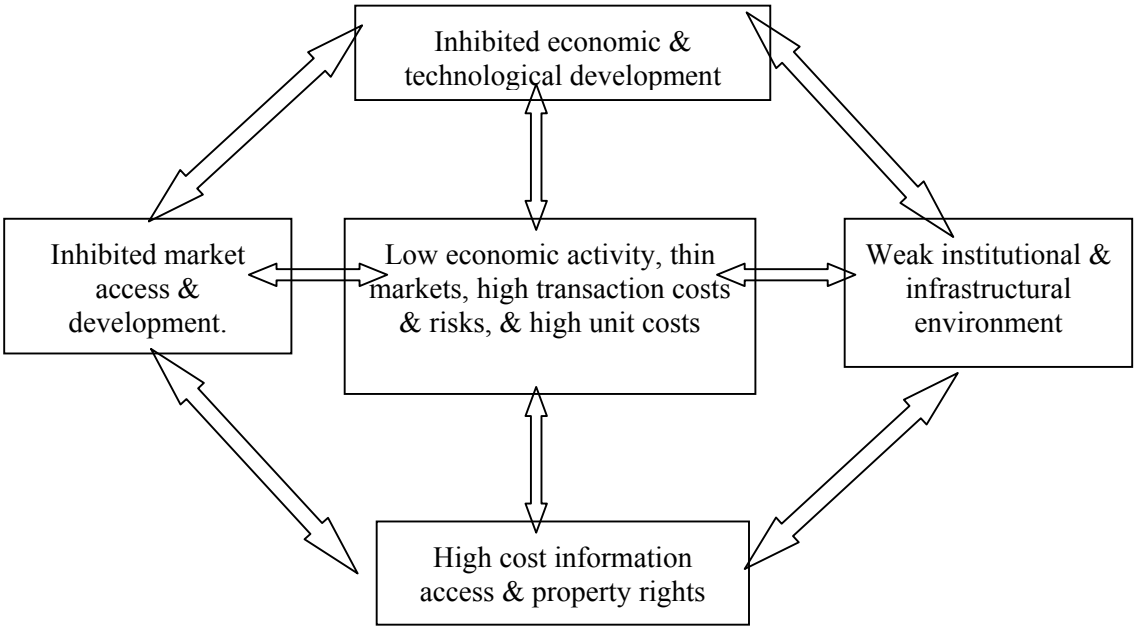
[1] Some of the ideas presented here have been developed under various activities funded by the Department for International Development (DFID) of the United Kingdom. However, the interpretations and conclusions expressed in this paper are entirely those of the authors and should not be attributed to DFID, which does not guarantee their accuracy and can accept no responsibility for any consequences of their use.

[2] Centre for Development and Poverty Reduction, Imperial College Wye, Wye, Ashford, Kent, TN25 5AH, UK. http://www.wye.ic.ac.uk/AgEcon/ADU/index.html. Email: A.Dorward@ic.ac.uk

2 Markets as institutions: theory

Following North, D.C., 1990, we define institutions as 'rules of the game' defining the incentives and sanctions affecting people's behaviour. Key concepts relevant to our arguments are the distinction between the institutional environment and institutional (or contractual) arrangements (Davis and North, 1971); the interaction of these with property rights, information flows, transaction costs, transaction risks, and market access failures for different market participants (e.g. Williamson, 1985; Williamson, 1991; Dorward, A., 2001); and processes whereby institutions change (North, D.C., 1990). The key point that emerges from an examination of institutional and economic development using these concepts is that less developed economies are characterised by situations with high transaction costs and risks, weak information flows, and a weak institutional environment. Actors, particularly those with little power or financial and social capital, then face high 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 themselves lead to thin markets, coordination problems, high transaction costs and risks, and high unit costs for infrastructural development. The result can easily be a 'low level equilibrium trap' (see Figure 1).

