



**The Political Settlement, Growth and
Technical Progress in Bangladesh**

Mushtaq H. Khan

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CONTENTS

Abstract	7
1. Introduction	9
2. The Political Settlement: A Brief Review	12
The Political Subsystem	15
The Bureaucratic Subsystem	17
The Economic Subsystem	20
3. The Evolution of the Political Settlement in Bangladesh	23
4. Military Authoritarianism: 1958-1971	31
5. The Rise and Fall of Dominant Party Authoritarianism 1972-1975	37
6. The Transition Period of Authoritarian Clientelism 1975-1990	47
7. Vulnerable Democracy 1990-	55
Bengali versus Bangladeshi Nationalism and Democratic Vulnerability	58
The Absence of (Informal) Rules for Live-and-Let-Live Cycling	66
Economic Organizations under Vulnerable Democracy	71
8. Catching up and Learning: An Analytical Model	74
Learning, Effort and Governance	85
Financing Instruments	94
Governance Agencies	96
Firm Structure	97
The Political Structure	96
Interdependencies Affecting Policies for Learning	100
9. The Garments Takeoff	101
Contracting Failures and Institutional Solutions in the Garments Industry	106
Effort, Learning and the Success of Desh Garments	111
Technology Upgrading in the Garments Sector	117
10. The Emergence of the Electronics Sector	123
11. The Crisis in Power Generation	133
Significant Characteristics of the Power Generation Sector	136
Analytical Framework	142
Evaluation of Policy Responses	149
12. Conclusion	153
13. References	155

FIGURES

Figure 1.	Growth and Crisis under Authoritarianism 1958-71	36
Figure 2.	The Dominant Party 1972-5	46
Figure 3.	Growth led by new sectors under Authoritarian Clientelism	54
Figure 4.	Growth with Vulnerable Democracy 1990-13	57
Figure 5.	Loss Financing and Learning-by-doing	83
Figure 6.	Effort Levels and the Viability of the Learning Process	89
Figure 7.	The Interdependence of Variables Determining Effort	93
Figure 8.	High-Effort Learning under the MFA in Bangladesh	110
Figure 9.	The Financing of Learning in the Electronics Industry	126
Figure 10.	Causal links between critical characteristics in power generation	143

TABLES

Table 1.	The Evolution of the Political Settlement in Bangladesh	24
Table 2.	East Pakistan/Bangladesh Growth Trends 1950-2005	25
Table 3.	Sectoral GDP Shares Bangladesh 1980-2005	29
Table 4.	Major Contracting Failures Affecting Technology Acquisition	86
Table 5.	Bangladesh Garments: Growth Rates of Dollar Exports 1985-2006	105
Table 6.	Duties and Taxes on Selected Electronics Imports June 2010	125

ACRONYMS

ADB	Asian Development Bank
BAKSAL	Bangladesh Krishok Sromik Awami League
BGMEA	Bangladesh Garment Manufacturers and Exporters Association
BIFF	Bangladesh Infrastructure Finance Fund
BKMEA	Bangladesh Knitwear Manufacturers and Exporters Association
BNP	Bangladesh Nationalist Party
BTC	Bangladesh Tariff Commission
BUET	Bangladesh University of Engineering and Technology
CEO	Chief Executive Officer
CRT	Cathode Ray Tube
CSP	Civil Service of Pakistan
DANIDA	Danish development agency
FBCCI	Federation of Bangladesh Chambers of Commerce and Industry
FIS	Islamic Salvation Front (of Algeria)
FOB	Free on Board
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
GNP	Gross National Product
GSP	Generalized System of Preferences
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit (German Agency for Technical Cooperation)
IDCOL	Infrastructure Development Company Ltd.
IFC	International Finance Corporation (World Bank Group)
IFI	International Financing Institutions
IPFF	Investment Promotion and Financing Facility
IPP	Independent Power Producer
JRB	Jatiyo Rokkhi Bahini (National Protection Force)
JSD	Jatiyo Shomajtantrik Dal (National Socialist Party, a left populist party)
KMT	Kuomintang (of Taiwan)
LC	Letter of Credit
LCD	Liquid Crystal Display
LDC	Least Developed Country
MFA	Multi-Fibre Arrangement
MOU	Memorandum of Understanding
NBR	National Board of Revenue
PCB	Printed Circuit Board
PDB	Power Development Board
PFC	Power Finance Corporation
PPP	Public Private Partnership
PPP	Pakistan People's Party (West Pakistan-based party led by Bhutto)

SD	Supplementary Duty
SOE	State Owned Enterprise
T&D	Transmission and Distribution
UD	Utilization Declaration
UP	Utilization Permission
VAT	Value Added Tax

ABSTRACT

The characteristics of a political settlement allow us to analyse the dynamics of institutional and policy evolution and their associated developmental outcomes. Four phases in the evolution of the political settlement in Bangladesh are identified, corresponding to the periods of military government in Pakistan from 1958 to 1971, the dominant party rule of the Awami League from 1971 to 1975, authoritarian clientelism under military rulers operating formally multi-party democracies from 1975 to 1990 and competitive clientelist democracy from 1990 onwards. For each period, we look at the dominant institutional and policy characteristics and the ways in which the political settlement constrained or enabled development outcomes. The framework is then used to analyse the dynamics of three sectors that have played a critical role in driving or constraining development in the growth acceleration after 1980. The first is the garments and textile industry, which emerged during the clientelistic authoritarian period of the 1980s and has driven growth in exports since then. Growth in the sector took off when financing instruments emerged that could finance the ‘learning’ of the appropriate technological and organizational capabilities for achieving competitiveness. The financing was partly based on the rents created by the Multi-Fibre Arrangement (MFA), and partly on a private financing arrangement between Desh and Daewoo, with institutional support from the government. The package created strong incentives and compulsions for high levels of learning effort. As the political settlement evolved, technological upgrading has become more difficult though it is happening at the level of individual firms. Second, we look at the electronics sector whose takeoff in the 2000s took place under a competitive clientelist political settlement. The external financing support available to the sector was much less significant and the takeoff depended on the leading role played by a nationalist enterprise that absorbed the risks of investing in learning-by-doing. Progress has been much slower compared to garments. The development of supportive policy for these sectors requires an understanding of both the importance of supporting learning with appropriate financing instruments and the requirement that these instruments should create strong incentives for putting in high levels of effort given the enforcement capabilities of the contemporary political settlement. Finally power generation is an example of an infrastructure sector where poor investment has constrained development. The problem here is not learning-by-doing but adverse incentives for investment that can be traced to an excessive reliance on private sector financing in a political settlement where long-term investments face significant political risks. This combination has resulted in only a few politically connected players bidding for projects with a focus on immediate ‘procurement rents’ rather than on the profits from future production. Conventional reform strategies focusing on transparency, competition and anti-corruption have not achieved results and the political settlement analysis

can explain why. However, a strategy focusing on a long-term financing agency with a dedicated governance structure could change incentives sufficiently to enable improvements in power generation to be achieved even in the context of a competitive clientelist political settlement.

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I. INTRODUCTION

Economic development involves the adoption and adaptation of technologies that result in a structural transformation of society. Historically, developmental transformations have been uneven, costly and contested processes, with economic policies and institutions apparently having differential effects across countries that conventional economic and institutional analysis finds hard to explain. One limitation of applying economic analysis to processes of growth and development is that both the evolution and the effects of particular policies and institutions are endogenous. That policies and institutions evolve out of the political processes of societies is well understood. Less well recognized is that the implementation, and therefore the effects of particular policies or institutions, can also vary significantly across societies. The framework of political settlements allows us to locate the analysis of institutions and policies in the evolving macro political economy of a society (Khan 2010). This enables us to provide a richer description of the evolution of developmental strategies and also a framework for explaining the relative pace and direction of development across countries and over time.

The evolution of the political settlement in Bangladesh allows us to examine the policies and institutions affecting the development of important growth sectors in Bangladesh. Growth in developing countries involves the development of new forms of organizing production and this typically faces much more significant contracting failures compared to the contracting failures that exist in advanced countries. In addition, markets in developing countries are in any case inefficient because of weak market-supporting institutions like

property rights and contracts. These weaknesses in the enforcement of formal institutions are a characteristic of all developing countries. The 'clientelist' political settlement that is typical in these countries involves significant informal modifications of formal rules as a condition of achieving political stability and a reproducible set of institutions. But these informal arrangements also mean that the formal property rights and rule of law on which market efficiency is based are always structurally weak in developing countries, in the very context that significant contracting requirements exist if transformative development is to be achieved. This explains why supportive state policies and the institutions backing these up have played a significant role in the economic transformation of developing societies.

The phases in the evolution of the political settlement in Bangladesh enable us to look at the different ways in which significant development challenges were addressed in different periods. When the British left India in 1947, Bangladesh was carved out of India as the Eastern wing of the state of Pakistan. From 1958 to 1971, Pakistan's political institutions were characterized by authoritarianism and the attempt to achieve rapid industrialization using industrial policy. East Pakistan had previously possessed virtually no industrial assets or organizations and this period saw the beginnings of an industrial sector emerge in the country. However, the Pakistani political settlement set political and economic limits to the development that was possible. Politically, the exclusion of East Pakistani political organizations from the ruling coalition meant that distributive conflicts between East and West became increasingly intense and the development of Bengali-owned economic organizations was relatively slow. Economically, the political settlement prevented

the disciplining of the emerging firms that benefited from industrial policy so that productivity growth was slow and the viability of the economic strategy was in any case not assured. The end came with a violent conflict in 1971 that saw the birth of Bangladesh.

There followed a decade of turbulence as the political order went through a process of flux. In the second phase in our classification of the political settlement, from 1971 to 1975, Bengali political organizations coalesced around a single dominant party that claimed socialism as its economic goal. But the period was marked mainly by distributive conflicts within the ruling coalition. As a growing number of organizations began leaving the dominant Awami League, its leadership responded with an attempt to create a one-party state by constitutional amendment. Well before the military coup of 1975 it was clear that this experiment would not achieve either popularity or legitimacy. The military takeover paradoxically allowed a gradual return to multi-party democracy, but political institutions during this period are best described as ‘authoritarian clientelist’, where multi-party competition was allowed to determine the relative power of political organizations. This marked the third phase in the evolution of the political settlement, from 1975 to 1990. Electoral democracy and the formal freedom to engage in political activity served the function of determining the organizations that should be included in the ruling coalition and on what terms, although the leadership at the national level could not be challenged. Eventually, this arrangement could not accommodate the growing power of competing political organizations. Political institutions had to adjust and a clientelist form of democracy emerged in 1990, marking the beginning of the fourth phase in the evolution of the political settlement.

While these political transitions were taking place, the economy underwent an acceleration of growth from 1980 onwards. We focus in particular on this growth acceleration that continued for the next three decades. The types of institutions and policies that contributed to this are analysed by looking at three major sectors in Bangladesh spanning the three decades of accelerated development. This enables us to look at a number of different types of contracting failures and how variations in the political settlement over time allowed or obstructed particular types of institutional and policy solutions. The first sector we look at has emerged as the most important sector in Bangladesh’s recent economic development, the garments and textiles sector. By 2010, this sector alone accounted for three-quarters of Bangladesh’s export earnings and provided employment to well over three million workers. Bangladesh has a large low-wage workforce and the take-off in the garments sector happened in the 1980s shortly after the statist planning of the early 1970s was abandoned. Not surprisingly, it is often argued that the growth of the garments and textiles sector was driven by market forces and the gradual liberalization of the economy.

Liberalization and the abandonment of a perverse type of ‘socialism’ that had been imposed during 1972-75 were indeed necessary for the garments sector takeoff, but liberalization was by no means sufficient. Even in a low-technology sector like garments, the workers, supervisors and entrepreneurs of the country lacked the know-how and tacit organizational knowledge to set up globally competitive productive organizations. This was despite the fact that investible funds were available in the hands of many potential investors after the mas-

sive 'primitive accumulation' of the post-independence years. The technology acquisition necessary for the takeoff was enabled by a number of specific institutional arrangements that allowed critical contracting failures constraining learning-by-doing to be overcome in this sector. The relatively successful implementation of these institutional solutions in the 1980s depended on characteristics of the political subsystem of the political settlement of that time which was characterized by the institutions of authoritarian clientelism. The garments sector was able to fully exploit the temporary advantage that was offered to least developed countries like Bangladesh by the Multi-Fibre Arrangement (MFA), which provided temporary rents that could assist start-up investments in this sector.

The garments industry is extremely important not just because of its current size and significance in the Bangladesh economy but also because it demonstrates the types of institutional strategies that can overcome critical contracting failures constraining technology acquisition and growth in developing countries. The success that the garments industry enjoyed was not replicated in any other major sector for a number of reasons. First, a critical component of the institutional arrangement that allowed the takeoff was the global institutional arrangement, the MFA, which created fortuitous rents on terms that assisted the learning-by-doing that was critical for the sector. While the details of this arrangement were not designed with this purpose in mind by anyone, the reasons why this particular institutional structure of incentives and opportunities worked so well has enormous significance for designing institutions for supporting learning-by-doing in the future. Secondly, authoritarian clientelism during the early

phases of the sector's takeoff allowed the rapid solution of a number of additional institutional constraints facing the sector. Other sectors did not enjoy the exogenous rents created by the MFA for the garments sector, and by the mid-1980s, the institutions of authoritarian clientelism were in crisis, to be replaced by a vulnerable democracy in 1991 that still describes the political settlement in contemporary Bangladesh.

The two other sectors we look at are the power generation sector and the emerging electronics sector in the 2000s. The emergence of a vulnerable democracy after 1990 was characterized by more intense competition between political organizations and a failure to evolve institutions that could maintain stability in the political domain. The instability and vulnerability that this caused seriously constrained the evolution of new potentially competitive sectors in the economy. The next sector we look at is the emerging electronics sector in Bangladesh which is still young but displays strong potential. Unlike the garments sector, electronics has not benefited from institutional rents that supported learning, and it is attempting to establish itself in a context of vulnerable democracy. Growth has been slow compared to the takeoff in the garments sector in the 1980s and the differences in the political settlement and in institutional support can help to explain some of these differences. The contracting failures constraining learning are being overcome in this sector largely as a result of a 'nationalistic' entrepreneurial attitude on the part of a pioneering company that decided to invest heavily in learning-by-doing on its own account. The sector, led by this company, has also been able to penetrate policy making to a limited extent to change some policies to support its investments. Nevertheless, unlike the garments

case, there have been no significant external rents supporting the learning process in electronics. This example shows that there are many routes to solving problems of technology acquisition even in the context of a very fragmented clientelist democracy. But there is a price to pay in terms of the pace of progress that is possible, and of course the electronics sector relied on the emergence of entrepreneurs who were not interested simply in profit maximization. The prospect of developing a new sector with risky investments in learning-by-doing is not the easiest and fastest way of making money in a clientelist political settlement.

The power generation sector has also faced significant contracting difficulties in organizing the long-term investments that are required for supporting its expansion. Bangladesh has one of the lowest per capita electricity generation figures in the world, and apart from the failure to provide power to the large rural population, power scarcities have created serious constraints for sustaining economic development. The political settlement is directly implicated in the problems facing the sector. Standard explanations for failures in this sector have focused on the lack of transparency and good governance, and the presence of corruption and insider dealings. However, these problems affect all sectors in Bangladesh, and indeed affect the power sector in neighbouring countries like India which have performed much better in power generation. The constraints in Bangladesh are related to specific failures in developing appropriate structures of financing and institutions that can support viable financing in the context of the current political settlement. This has resulted in a persistent failure to overcome the critical contracting failures constraining investments in this sector.

2. THE POLITICAL SETTLEMENT: A BRIEF REVIEW

An analysis of the ‘political settlement’ in a country allows a number of interrelated institutional and political economy questions to be addressed (Khan 2010). It has been widely observed that in developing countries, the *formal* institutions that describe the political and economic rules in a society are routinely modified and violated to different extents. The formal institutions of democracy or of industrial policy may be implemented in very different ways in different countries, and we need a framework to understand why this is so and the possible implications. A political settlement is defined as a reproducible ‘equilibrium’ of institutions and organizations, where the institutions and organizations can be both formal and informal. The achievement of a reproducible equilibrium implies that the distribution of power across all relevant organizations and the distribution of incomes across these organizations are compatible. If they were not, powerful organizations would mobilize to change the formal and informal institutions supporting the distribution of incomes across organizations till a reproducible equilibrium was achieved. In developing countries, informal institutions, in particular rules enforced by non-state actors or agreed upon informally, play a particularly important role because formal institutions are typically insufficient for generating a distribution of incomes that is compatible with the actual distribution of power across organizations. This insight gives us a framework for analysing many of the variations in the operation of formal institutions across countries.

The achievement of a political settlement in developing countries typically requires informal modifications of formal institutions to bring the distribution of incomes into

alignment with the distribution of power across organizations. The achievement of a sustainable distribution of incomes that is in line with the relative power of organizations in turn serves to reinforce this distribution of power and makes the political settlement resilient against attempts at rapid change. Nevertheless, political settlements do change over time as economic transformation changes the relative power of organizations and as new social groups mobilize and organize, but these changes are relatively slow. At any particular time, the characteristics of the current political settlement can help to explain why particular institutions and policies exist and their likely effects on economic development. That the political settlement as defined here can have a bearing on the emergence and evolution of policies and institutions is not surprising as political equilibrium is achieved precisely through the evolution of formal and informal institutions in this framework. More importantly, the political settlement can also help to explain why particular formal institutions and policies may be unimplementable or face significant informal modifications in ways that affect development outcomes.

The modifications in the application of formal institutional rules typically happen if the particular institutions and policies that are being investigated generate a distribution of benefits that is significantly out of line with the distribution of organizational power supported by the macro-level political settlement. If this is the case, the particular institutions or policies are unlikely to be enforced or implemented according to their formal design and the economic outcomes associated with them are also likely to be modified. This insight can help to explain why apparently similar policies and interventions have had very different effects across countries. For instance, democracy in developing countries operates

very differently from democracy in advanced countries, and the operation of the informal rules of democracy can also vary significantly across developing countries, reflecting the differences in the organizational structure of political organizations. Similarly, the formal industrial policy frameworks in Pakistan and India during the 1950s and 1960s achieved successes that were far less dramatic than those in East Asia. The difference cannot just be explained by the poor design of formal policy because we have to explain why policy did not evolve to become better as it did in East Asia. A deeper explanation is that policies that were addressing similar contracting failures could not be implemented with the same level of effectiveness across countries. Moreover, policy evolution in the direction of greater effectiveness did not happen in some countries because this was also successfully opposed by organizations that were powerful in the political settlement. The relative power of different types of organizations and the ways in which they exercise their power to further their interests can therefore be important for understanding differences in the performance and evolution of institutions and policies across countries.

The characteristics of the political settlement in a country depend on the interaction between the evolution of formal institutions and the evolution of the political, bureaucratic and economic organizations in that society which determine the necessary informal modifications. These characteristics are likely to change over time for many reasons: Economic development changes the bargaining power of different types of economic organizations, new social movements emerge for autonomous reasons, generating new political organizations, economic entrepreneurs engage in different types of organizational activities, countries and regions engage

in conflict and competition that affect their internal distribution of power across organizations, and so on. Some of these changes can be gradual, others may be discontinuous ruptures. The evolution of the political settlement is the outcome of the interaction of a broad range of factors. Identifying the relevant features of this 'macro' political settlement is important if it can help to inform the micro-level analysis of institutions and policies. Why did some policies and institutions fail to achieve the expected results while other policies, often not the most obvious ones, were sometimes effective? Why did incremental changes in the institutional and policy framework proceed in one direction rather than another? The broad features of the political settlement in a country can provide important 'data' for answering these types of micro-level institutional questions by allowing us to examine enforcement issues and the ways in which formal institutions may have been informally modified by powerful organizations. Obviously, the question at issue will determine the level of information required about the relevant organizations, but a broad outline of the evolution of the political settlement is a good starting point.

We track the changes in the political settlement in Bangladesh by looking at features of the political, bureaucratic and economic subsystems in the country, looking in each case at the operational equilibria of institutions and organizations in these broadly defined areas. Political, bureaucratic and economic subsystems obviously interact with each other and the features of one affect the others, but for the purposes of presentation, slicing the complex social reality into these three spheres is a useful starting point before looking for the interdependencies that are also very important. In reading this information the reader needs to keep a number of features of this

analysis in mind. First, the most observable features of a political settlement are the formal institutions. For instance, in the political subsystem, it is relatively easy to see that the dominant institutions are democratic, authoritarian, or authoritarian-clientelist or some other variant. However, that does not describe the institutional-organizational balance or operational equilibrium in the subsystem, which may result in a significant modification of these formal institutions in practice. To understand the operational equilibrium that characterizes the political settlement, we need to also look at the distribution of power across the relevant organizations with which the institutions are interacting. Secondly, the political settlement at the macro-level is defined by the interdependence of the political, economic and bureaucratic subsystems. So for instance, countries whose political subsystems are similar can have very different political settlements if other aspects of their institutional and organizational structure are different. This is why, for instance, countries with authoritarian political subsystems can be very different from each other in terms of their institutional performance if their other subsystems are different.

Differences in other subsystems not only imply obvious differences across societies, but more importantly, these differences can also affect the operation of their subsystems that appear to be similar. So for instance even if the political subsystems appear to be similar in two countries, political organizations may actually behave very differently because the alliances and conflicts between political organizations and other types of organizations are different. Examining the three subsystems separately is therefore the starting point for dealing with a complex picture, but the characteristics of each political settlement will depend on the interaction of all

subsystems. The micro-analysis of the likely implications of a particular policy or institution has to look at issues of enforcement and informal modification taking into account the interests of all the organizations that are likely to be affected or have an interest in the outcome. In particular, the efficacy of enforcement and the direction of modification is likely to depend not only on the bargaining power of particular types of organizations but also on the likely coalitions and alliances they can make with other types of organizations, and this is where the interdependence across subsystems becomes important.

The Political Subsystem

The political subsystem describes the operational equilibrium between political organizations and the institutions (or rules) of political engagement. The distribution of power across political organizations determines the types of political institutions that are viable. Viability in this context refers to a reproducible combination of political organizations and institutions that can be described as an operational equilibrium in the political subsystem. Political institutions set the rules for political competition. If these rules allow powerful political organizations to sustain their power or at least to circulate in and out of power with a sustainable level of political contestation, an operational equilibrium can emerge. In general, formal political institutions will be significantly modified in developing countries, but as long as the informal modifications can operate within the rubric of the formal rules and the distribution of organizational power can be sustained, an operational equilibrium can emerge. The significant issue from our perspective is to assess the organizational power of political organizations. This determines both the type and extent of modifica-

tion of the formal institutions and therefore their sustainability, and also determines the reproducible power of political organizations which may have consequences for the operation of other subsystems.

One way of mapping the distribution of organizational power in the political subsystem is to look at the relative power of the ruling coalition compared to political organizations that are currently excluded and the bargaining power of higher levels within the ruling coalition vis-à-vis lower levels. Political organizations in developing countries can be both formal and informal, with the latter playing an important role. Formal political organizations like political parties are often loosely constructed and flexible coalitions of many informal organizations, each organized around particular political entrepreneurs. In many developing countries (including Bangladesh), these informal political organizations are typically led and organized by political entrepreneurs from the 'intermediate classes'. Their organizations aim to mobilize broader social groups to increase their bargaining power to create or capture rents, which are in turn distributed to supporters in different ways and in varying proportions. The primary mechanism giving political organizations access to rents and payoffs is their success in getting included in political parties or coalitions that can form a ruling coalition so that the power of office can be used to create rents for their constituent organizations using formal and informal mechanisms.

In developing countries, the ruling coalition is typically constructed through such patron-client politics, in many cases even during periods of military rule. Patron-client politics use informal resource allocation processes (like informally determining the allocation of government contracts and jobs, the off-budget allocation of resources to particular

groups or organizations or influencing contract enforcement in ways that favour particular parties) to build and hold together political coalitions. An important aim of a smaller political organization is to generate rents for itself by joining or threatening the party or coalition that constitutes the ruling coalition. It follows that many of the rents that are created and allocated in these processes of coalition-formation are not created through rule-following processes, so patron-client politics is likely to be both ‘personalized’ and to involve political corruption. The calculation of the leadership of an actual or potential ruling coalition is to include the maximum numbers of subsidiary organizations in the coalition at the minimum cost to the leadership. The objective is to ensure electoral victory, political stability and sufficient enforcement capabilities to achieve the implementation of programmes essential for the survival of the ruling coalition. Conversely, the calculation of subsidiary organizations seeking inclusion in the system of political rent distribution is to demonstrate the capability to deliver voting constituencies, or capabilities to disrupt and enforce, or in some cases their violence capabilities. The greater the value of what the particular political organization delivers, the greater the rent its leadership can expect as their reward for their inclusion or quiescence, and therefore the greater the rents they in turn can deliver to their supporters.

The variations in the organizational structure of political organizations can be summarized in different ways. In Khan (2010) we distinguish four variants of the distribution of power across political organizations that can potentially form the ruling coalition. When the political organizations forming the ruling coalition face little threat from excluded political organizations and when higher-level political organizations within the ruling

coalition are more powerful than lower-level ones, we describe the configuration as *strong patrimonialism*. The ruling coalition in such a configuration can credibly claim a ‘patrimonial’ right to rule. Here, political institutions that support formal authoritarianism can easily be in an operational equilibrium with this configuration of political organizations without the requirement of having to use excessive amounts of repression and without significant informal modification. The political leadership also has strong and effective enforcement capacities here because organizations at the higher levels of the ruling coalition are more powerful than lower levels. As a result, this political configuration can also support formal developmental interventions and institutions, particularly if appropriate conditions exist in the bureaucratic and economic subsystems.

If excluded political organizations are strong, the distribution of organizational power becomes less amenable for this type of benign authoritarianism. We describe this configuration of organizational power as *vulnerable patrimonialism*, as the claim of a right to rule by the ruling coalition can now be effectively challenged. As excluded political organizations become stronger, the ruling coalition becomes more vulnerable. As a result, the formal institutions of authoritarianism may still be in an operational equilibrium, but may require increasingly greater repression, or they may require significant informal modification such as payoffs to and the incorporation of political organizations that are supposed to be formally excluded. As the power of excluded organizations grows, at some point formal authoritarianism may become unviable as an operational equilibrium even with significant repression. The behaviour of ruling political organizations in this operational equilibrium can be expected to

be different. The time horizon and implementation capabilities of the ruling coalition are both likely to be more adverse compared to the strong patrimonialism configuration.

Another variant of weak patrimonialism emerges where the threat to the leadership of the ruling coalition comes from lower-level political organizations within the ruling coalition rather than from excluded organizations. This variant can be described as *constrained patrimonialism*. The ruling coalition's right to rule may be difficult to contest from outside but is constrained from within. It can expect to be in power for a long time as its external opposition is weak, but it may be severely constrained in what it can implement, as decisions that are opposed by any of its internal coalitions is likely to be blocked. This configuration is likely to result in relatively stable one-party rule that can be in an operational equilibrium with both democratic and authoritarian political institutions. In both cases, the outcome is likely to be one-party rule, as excluded political organizations are unlikely to win elections under democratic rules or to effectively challenge authoritarian political institutions if these exist. The limitation of this configuration is that the leadership is likely to have to make extensive concessions to its sub-organizations, and this can significantly limit its implementation capabilities. Moreover, as lower-level organizations become stronger, some may eventually make a calculated exit from the ruling coalition and become part of the excluded opposition, if they think there is a chance of replacing the ruling coalition altogether.

The final configuration of political organizations is that of *competitive clientelism*. Here the numbers and strength of political organizations are such that a ruling coalition is likely to face significant opposition from excluded organizations, and is likely to have to include

many lower-level organizations within the ruling coalition that are relatively powerful. The ruling coalition is therefore likely to be vulnerable and therefore to have a relatively short time-horizon, and it is also likely to have constrained implementation capabilities, as its internal lower-level organizations have the capacity to block decisions that they oppose. This configuration of power, once it emerges, is not likely to be in an operational equilibrium with authoritarian institutions. The latter may survive for a while in protecting a particular ruling coalition, but is eventually likely to be overthrown or modified. In Bangladesh in the late 1970s and 1980s, the configuration of power across political organizations had become one of competitive clientelism, and military rule could only operate by devising new institutional rules. The institutional form of 'authoritarian clientelism' emerged at this time, where the president selectively included organizations within the ruling coalition in a managed democracy. Democratic institutions in developing countries can be in an operational equilibrium with this configuration of power, but democracy is vulnerable because political organizations are by definition not rule-following in these contexts, and the rules of democratic elections can be difficult to enforce.

The Bureaucratic Subsystem

The administrative structure of a state is made up of bureaucratic organizations with specific financial and organizational capabilities. The formal 'organizational' chart showing the relationships between agencies and their lines of accountability and responsibility describes the institutional structure of the state. However, this may not correspond very closely with how the relevant bureaucratic organizations actually operate, particularly in

developing countries. The real distribution of organizational power describes the ability of particular bureaucratic organizations to bargain for resources, deliver and enforce decisions or block the activities of other bureaucratic organizations that run counter to their own interests. The greater the gap between the formal institutional description of the bureaucratic structure and the actual distribution of power across the relevant bureaucratic organizations, the greater the informal adjustments to formal rules are likely to be. As some policies and interventions require a specific state structure for their coordination and enforcement, if the actual distribution of power across bureaucratic organizations is far removed from these requirements, the policies are likely to be poorly implemented. The achievement of an operational equilibrium in this case is likely to involve more or less significant informal modifications of formal rules of conduct. These in turn are likely to have implications for the implementation, monitoring and enforcement of particular policies, sometimes adversely and at other times in ways that may lead to better outcomes than if the formal policies had been effectively enforced.

The degree to which power is horizontally and vertically dispersed across and within bureaucratic organizations is therefore another relevant variable for understanding the overall political settlement. Formal decisions about resource allocation are made within bureaucratic organizations, which are subsequently also empowered to monitor and oversee the implementation of policies. As a result, bureaucratic office is aspired to as a source of rents for office-holders, and indirectly by political organizations which attempt to get their own supporters into critical positions to facilitate their rent capture activities. The political ability to cre-

ate and allocate formal and informal rents therefore depends on political control over the relevant bureaucratic agencies. The political and bureaucratic subsystems therefore closely interact. If the political subsystem is highly concerted, as in strong patrimonialism, it is likely that the ruling coalition will use its authority to attempt to coordinate and centralize bureaucratic power, simply in order to effectively implement their rent creation and rent-management strategies. This is important because bureaucratic agencies may formally have overlapping jurisdictions and, without coordination and the establishment of a decision-making hierarchy, rent creation may be dissipated by uncoordinated free-riding behaviour by different agencies. If bureaucratic organizations are strong enough to resist attempts at coordination, strong patrimonialism is unlikely to prevail in the political sphere, as the weakness of the ruling coalition will be revealed and their access to resources will soon be insufficient to satisfy their supporters. More likely, strong patrimonialism is likely to successfully restructure bureaucratic organizations even if they were initially fragmented in the sense of having multiple centres of power and authority. But with weaker patrimonialism or with competitive clientelism, the political leadership may be too weak to reorganize the bureaucracy. In these cases, the inherited structures of bureaucratic power can matter a lot more.

With weaker, less centralized ruling political organizations, the interaction between the political and bureaucratic subsystems can result in cycles of vicious or virtuous causation. A weak patrimonial political subsystem that fails to coordinate a strongly fragmented bureaucracy may as a result become weaker and move towards competitive clientelism or collapse as a result of its

failure to generate enough rents to satisfy its core supporters. On the other hand, if an initially weak patrimonial political subsystem is lucky enough to inherit a centralized bureaucratic subsystem that is easier to coordinate and command, its success in generating and controlling rents may allow it to consolidate its power and perhaps even move towards a stronger version of patrimonialism.

In Khan (2010) a fourfold classification of the distribution of bargaining power within the bureaucratic subsystem is suggested. In the case of *concerted bureaucratic authority*, the distribution of bargaining power across bureaucratic agencies allows both horizontal and vertical coordination. Horizontally, there is a hierarchy of bureaucratic agencies and a lead agency can be identified or created that can coordinate decisions and implementation across all the relevant organizations. For instance, the successful creation of planning ministries in some countries, but their failure to coordinate successfully in others, demonstrates the possible variations here, though we have to see these successes and failures as an interactive outcome with the political subsystem. Vertically, each agency is internally structured such that higher levels can effectively get delivery from lower levels. Concerted bureaucratic authority does not mean that the bureaucracy is a centralized one at the national level. This authority structure is consistent with a federal structure if at each political level bureaucratic authority is concerted and can be coordinated by the political authorities.

Two dimensions of weakness in the structure of bureaucratic organizations follow. If there are multiple and powerful agencies making horizontal coordination difficult but the internal hierarchies are strong within each agency, we have a case of *divided bu-*

reaucratic authority. This configuration makes it difficult to implement policies that need coordination across agencies or regions of a country, but there may be quite good implementation capabilities for policies that a single agency is responsible for. A second possible variation is when horizontal coordination is possible but hierarchies within each agency are weak so that higher levels cannot get effective implementation by lower levels. We describe this variant as *constrained bureaucratic authority*. This is likely at early stages of development where formal bureaucratic capabilities are weak and lower levels within agencies are more likely to be political appointees who are engaged in lower-level rent appropriation. As technical capabilities improve, this problem can become less severe, but political evolution also increases the linkages between lower levels of the bureaucracy and political entrepreneurs and organizations. The likely evolution is therefore not necessarily linear. In some cases bureaucratic authority can become less constrained over time. In other cases the effects of improved technocratic capabilities may be outweighed by political fragmentation making it easier for lower levels of each agency to engage in their own rent-capture decisions in alliance with lower-level political organizations.

The final variant of bureaucratic organization is one where coordination is difficult both horizontally and vertically. Here it is not only difficult for a single agency to coordinate across agencies; it is also difficult for higher levels within any agency to get lower levels to do their bidding. This is the case of *fragmented bureaucratic authority*. There are strong forces working in this direction in many developing countries, particularly those with weak patrimonialism or competitive clientelism in their political subsystems.

Political fragmentation and the linkages between political organizations and bureaucratic organizations tend to accelerate the fragmentation of bureaucratic authority in this direction, making it more difficult for coordinated policy making and implementation. In turn, fragmented bureaucratic authority limits the gains to coordination for political organizations and tends to make free-riding behaviour by political organizations more likely, thereby consolidating and deepening competitive clientelism.

The Economic Subsystem

Economic organizations are at the heart of the economic transformations that constitute development. Economic organizations refer to all collective productive organizations, ranging from informal peasant farms to formally organized large firms. However, even formally organized firms in developing countries continue to operate with significant elements of informality both in their internal operations but also in their external relationships. This is not surprising since the broader society and its political and bureaucratic subsystems continue to be organized with a large element of informality. In turn, the activities of political and bureaucratic organizations affect economic organizations not only through the formal routes of policy and resource allocation which are not fully enforced, but also through many informal routes of policy modification, off-budget resource allocation and informal enforcement and resource sharing.

The bargaining power of economic organizations of different types is a critical determinant of the likely success of particular formal policies supporting accumulation and technology acquisition. Apart from their 'political' power, the productive technological

capabilities of economic organizations are likely to determine their bargaining strategies. Firms that are already competitive in some areas or are close to achieving competitiveness are more likely to use their bargaining power to negotiate public support in ways that allow them to sustain or achieve competitiveness. This is particularly likely if competitiveness gives access to significant profits from production and if the returns from spending time and resources to capture other types of rents are less attractive. In contrast, economic organizations that are very far away from achieving competitiveness have a much greater incentive to focus their entrepreneurial activities in capturing a variety of other rents that may not aid their achievement of competitiveness. These rents are therefore likely to have a negative consequence in net terms for social development. This does not mean that firms far away from the competitiveness frontier are unlikely ever to reach it, but it does mean that policies for assisting them are likely to require longer periods of support and consequently stronger governance capabilities of monitoring and disciplining on the part of political and bureaucratic organizations.

We can classify the distribution of economic organizations in a society in a number of ways but the problems of interdependence with other systems are particularly acute for the economic subsystem. Keeping this in mind, a useful classification is to distinguish societies by looking first at the extent to which the most important economic organizations in that society have productive capabilities that enable them to engage in competitive production and secondly at their bargaining power relative to other types of organizations. As competitiveness in the modern world is unlikely to be achieved by economic organizations in traditional sectors

(like peasant farms or craft-based manufacturing), the existence of firms with moderate to high productive capabilities implies the existence of a 'modern' sector that could potentially play a transformative role in the economy. The dominance of economic organizations with low productive capabilities could either be because the modern sector has not developed at all or because the modern sector is populated by firms that are far from the technological frontier in terms of their productive capabilities.

The first configuration we identify is one where there is a significant block of economic organizations which are *high capability and powerful*. The judgement of the capability and bargaining power of economic organizations is a relative one. If the majority of economic organizations in a country were really of this type, the developing country would no longer be classified as one. Nevertheless, more advanced developing countries may have significant numbers of economic organizations that are already competitive and that are relatively powerful in the overall political settlement. For the types of contracting failures that developing countries face, this configuration can be a double-edged sword. On the one hand, if there is a significant number of firms that already competitive or close to achieving competitiveness and if they are relatively powerful, they are likely to drive policy or spend resources to informally modify institutions to support their trade and investment requirements. But in a developing economy, other economic organizations that are not yet competitive but aspire to achieve competitiveness may have a different set of requirements. Policies to support capability development for these new entrants may find less political support in these contexts and this can slow down or block policies that can accelerate the creation of *new* productive enterprises.

A second configuration is that of *high capability but weak* economic organizations. Here there are many economic organizations that are already competitive or close to achieving competitiveness but in this case they have limited bargaining power. Here, the economic outcomes can be quite different depending on the characteristics of other subsystems. If the political and bureaucratic subsystems are fragmented and incapable of long-term coordination, there may be strong incentives for political organizations to extract rents from these firms as they are both profitable and weak. These relatively easy rent capture strategies imply that in these contexts, high capability firms will obviously not remain so for very long. On the other hand, if the political and bureaucratic subsystems allow long-term planning and management of rents, there may be strong incentives and opportunities of rapid capability development. Political organizations may now have the incentive to allocate rents to firms to help them to build up their capability for a share of their enhanced long-term profitability either in the form of taxes or informal profit sharing. However, this requires a longer time horizon and higher implementation capabilities that are features of specific combinations of political and bureaucratic characteristics.