Figure 1: Institutions and the Low Level Equilibrium Trap



We are therefore left with critical questions about the processes by which institutional, technological, social and economic development can proceed, and the roles of different stakeholders in promoting such development, particularly 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. Again North has made a seminal contribution here with a historical perspective on the influence of different paths of institutional change on economic development (Davis and North, 1971; North, D. C. and Weingast, 1989; North, D.C., 1990; North, D. C., 1995). 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 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. In broad terms, institutional change can take an "anti-development" form (structuring transactions to create rents), or a "pro-development" form (structuring transactions to reduce costs, promoting trade and investment). There is a strong path dependency in these processes, as history plays 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 World Bank, 2000; World Bank, 2002 and IFAD, 2001) is largely on the institutional environment (it lacks formal attention to institutional arrangements) and on the role of the government and civil society (in improving communications, property rights, the macro-economic environment, and access to information to support competitive markets). These are very important, but unfortunately if the institutional analysis stops there its principal output is a growing list of often unrealistic demands on governments. It becomes clear that the liberalisation agenda of the 1990s that emphasised and tried to escape the serious problems of state failure in market interventions has again run up against the buffers of serious state failure, but now these failures are in providing the institutional support required for privatised competitive markets to develop and work in the challenging conditions where poverty is most intractable.

How can we move beyond this impasse? We suggest that institutional analysis needs to be taken forward in a number of ways. First, we need to recognize an inherent contradiction between the broader conceptual framework which emphasises neo-classical competitive markets and an important, pragmatic thread that runs through conventional development wisdom, calling for support for bottom up non-market organisations (in producer groups, Community Based Organisations, micro-finance groups, and common property resource management groups for example). These are not parts of a competitive market structure, but they can work. Policy analysis needs to catch up with praxis, and we need to integrate these organisations into an overall conceptual framework.

A more comprehensive conceptualisation of markets as institutions (and hence part of the process of institutional development) overcomes these problems. Two practical policy conclusions arise from this: first that competitive neo-classical markets are then seen as only one institutional model (albeit a very important and often effective one) by which resources, production and consumption are allocated, coordinated and exchanged in an economy; second that economic development involves the development of institutional arrangements as well as of the institutional environment. These points merit further consideration.

With regard to competitive neo-classical markets being only one institutional model for allocation, coordination and exchange in an economy, this is not to deny their many advantages, and frequent efficiency and effectiveness in performing these functions. 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) and even in the most developed economies a very significant 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,

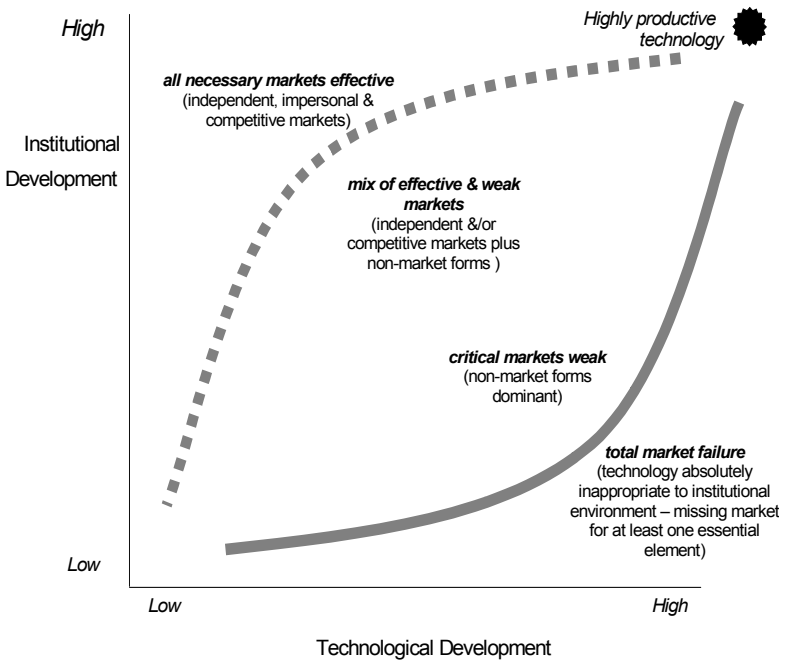
1992, Williamson, 1985, 1991,Hall and Soskice, 2001). Globally the proportion and amount of transactions occurring within firms (and therefore through non-market arrangements) is growing as two thirds of world trade is either within transnational corporations (TNCs) or associated with TNCs (United Nations, 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 institutional models may perform more effectively, and indeed neo-classical competitive markets may not perform at all.