A third configuration is one where economic organizations are of *moderate to low capability and powerful*. Here economic organizations have weak incentives to focus on achieving competitiveness unless they can take a long-term view and the political and bureaucratic environment creates conditions that make such a strategy credible. The problem here is that long-term support for capability development requires strong disciplining and monitoring conditions on the part of public authorities, and that is unlikely if the firms receiving support are

relatively strong and can resist attempts at disciplining them. The most desirable but less likely outcome in this configuration is economic organizations use their superior political power to capture rents and resources that eventually help them to finance their own capability development. This is a scenario of 'primitive accumulation' driven by powerful economic organizations followed by capability development, perhaps because these economic organizations have to operate in competitive markets and are threatened with losing their assets unless they can develop their competitive capabilities.

A fourth and final configuration is that of economic organizations that are of *moderate to low capability and weak*. Here too, the economic outcome depends on the interaction with political and bureaucratic subsystems. If political and bureaucratic organizations cannot take a long-term view and have weak enforcement capabilities, this configuration can result in the worst outcomes, with sustained underdevelopment. On the other hand, if the political and bureaucratic subsystems allow long-term rent management for development, long-term support to build capabilities may be possible. But progress is obviously likely to be slower and more risky than in the first case where the economic organizations are already relatively close to the competitiveness frontier.

These variations show how institutions and policies are likely to differ in their content and their effects across developing countries as a result of the interactions between the characteristics of their political, bureaucratic and economic organizations. The implications of the political settlements framework for institutional analysis are dealt with in more detail in Khan (2010). The discussion of Bangladesh that follows draws on this framework to identify characteristics of the country's political settlement and how it has evolved since

1947. This background provides two types of analytical insights in the analysis that follows.

First, the characteristics of the political settlement determine the 'growth-stability trade-off' facing the enforcement of particular policies and institutions. If we consider a particular policy or institution that potentially supports growth, its introduction and incrementally better enforcement can on the one hand enhance developmental outcomes, but if the policy is against the interests of powerful organizations, its enforcement in this way also implies a cost in terms of stability for the ruling coalition. The extent to which a policy or institution will be either modified or face a stability cost, if it is enforced, determines the likely outcome of the policy. These choices are summarized in the growth-stability trade-off for that institution or policy given the particular political settlement that is in place. For instance, in a political settlement where politics is characterized by a combination of strong patrimonialism, concerted bureaucratic authority and capable but politically weak economic organizations, industrial policy strategies that provide conditional assistance to firms to engage in learning-by-doing are likely to face a very favourable growth-stability trade-off. This means that the enforcement of formal policies and institutions supporting industrial policy is likely to face very limited opposition and informal modification. As a result, growth enhancements are likely to be achieved at relatively low cost in terms of declining stability. In contrast, very similar industrial policy institutions may face a steep and unfavourable growth-stability trade-off if the political subsystem is characterized by vulnerable patrimonialism, if the bureaucracy has divided authority and if economic organizations are politically strong.

Secondly, the political settlement analysis helps to set the stage for a detailed analysis of the institutions and policy affecting particular sectors. In the garments and electronics sectors, growth depended on finding solutions to finance learning-by-doing. Although these are relatively low technology sectors, setting up and operating competitive organizations in these sectors involves the acquisition of tacit knowledge. The investments required for this face contracting failures and investors are likely to lose money due to low investment of effort by those involved in organizing the learning unless the financing creates compulsions for effort that are consistent with the political settlement. The growth of the garments sector was based on a fortunate conjuncture of financing opportunities and institutions and policies that could be effectively enforced given the political settlement. By the time the electronics industry began to emerge, the financing instruments for assisting learning were less favourable and the political settlement less propitious for the enforcement of appropriate instruments. As a result growth in this promising sector has been much slower. Finally, the political settlement has had significant effects on the incentives and compulsions of private investors in the critical power generation sector. Long-term investments require a credible pricing structure for investors and the credibility of long-term contracts, both of which have been missing. The result has been a focus on short-term 'procurement rents' rather than longer-term production profits. Procurement rents refer to profits that can be made in the early stages of the project in the process of procuring the land and machinery for the project. Even worse, these incentives have resulted in intense political competition over the allocation of projects that has constrained investments in long-term power generation projects.

3. THE EVOLUTION OF THE POLITICAL SETTLEMENT IN BANGLADESH

The borders of Bangladesh emerged in 1947 when British rule in India ended. The province of Bengal was partitioned into a Hindu and Muslim part, and a Muslim-majority part of Assam was added to the eastern part to create East Pakistan. This became the eastern wing of the uniquely bifurcated new state of Pakistan. East Pakistan later became Bangladesh in 1971 when the two wings of Pakistan separated. The evolution of the political settlement in East Pakistan-Bangladesh went through four main phases, each with implications for the institutions and policies relevant for growth and stability. These are summarized in Table 1.

The first phase, from 1958 to 1971, was the period of military-authoritarian political institutions under Pakistan. The economic backwardness of the new state of Pakistan and the perceived threats to its survival combined with a failure to find a constitutional arrangement that could satisfy both East and West Pakistan resulted in the emergence of an authoritarian governance structure in 1958. The root of the constitutional problem was that the majority of the population was in East Pakistan while the dominant economic, bureaucratic and military organizations were almost entirely located in West Pakistan. A simple democratic arrangement would therefore not work, and attempts to find a constitutional balance that would be acceptable to the potentially dominant political organizations of the East and the already dominant economic and bureaucratic organizations of the West failed. The weakness of the excluded East Pakistan political organizations relative to the military-bureaucratic ruling coalition meant that the relative power of the latter approximated to a *vulnerable patrimonialism*. This

Table I. The Evolution of the Political Settlement in Bangladesh

<i>Dominant Institutional Characteristics</i>	<i>Political Organizations</i>	<i>Bureaucratic Organizations</i>	<i>Economic Organizations</i>	<i>Outcomes</i>
Military Authoritarianism and Industrial Policy 1958-71 (East Pakistan)	Initially <i>vulnerable patrimonialism</i> in operational equilibrium (op. eq.) with institutions of Repressive Authoritarianism. Emergence of <i>competitive clientelism</i> in 1960s destroys this op. eq.	<i>Divided bureaucratic authority</i> in weak op. eq. with developmental institutions. Growth of regional politics leads to politicization of East Pakistani bureaucratic organizations and open revolt in 1971.	<i>Moderate capability and politically strong</i> in op. eq. with institutions supporting accumulation but weak op. eq. with institutions disciplining rents. Bengali-owned firms of lower capability.	Industrial policy achieves rapid output but slow productivity growth. Collapsing op. eq. of political organizations results in increasing instability in the late 1960s and the creation of Bangladesh.
Dominant Party Rule and 'Socialism' 1971-75 and brief attempt to institutionalize One-Party State in 1975	Initially <i>constrained patrimonialism</i> in op. eq. with democratic institutions sustaining dominant party rule. Undermined by re-emergence of <i>competitive clientelism</i> . Attempt to impose one-party state (dominant party authoritarianism) fails.	<i>Divided bureaucratic authority</i> in weak op. eq. with virtually all formal institutions in post-conflict economy. Bureaucratic and political organizations collude in 'political accumulation' (primitive accumulation).	Existing Bengali-owned firms are nationalized. New economic organizations have <i>strong political connections and weak productive capabilities</i> and primarily provide cover for primitive accumulation.	Formal institutions of 'socialist planning' are weakly enforced. Informal modifications support significant primitive accumulation. Weak op. eq. of political institutions results in significant political instability till regime is violently overthrown
Authoritarian Clientelism with 'Liberalization' 1975-90	<i>Competitive clientelism</i> in moderate op. eq. with authoritarian clientelist institutions: entry and exit into ruling coalition determined by relative power of organizations but top leader not replaceable.	<i>Divided bureaucratic authority</i> but some improvements in capabilities. Moderate to weak op. eq. for enforcing some developmental institutions and policies.	<i>Economic organizations approach productive capability in low-technology sectors:</i> political access enables some sectors (like garments) to negotiate developmental support.	Emergence of high-growth garments sector as a result of targeted support and MFA. Moderate op. eq. of authoritarian clientelism results in some political stability but system overthrown in 1990.
Competitive Clientelist Democracy and Liberal Economic Policies 1990-	<i>Competitive clientelism</i> in moderate to weak op. eq. with democratic institutions. Vulnerability due to absence of informal 'live and let live' behaviour by parties.	<i>Divided bureaucratic authority</i> tending towards <i>fragmented authority</i> (as a result of growing politicization) results in weak op. eq. with developmental institutions.	<i>Moderate capability and moderately powerful enterprises</i> in weak op. eq. with market-supporting institutions. Adverse incentives for firms far from the frontier and in infrastructure.	Established sectors do well but support for new sectors limited. Op. eq. of democratic institutions results in moderate political stability but with frequent breakdowns.

Source: Author

allowed an ‘operational equilibrium’ with authoritarian political institutions for a while.

Bureaucratic organizations during this period were not well coordinated as Pakistan had to reconstruct its bureaucratic structure in the peripheral parts of India that it had inherited. The new country also inherited very few of the top bureaucrats from British India. Nevertheless, the bureaucracy had moderately good internal hierarchies and implementation capabilities were not poor. The military was disciplined and nationalist given its threat perception from India, and this favourably impacted on bureaucratic practices given the close alliance between the military and the bureaucracy during this period. However, political authority was not strong enough to enforce coordination across bureaucratic organizations. Thus, bureaucratic organizations at this time had *divided bureaucratic authority*.

Economic organizations during this period had low productive capabilities, again because partition conferred to Pakistan some of the least developed parts of India, and firms were particularly weak in East Pakistan. Yet the dominant economic organizations were politically powerful and well-connected, particularly the Indian Muslim entrepreneurs who immigrated and settled in the West, making it difficult to discipline these organizations when that became necessary. Nevertheless, it was during this phase that Pakistan’s industrial policy was at its most effective in generating growth, with significant progress in industrialization, mostly in the West, but with substantial progress in the East as well, as can be seen in the first four rows of Table 2 showing the growth in industry and agriculture from 1950 to 1970.

Table 2. East Pakistan/Bangladesh Growth Trends 1950-2005

	<i>Manufacturing</i>	<i>Industry</i>	<i>Agriculture</i>
<i>1950-1955</i>	9.5	11.5	2.4
<i>1955-1960</i>	8.5	8.6	0.3
<i>1960-1965</i>	10.6	17.4	3.2
<i>1965-1970</i>	5.3	7.7	2.8
<i>1970-1975</i>	-9.8	na	Na
<i>1975-1980</i>	5.1	5.9	3.3
<i>1980-1985</i>	4.5	5.5	2.8
<i>1985-1990</i>	4.6	5.4	1.6
<i>1990-1995</i>	7.9	7.2	1.7
<i>1995-2000</i>	5.5	6.3	4.7
<i>2000-2005</i>	6.5	7.1	2.4
<i>2005-2010</i>	7.7	7.2	4.2

Sources: Lewis (1969: Table 1), World Bank (2008, 2012).
(na = figures not available)

The growth-stability trade-off in this political settlement was relatively favourable for the implementation of institutions and policies supporting *extensive* growth. A pro-industry industrial policy supported a high rate of accumulation in industry assisted by exchange rate, interest rate and subsidy policies. Rapid industrial investments took place in new sectors in which the country had little or no prior experience. No powerful organizations offered significant resistance to these policies, nor were they modified in damaging ways. The new capitalists were however well connected to politicians and bureaucrats within the authoritarian state. This meant that despite the state being formally authoritarian, it lacked the political capacity to discipline economic organizations and this limited the prospects of industrial policy when it had to move beyond its extensive phase (when new economic activities were initiated) to an intensive phase (when the new organizations had to graduate to global competitiveness so that subsidies could be removed and made available for other sectors). The low productivity growth within the new firms being set up in industry would eventually have made the strategy unsustainable. But before that happened, a challenge to the political settlement emerged from a different source: the gradual growth in the power of political organizations in East Pakistan. The result was that the vulnerable patrimonialism became much more vulnerable, and by the late 1960s authoritarian institutions could no longer be in an operational equilibrium. The failure of political institutions to adapt to the new political power balance resulted in a discontinuous rupture in the political settlement and ultimately in the separation of Bangladesh.

The industrial policy that was applied in Pakistan created a distribution of benefits between East and West Pakistan that

became politically unsustainable with the growing strength of political organizations in the East. The industrial policy favoured the growth of economic organizations that already had moderate productive capabilities and these were almost entirely based in or owned by entrepreneurs from the Western wing. The strategy of developing an East Pakistani capitalist class was half-hearted and insufficient. The fact that the East's population was bigger than that of the West meant that the distributive conflict rapidly took the form of a mass movement for democracy. As new political organizations emerged and began to coalesce into grand coalitions, particularly in East Pakistan, the distribution of power between the ruling coalition and the excluded organizations changed. The political subsystem was no longer characterized by vulnerable patrimonialism by the late 1960s but had shifted effectively towards competitive clientelism. The operational equilibrium of authoritarian political institutions was no longer sustainable without excessive violence. Not surprisingly, the embattled military government eventually allowed elections in 1970, and the East Pakistani Awami League won a majority of seats in the Pakistan parliament on a programme of radical federalization. But a transition to democratic political institutions could not be achieved because economic, political, bureaucratic and military organizations of the West refused to accept the outcome of the elections. The result was another partition, with much violence.

The birth of Bangladesh in 1971 was followed by more violence that grew in intensity in the early years of the state. The conflicts over resources between competing groups of 'primitive accumulators' became more intense, as previously excluded Bengali political organizers now had access to state power to capture resources. Initially, of course, these

processes were very wasteful because the accumulators were not productive and their accumulation strategies seriously damaged an already vulnerable economy. And yet, this accumulation created the future class of capitalists who would play a role in driving growth in the next decade. This was a period of substantial instability, with an attempt to create a one-party state in 1975, the assassinations of two heads of state in 1975 and in 1981, periods of military rule and finally the emergence of multi-party democracy in the 1990s. This democracy continued to face periodic crises of electoral transition when opposition parties refused to accept (often with good reason) the organization of elections or their results. Nevertheless, despite its apparently dysfunctional governance, by the turn of the century Bangladesh emerged as a relatively high-growth developing country with a growing base in manufacturing based on the garments and textile industries and gradually branching into other sectors. The trends in growth rates from 1970 to 2010 in Table 2 summarize aspects of this economic performance.

The second phase in the evolution of the political settlement in Bangladesh covers the period from 1971 to 1975. The dominant institutional characteristic of politics during this period was a formal democracy that sustained one-party rule, and when this was threatened, there was a brief and failed attempt at institutionalizing a one-party state. A diverse coalition of organizations had come together to fight the authoritarian state in Pakistan and this coalition now came to power at the head of the new state. The inclusion of almost all politically relevant organizations within the ruling coalition meant that the political subsystem could be described as a constrained patrimonialism. Constrained patrimonialism has limited enforcement capabilities in gen-

eral, but here it faced subordinate economic and political organizations with strong incentives for unproductive resource capture. The most powerful economic organizations at this time had limited economic capabilities and were often indistinguishable from political organizations. The objective of these organizations was resource capture: The result was intense 'primitive accumulation' or the capture of assets and resources using political power. This was necessary to satisfy the aspirations of important organizations within the new ruling coalition, but the pace of the primitive accumulation meant that the ruling coalition rapidly faced the prospect of political and economic collapse. Political and bureaucratic organizations had no interest in enforcing the formal rights of the productive sector. Their goal was rather to use formal and even more so informal political power to capture assets and resources for themselves. The growth-stability trade-off was adverse for almost any growth-enhancing institutional strategy. Moreover the trade-off was rapidly worsening to a position where the achievement of the minimum economic and political viability conditions was threatened. Famine struck in 1974 and the attempt of the ruling coalition to hold on to power began to unravel.

Constrained patrimonialism had produced a dominant party through the electoral system but its electoral dominance could no longer be guaranteed given the economic and political crisis that was unfolding. Many of its constituent organizations were dissatisfied with what they were getting and wanted to leave. Some did begin to leave and began to challenge the ruling party from outside. Effectively, the distribution of organizational power once again began to change in the direction of competitive clientelism. The response of the ruling coalition was to amend

the constitution to create a one-party state, effectively attempting to maintain the dominant party by changing the institutional rules of the game. Keeping the ruling coalition formally inclusive by administrative decree would at best be a weak operational equilibrium given that the underlying distribution of power was moving away from constrained patrimonialism towards competitive clientelism. As it happened, the one-party state could not be implemented because President Mujib-ur-Rahman was assassinated in 1975 with the tacit support of powerful individuals and organizations within the ruling coalition.

The third phase from 1975 to 1990 was a transitional phase towards the emergence of political institutions of a multi-party democracy. Political institutions that were entirely authoritarian could no longer be in operational equilibrium with the emerging competitive clientelism characterizing the distribution of power across political organizations. The constitutional amendment making the country a one-party state was repealed. An operational equilibrium was achieved by military rulers introducing an intermediate set of institutional rules that were formally democratic but with the top job of president informally restricted from competitive access. This was no longer the repressive authoritarianism of the type that was instituted in the 1960s or the formal one-party state of 1975, as these institutions could no longer be in operational equilibrium with the distribution of power that had evolved. The interim solution devised during this transition period was to have political parties engaging in electoral competition with the military-backed ruling party with little or no formal restrictions. In fact, of course, the opposition knew that winning these elections outright was impossible because of informal administrative measures.

We call these institutional rules authoritarian clientelism. The formal electoral process and open political competition served the purpose of helping to identify the most powerful political organizations which needed to be accommodated within the ruling coalition. The ruling party was ready to absorb individuals and coalitions from other parties, at a price commensurate with their organizational power as revealed by open political competition. The political competition was therefore functional in helping to construct the ruling coalition in terms of determining who was to be included and the price at which they were included. The political calculations for constructing an effective ruling coalition in a context of competitive coalition thus began to emerge during this transition period.

This was also the period when the economy began to slowly recover from years of conflict. From 1980 to 2010, the agrarian nature of the economy began to gradually change. Table 3 shows that the share of industry in GDP grew from around 20 to almost 30 percent, with agriculture moving in exactly the reverse direction. The military rulers and military-backed parties began a slow process of economic reforms that moved away from the centralized 'socialism' of the immediate post-independence period, with (very gradual) moves towards privatization and liberalization. The garment sector takeoff began in the late 1970s, helped by lucky international accidents like the Multi-Fibre Arrangement (MFA) but also because ad hoc institutional changes on a small scale could be effectively implemented and enforced under the more stable operational equilibrium in the political sphere under President Zia ur Rahman. The growth-stability trade-off began to improve but growth was still sluggish. Economic organizations were still weak in terms of technological capabilities and still had considera-

Table 3. Sectoral GDP Shares Bangladesh 1980-2005

	1980	1990	2000	2010
Agriculture	31.6	30.3	25.5	18.6
Industry	20.6	21.5	25.3	28.5
Services	47.8	48.3	49.2	52.9

Source: (World Bank 2008, 2012)

ble access to political power. In some sectors, economic organizations were close to the global competitiveness frontier in technologies that were relatively simple, like garments. In these sectors, the political connections of economic organizations helped to get policies modified in ways that could assist them to achieve international competitiveness. This assisted growth through gradual pro-business interventions in sectors with relatively simple technologies where emerging economic organizations could achieve competitiveness.

The institutional arrangements of authoritarian clientelism were a transitional arrangement because the institutions of controlled democracy were in increasingly unstable equilibrium with intensifying competitive clientelism. Competitive clientelism describes the distribution of power across political organizations. The latter was evolving in this direction as excluded factions were becoming relatively stronger and were increasingly unwilling to accept the rules of political competition set during this period. After a series of intense confrontations, the second ex-military ruler, President Ershad, was forced to step down in 1990 and the period of multi-party political competition under competitive clientelism began.

The fourth and final period from 1990 onwards is one of a moderately stable but vulnerable operational equilibrium of democratic institutional rules with competitive clientelism. This period also witnessed a steady increase in the economic growth rate. The garment industry played an important role in the economic fortunes of the country in this period. After steadily acquiring competitive capabilities, its growth took off in the mid to late 1980s and it rapidly became the major foreign currency earner of the country. Political competition was organized around two major parties distinguished by deeply felt differences in the way they defined the 'nation'. These differences had trivial implications for actual policy issues but allowed the definition of two coalitions big enough for each to form a ruling coalition. The major political problem was to ensure that elections were not manipulated by incumbents to the extent that the losing faction would refuse to accept the result. The crucial transitional election of 1991 was held under an ad hoc caretaker government that was non-partisan. The non-partisan administration during the election meant that the losing Awami League accepted the result and their demand for a similar arrangement at the next election led to

the introduction of a constitutional arrangement of a caretaker government to organize elections after 1996.

The system worked till 2007 when the caretaker system was undermined by the ruling Bangladesh Nationalist Party interfering with the process that determined the head of the caretaker system. The resulting crisis resulted in a two-year emergency caretaker government backed by the army that attempted to solve the problem of political instability by attempting to implement good governance reforms. It is not surprising that the emergency government failed to institutionalize good governance. Good governance, as it is understood in the international policy discourse, describes the effective enforcement of formal property rights and a rule of law, an impossible challenge in the context of developing country political settlements. Not surprisingly, the system reverted to its equilibrium of multi-party democracy with competitive clientelism after two years of anti-corruption drives. Ironically, in 2011 the ruling Awami League pushed through the 17th Amendment that did away (amongst other things) with the caretaker system. Apparently, this competitive clientelist party did not understand that a ruling party's assurance that it would enforce formal rules of electoral competition would not be acceptable to the opposition in a society where the informal modification of formal rules was the norm and where the relationship between political and bureaucratic organizations during elections did not ensure a satisfactory chance for opposition parties. As expected, the opposition BNP stated that it would not participate in the elections of 2014 unless the caretaker system was re-instated. The sustainability of democratic institutions therefore remained vulnerable.

A serious problem for the operational equilibrium of democratic institutions with

competitive clientelism is that the enforcement of formal electoral rules is insufficient for ensuring acceptable elections. In a context where all formal institutions are informally modified, it is not surprising that formal electoral rules have proved inadequate for constraining competing parties during elections. Violations of the rules constraining the illegal financing of political parties are widespread. In addition, the incumbent can use bureaucratic organizations involved in administration and policing to tilt the outcome slightly. This is an important reason why the bureaucracy has been increasingly politicized over time. The electoral result can therefore often be justifiably rejected by the loser if the winner is the incumbent. If elections are close in terms of the numbers of votes cast for the two major parties (which is often the case in Bangladesh), the outcome can depend on administrative obstacles created for the losing party in a small number of constituencies. Politically, the outcome of an election is acceptable to the loser under these circumstances only if it is very clear that the winner can field significantly greater organizational power. The attempt to solve this problem through the constitutional mechanism of caretaker governments during elections worked for three successive elections but failed in 2007. The sustainability of democratic political institutions with a competitive clientelist distribution of power across political organizations requires a solution that credibly assures acceptable elections. This assurance is likely to require a credible but informal 'live-and-let-live' understanding between the competing parties that certain red lines will not be crossed by the incumbent in fixing the outcome, and in exchange the winner guarantees the same in the next election. This informal understanding has not emerged.

An unfortunate consequence of competitive clientelism in the political subsystem has been that bureaucratic organizations have become more fragmented and of lower capability over time. This is the result of a creeping politicization of the bureaucracy with wholesale transfers of bureaucrats after elections that amount to the effective demotion of senior bureaucrats. As a result, the time horizons of bureaucrats shrink and incentives are created for bureaucratic investments in developing party links rather than in professional capability development. Economic organizations have on the whole gradually enhanced their competitive capabilities though most remain in relatively low-technology sectors like garments and textiles. The growth-stability trade-off in this political settlement depends on the particular institutions and policies being examined. For sectors where entrepreneurs possess sufficient capabilities to become internationally competitive rather rapidly, the growth-stability trade-off can be quite favourable. Institutions that appear to be dysfunctional can often be made to work in the interests of competitive economic organizations through informal means and side-payments. Thus, the property rights of these enterprises are effectively protected (for a price) and they are able to influence policy and implementation sufficiently to remain viable. On the other hand, acquiring technological capabilities in new sectors that are far from the competitiveness frontier faces a much less favourable trade-off. Responding to these contracting failures typically involves the creation of relatively long-lasting policy-induced rents to enable learning-by-doing to be financed. Success requires the management of these rents by enforcing conditions for their allocation using formal or informal mechanisms. These requirements are difficult to meet when political power is fragmented and bureaucratic organizations have weak capabilities and are

closely linked to political organizations. Thus, in sectors where economic organizations are far from the competitiveness frontier, the growth-stability trade-off was fairly adverse. In the next four sections we look at each of these four phases in the evolution of the political settlement in more detail.

4. MILITARY AUTHORITARIANISM: 1958-1971

The roots of the economic and political crises with which Bangladesh began its life as an independent country in 1971 has to be understood by looking at the legacies of the Pakistan period. Pakistan itself faced serious political and economic challenges when it became independent in 1947 and the patterns of economic and political development that were adopted deepened the crisis in the country's eastern wing. The challenges faced by Pakistan were both economic and political. All the territories that constituted the new state of Pakistan were relatively some of the least developed parts of the Indian subcontinent. The reasons behind the political crisis were even deeper. A constitutional crisis in the newly independent Pakistan was almost inevitable given that the western wing was relatively more developed and was home to the top bureaucratic, military and economic elites while the eastern wing had a bigger population and therefore would hold power in a democratic polity. East Pakistan had virtually no indigenous capitalists and virtually no senior bureaucrats or army officers in 1947. While West Pakistan was less developed compared to more advanced areas of India, many of the Muslim businessmen and senior bureaucrats from other parts of India who opted for Pakistan settled in West Pakistan as

they were culturally closer to that region. The army too was largely drawn from the Punjab region of West Pakistan.

The indigenous elites of the two wings of Pakistan had never been strongly behind the idea of Pakistan and had not worked together prior to 1947 with a shared vision of Pakistan. This may appear to be surprising but their unpreparedness and lack of coordination is in fact easy to understand. The two most important Muslim-majority areas of India were Punjab and Bengal. The western part of Punjab became the heart of West Pakistan and the eastern part of Bengal became the core of East Pakistan. However, the demographic dominance of Muslims in these provinces meant that Muslims already enjoyed substantial power under the electoral system introduced by the British in 1936. As a result, Muslim chief ministers already ruled in these provinces long before 1947 and they had no interest in partitioning the provinces they were already ruling. The dominant Muslim parties in these provinces were not the Muslim League though they were sometimes in coalitions with the latter. The discourse on partition was primarily played out in central India where Muslims were a minority and where Jinnah's Muslim League was trying to negotiate constitutional and political protections for Muslims in these provinces in an independent India. The Muslim League was not organizationally strong in either Bengal or Punjab and it spent much time trying to bring these provinces under its wing to enhance its own bargaining power at the centre.

Jinnah's own commitment to an independent Pakistan was a negotiable one. When the British offered a federal plan (known as the Cabinet Mission Plan) in 1946, Jinnah gave up his demand for Pakistan and was willing to negotiate with the Indian Congress under

Nehru on this basis. The Cabinet Mission Plan gave substantial powers to federal units and the fact that Muslims would have real powers in some parts of India gave Jinnah the confidence that this would be sufficient to protect Muslims in the parts of India where they would be a minority (Jalal 1985; Chatterji 1995). It was only when Nehru ruled this out that the Muslims in Bengal and Punjab panicked at the implications of a centralization of power in Delhi which would make them powerless in their own provinces. There was an electoral and political swing to the Muslim League at the last minute, as a result of which the Muslim League won the 1946 elections in Bengal and was the biggest party in Punjab. The partition of India rapidly became inevitable as a result of this last-minute failure in negotiations between Jinnah and Nehru. Only then did it become clear that the partition of India was definitively going to happen and would create a Muslim homeland in the two main Muslim provinces. Even at that late stage, the local leaderships and populations in these provinces were unprepared for partition and statehood and had not spent a long time working out what such a state would look like.

The Muslim League immediately faced serious problems in trying to cobble together a Pakistani state. It had won many votes in the 1946 elections but it had a weak party organization in the parts of India that would now become Pakistan. Moreover, most of its top leadership came from parts of India that would *not* become Pakistan and lacked any political constituency in the new country. However, West Pakistan's largely Punjabi elites soon discovered they stood to become the dominant group in the new state in terms of their relative position in the bureaucracy and army and their relative economic development. The Punjabis also experienced the

most significant savagery on both sides during partition and this created a strong demand for a centralized and militarily strong Pakistan, a demand that had little resonance in the East where the experience of partition was less traumatic and bloody. This combination of factors led to the East Pakistani political elites suddenly discovering that they were in a subordinate position of political power in the new state. Thus, from the outset the new state of Pakistan began its life with serious conflicts of interest between the politicians and the political organizations of the two wings. A decade of constitutional discussions failed to achieve a power-sharing formula between the two wings that would satisfy both the dominant elites of the West and the aspiring elites of the East. The former were dominant in terms of their links with economic and bureaucratic (including military) organizations, but the latter could legitimately claim political equality if not superiority on the basis of their population numbers.

The central problem was that the relatively poorer and less developed East Pakistan had at that time a bigger population, making the economically dominant West Pakistani elites suspect that they had much to lose in a democratic system. Moreover, even though East Pakistan was relatively underdeveloped, its political organizers were more organized and experienced in mass political mobilization and electoral politics as the region had a longer history of colonial rule. Finally, West Pakistan was internally split into four provinces so that it was very likely that votes in the West would be split between several political parties. These asymmetries in the economic, political and organizational capabilities of the two wings made a constitutional settlement virtually impossible. The military coup of Ayub Khan in 1958 was the result.

The imposition of martial law curtailed the formal rights to set up and operate political organizations. The ruling coalition was defined around a core group of bureaucratic and military elites, but inevitably West Pakistani economic organizations were close to these groups. Political parties were excluded and initially had very limited organizational capabilities to resist the enforcement capabilities of the military-bureaucratic coalition. However, the history of prior political mobilization meant that the excluded organizations would not remain permanently quiescent. The political subsystem was nevertheless initially a vulnerable patrimonialism and the institutional authoritarianism that was introduced was initially in a moderately effective operational equilibrium with this underlying distribution of organizational power. For a while, the threat of force did indeed disrupt the ability of excluded organizers to pose a significant threat to the ruling coalition. Till the mid-1960s the operational equilibrium was fairly stable in the political subsystem. But gradually, political organizers in both wings of Pakistan began to organize increasingly effective popular resistance to the ruling coalition, taking the form of strikes, demonstrations and defiant public meetings. In the second half of the 1960s, Bhutto's Pakistan People's Party in the West and, even more so, the Awami League in the East led by Mujibur Rahman began to mount an effective challenge to the 'patrimonial' claim of the military-authoritarian ruling coalition to rule in perpetuity.

Economic organizations had low competitive capabilities in both wings of Pakistan but they were almost non-existent in the East. The West benefited from the fact that a number of capable Muslim merchant and industrial capitalists immigrated to Pakistan from western India and chose West Pakistan as their natural home. These capitalists had

strong links with the Muslim League from British times and had financed its politics in India (Khan 1999). These political contacts became even stronger now because the military-dominated ruling coalition realized that economic growth was vital for the survival of the country. As a result they fostered strong 'political' links with the West Pakistan-based business elites. Policy-induced rents were now controlled by a ruling coalition consisting of the military-bureaucratic elite and their close business allies. At the same time control over access to foreign exchange, the exchange rate, interest rates and tariffs and quotas allowed the state to create rents for privileged business elites. The initial effect of the new political settlement was not only greater political stability but also a sustained growth spurt that lasted through much of the 1960s. But the location of political power and entrepreneurial capabilities meant that almost all the manufacturing growth was located in West Pakistan.

The military ruling coalition could not rule without some incorporation of political forces. The major institutional mechanism for purchasing and organizing stability was the Basic Democracy system that Ayub innovated in 1959, one of the first acts of his regime. This attempted to by-pass the established political organizations led by organizers based in the towns by creating a new constituency of political leaders in the villages who would be cheaper to accommodate within the ruling coalition. A total of 80,000 'basic democrats' were elected on a non-party basis. They served as an electoral college for electing Members of Parliament as well as the President. Authoritarian regimes have often used this tactic of going over the heads of their immediate opponents and appealing to the interests of those below them. The latter would initially demand a lower price and

from the perspective of the patrimonial ruling coalition, the new socially inferior political organizations appear to be easier to control. The provision of relatively limited rents to this large army of rural representatives through rural infrastructure construction programmes and Food for Work programmes for a time created a countervailing source of support for the regime that made it difficult for the older political organizations to organize dissent (Sobhan 1968).

In the end, Basic Democracy was self-defeating for the regime. As the rural basic democrats became more confident and ambitious, they saw obvious opportunities in throwing their lot in with the growing dissent that the traditional political organizations could mobilize. When this began to happen in the late 1960s, not only did the 'hot house' economic development come under threat, the political stability of the country was fundamentally challenged as there were no easy ways of incorporating excluded elites into the system quickly enough. The PPP in West Pakistan and the Awami League in East Pakistan began to significantly increase their holding power as their number of direct and indirect supporters increased. In the second half of the 1960s the number of strikes, *hartals* (general strikes shutting down cities for a day) and other manifestations of civil protest increased exponentially (Alavi 1971; Ziring 1971; Jahan 1972; Gardezi and Rashid 1983; Zaheer 1994). This evidence can be interpreted as a dramatic increase in the relative power of excluded organizations and an increasingly rapid dissolution of the organizational distribution of power in the political subsystem described as vulnerable patrimonialism.

Under pressure in both wings of Pakistan, the military government allowed elections in 1970. They did not foresee that the East Pakistan-based Awami League would gain an

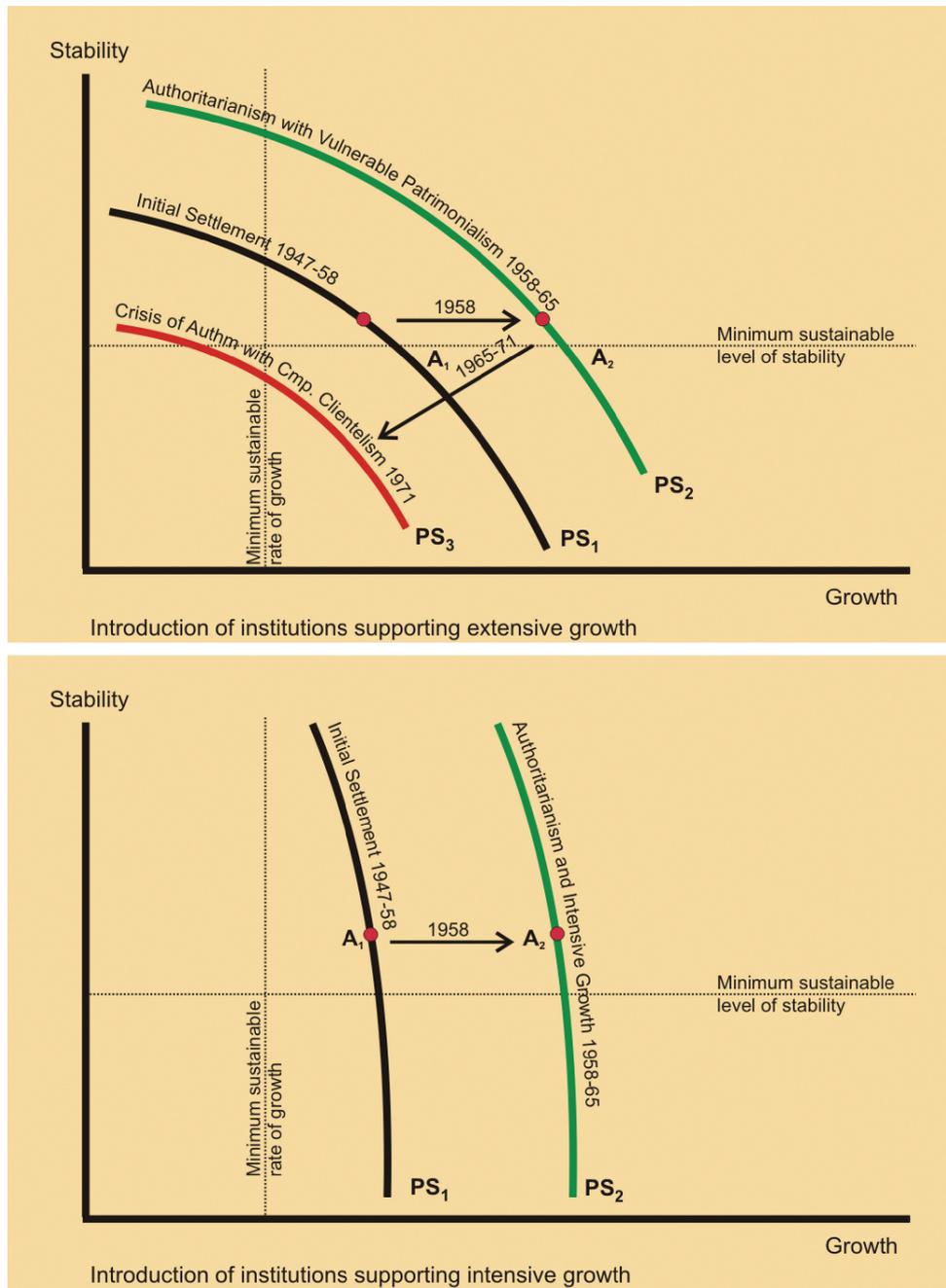
absolute majority in parliament. The East did have a majority of seats in the central legislature but the military ruling coalition believed that the vote would be split between several parties. In the end, the superior political organizational skills of East Pakistani politicians led to a resounding victory of a single party, the Awami League. This led to an even more serious constitutional crisis as West Pakistan-based elites were unwilling to let an East Pakistan party form the government. The last desperate act of the authoritarian regime was a bloody crackdown on political organizers and their intellectual supporters in East Pakistan in March 1971. As the conflict became increasingly bloody, the political settlement collapsed into crisis. Civil disobedience in the East intensified and transformed into a war for liberation and independence. Pakistan's historic enemy India intervened to assist the Bengali struggle for independence and the independent country of Bangladesh was born in 1971.