Figure 2 (adapted from Dorward, A. *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 technological and institutional development are two key, interacting and endogenous elements in economic development. Highly productive technologies require intensive and effective mechanisms for complex coordination and exchange, to allow investment in and operation of different specialized activities. These mechanisms in turn require effective institutions. Economic development is therefore shown in figure 2 as a movement from the south west to the north east, with complementary progress in institutional and technological development.

Simplistic and highly stylized though it may be, this representation yields some helpful insights. First, it helps us to conceptualise a mapping of different combinations of institutional and technological development, and to ask how the exchange and coordination mechanisms for particular technologies may be provided in specific institutional contexts. Poorly developed institutions cannot support highly advanced technologies, and therefore in the south east of the diagram we encounter market failure. In the north west corner, however, high levels of institutional development should allow effective competitive markets to support relatively simple technologies[3]. Along the south west to north east diagonal there is more ambiguity: institutional development may be insufficient to support the competitive markets required for the coordination and exchange necessary for particular technologies. Market failure is not, however, the only alternative to well functioning competitive markets. Where wider institutions are not sufficiently developed to support these markets, actors will often develop specific arrangements for coordination and exchange. These may be non-competitive or non-market arrangements but may operate more effectively and efficiently than liberalised competitive markets. There is, therefore, no *a priori* reason for expecting an optimal development path or movement from the south west to the north east to be restricted to situations with 'all necessary markets effective': it is more likely to move through a mix of effective and ineffective competitive markets with non-market institutional arrangements.

[3] 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 recognised.

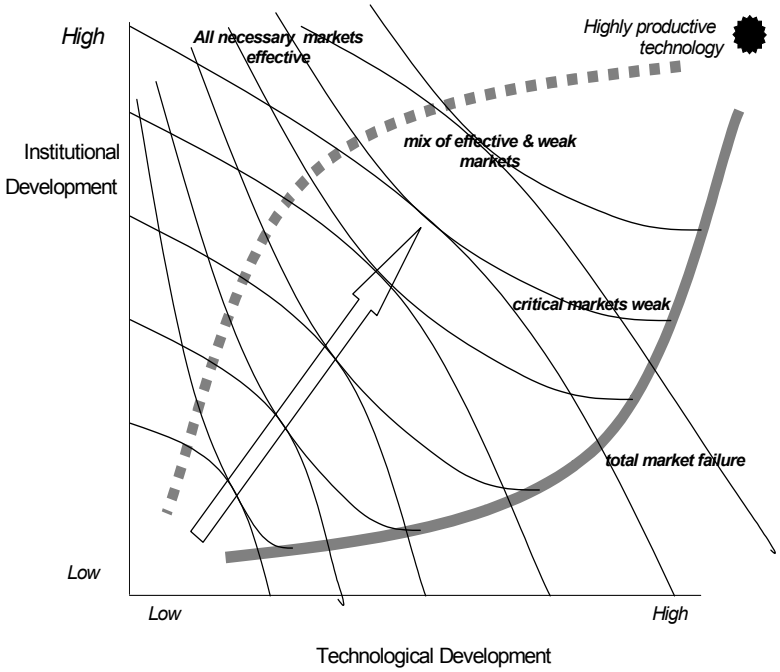
Figure 2. Technological and Institutional Development and Market Forms



This leads on to questions about optimal (or at least viable) paths and processes for an economy, community or industry to move in a north easterly 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 combinations of technological and institutional development (see figure 3). Again, this is highly stylized but 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, and there is no *a priori* reason for expecting it to be restricted to situations with 'all markets effective'. We discuss below influences on the shapes of the curves, but the natural expectation would be for the path to move across the middle of the diagram, as drawn. A mix of effective and ineffective competitive markets with non-market institutional arrangements would therefore be expected as the 'normal' path.