The relationship between changes in the political settlement and the implementation of institutions supporting growth is summarized in Figure 1. The combination of changes in the relative power of political organizations and the introduction of authoritarian political institutions in 1958 resulted in a movement outwards of the growth-stability trade-off curve *for institutions and policies supporting extensive growth*. These were institutions that focused the allocation of resources and subsidies to a small number of economic organizations that could drive growth. They included the licensing rules that allocated scarce foreign exchange to growth sectors, overvalued exchange rate policies that made machinery imports cheap at the cost of the rupee income of peasant exporters of raw jute, provided subsidies for exporters of manufactured products and al-

located bank lending to favoured investors in new manufacturing industries. These formal institutions could be enforced to a greater extent because the political settlement prevented those opposed to these policies from organizing effective resistance, while the economic and political organizations that benefited did not have significant incentives to informally modify these institutions in ways that hampered their enforcement. For almost a decade, the institutions supporting extensive growth achieved rapid growth with the development of new sectors that had previously not existed in the country (Khan 1999, 2008c). This is shown in the top half of Figure 1 as an increase in the growth rate from A_1 to A_2 .

In contrast, the improvement in the trade-off curve for the institutions that were required for intensive growth was much less favourable, as shown in the lower set of curves in Figure 1. As in the India of the same period, powerful business groups were strongly networked with particular politicians and in the case of Pakistan with particular bureaucrats or generals. This meant that from the growth rate of A_2 , further improvements in growth could not be achieved through learning-by-doing and productivity growth because the enforcement of discipline faced very steep declines in stability. Alternatively, the institutions responsible for disciplining would be informally modified so significantly that growth improvements would not be achieved. The operation of banks, licensing rules and other institutions that should have enforced discipline on poor performers were informally modified so that growth-enhancing outcomes were not achieved. If these institutions could have been enforced (whether through formal or informal mechanisms) growth could have been pushed significantly beyond A_2 in Figure 1. But more significantly,

Figure I. Growth and Crisis under Authoritarianism 1958-71



the extensive growth at A_2 was not sustainable without productivity growth making economic organizations viable without subsidies. The failure to achieve the enforcement of the second type of institution resulted not only

in lower growth rate, but also eventually the collapse of extensive growth.

The political settlement was not sustainable for several reasons. First, the failure to make the growth sectors self-sufficient meant that

subsidies could not be freed up to spread the growth to new sectors. Economic organizations that failed to achieve competitiveness appeared to be crony capitalists living off public resources. This delegitimized the ruling coalition and its strategy and allowed political entrepreneurs to organize new intermediate class groups who had been left out of the growth and could now be mobilized to organize even broader groups in society. Secondly, the skewed regional pattern of growth had further delegitimizing effects. The absence of an East Pakistani capitalist class and the absence of a sufficiently autonomous ruling coalition that could develop East Pakistani economic organizations as a long-run strategy of stabilizing the polity meant that the major beneficiaries of policy-induced industrial growth were West Pakistani-owned economic organizations. There were some attempts to redress the balance both by promoting some East Pakistani capitalists in the 1960s as well as using the public sector to promote industrialization in the East, but these steps were too limited relative to the scale of the problem. The economic imbalance created a ready and legitimate grievance for excluded political organizations in the East to coalesce around issues of economic and political exploitation of the East. The mobilization of political organizations in the late 1960s meant that the distribution of power across political organizations no longer approximated vulnerable authoritarianism. As this happened, authoritarian institutions could not be in operational equilibrium with this underlying distribution of power. The result was a growth of instability and violence within the political subsystem and the consequence was that the political settlement as a whole began to collapse into a broad-based crisis. As the first diagram in Figure 1 shows, the result was a collapse in the trade-off curve for the operation of all

institutions including the institutions supporting extensive growth. In fact by the late 1960s the level of instability and violence had reached a point where the minimum economic and political viability conditions for system reproduction could not be met. It was out of this violence that Bangladesh was born.

5. THE RISE AND FALL OF DOMINANT PARTY AUTHORITARIANISM 1972-1975

The victory of the excluded Bengali political organizers in 1971 created a new crisis. The Awami League, which won virtually every seat in East Pakistan in the 1970 elections, was clearly for the moment a dominant party. The party had also included within its ranks the majority of political entrepreneurs and their organizations. By the time independence was achieved in December 1971, there were few significant organizations that remained outside the broad umbrella of the party and its related organizations. The patrimonial nature of its subsequent rule was based on this inclusion of all relevant and powerful organizations directly or indirectly within the movement led by the party. In terms of our categories, the distribution of power across political organizations immediately after independence approximated that of constrained patrimonialism. Given the formal democratic institutions that were in place, constrained patrimonialism supported one-party rule by the Awami League as long as constrained patrimonialism was itself sustained.

But the inclusion of so many diverse organizations under the umbrella of the nationalist movement led by the Awami League was not based on a unified ideological position

on which a disciplined party had been constructed. Many if not most organizations had joined the Awami League to ensure that they were not excluded from access to power in the new political arrangement that was likely to follow after the breakdown of the authoritarian regime in Pakistan. The incentive to work under the umbrella of the Awami League was magnified after the election victory of the Awami League in 1970 and even further after the breakdown of negotiations in early 1971 that made the independence of Bangladesh inevitable. By late 1971 therefore, only political entrepreneurs who were strongly opposed to the partition of Pakistan and a few ideological parties like some Marxist factions remained outside the broad umbrella of the Awami League and its allied parties. Thus, when Bangladesh was born, the ruling coalition consisted of almost every politically significant organization in the country, but it was also a coalition that was particularly weak in terms of its internal discipline.

Initially, the constrained patrimonial description of the political subsystem meant that the leadership of the Awami League began to believe that they could rule indefinitely as long as the inclusive character of the dominant party could be maintained. But this inclusion was actually not based on shared political objectives but rather on the calculations of a large number of diverse organizations that their opportunities for economic and political advantage were larger within the party than outside. The political leadership also did not have a disciplined party apparatus that was adequate for maintaining discipline in a context where significant resources were to be allocated to entirely new groups of the social structure that had previously been excluded. How would the political beneficiaries of the new system of power be selected and how would their relative claims be as-

essed and satisfied? It is not surprising that violence within the party steadily increased. The number of organizations and therefore political entrepreneurs within the party had vastly increased and now almost all powerful political entrepreneurs were within the ruling coalition. Given the limited rents that were available for distribution or capture, the allocation could not be settled to everyone's satisfaction.

Central party control over its own competing political organizers could not be easily established. Individuals and groups who received less than they expected threatened to leave the party and engage in opposition or violence from outside. At the same time, accommodating all individuals and groups on the terms that each thought reflected their bargaining power would add up to more resource redistribution than the economy could possibly sustain. The dissatisfaction within the party was rapidly represented in a number of ideological debates: Between those who had fought or claimed to have fought in the war of liberation and those who for various reasons had not or could not, and between slightly different versions of the now dominant 'socialist' ideological consensus. Behind these debates over nationalism and socialism was in most cases primarily a concern about who would have the power to decide or limit the allocation of rents.

An analysis of the logic of patron-client politics in developing countries can help to explain this crisis. Twice in the last 50 years in East Bengal, massive political victories were followed by the virtually immediate disintegration of the winning party. The Muslim League, which won a landslide in Bengal in 1946 and was instrumental in achieving Pakistan, fell apart in East Pakistan in a matter of months. It lost the 1954 provincial elections to the secular United Front, never to recover

(M. G. Kabir 1995: 122-39). Now, once again, the Awami League had won a landslide victory in East Pakistan in 1969 and its victory was instrumental in creating another independent country but now it began to disintegrate within months of independence (M. G. Kabir 1995: 183-95). Some aspects of these disintegrations can be explained in terms of the economic logic underpinning the competition between organizations within a ruling coalition in a clientelist political settlement. The paradox of political success is that when a political organization is too successful in attracting primary organizations to join it, it faces a problem. It achieves significant holding power in contests with other organizations and can potentially win to become the ruling coalition, but in victory it finds it does not have sufficient resources to satisfy all the aspirants who have joined as faction leaders. In East Bengal in 1947, and then in East Pakistan in 1971, the problem was even more dramatic. The overlapping of communal or ethnic identities with factional ones meant that in 1947 the defeated factions preferred to leave the country, and in 1971 they were forced to leave. Thus, at the same time as demands for redistribution increased, the resources that could be redistributed shrank. In 1947 the aspirations of East Pakistani political organizers were blocked by new constitutional problems and eventually the imposition of martial law. But in 1971, these aspirations broke out in an intense competition for resources that threatened to tear apart the ruling party.

The situation within the ruling coalition in 1972 was clearly unsustainable and the ruling party, the Awami League, attempted to reassert central authority over competing political organizations by resorting to authoritarian means. Authoritarian in this context refers to the imposition from above of rules

that restrict the activities or choices of political organizations. The Awami League could not impose martial law after having fought so long against it, so instead it tried to use a constitutional amendment to introduce a one-party state and a presidential system of governance that would concentrate powers in the hands of the president. The hope was that this would reduce the intensity of competition between competing political organizations and enable the president to impose discipline from above, if necessary by using repressive enforcement. In particular, the threat of leaving the dominant party and competing with it from outside was removed by formally requiring that all political activity had to be carried out within the party. This too was expected to reduce the bargaining power of constituent organizations within the party and to assist the president in enforcing from above the distribution of benefits across organizations that had been decided upon.

In January 1975 the 4th Amendment to the constitution was pushed through despite misgivings amongst many party members. Mujib, the leader of the liberation movement, had to threaten to resign to make his party fall into line on the vote (Karim 2005: 348). The constitutional amendment created a presidential system, with power concentrated in the hands of Mujib who became the president. The amendment also provided for the creation of a 'national party' with the sole power to engage in political activity, and all members of parliament and the president had to belong to this party. In February all other parties were suspended and the national party launched. This was the Bangladesh Krishok Sromik Awami League (Workers and Peasants Awami League) or BAKSAL (Mascarenhas 1986: 57). The plan had the strong support of the pro-Moscow faction of the Communists as it fitted in with the blueprint of similar one-

party experiments in other parts of the developing world then supported by Moscow. Socialist ideology aside, this was clearly also an attempt to reassert central control over rent allocation within a defined dominant coalition, in other words, to create a one-party version of an authoritarian ruling coalition.

The problem for the 4th Amendment was that this institutional solution could not find an operational equilibrium with the actual distribution of power across organizations as the latter was rapidly evolving. The actual distribution of power across organizations no longer reflected a constrained patrimonial structure. Although most powerful organizations were formally within the ruling coalition, most organizations within the one-party structure did not perceive themselves to be part of the ruling coalition. The party simply did not have that kind of ideology or discipline to make organizations feel included nor could it offer most organizations the resources that might make them want to voluntarily stay within the coalition. Many organizations within the ruling coalition felt that they were not getting their due share of rents and decided to leave. In the absence of the constitutional amendment, the departure of a large number of organizations would demonstrate that the real distribution of organizational power was that of competitive clientelism. The constitutional change tried to hold back competitive clientelism from fragmenting the ruling coalition, but the leadership of the ruling coalition did not have the violence capability to enforce the institutional rule imposing a one-party state. The one-party state could not therefore be an operational equilibrium given the underlying (competitive clientelist) distribution of power. If the experiment had continued for a while it would almost certainly have collapsed even if violence were unleashed for a

while on political organizations that refused to accept the formal constitutional provision of a one-party state. As it happened, a number of individuals from the army with the collusion and support of factions within the ruling party acted to violently remove the top leadership of the party.

The events leading up to the constitutional amendment and the bloody debacle that followed demonstrate this analysis. The opposition to the constitutional amendment was, of course, not expressed in terms of the implications for the competition over rents between the constituent political organizations of the ruling party. Instead, disquiet was expressed (and some of this was undoubtedly genuine) about the possibility that this was the thin end of the wedge that would convert the country into a planned economy of the Stalinist type with its attendant authoritarian characteristics. No doubt, the pro-Moscow communists also supported the plan on a similar expectation but with the hope that this would be likely to favour them. Nevertheless, the failure of this proposal to win the support of many of Mujib's key lieutenants was significant. Many people inside and outside the party saw the move as a logical culmination of steps towards an authoritarian protection of the power of the actual ruling coalition composed of Mujib and his close associates. In the absence of well-understood and shared rules for sharing rents within the party (which a more disciplined party may have had), many political leaders and their supporters within the ruling party felt justifiably threatened.

Already by 1973, it had become clear that the rule of the dominant party could not be taken for granted and many constituent organizations were threatening to leave. As early as 1972 a significant section of the 'left-wing' of the Awami League left to form the

Jatiyo Shomajtantrik Dal (the National Socialist Party), JSD, on the grounds that the party was no longer socialist enough. The 1973 election, though it resulted in a huge victory for the Awami League, had revealed the vulnerability of many of the top leaders whose re-election was widely believed to have been achieved through administrative interventions in the electoral process (Karim 2005: 305-8). Many of Mujib's henchmen and relatives were already deeply unpopular for their acts of appropriation and their blatant immunity from all legal restrictions. As the opposition National Awami Party put it: 'Pakistan's 22 families have become Bangladesh's 2000' (Karim 2005: 290). They could have added that the rents of the 2000 were based entirely on expropriation and were not even remotely associated with technology acquisition or industrialization. The paramilitary Jatiyo Rokkhi Bahini (National Protection Force), or JRB, was increasingly used to protect Awami Leaguers from attack and also to intimidate voters during elections (Karim 2005: 273). It was in this context that the introduction of BAKSAL and the one-party state has to be assessed.

While there was little public demonstration against the constitutional amendment, the climate of fear was not appropriate for the free expression of views. In secret, many different groups began to plot Mujib's violent removal (Mascarenhas 1986: 64). Mujib himself was aware that the 4th Amendment could not represent a permanent solution and was at best an emergency response to a situation going out of control: 'This one-party arrangement is purely temporary. Once I have saved the country from counter-revolution I will restore multi-party democracy' (quoted in Karim 2005: 258). Mujib's enemies were not convinced. They were not only based in other parties and in the army, but within his

own party. Many 'rightist' members of his cabinet and indeed some foreign embassies were aware that a strike was being planned against him (Lifschultz 1979; Mascarenhas 1986). The silence of a number of key political leaders within the party was essential for the assassination to have been successful. And so it was that on the 15th of August 1975, less than four years after achieving independence, the founding father and president of the new country was assassinated.

Independently of the secret betrayals and conspiracies, it is clear that the plan to create a one-party state was deeply unpopular with many of the very elites that the party hoped to bring together into an authoritarian one-party ruling coalition. The viability of an authoritarian ruling coalition is only assured if any significant organizers of violence outside the party can be effectively repressed *and* lower-level coalitions within the party are sufficiently satisfied to have no incentive to rebel or can be repressed if they do. The more credible the threat of repression becomes the less likely it is that repression will have to be exercised. From the perspective of credibility, the BAKSAL experiment was demonstrably a failure. The threat to impose discipline and repress those who disagreed was in the end not credible because the underlying distribution of power across organizations already represented a competitive clientelism. There were too many powerful organizations that did not feel they were part of the ruling coalition and they were too powerful and too numerous to be credibly repressed given the instruments of enforcement available to the actual ruling coalition.

The interesting question is why the attempt to define the ruling coalition in an inclusive way did not find broad support amongst the competing political organizations that it wished to incorporate. The likely answers to

this question have important implications for understanding the organizational characteristics of clientelist political organizations in Bangladesh. The essential problem with an attempt to impose order on formal and informal rent allocation in developing countries using a one-party authoritarian structure is that there are no well-defined criteria for allocating resources across organizations of varying size and power. Political accumulation by political entrepreneurs is a dynamic process where sequential layers of political entrepreneurs are continuously emerging at all levels. One way of imagining this is to think of a multitude of patron-client political organizations with conveyor belts in each taking enterprising individuals higher up and with individuals at higher levels occasionally branching off to construct their own factions. A single authoritarian party is simply a coalition of a large number of patron-client organizations which have been brought together in a larger coalition. Attempting to define rent allocation in a coherent way in this context faces two sorts of problems.

The first problem is to determine the distribution of rents between the different factions (or constituent organizations) that are part of the ruling coalition. If each of these organizations was generating its own rents and the question was only about protecting existing rents, the problem would be a lot simpler and the ruling coalition could collectively provide third-party enforcement for its member organizations. This could happen if all factions within the ruling coalition were productive organizations or if the patrons of each faction were only extracting rents from their own clients. But if a significant part of the rents of factions are based on redistribution from elsewhere in society, each faction is targeting the same pool of resources for capture. In this case, the distribution of rents

between factions cannot be guaranteed by the factions themselves. Only the supreme leader can do the arbitration of rent allocation between constituent organizations and that too only if the leader has the support of most organizations most of the time. If the distribution of rents between internal factions depends on the decisions of a supreme leader, all factional leaders have to be confident of their access to the supreme leader, and the leader has to have sufficient authority to impose decisions once taken. Clearly, a number of internal factions were already refusing to accept Mujib's decisions within a year of independence and some had already left to oppose the ruling coalition from outside. Mujib's judgement that a one-party system based on a constitutional amendment could force all these factions back to the fold and force them to accept the rent allocations he offered was a significant gamble. It would only work if most organizations accepted the rent allocation that was offered, in other words, if most organizations were actually part of the ruling coalition. In that case repression would only be required against a minority of organizations outside the ruling coalition, and in the case of constrained patrimonialism, the excluded organizations are of negligible strength. Unfortunately, in the case of Mujib's constitutional experiment, many if not most of the organizations formally within the ruling party were unlikely to accept rent allocation from above and were also sufficiently strong to resist the repression that was available to the ruling coalition.

The second problem for a dominant party is to define the limits of the ruling coalition. In the South Asian context, the number of political organizers who believe they have enough disruptive capacity to deserve inclusion within the ruling coalition and claim a share of political rents is potentially vast. It

may have appeared for a moment after the victory of 1971 that all political organizers in Bangladesh were united in one party, but this was an optical illusion. The more organizers the ruling coalition accommodated, the smaller the rents for each organizer. The problem for a well-defined ruling coalition as in a one-party state is that it defines insiders and outsiders clearly. Not only is the group of insiders too large as discussed earlier, the outsiders, however defined also have strong incentives to unite against insiders. Successful one-party authoritarian regimes usually have some special features that allow them to keep insiders in, outsiders out, and to absorb outsiders at a manageable rate. For instance, they could have significant natural resource rents that could be used to finance an acceptable distribution of rents for major factions and a credible control of violence at the centre. Some oil-rich one-party states provide examples of this variant. Still, the calibration of the frontiers of the party is critical to ensure that the available force is sufficient to deal with potential dissent. Of course, the combination of force and rents required to make a one-party system of this type viable is not defined in absolute terms, but rather in relation to the strength of potential organizations (within and outside the ruling coalition) who demand rents based on their relative power.

The danger of using rents to construct a large single-party ruling coalition is that the ruling coalition has to have access to significant rents and the rent allocation is likely to be unproductive. Dominant party states often suffer from this constraint, as well as the constraint that they may be unable to re-allocate rents that are captured by powerful constituent organizations of the ruling coalition. However, these constraints are not always binding. A possible variant of a one-party ruling coalition that can overcome some of

these problems is a disciplined authoritarian party that does not immediately offer significant rents to leaders and organizations lower down the organizational chain, but does offer credible career paths for individual party members to move up the pyramid. The credibility of such a party to offer future rents to individuals implies that it has a developmental strategy that can provide steadily growing rents over time. This may be credible strategy for keeping lower-level clients disciplined if the party is well-organized party and has a credible developmental strategy. Contemporary China provides an illustration of a one-party ruling coalition that does not immediately have to allocate so many rents to its internal supporters that the overall social rent allocation is destructive. On the contrary, the disciplined control over rent allocation at the social level allows the Chinese Communist Party to play a significant developmental role. In contrast, Mujib's party had neither the natural resource rents nor a disciplined party hierarchy running a credible development strategy. Indeed, the party did not even control the army, as Mujib's assassins were dissident young officers who operated with the knowledge of factions within the Awami League.