Figure 3. Mapping an Institutional and Technological Development Path



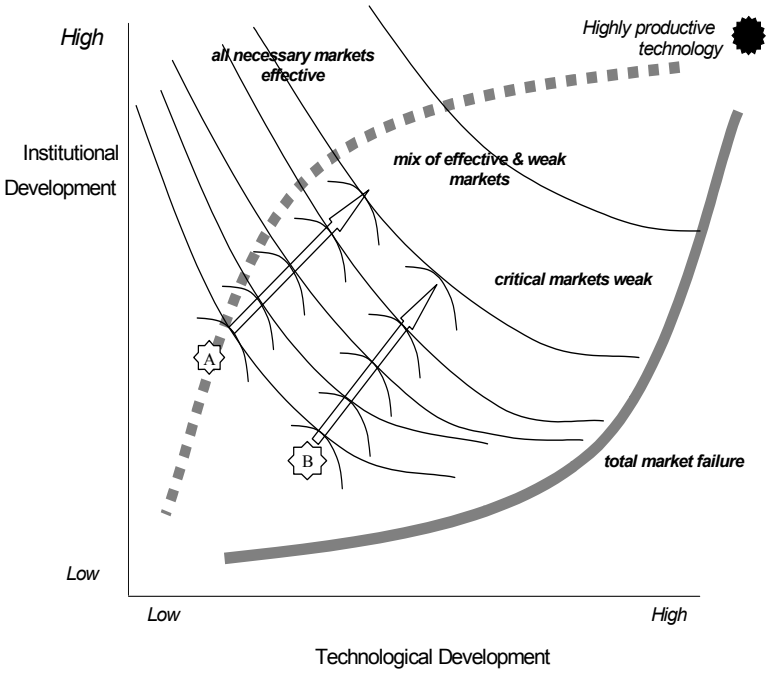
What is therefore likely to determine the shapes of these curves and hence the optimal path? Different stakeholders will face different curves, as they bear different costs and gain different returns from different technological and institutional options. These stakeholders will therefore have different 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, p14, Dorward, A., 2001)[4]. 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 [5]. As a result different economies, and different communities and industries within an economy, will develop different institutional models, with

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

[5] 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 globalisation on national development.

institutional comparative advantage in different types of technological activity in which they have specialised (Hall and Soskice, 2001). In practice it will not however 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.

Figure 4. Mutiple Institutional and Technological Development Paths



These ideas can be developed further, and related to policy choices in developing countries, if we use the distinction between the institutional environment and institutional arrangements to unpack the rather amorphous concept of 'institutional development' in figures 2 to 4.

Earlier expositions of figure 2 (Dorward, A. *et al.*, 1998, Kydd, J.G. *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 establishing or continuing with and extending 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 organisational capacity) and the poor market and infrastructural development in rural areas presented highly risky and unattractive investment opportunities. At the same time there were major coordination 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. State intervention, however, was seen as a means of addressing all these problems, in that it could provide a coordination mechanism across trading, infrastructural, research and extension investments and activities, it could access official finance sources, it could coordinate with farmers, and it could invest in the organisational and human resource development necessary to develop working systems. [6]

These economic arguments for establishing parastatals can be illustrated in figures 2 to 4. Subsistence agriculture is located in the extreme south west corner of these diagrams, with a very low level of institutional development, and technologies involving very 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, etc) 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 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 development required to support the linkages needed for increased agricultural productivity. As outlined earlier, the parastatal option can be seen as a specific 'institutional fix' to a specific set of linkage problems, providing the institutional development necessary to support the particular linkages involved in a specific 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, A. *et al.*, 1998, Kydd, J.G. *et al.*, 2001) these parastatals had a very mixed record. However the problems that they faced as often inefficient, ineffective monopolies and state organs of patronage and of agricultural taxation should not mask the institutional problems that they were initially set up to address, nor the successes that they sometimes achieved in addressing these problems. Given the failure of liberalised competitive markets to overcome these problems, 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 specific 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 investments in appropriate institutional arrangements to generally yield higher returns than investments in the institutional environment, whereas in more developed economies the reverse may be true. There are three principal reasons for this. First, the cost of making particular changes in the institutional environment is likely to be higher in economies with less developed

---

[6] 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.

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). 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 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, an effective constituency for change in the institutional environment is 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, easier for individuals and groups to promote through (often bilateral) negotiation between parties, and the benefits, and processes of change, will often be much more tangible[7].

The distinction between institutional arrangements and the institutional environment is however not as clear cut as this discussion might suggest. Institutions are nested, and as one set of institutional arrangements are nested within another, the latter become 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 service providers for a specific crop or locality. Much more nuanced policy choices need to be made, recognising 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) recognises liberalised, competitive markets as one form of institution fulfilling exchange and coordination 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 low levels of institutional development [8]. Second, an over emphasis on institutional development to promote competitive markets may be sub-optimal - inefficient and ineffective in promoting economic growth and development, and particularly inefficient in promoting growth and development offering 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

---

[7] 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) or 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).

[8] We are not considering here standard public good, externality or welfare arguments for state intervention in markets.

non-market forms are likely to be important and indeed desirable mechanisms for economic coordination 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.

3 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 involve as an integral part of its success 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 50 years, the on-going 'micro-finance 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.

3.1 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 this they examine cross country differences in political and economic organisation. We do not pursue here the details of their arguments [9], but focus on their analysis of the ways that firms within different national political economies solve coordination problems. They propose two "types" of national economy, at poles of a spectrum: Liberal Market Economies or LMEs (where activities are coordinated via hierarchies and competitive market arrangements) and Coordinated Market Economies or CMEs (where there is more use of "non market relations to coordinate endeavours and to construct core competencies"). LMEs rely for coordination principally on competitive markets and hierarchies (firms), together with vertical hybrid arrangements between firms in a supply chain. 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 organisations and institutions, supporting more horizontal or networked strategic interaction, both across and within supply chains. Of course, LME and CME are ideal types: in LMEs firms enter into relationships which are not fully mediated by market forces, and markets and hierarchies are important to all capitalist economies, CMEs included.

Hall and Soskice use this categorisation 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 coordination 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

[9] See Kydd, J. *et al.*, 2002 for a more detailed application of these arguments to developing country agriculture

within the OECD turns out to be a distinction between the English speaking countries and the rest. Second, the CMEs are specialised in activities characterised 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) coordination (typically Northern European based on intense intra-sectoral cooperation); group-based coordination (Japan and Korea, where cooperation is based within a family of companies); and state-led coordination (France and Southern Europe, where senior industry managers have strong connections to the state). Governments may play three roles in CMEs: facilitating deliberative and coordination processes between different actors; facilitating supporting strategies that emerge from these processes; and actively promoting particular coordinated 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 coordination, 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 cooperation 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 coordination in 'governed markets' in the development of the East Asian Tigers, with governments providing strong, stable and consistent leadership and coordination, and strong links between firms, financiers and government. Although the East Asian export promotion strategies of the 80s may not work for developing countries in today's global economy, and the financial crisis of the late 1990s exposed major organisational 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 40 years still stand, in marked contrast to the performance to date of South Asian and Sub Saharan economies.

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?