The relationship of the evolving ruling coalition with economic organizations during this period is also interesting. Most Bengali economic organizations were of low capabilities, but the few high-capability Bengali economic organizations were not seen as allies of the regime in its attempt to achieve economic viability. This is partly because the departure of Pakistani capitalists left behind significant abandoned assets like major factories and these offered significant rent opportunities for the ruling coalition. These assets had to be nationalized by the state because there were no obvious Bengali entrepreneurs who

could take them over and even if there were, it would be very disruptive to allocate them to private owners after a long fight against economic exploitation. The nationalizations increased the state's share in modern industry from 34 to 81 percent. But even this was not enough for the new ruling coalition. The Presidential Order of March 1972 brought the few high-capability Bengali-owned economic organizations in the jute, cotton and sugar sectors into public ownership, raising the public sector's share to 92 percent with a corresponding increase in the rents that the state could allocate to its supporters (Sobhan and Ahmad 1980: Table 10.1; K. A. S. Murshid and Sobhan 1987: 3-4). Why this was done has been much debated. To some extent ideology played a part, but more prosaically, nationalization brought more rents under the control of the state which needed rents to keep its fractious coalitions together.

The quality and capabilities of bureaucratic organizations also suffered a significant decline during and after the war. The top echelons of the civil service during the Pakistan period was staffed by an elitist group of mandarins selected by examination. They constituted the Civil Service of Pakistan, the CSP. Very few Bengalis found positions in this elite service and the CSP were generally perceived to be antagonistic to the interests of East Pakistan. Bureaucratic authority remained divided but with weaker internal hierarchies as technocratic capabilities declined. The new state opened up employment in the civil service on much easier terms to a new swathe of aspirants, frequently accommodating political clients of the ruling coalition on an informal basis. Employment in the public services witnessed a dramatic expansion at a time when the examination process was in any case informally weakened to ensure the admission of particular individuals and groups.

At the time of liberation in 1971, there were 450,000 employees of all grades in the public services, of which only 320 were officers at the level of Joint Secretary or above. By 1973 total employment in the public services had increased to over 650,000, with officers in the higher grades increasing to 660 (World Bank 1984: 109). Some of this growth was due to the change in coverage from the inclusion of new industrial units within the public sector which brought their administrative staff within the ambit of the public services. But the number of white collar staff in Bangladesh's small industrial sector would only account for a fraction of the increase. The informal institutional modification that allowed examinations to be 'fixed' so that clients of the ruling party could achieve easy entry into the civil service proved to be a very difficult informal institution to alter. It achieved a rapid operational equilibrium with the actual distribution of power in the political subsystem because the ruling coalition needed clients in the bureaucratic organizations and had the political power to ensure that these clients could be rapidly created. It is a problem that continues to affect attempts to improve the capabilities of bureaucratic organizations.

The rent and resource capture during this period can be described as intense primitive accumulation. The most important economic organizations that were politically connected and benefited from rent allocation were set up by low-capability new entrepreneurs who were closely connected to political organizations. A new class of entrepreneurs began to emerge, rapidly bypassing the handful of older Bengali capitalists who had emerged during the Pakistani period, and whose assets had now been nationalized. Interestingly, the new accumulators rapidly went beyond primitive accumulation and wanted to change the limits of the 'socialist' policy framework that

restricted private investment. Pressure from this group had already resulted in a revision of the government's socialist industrial policy. They demanded the legalization of property rights over their potential investments. They would no doubt still prefer to have some types of rents to assist their investments but no longer supported the destructive rent capture of other primitive accumulators. Under pressure from this group in 1974, the ceiling on private investment was increased from 2.5 million to 30 million takas. Partnerships with foreign private investors were allowed, and the moratorium on nationalization was increased from 10 to 15 years. These emerging capitalists were not at all excited at the prospect of a 'socialist' one-party state which could reverse these changes.

Nurul Islam, an economist in the Planning Commission at that time, describes some of the processes of asset and rent capture: "By 1974 there were a number of factors which had contributed to an accumulation of surplus funds in private hands. For one thing, high profits were earned in domestic and import trading activities, including illegal trade such as trade in contraband goods and in smuggling jute and other exportables across the border. Since these transactions were illegal, the risk premium was high and hence profits, once realised, were high. In addition, many residential buildings and trading or commercial enterprises, abandoned by Pakistanis, were illegally occupied by private persons. The 'caretakers' of such commercial enterprises, hastily appointed by the government in 1972 immediately after independence, made large fortunes through the undeclared sale of assets. Moreover, there were gains to be obtained from rental or sales proceeds of the abandoned houses which were illegally occupied by private persons. Those who had accumulated financial resources were

pressing the government to commit itself to a more substantial and permanent role for private enterprise in the economy of Bangladesh" (Islam 1979: 225-6).

The anarchic process of rent capture during this period had the expected negative effects on economic performance. An assessment of 1970-1975 is difficult because of the very real disruptions caused by the war, and the short life of the regime. Productivity in manufacturing was on average less than 50 percent of the level reached in 1970 and real wages in manufacturing around 60 percent of their 1969/70 level (World Bank 1978: Vol. II Annex I.6 p. 173, 1984: Vol. II Table 9.12 p. 118). In addition, in 1974 Bangladesh suffered from a serious famine that took place without any significant decline in aggregate food availability (Sen 1983). The causes were largely state failure in managing distribution and ensuring purchasing power in a context of hoarding and smuggling. More than a million people died in the famine, which according to some estimates was probably more than in the war of liberation (Sen 1983: 134-41; Karim 2005: 335-40). When finally an attempt was made to rein in the unproductive rents through a 'Second Revolution' (the one-party state), many factions within and outside the dominant party had no faith that this would be in their interest. Mujib's assassination ended this experiment.

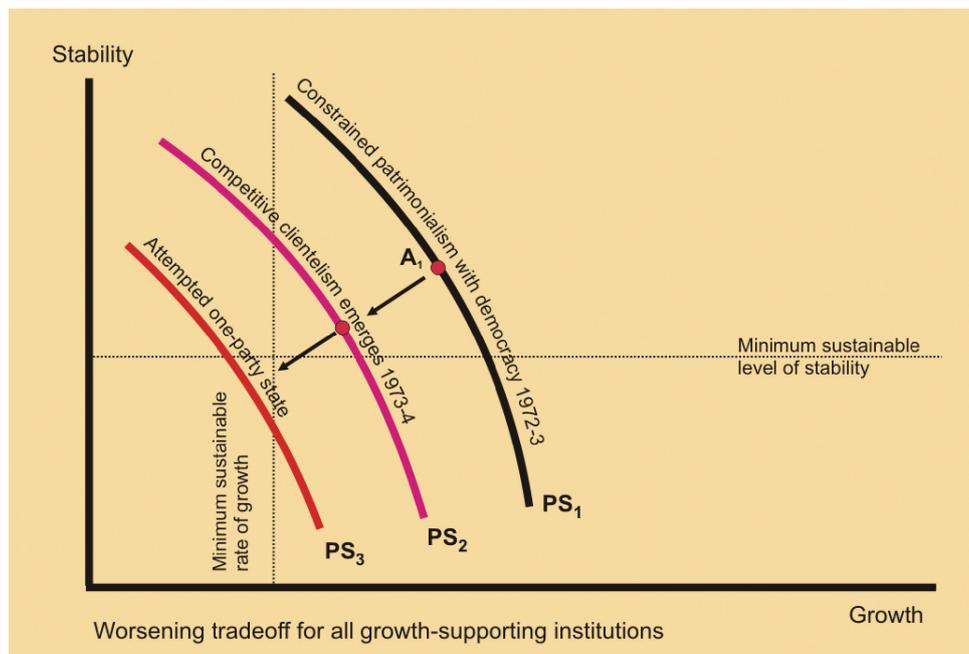
Overall, however, the types of rents that political organizations were creating in Bangladesh during this period were largely unproductive and purely redistributive rents. The vulnerability of the economy was both a cause and a consequence of the fact that the rents generated by the political process were almost entirely value-reducing (Umar 1980; E. Ahmed 1986: 27). Formal institutions had collapsed to the point that informal rent capture was not simply sharing the

returns created by productive activities but were in many cases simply asset capture and the creation of monopoly rents through different types of restrictions, over-invoicing opportunities, and so on. Faction leaders were involved in grabbing abandoned assets, appropriating public resources through the creation of excess employment, making excessive margins on construction contracts, import contracts, and so on (Islam 1979: 225-6). These rents were zero-sum at best and had no positive effect on productive investments. In fact, they were mostly value-reducing. Major targets of appropriation were the assets of departing Pakistanis and of groups who could be associated with them, such as the (non-Bengali) Biharis. But assets of Bangladeshis were also targeted as were the assets of many Hindus (who had never been supporters of Pakistan) (Karim 2005: 283-90).

Figure 2 summarizes the poor enforcement prospects of growth-enhancing in-

stitutions in the context of the collapsing political settlement from 1972 to 1975. The period began with constrained patrimonialism in the political subsystem in the immediate aftermath of independence. The Awami League and its allied political organizations dominated the political subsystem. This allowed for a time an operational equilibrium with democratic political institutions as the latter still ensured the political dominance of the Awami League. However, the internal fragmentation of the Awami League began to lead to the departure of disgruntled organizations from within the Awami League. This began to transform the political subsystem into a competitive clientelist one. The consequence was both a threat for the continuing dominance of the dominant party under the existing institutional rules as well as a worsening trade-off for growth institutions. In particular, the intensification of the competition for rents and of primitive accumulation led to more extensive informal modifications

Figure 2. The Dominant Party 1972-5



of formal institutions and worsening growth prospects.

It was in this context that the Awami League leadership attempted to reinforce its patrimonial claim by changing the institutional rules in the political subsystem to set up the one-party state. However, given the competitive clientelist distribution of power, this simply further increased instability and contestation. The incompatibility of these institutional rules with the underlying distribution of power across organizations was the source of a sharp increase in potential violence and a deeper economic crisis. This is shown in Figure 2 as a collapse of the political settlement. With enough instability in politics, the minimum economic and political viability conditions of the system are unlikely to be met. The political settlement effectively collapses under these conditions and some type of discontinuous adjustment is likely to happen. In 1975 this took the form of a revolt by young army officers that wiped out the top leadership of the Awami League.

Some aspects of the emerging crisis in Bangladesh in the early 1970s were unavoidable. The economy had been severely disrupted by war and conflict. The bureaucratic organization of the state had been thoroughly disrupted as a result of politicization and the departure of West Pakistani personnel. It is unlikely that even a limited developmental strategy could have been properly implemented even in the absence of any organizational resistance. In addition, the hunger of excluded political entrepreneurs and their organizations should not be underestimated and it would be unrealistic to assume that any political leadership could have fully contained the primitive accumulation that was unleashed. The failure of the Awami League leadership to stay on top and manage this social eruption therefore has to be placed in

context. But the leadership and its policy advisors also appeared to be entirely unaware of the processes that were going on and took no steps that could ameliorate some of what was happening. On the contrary, some of their steps, like nationalizing Bengali-owned economic organizations, trying to develop 'socialism' defined as public ownership and job creation in a crushingly poor economy, repressing political competition and finally attempting to set up a one-party state against the grain of the evolving distribution of organizational power were a series of avoidable mistakes that contributed to make the problems much worse than they need have been.

6. THE TRANSITION PERIOD OF AUTHORITARIAN CLIENTELISM 1975-1990

The violent end of the first Awami League regime was followed by a period of political turbulence. The distribution of organizational power in the political subsystem now approximated competitive clientelism, as a number of competing and powerful patron-client organizations had emerged and none could be excluded for long by any institutional arrangements that strictly attempted to enforce exclusion. At the same time the institutional arrangements for organizing a democratic contest between these organizations could not immediately emerge given the context of violence and the absence of any shared conception of rules of the game to regulate such a contest. A gradual transition towards such an institutional structure did however take place, ironically under military leaderships. The transition period can be described institutionally as authoritarian clientelism. It was marked by the creation of

first one and then a second alternative party to the Awami League based on the principle of clientelist inclusion of powerful organizers into a ruling party run by a dominant leader, initially from the army. Formal multi-party competition was introduced under these parties. While it was informally clear that the top job was not open to capture through political competition, the latter established the relative power of competing political entrepreneurs and their organizations and the terms of their possible inclusion into the ruling party. These principles of inclusion based on organizational power revealed by political activity established the informal rules for the organization of clientelist political parties, which in turn enabled the transition to democratic competition under competitive clientelism after 1990.

The re-establishment of a greater degree of political stability took time. The entry of the armed forces into the political arena with significantly greater violence potential compared to the contesting political organizations did impose a truce on the deteriorating law and order situation in the political subsystem. However, initially the violence simply shifted within the army, as competing officers vied to establish their leadership within the armed forces which had themselves been politicized by the war of liberation. Mujib's assassination was thus followed by a series of bloody coups and counter-coups led by competing officers and supported by their informal organizations within the army and supporters outside. It was only in November 1975 that General Zia ur Rahman, the army chief appointed by Mujib, emerged as the supreme leader. But the military leadership knew by now that neither the authoritarian model of the Pakistan period based on the exclusion of all autonomously powerful intermediate class organizers nor the authoritarian one-party

model of Mujib that attempted forced inclusion under centrally determined terms would work in Bangladesh. General Zia was a decorated freedom fighter and enjoyed wide popularity. When he formally became president in 1977 he took care to construct a strong constituency of supporters for his rule by moving swiftly to construct a political party that eventually became the Bangladesh Nationalist Party (BNP). It remains one of the two dominant parties in contemporary Bangladesh. The new strategy for constructing the ruling coalition had a number of important features distinct from earlier phases.

First, the terms on which individual coalition leaders joined the ruling coalition were individually bargained. The terms were effectively to offer inclusion on terms that were proportional to the holding power of the organization that the political entrepreneur could bring into the ruling coalition. The national leader wanted to incorporate the largest number of the most important organizers and their political organizations at the lowest price in terms of the rents that they demanded. A broad ideology of development and nationalism allowed organizers from the far left to the far right to seek terms for entry. The price they could extract in terms of their access to future rents depended on their proven organizational capabilities and therefore the significance of their departure for weakening their erstwhile parties. As alternative parties were no longer banned, organizers had the chance of proving their abilities outside the BNP before negotiating incorporation. Opposition parties were allowed to set up, operate and contest elections. The only (informal) limitation was that the top job was not up for grabs because the dominant party was unlikely to be defeated given its control over the administration. This informal administrative restriction is nevertheless sufficient to

define the institutional rules as authoritarian, even though multi-party democracy was formally reintroduced with the repeal of the 4th Amendment that created the one-party state. We describe this hybrid set of political institutions as authoritarian clientelism.

Secondly, no attempt was made to define *ex ante* the boundaries of the ruling coalition. The regime maintained the right to calibrate the size of the ruling coalition through a competitive process of assessment and negotiation. This too ensured that excluded elites had an expectation that they may be included on appropriate terms in the future if they played according to the rules of the game. The combination of these two characteristics ensured that the minimum required rents were competitively allocated to the most important political organizers. Implicitly, this party formation process identified and established the most important principles for constructing effective political organizations given the competitive clientelist distribution of power across political organizations. The coalition that could put together the greatest number of powerful organizations within a feasible 'budget' in terms of rent allocation to client organizations would be the most effective coalition to govern within the constraints of maintaining political stability. However, the transition to a multi-party democracy with competitive clientelism could not happen till the principles for constructing effective clientelist parties had been established.

Finally, economic viability required that the cost of constructing a coalition that could viably rule should not be too high. This meant that at the same time as encouraging political organizers to reveal their holding power and their terms for inclusion, it was also necessary to check their ambitions by encouraging countervailing political organizations. Both Zia, and General Ershad who succeeded

him, attempted to check the claims of established political organizers by creating new rural voices through 'decentralization'. These strategies were quite similar to the Basic Democracy strategy of the Pakistani period, but now they were a complementary part of a broader strategy of competitive party formation and not part of a strategy that sought to permanently exclude established political organizations. Even so, these strategies, particularly Ershad's attempt to create a new class of political representatives in the newly created 'upazillas' (a tier of government constituting a small number of villages), was strongly opposed by urban political organizers. They had a limited effect in enhancing overall political stability, and the attempt to force through these strategies of decentralization possibly had a negative effect on political stability during the Ershad period.

The period as a whole remained one of considerable instability even though the extreme instability of the early years of independence gradually declined. Violence continued for a while, particularly within the army, where coups were frequently attempted. Nevertheless, some signs of a viable political settlement began to emerge and these elements would be built on in the fourth phase. First, the strategy of ensuring entry to political organizers through individual negotiations to determine the 'price' that was demanded in terms of access to rents proved to be a viable strategy for constructing parties as coalitions of organizations. It remains the strategy through which competing political parties in the fourth 'democratic' phase continue to construct coalitions to form governments. By its nature, a ruling coalition put together in this way is likely to be turbulent with constant internal re-negotiations and infighting. Violence is likely to sometimes break out, both within the ruling coalition and against

factions currently out of power. But in the absence of a better method of determining the distribution of rents for constructing a ruling coalition, this has emerged as the operative default mode for constructing coalitions during the democratic period.

Second, the openness of the boundaries defining the ruling coalition has proved to be extremely useful in managing the perpetual entry of new aspirants into the ruling coalition and the orderly departure of those who are dissatisfied. The 'authoritarian clientelist' period allowed new entry into the ruling coalition even if not to the top job. This restriction would of course eventually prove to be unsustainable in a competitive clientelist political structure because eventually a coalition of organizations could hope to challenge it. On the one hand the restriction created strong incentives for ambitious officers within the army to try to violently replace the supreme leader. There were frequent coup attempts against General Zia who was eventually killed in a coup in 1981. On the other hand, the indefinite reservation of the top job for a single individual also resulted in strong opposition from ambitious civilian political organizers from other parties. The futility of elections to replace the top leader became apparent under General Ershad and resulted in a growing mobilization against him. As the BNP (Zia's party) was now in opposition, this mobilization brought together the BNP with Mujib's Awami League against the Jatiya (National) Party that Ershad had created. From 1987 onwards the country was under almost perpetual political instability with street demonstrations, strikes and frequent *hartals* when the excluded political organizations prevented movement on the streets of big cities including the capital. Ershad was overthrown in 1990 by a popular uprising when the army refused to continue to sup-

port him if it meant shooting at thousands of demonstrators. The return to 'democracy' kept intact many features of the system that had been established during the clientelistic authoritarian period. The major change was that not only the membership but also the leadership of the ruling coalition was now contestable in a competitive multi-party system. Both would now be determined through competitive demonstrations of relative organizational power.

The transition period also saw a significant change in the capabilities and strategies of economic organizations. The most predatory types of primitive accumulation began to die down after most abandoned assets were appropriated. The beneficiaries of the primitive accumulation and the older capitalists gradually regrouped during this period and established political connections with factions within the ruling parties. As many of the new 'capitalists' were direct beneficiaries of political accumulation, they were closely networked into existing factional structures. While primitive accumulation continued, economic organizations that had accumulated enough now began to invest in capability development and to learn the use of new technologies that would allow them to achieve global competitiveness. The breakdown of full-fledged authoritarianism as well as of dominant party authoritarianism was beneficial for this process in a number of respects.