3.2 The micro-finance 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 'micro-finance revolution', one of two major, if often controversial, processes of change in developing countries in the last 50 years. We argue that in this, as in the 'green revolution' (which we examine next) it has been externally (NGO or Government) sponsored introduction of specific institutional arrangements that has provided the critical stimulus to change.

The micro-finance revolution has at its root the interaction of two processes of change in the 1970s and 80s: the development of the Grameen Bank in Bangladesh (see for exampleJain, 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 institutional model (i.e. a set of non-market institutional arrangements) was developed to address widespread market failure in financial markets for the poor, and at the same time the failings of the hitherto dominant institutional model for agricultural and rural lending were being increasingly recognised, in the context of growing dissatisfaction with direct government involvement in markets. The Grameen Bank and other micro-finance initiatives expanded dramatically, in their spread and in the volumes of savings and loans that they handled. The achievements of the micro-finance 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 micro-finance suppliers. However, our point here is that it has resulted in improved access of 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 MFI and 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 that 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 micro-finance providers in ways that reduced transaction costs and risks in the provision of external finance to rural people. These have been supported by a fairly narrow and low cost change 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 micro-finance activities into main stream financial markets, with greater access to commercial finance, greater protection for micro-finance clients, and opportunities for micro-finance organisations to offer a greater range of financial services. New institutional arrangements have been developed as the micro-finance concept has spread to different areas and 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 our discussion of micro-finance 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 micro-finance revolution. This is seen globally (with the spread and adaptation of Grameen principles around the world) and nationally (as micro finance organisations 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 micro-finance 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 organisations. These changes have then had spillover effects internationally and nationally, as late adopting countries, organisations and districts or communities have benefited from changes in the institutional environment ‘won’ by earlier adopters.

3.3 The green revolution [10]

Dorward, A.R. *et al.*, 2002examine irrigated and non-irrigated agricultural transformations in the 20th 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.' (Dorward, A.R. *et al.*, 2002, p20). The key question is then how these conditions can develop, and they 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 liberalised competitive markets, in a process summarised in figure 6.

Figure 6 **Policy phases to support agricultural transformation in favoured areas** [11]

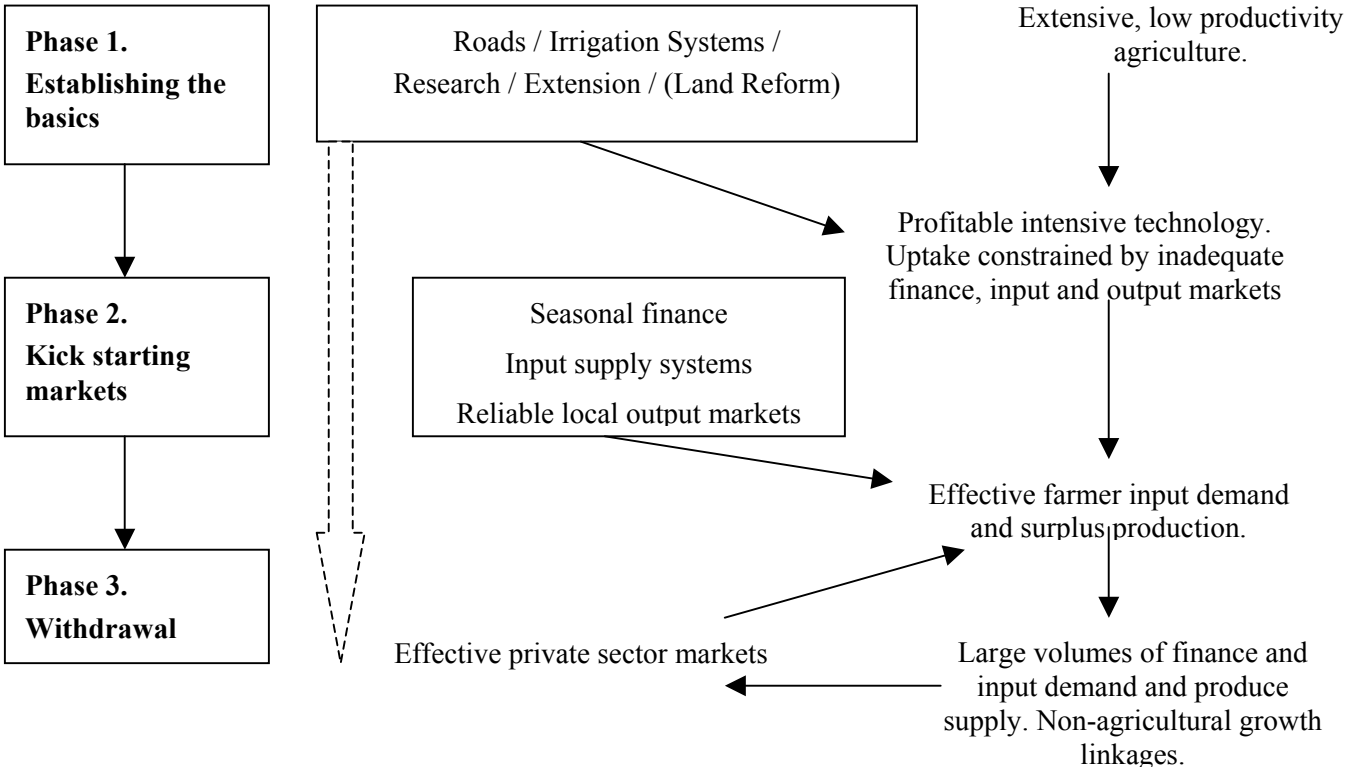


Figure 6 shows schematically how in successful irrigated Green Revolutions non market institutional arrangements supported financial, input and output market development in a particular development 'phase'. Thus a prior phase (Phase 1) involved basic interventions to

[10] 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 recognising that it has not solved the problem of poverty and that there are serious questions about its environmental and social impacts (for example see Rosegrant and Hazell 2000 and Lipton and Longhurst, 1989).

[11] From Dorward, A.R. *et al.*, 2002

establish technological, 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 low cost and low risk. 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 micro-finance revolution, emergence from the low equilibrium trap needs investment in both 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 that the particular way that the state became involved did not often become ineffective and a monumental waste of resources. Rather 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 liberalised 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 20th century (Dorward, A.R. *et al.*, 2002). 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.

4 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 reiterate here points made in earlier discussion, together with a number of new ones.

First, we need to move away from current policy pre-occupations 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 coordination functions in an economy, recognising 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 emphasising neo-classical competitive markets and discouraging on ideological grounds almost all non-standard institutional arrangements, while promoting poor stakeholder groups.

A more nuanced understanding of institutions and markets should both demand and promote greater understanding of the processes and types of institutional change needed for poor

economies and communities to climb out of 'low level equilibrium traps', and 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 the (often partisan) institutional functions that they may have attempted to fulfill, with 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 policies with a very strong emphasis on promoting market liberalisation and on minimising state intervention in markets, it also recognises, 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 theory to catch up with practice, as 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 success of Asian tigers, in the green revolution, and in the micro-finance revolution. The arguments are, however, new in terms of (a) providing a consistent theoretical framework, (b) linking wider changes in the institutional environment with specific institutional arrangements, (c) linking international institutions with national and local institutions, and (d) setting an explicit 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.

References

Binswanger, H. and M. Rosenzweig (1986). Behavioural and material determinants of production relations in agriculture. Journal of Development Studies 22: 503-539.

Coase, R. H. (1992). The institutional structure of production. American Economic Review 82(4): 713-719.

Davis, L. E. and D. C. North (1971). Institutional Change and American Economic Growth. Cambridge., Cambridge University Press.

Dorward, A. (2001). The effects of transaction costs, power and risk on contractual arrangements: a conceptual framework for quantitative analysis. Journal of Agricultural Economics 52(2): 59-74.