First, the breakdown of a single hierarchical political structure, whether based on military authoritarianism or a dominant party, created more room for manoeuvre for political leaders and economic organizations. In hierarchical political systems, where political and economic organizations that matter have a well-defined place in the hierarchy, it is often more difficult to change the allocation of sub-

sidies and benefits because the true holding power of inefficient economic organizations (and therefore the political cost of re-allocating resources) is difficult to determine without significant political disruption. Relatively weak organizations can continue to claim resources and block change because most organizations have an interest in maintaining the status quo, and threatened organizations can find many allies if their interests are threatened. In addition, the Awami League's dominant party system formally subscribed to the ideology of 'socialism' which made it easy for opponents of any change in the direction of greater efficiency to present the restructuring as a threat to jobs or a move in the direction of capitalism. The breakdown of the centralized political hierarchy allowed the ruling coalition to pick and choose organizations for support with a greater degree of freedom. In this context, gradual and slow moves towards privatizations began in the late 1970s, as well as policies targeted to support private sector investments in emerging sectors like garments.

Secondly, from the perspective of economic organizations, political rent capture became more competitive and therefore more difficult and this increased the incentive for investments in achieving competitiveness. However, the achievement of competitiveness was only feasible for economic organizations that were relatively close to the frontier because the competitive clientelist distribution of power meant that long-term sustained support from the political system was an unrealistic expectation. Economic organizations could expect to make relatively short-term alliances with political organizations to create and share rents, and if they were relatively close to the competitiveness frontier, it could be a feasible strategy to use these rents to achieve global competitiveness and seek

profits in the marketplace. As Bangladeshi economic organizations were of relatively low capability in terms of their technological and entrepreneurial expertise, an economic takeoff could only happen if relatively low technology sectors became available for investment and if rents could be created to support learning and technology acquisition in these areas. Fortunately for Bangladesh, precisely such a conjuncture opened up in the 1980s with the opportunities for investment in the garments industry.

However, business-government links that drive productivity growth to achieve competitiveness are only likely to work if economic organizations are within striking distance of achieving competitiveness and if the time scale for which they can feasibly rely on policy-induced rents (given the short-term nature of political commitment in a competitive clientelist polity) is sufficient for them to attempt to achieve competitiveness. Given the initial capabilities of Bangladeshi economic organizations in the 1980s and the types of policy-induced rents that could be created, this was a credible and profitable strategy of rent-creation for sectors like the garments sector. Once such sectors achieve competitiveness, they do not need the support of rents to finance their learning. Thus, when sectors and firms close to the frontier achieve competitiveness, the ones that are left are likely to be further and further away from the competitiveness frontier. Business-government links with economic organizations that are far from the frontier are unlikely to result in favourable outcomes in a competitive clientelist political context. Political organizations are willing to pursue policies that create rents for economic organizations because they need the kickbacks that economic organizations can then provide. But economic organizations that are far from the frontier are unlikely to be able to

use rents for productive purposes to achieve market-based profitability. In these contexts, business-government links are likely to result in many types of unproductive rent creation and rent capture that do not add to social productivity. The garments industry takeoff happened in an organizational context of competitive clientelism but in an institutional context of authoritarian clientelism where the ruling coalition could take a somewhat more long-term and developmental outlook. The challenge of developing new sectors became more severe in the democratic phase of competitive clientelism.

Finally, the rapid decline in the capabilities of bureaucratic organizations as a result of the ravages of the war, the politicization of the bureaucracy and its involvement in primitive accumulation were to some extent stopped and even reversed during this period. To some extent this was driven by the exhaustion of very significant rent capture opportunities as time went on. For instance, all abandoned Pakistani assets and industries were eventually allocated and after almost everything had been nationalized it became clear that the next movement would be in the direction of privatization. The entry of personnel from the armed forces into leadership positions within the administration also introduced a semblance of discipline for a time, though the armed forces personnel often became incorporated into the political rent creation and rent capture processes. Finally, the return of political stability allowed normal processes of recruitment and capacity-building within bureaucratic organizations to be resumed.

An important change compared to the Pakistan period was that rents were no longer created or defended on the basis of general policies of development. The state stopped trying to create or allocate rents as part of

an explicit formal industrial policy to develop infant industries. At best some general subsidies were temporarily justified on welfare grounds, for instance to safeguard employment in public sector enterprises that were recognized as inefficient. Contracting failure justifications for infant industry protection or technology acquisition almost disappeared. This was partly because of the memory of the political fight against the statist pro-capitalist policy of Pakistan and against the statist 'socialism' of the Awami League, and partly because international economic opinion informing policy in Bangladesh had also changed radically in the 1980s. Not surprisingly, Zia was an advocate of privatization. However, many public sector industries and some of the newly privatized ones continued to receive rents (for instance in the form of loans from public banks that were not repaid) because the state was too weak to remove these rents from powerful organizations, not because the ruling coalition believed that this would accelerate the modernization of the economy.

However, sector-specific and firm-specific rents did not disappear and indeed were unlikely to disappear given the political and economic requirements of organizations in a developing country. A more open and competitive economic and political environment meant that individual capitalists were free to link up with the leaders of political organizations to identify mutually beneficial strategies. An excellent example of this was the policy support that was made available to the garment industry, which played a critical role in ensuring its takeoff. The achievement of competitiveness in this sector required a critical set of international rents and domestic rents based on institutional innovations that Zia undertook in order to support the sector (Khan 2008c, 2009). The new politi-

cal settlement, in particular the breakdown of the centralized political structure, resulted in a fragmentation of political opposition to change and allowed the rapid introduction of some small but vital institutional innovations that were necessary for the takeoff of the garments sector. These included the introduction of the back-to-back LC (letter of credit) that allowed garments producers to finance their imports of raw materials on the basis of the collateral provided by the export order of the final buyer and the bonded warehouse system that allowed duty free import of raw materials which were re-exported in finished form. These changes could be introduced without any significant opposition from organizations who may have felt left out of these new income opportunities.

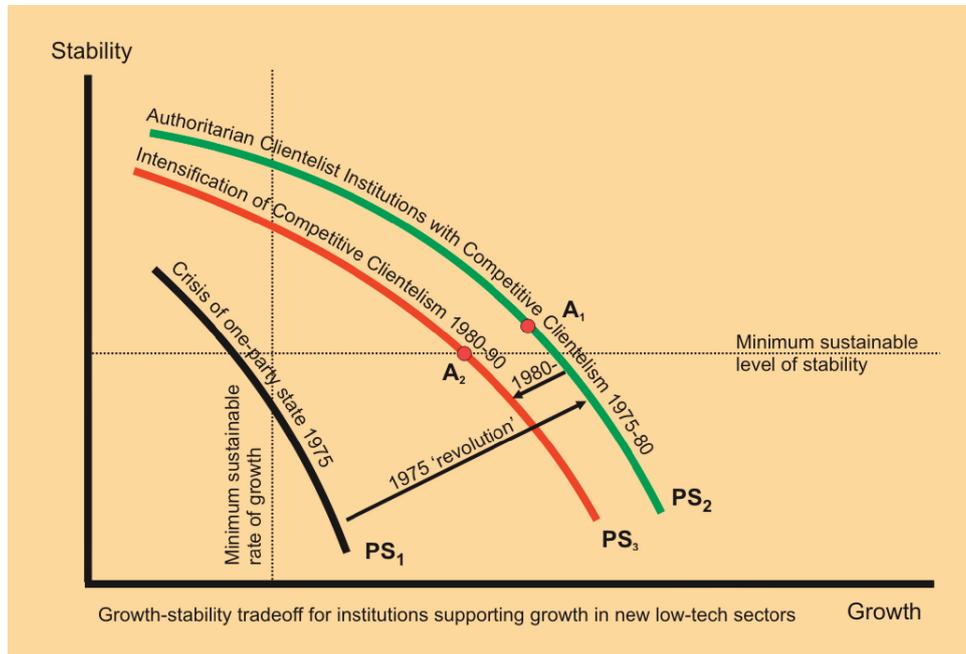
The change in the political subsystem also allowed a gradual movement towards privatizations that in turn changed the characteristics of economic organizations over time. The process began very early in General Zia's tenure. Between 1976 and 1983, a total of 217 public sector enterprises were wholly or partly sold to the private sector or returned to their former Bengali owners from whom they had been nationalized without compensation in the aftermath of liberation. However, significant denationalizations only began under the regime of General Ershad. Under the New Industrial Policy adopted in 1982, denationalizations of large-scale public enterprises were given priority. Privatization faced substantial political opposition, particularly from the trade unions of white collar workers who benefited most from the over-employment in the public sector (Bhaskar and Khan 1995). Although white collar workers were potentially very powerful and were part of the intermediate classes that provided the political entrepreneurs who led all political organizations, the fragmentation of political

organizations had significantly reduced their ability to organize concerted opposition to economic changes. The government was able to divest 110 large units in little more than a year, including jute mills that had previously been owned by Bengalis, after which the programme continued at a slower pace (World Bank 1984: 149).

The privatizations initially had a very limited economic impact on the economy. The large-scale enterprises that had been created under the Pakistani industrial policy of the sixties had never achieved full global competitiveness. After they were nationalized in the 1970s they built up vast additional liabilities because of over-employment, looting and mismanagement. This did nothing to help their future viability when they were gradually privatized in the 1980s. The new owners took over the liabilities as well, wrongly believing that political arrangements could be worked out to sustain subsidies into the future. Some of the privatized firms limped on and were lucky to become moderately profitable. Many eventually closed down, particularly in the jute and cotton textile sectors. However, the privatizations began to reduce the unproductive rent allocations that the permanent losses of these industries represented, freeing up the state to engage in the ad hoc and sector-specific policy support that had a greater chance of supporting growth in a few sectors.

The growth takeoff under authoritarian clientelism was based on new low-technology sectors where the political settlement created the space for new ad hoc institutions and policies of support that could be implemented in growth-enhancing ways. This is shown in Figure 3. The institutions that could be implemented could only provide limited support, but this was sufficient in the case of a number of low-technology sectors, in particular gar-

Figure 3. Growth led by new sectors under Authoritarian Clientelism



ments. Here, the assistance for learning new technological capabilities was significantly assisted by the existence of globally generated MFA rents, which allowed disciplined learning in the garments sector. The political settlement was thus much more promising for growth than before, and for the first time a Bengali-owned capitalist sector began to grow. This is reflected in the growth figures for manufacturing and industry in the 1980, as shown in Table 2. The growth-stability trade-off was favourable for the support and promotion of a limited range of formal institutions supporting specific accumulation strategies. Examples include the rapid implementation of changes in banking laws and customs rules that provided targeted assistance to growth sectors. In a break with the Pakistani authoritarian military period, there was also a new consensus that policy should not support general industrialization strategies like import-substituting industrial-

ization or general support for exports. There was no general policy that sought to use rents to create more sophisticated organizations or to absorb more sophisticated technologies. Rather, the focus of rent allocation was much more about the management of political stability. However, sector-specific and firm-specific policies did emerge on an ad hoc basis that implicitly created rents for businesses and sectors that were close to the technology frontier and the growth dividends they offered were attractive to political organizations and the political leadership.

At the level of politics, the clientelistic authoritarian period established that brute force to enforce restrictive political rules could not be used to stay in power. The ruling coalition needed to incorporate significant numbers of political organizers. But it could not absorb all potential organizers either. In other words, neither the authoritarianism of the Pakistan period nor that of the Awami League one-party

state was judged to be feasible in Bangladesh. The actual practice of the clientelistic military rule established the norm that political stability has to be based on a competitive system of rent allocation to allow the most important political organizers and their organizations to be brought into the ruling coalition at the cheapest price. The links of the supreme leader with the army meant that this position was not available for re-allocation. Competing political organizations could at best expect some of their most important organizers to be incorporated into the ruling coalition on attractive terms. This arrangement provided political stability for a while but eventually the major political parties united to reject an arrangement that deprived them of access to the most significant political job. The growing strength of excluded political organizations can be represented as an intensification of competitive clientelism to a point that the operational equilibrium with clientelist authoritarianism was no longer feasible. By the late 1980s there was a significant increase in political instability, regular strikes and *hartals*. The much more significant political instability in the latter half of the 1980s had significant effects for the enforcement of growth-enhancing institutions, and this too is shown in Figure 3. Eventually General Ershad was overthrown in a mass uprising in December 1990.

7. VULNERABLE DEMOCRACY 1990-

The overthrow of Ershad and the holding of elections under a caretaker government converted the authoritarian clientelistic system into a (weakly) institutionalized democratic one. By then, competitive clientelism had developed to the point that there were too

many powerful organizations that would not be satisfied with anything less than a chance to form the ruling coalition. Any ruling coalition could therefore only achieve stability if it accepted the right of excluded organizations to replace them through a democratic process. The problem (in all developing countries) is that the formal institutions of democracy (like any other formal institutions) cannot be fully enforced in a clientelist political settlement. There are bound to be informal modifications of the formal rules of democracy as a result of the activity of powerful political organizations, so a workable democracy has to have *informal* limits to these modifications to ensure that excluded political organizations have a reasonable chance of winning and do not therefore engage in excessive violence. Democracy in Bangladesh remained vulnerable because satisfactory informal rules did not fully emerge more than two decades after the fall of Ershad. The ruling party periodically attempted to fix the formal and informal rules in a way that would perpetuate their power, in effect attempting to revert back to clientelist authoritarianism as an institutional system under the guise of formal democracy. But every time the result was an outbreak of intense political instability that inevitably led to the replacement of the party in power with an opposing coalition in the next election. Yet, even as late as 2013, the major parties did not appear to have learnt the futility of trying to modify the institutional rules of political competition to their advantage in ways that would not be accepted by excluded political organizations.

Economic organizations were by now relatively developed, not only in the garments and textile sector, but in a range of medium-technology manufacturing sectors ranging from electronics to pharmaceuticals and shipbuilding. Industry overtook

agriculture in terms of share of GNP in the 2000s (Table 3). Some leaders of industry were by now rather well-organized and closely networked with political parties, often keeping good relationships with more than one, as parties regularly cycled in and out of power. Collective organizations like chambers of commerce and industry played a part in engaging in the policy process, though their formal influence was often far less than the informal access that they sometimes enjoyed depending on the individuals and organizations involved. The Federation of Bangladesh Chambers of Commerce and Industry (FBCCI) played an important role in the political crisis of 1996. The ruling Bangladesh Nationalist Party (BNP) held an election in which the major opposition parties, including the Awami League, refused to participate. They had demanded a continuation of the caretaker system where a neutral bureaucratic interim government conducts the elections after the term of a government ends. The boycott of the opposition ensured that the first 1996 elections lacked legitimacy.

If the opposition alone had to dislodge the ruling coalition, the process may have been protracted and violent. The FBCCI along with a number of other business and professional and bureaucratic organizations took the stand that a caretaker system had to be introduced and their open declaration assisted in the rapid introduction of the 13th Amendment that made the caretaker system mandatory. Ironically, the Awami League that had successfully demanded the caretaker system (and won the 1996 elections under it) felt that it could get rid of the system when *it* was in power. This it did in the 15th Amendment of 2011, pushing the country into a new electoral crisis as the opposition BNP immediately made it clear it would not contest the

2014 elections if the caretaker system was not reinstated.

But while the capabilities of some economic organizations were by now fairly sophisticated, the evolution of the political settlement had some adverse implications for industrial policy, infrastructure development and general governance. Competitive clientelism with vulnerable institutions of democracy has, *ceteris paribus*, a relatively adverse growth-stability trade-off for many institutions supporting long-run growth. This is both because the permanent presence of significant excluded factions that are always building up their oppositional strength serves to reduce the time horizons of incumbents and focuses their minds on making quick money to fight the next election. In addition, the competitive context increases the power of lower-level factions within the ruling coalition and makes policy implementation difficult and the enforcement of formal institutions relatively poor. Strong operational equilibria with developmental institutions are therefore more difficult.

In particular, institutions required for supporting long-term investments are not likely to provide significant rents to political organizations with short time horizons. As a result, political organizations are likely to make informal modifications to these institutions to extract short-term benefits in ways that are likely to be damaging. Overcoming these informal modifications and enforcing growth-supporting institutions in these contexts is therefore likely to face a significant stability cost, implying adverse growth-stability trade-offs. This is a paradoxical result for many good governance policy recommendations where the assumption is that the introduction of democratic institutions will make it easier to enforce growth-enhancing institutions. In reality, institutions like those supporting industrial

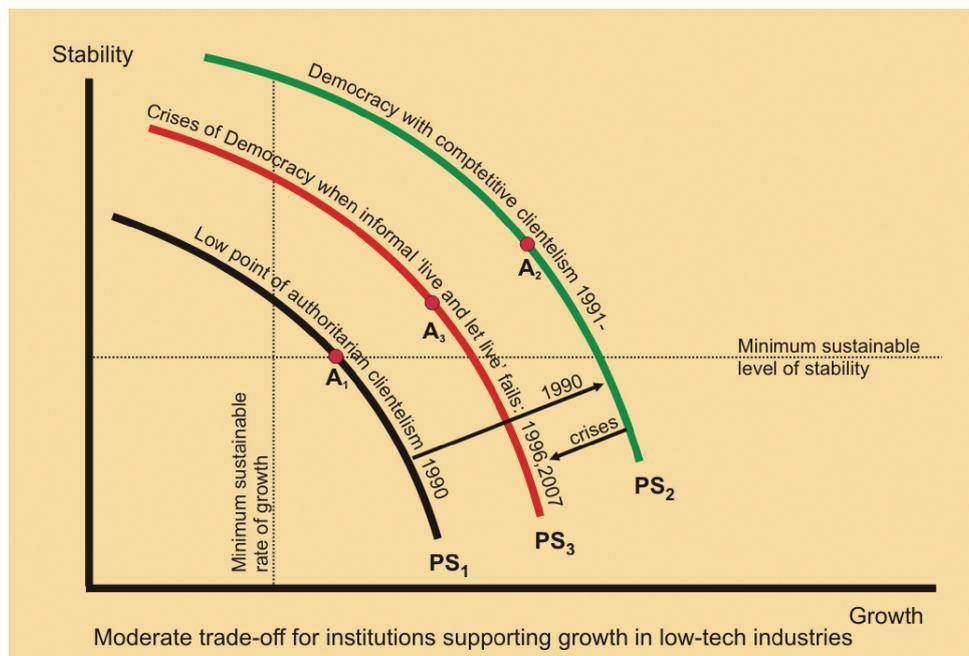
policy or infrastructure development are likely to face adverse growth-stability trade-offs in developing countries with democracies.

However, this analysis does not necessarily imply that authoritarian political institutions will achieve better growth-stability trade-offs for growth-supporting institutions. Apart from being desirable for itself, democracy in developing countries may allow better economic outcomes if we understand the alternative properly. If the underlying distribution of power across political organizations resembles competitive clientelism, the institutions of democracy may offer a more stable operational equilibrium in the political subsystem compared to the alternative of authoritarianism or even authoritarian clientelism. The latter may result in a weak and contested operational equilibrium in the political subsystem characterized by significant political instability and violence. The instability can directly reduce time horizons across the system so that growth-stability

trade-offs for important productive institutions may be even more adverse than under democratic institutions, however vulnerable. In other words, from a purely economic perspective, authoritarianism or authoritarian clientelism can only result in more favourable growth-stability trade-offs if the underlying distribution of power is, or can be changed to become, a patrimonial one (whether constrained or vulnerable). This is why the transition to democracy in Bangladesh in 1990 was marked by reduced political instability and an improvement in the growth-stability trade-off in a few sectors.