Dorward, A., J. Kydd, et al. (1998). Conclusions: NIE, Policy Debates and the Research Agenda. In (eds) A. Dorward, J. Kydd and C. Poulton Smallholder Cash Crop Production under Market Liberalisation: A New Institutional Economics Perspective. Wallingford, CAB International: 240-265.

Dorward, A. R., J. G. Kydd, et al. (2002). A Policy Agenda for Pro-Poor Agricultural Growth. Paper presented at the Agricultural Economics Society Conference, Aberystwyth, 8th - 10th April 2002.

Hall, P. A. and D. Soskice, Eds. (2001). Varieties of capitalism: The institutional foundations of comparative advantage. Oxford, Oxford University Press.

Harriss, J., J. Hunter, et al., Eds. (1995). The New Institutional Economics and Third World Development. London, Routledge.

IFAD (2001). Rural Poverty Report: the challenge of ending rural poverty. Oxford/ Rome, Oxford University Press/ IFAD.

Jaffee, S. and J. Morton, Eds. (1995). Marketing Africa's High Value Foods, Kendall Hunt.

Jain, P. S. (1996). Managing credit for the rural poor: lessons from the Grameen Bank. World Development 24(1): 79-89.

Kydd, J., A. Dorward, et al. (2002). Institutional dimensions of trade liberalisation and policy. OECD Consultation on Trade Liberalisation and Policy, May 2002, Paris.

Kydd, J. G., A. R. Dorward, et al. (2001). New institutional economics, agricultural parastatals and marketing policy. In (eds) D. Byerlee and I. Livingstone, Renewing Development in Sub-Saharan Africa: policy, performance and prospects, Routledge.

Lipton, M. and R. Longhurst (1989). New Seeds and Poor People. London, Routledge.

Nabli, M. K. and J. B. Nugent (1989). The new institutional economics and its applicability to development. World Development 17(9): 1333-1347.

North, D. C. (1990). Institutions, Institutional Change and Economic Performance. Cambridge, Cambridge University Press.

North, D. C. (1995). The new institutional economics and third world development. In (eds) J. Harriss, J. Hunter and L. C., The New Institutional Economics and Third World Development, Routledge.

North, D. C. and B. W. Weingast (1989). The evolution of institutions governing public choice in 17th century England. Journal of Economic History 49: 803-832.

Poulton, C., A. Dorward, et al. (1998). A New Insitutional Perspective on Current Policy Debates. In (eds) A. Dorward, J. Kydd and C. Poulton, Smallholder Cash Crop Production under Market Liberalisation: A New Institutional Economics Perspective. Wallingford, CAB International: 1-55.

Rosegrant, M. W. and P. B. R. Hazell (2000). Transforming the rural Asian Economy: The Unfinished revolution. Hong Kong, Oxford University Press (China).

Stiglitz, J. E. (1986). The new development economics. World Development 14: 257-265.

United Nations (1999). World Investment Report. New York, United Nations.

Von Pischke, J. D., D. Adams, et al., Eds. (1983). Rural Financial Markets in Developing Countries. Baltimore, Md., Johns Hopkins University Press.

Wade, R. (1990). Governing the market: economic theory and the role of government in East Asian industrialisation. Princeton, Princeton University Press.

Williamson, O. E. (1985). The Economic Institutions of Capitalism. New York, The Free Press.

Williamson, O. E. (1991). Comparative economic organisation: the analysis of discrete structural alternatives. Administrative Science Quarterly 36(269-296).

World Bank (2000). Can Africa Claim the 21st Century?, World Bank, African Development Bank, United Nations Economic Commission for Africa.

World Bank (2002). Institutions for markets: World Development Report 2001/2002. Washington D.C., World Bank.

Yusuf, S. (2001). Globalisation and the Challenge for Developing Countries. Washington DC, World Bank.