Figure 4 shows the changes in the prospects of sectors where growth-supporting institutions were potentially feasible in a context of competitive clientelism. The initial position is that the growth-stability trade-off for growth-enhancing institutions had become adverse by 1990, shown as PS_1 . The growing operational disequilibrium between the institutions of authoritarian clientelism

Figure 4. Growth with Vulnerable Democracy 1990-



and intensifying competitive clientelism created a crisis in the political subsystem. The sustained political instability of the late 1980s affected the operation of all institutions including potentially growth-supporting ones and the trade-off curve for these institutions had become adverse. The growth that could be sustained by potentially effective institutions declined to a position like A_1 . The democratic revolution of 1990 introduced political institutions that were democratic compared to authoritarian clientelism because now the top political job became contestable and it became credible for an opposition party to fully replace the ruling coalition.

Democratic political institutions that gave excluded political organizations a realistic chance of forming the ruling coalition potentially offered a more stable operational equilibrium with competitive clientelism and therefore greater stability in the political subsystem *compared to the intense instability of 1990*. Greater political stability in turn allowed the better enforcement of some institutions supportive of growth, again relative to the situation in 1990. The result was a more favourable growth-stability trade-off at PS_2 and the possibility of better growth outcomes shown by A_2 for sectors that were relatively close to the competitiveness frontier and which either did not require further assistance or required support for very limited periods. The vulnerability of the political subsystem during this period meant that the operational equilibrium was not very stable and was periodically thrown into disequilibrium as a result of attempts by the ruling coalition to fix the rules of the political game to disadvantage the opposition. Whenever this happened, the result was an upsurge of violence and instability as excluded organizations successfully contested the formal or informal limits that adversely restricted their chances of winning. During

these periods of instability, the growth-stability trade-off would once again become adverse, moving to positions such as PS_3 with growth declining to positions such as A_3 .

Bengali versus Bangladeshi Nationalism and Democratic Vulnerability

If the distribution of power across political organizations is sufficiently dispersed (competitive clientelism is entrenched), an attempt by a ruling coalition to exclude others using institutional rules and enforcement is likely to be met with stiff resistance and instability till the limitations are lifted. Therefore, the achievement of even a moderately stable operational equilibrium in a competitive clientelist polity requires institutions that limit the ruling coalition from constraining the chances of victory of excluded political organizations. The futility of attempting to institutionally constrain excluded political organizations under competitive clientelism was repeatedly demonstrated in Bangladesh after 1990 in the failure of successive attempts by ruling parties to alter institutions in ways that reduced the probability of excluded political organizations achieving political power.

The interesting question is why this experience did not result in a recognition by the two dominant parties, the Awami League and the BNP, that the only mechanism for achieving stability and sustained growth (and therefore for sustaining their own long-term interests) was to have shared informal rules that supported 'live and let live' strategies of political competition. Part of the answer lies in the path-dependent development of the antagonistic ideological positions of the two major parties. These differ not on substantive policy issues but on existential questions relating to the origins and fundamental char-

acteristics of the country. These ideological differences served to establish two mutually exclusive claims to be the natural party of rule in Bangladesh. From the perspective of each of the two major parties, the other is portrayed not just as a fraudulent claimant to the right to rule but also a potential threat to the survival of Bangladesh as an entity with the characteristics defined by the party in question. The ideological positions as they have developed are thus inimical for the development of a live-and-let-live set of compromises. Indeed, each is a bid to establish a patrimonial right to rule on an exclusive basis. The ideologies of the parties therefore did not adapt to the new operational equilibrium in the polity and indeed periodically served to disrupt that equilibrium in the direction of new crises.

The history of these ideological positions is important to understand because they explain the path-dependent problem that they generated for the post-1990 attempts to institutionalize democracy. Core aspects of the ideologies of both main parties had developed in the context of zero-sum conflicts against a ruling coalition that in each case had attempted to exclude others using ideology, institutional rules and substantial violence. In each of these contexts, excluded organizations had to develop ideological positions that united them in a life-and-death struggle against the ruling coalition. In the case of the Awami League, its ideology of Bengali nationalism developed in the course of the fight against the ruling coalition in command of the Pakistani state. In the case of the BNP, its ideology of Bangladeshi nationalism developed in the aftermath of the violence unleashed by the attempt by the Awami League's to institutionalize a one-party state. The purpose of this ideology was to unite political organizations that had been excluded by the

Awami League in the aftermath of its violent overthrow to ensure that it could not come back to power. In both cases, the ideologies were deliberately constructed to be exclusive and to brook no compromise. Unfortunately informal institutions allowing compromises were essential for maintaining the operational equilibrium of democratic political institutions with competitive clientelism. The path-dependent development of these ideologies provides part of the explanation for the vulnerability of democratic institutions under competitive clientelism in Bangladesh.

Once social forces are mobilized around exclusivist ideologies, they tend to get more entrenched because if political strategies of one side are based on exclusion, the other side has no option but to drum its ideological position more stridently. The path dependence follows. One illustration of the problem was that the behaviour of both main parties in the democratic period suggested that the main object of their politics was to save the nation from the opposition. In the 1990s and into the 2000s the zero-sum attitude of the two major parties came to be known in the reflective sections of the Bangladeshi media as the 'battle of the begums', referring to the two ladies who led the rival parties. Sheikh Hasina, daughter of the assassinated President Mujib, led the Awami League, and Khaleda Zia, wife of the assassinated President Zia, led the Bangladesh Nationalist Party or BNP. Their implacable opposition to each other was manifested in a range of different ways. The two leaders refused to talk to each other and their political strategy in opposition was generally to boycott parliament and to rapidly call for mass political agitation to overthrow the government, including the use of *hartals* or general strikes. Their mutual attitude often appeared to be that to rid the country of the menace posed by the other party would

be the most positive contribution to development.

It is in this context that we have to understand the debate in Bangladesh on the question of nationalism. The Awami League has defined itself as the protector of *Bengali* nationalism, while the BNP emerged as the defender of *Bangladeshi* nationalism. For nationalisms to differ from each other politically, they must each have a different project of state building with different borders and definitions of who is included and excluded in the state project. A close look at the content of the two nationalisms shows that they do not in fact have separate state-building projects. Yet in the political discourse in Bangladesh, these ideologies are mutually exclusive and there can be no compromise between them. Their incompatibility is real but this has to be understood instead in terms of the function these ideologies performed at an earlier period in building coalitions against a particular ruling coalition. The logic of coalition building requires ideologies that can serve as convenient pegs for structuring coalitions, though the ideologies themselves may not describe their interests. The definition of two mutually exclusive variants of nationalism for the country served to distinguish two implacably opposed coalitions, even if the ideologies did not describe any significant differences in their interests or policies. However, by defining their differences in terms of ideologies that were linked to past struggles where no quarter was given and no compromise was possible, the parties committed themselves to similar strategies in the future. Connected to these definitions of nationalism was the related position of the two parties on secularism and Islam. Here it may appear that there really are fundamentally opposed positions of the parties, but again a closer

examination suggests that this is not the case. No significant material differences exist between the parties in their commitment to secularism or the practice of religion or even on the absolute separation of religion from the state. There are undoubtedly small differences between the parties on these issues, but they are hardly significant enough to explain the sharply uncompromising positions they have taken in politics. For that we need to look at other functions that ideologies perform and have performed in the past in the context of coalition building in a clientelist political settlement.

Many contemporary ideas about the progressive role of secularism can be traced back to the European experience with the Reformation and the separation of Church and state. The conflict between the Church and secular social forces during the Reformation is rightly recognized as one of the defining moments in Europe's transition to modernity. This was because in Europe the Church was blocking the material interests of the classes that would eventually lead the industrial revolution. This was a fundamental reason why the opposition of the progressive bourgeoisie to the Church was implacable until the Church had been significantly reformed (Tawney 1938). The specific features of the Reformation differed from country to country in Western Europe but some broad features were shared in common. Productive capitalist classes were emerging based on long-distance trade, and states were being constructed that could exercise territorial jurisdictions within which capitalism could grow. The social forces that were often opposed to them were organized around the wealth of the Church and the political ambitions of a Church-based empire. The social coalitions organized by the Church often incorporated older elites who were opposed

to many of the changes that merchants and capitalists were bringing about because these changes threatened the stability of the old order and in particular the dominance of the Church in the ideological sphere. As a result, there were relatively sharp *economic* conflicts between monarchs, the Church and emerging capitalists that put the Church on one side and a collection of progressive economic forces on the other.

An important economic conflict between reforming monarchs and the Church concerned the vast amounts of land owned by the Church. These assets not only reduced the access of the monarch to revenues but also created a powerful competing political force allied to Rome, which could prevent the centralization of political authority in local states. Secondly, there was a conflict between merchants and the Church over the theological acceptability of income from interest in Christianity. Here capitalist accumulation which was driving growth faced obstacles from a pre-capitalist Church-based system of maintaining social order based on notions of justice that were no longer appropriate. Finally, there was a conflict between Church and state over their respective jurisdictions when it came to appoint officers to lucrative administrative and judicial positions. In this case too, territorially defined emerging modern states faced competition from a parallel set of jurisdictions organized around the Church. Thus the economic interests underlying the ideological conflict between Church and secular social forces were based on radically different ways of organizing production. This is why religion and secularism represented conflicting social interests in Reformation Europe. This in turn ensured that the victory of one side or the other would have economic consequences for the mode of organizing pro-

duction in Western Europe over a period of several centuries.

The emergent economic supremacy of the secular interests challenging the Church in the course of the Reformation resulted in stronger local states and an acceleration of economic growth. The material interests of new productive classes ensured that the relevant aspects of secularism defined as the political separation of Church and state began to be reflected in the *practice* of politics across Western Europe. This is despite the fact that in many European countries, including England, the formal constitutional separation of Church and state has not emerged to this day. The Western European story is important because the theoretical association of secular movements with the liberal bourgeoisie and therefore with social progress is based on a reading of this history. But the political economy of religion in contemporary developing countries is very different and the developmental attitudes of different parties cannot be so readily read off from their attitudes towards religion and secularism.

In the Indian subcontinent neither Hinduism nor Islam had an organized church with significant land-holdings and incomes along the European pattern either in pre-colonial or colonial times, or indeed subsequently. Nor has there been any ongoing competition between “church” and state over their respective jurisdictions in appointing office-holders along the European pattern. The weakness of religious control also meant that rules about interest could be ignored altogether, or evaded by defining it as profit-sharing as in many applications of Islamic banking in contemporary Pakistan and Bangladesh. This meant that the restrictions on usury in Islam did not lead to intense conflicts between emerging merchant-financiers and the “church”. In independent Pakistan or Bangladesh, the mer-

chant and capitalist classes have certainly not felt threatened by the anti-capitalist elements implicit in the Islamic ban on usury. Similarly, while some aspects of Hinduism, such as the caste system, appear to be anti-capitalist, emerging Hindu traders and capitalists have not felt threatened by these and have certainly not been in the forefront of secular movements in India.

In the absence of a fundamental cleavage between religion and emerging capitalist economic interests, the political use of religion in Bangladesh has reflected very different interests. Clientelist coalitions have used religion, language, caste and other long-standing beliefs and identities as pegs around which to establish differences between themselves and their opponents or to invite new factions to join particular coalitions. As a result, parties with an apparent 'position' on religion have been willing to change their positions far more readily than if particular religious institutions or practices had fundamental implications for their economic interests. The Bengali nationalist movement led by Mujib and the Awami League against the policies of the Pakistan state in the 1960s mobilized against the ostensibly Islamic state backing the policies of the ruling coalition. In this context, the 'secular' aspects of Bengali nationalism were highlighted. However, as we have described earlier, the economic interests of the upwardly mobile Bengali Muslim intermediate classes were not blocked by the equivalent of the Church or by Islamic values but by the preeminent position of a non-Bengali ruling coalition unwilling to incorporate excluded political organizations. The victory of the Awami League in 1971 led to Bengali nationalism emerging as the dominant ideology of the country. The break with Pakistan was followed by the adoption of a secular constitution and the definition of the nation in terms of a secular Bengali nation-

alism. But because secularism was not essential for protecting any fundamental economic interests of the ruling coalition, the Awami League was ready to ally with Islamic political organizations when this was necessary for its coalition building.

This is best illustrated by the overtures that Mujib made to Islamic groups immediately after the victory of secular Bengali nationalism over the Islamic republic of Pakistan. An important religious party, the Jamaat-e-Islami, had supported Pakistan and opposed Bangladeshi independence. Many of its members, and indeed members of other smaller Islamic parties, had fought on the Pakistani side. In this context, Mujib's decision in 1973 to release without trial or investigation the 33,000 alleged war criminals who sympathized with, or were members of, Islamist parties was significant. Shortly afterwards, in 1974, Mujib travelled to Pakistan to attend the Islamic Summit at Lahore and returned home proudly proclaiming Bangladesh to be the world's second largest Islamic nation, bigger than Pakistan (B. M. Kabir 1988: 83-4). In the same year a Madrasah Education Commission was formed to report on how religious education could be improved. And in 1975 the Islamic Foundation was set up to promote Islamic studies and to manage mosques (M. G. Kabir 1995: 188-90; T. M. Murshid 1996: 362-3). Even in terms of the narrow definition of secularism in the new constitution, some of these moves, at least, were suspect.

It is possible to comprehend these actions if we recognize that for the Awami League and other clientelist parties taking positions for or against secularism, the *practice* of Islam or secularism did not have a direct material significance for their organizations or constituents. Reaching out to Muslim political organizations was simply an act of restructuring the ruling coalition. It allowed the Awami

League to neutralize or incorporate groups whose members were in any case very similar to those who were already part of the ruling coalition. Religious beliefs are important and clientelist organizers and politicians are likely to have their own preferences and prejudices, but subject to these, their main concern is to maintain the ruling coalition. The ruling coalition is always searching for allies who will join or support them at the lowest cost, and this logic can shed some light on Mujib's possible motivations when he made these concessions to Islamic political organizations. In the aftermath of independence, it was cheaper for the ruling group to acquire potentially powerful organizational allies from amongst the defeated Islamist groups rather than from within the left. The left was growing in mobilizing ability, and its leaders could and were demanding much bigger payoffs for their allegiance. It was already becoming clear that many of these powerful organizers and their organizations would soon leave the ruling coalition to oppose it from outside with the objective of dislodging it. In that context it is not at all surprising from the perspective of the logic of maintaining the ruling coalition that Mujib was making overtures to his old enemies in the Islamic movement, while increasingly using violence on his old allies on the left.

Clearly, Mujib's manoeuvres for sustaining the holding power of the ruling coalition against those who were outside and those who were leaving to join them began to rapidly unwind. The ruling coalition failed to maintain enough support to sustain its patrimonial desire to rule indefinitely. Eventually, the disastrous attempt to stop its decline with the institutional solution of the one-party state and the enforcement of this with formal and informal power led to Mujib's assassination in 1975. Those who united against the

Awami League at that time did not do so as a normal act of political opposition, but perceived their fight to be a life-and-death one against a ruling coalition that was organizing to wipe them out politically. This context has to be understood to see why the ideology of the new ruling coalition was designed to signal an irrevocable break with the supporters of BAKSAL, the one-party state. This was the context in which Zia ur Rahman and his Bangladesh Nationalist Party or BNP developed the counter ideology of *Bangladeshi nationalism*. This was defined as the nationalism of Bengali Muslims, and distinguished their nationalism from the Indian nationalism supported by the Bengalis of West Bengal. The implicit signal was that the supporters of Bengali nationalism had let down the country because they were pro-Indian, as Bengali nationalism implied a close alliance, if not unification, with West Bengal, and by implication, India.

In fact, *Bengali* nationalism as Mujib had understood it was never about attempting the reunification of Bengal, nor did Mujib's definition of Bengali nationalism deny the Muslim identity of the vast majority of Bangladeshis. The distinction between Bengali and Bangladeshi nationalism was not based on different material interests or even deeply felt beliefs about the practice of secularism, or a debate about the borders of Bangladesh. Indeed, the supporters of both nationalisms recognized that reunification with West Bengal was neither possible nor desirable, and that while India was a big neighbour, there were many conflicts of interests with the Indians. Moreover, both parties recognized that as a Muslim-majority Bengali nation-state some recognition of its Muslim identity was necessary to justify its borders, and neither camp supported a *sharia* version of Islamic law. Rather, the real purpose of the

vaguely defined distinction between the two nationalisms was really to sharply distinguish the core supporters of the ruling coalition of 1975, who supported a one-party state, from those who participated in opposing and overthrowing it to create an alternative ruling coalition in the following years.

Indeed, the military governments which succeeded Mujib and the civilian parties they created absorbed many defectors from the Awami League who saw no contradiction in adopting the new definition of Bangladeshi nationalism. They also attracted old Maoists like Kazi Zafar and JSD socialists like Abdur Rab who argued that the developmental agenda of the ex-military leaders was more in tune with the developmental agenda of their own socialism. Even though constitutional changes *were* introduced, which recognized the privileged status of Islam, the left-leaning organizers and organizations that now subscribed to Bangladeshi nationalism did not see any significant difference in the practice of secularism as a result. Nevertheless, the secular agenda of separating religion from the state, to the extent that it was ever implemented, was now somewhat attenuated. By the end of the 1980s the main lines of factional conflict were drawn between the *Bangladeshi* nationalist BNP (the Bangladesh Nationalist Party set up by General Zia) and the *Bengali* nationalist Awami League. While the conflict between the two was often implacable, they did occasionally cooperate. The two joined forces in the late 1980s in their fight against the ruling Jatiyo Party of Ershad that was ideologically indistinguishable from the BNP. Indeed in the early 1990s, it was the 'secular' Awami League that entered into an alliance with the Islamist Jamaat against the then-ruling BNP government. Inevitably, over this period the Awami League's secular claims became much more muted. By this

stage it had become difficult to identify any important issues of concrete political practice affecting secularism on which the three major parties actually differed. For instance, BNP and Awami League governments were very similar in the 1990s in banning books offending Islamic sensibilities.

The Awami League government that took office in 2009 identified as one of its most important priorities the trial of the war criminals of 1971. This process had been abandoned by Mujib and later governments, but the new Awami League government took up a demand that had been voiced by many of its supporters and by a wider constituency for some time. The demand reflected not just a nagging perception amongst many sections of the population that justice had not been meted out to many people who participated in crimes during the war. But the Awami League government was soon criticized by international observers for choosing as targets for prosecution only prominent members of the opposing camp (for instance in a series of articles on the war crimes trials in the *Economist* magazine throughout 2011). The trial process began very slowly and with many questions about procedures but its most salient feature was that by 2011 only a handful of individuals were finally charged and they were all members of the Jamaat-e-Islami party, together with one individual from the BNP. Nevertheless, by then the issue failed to polarize society into supporters and opponents of the trials in the way the Awami League perhaps expected because there was very little underlying difference in the broader society about the desirability of a proper trial.

The Awami League's claim that those who did not support the war crimes trial were opponents of Bengali nationalism and thereby supporters of Pakistan, who had aided and

abetted the Pakistanis, no longer rang true. The repeated pronouncements of the ruling party that many people were trying to disrupt the trials, suggested that they actually expected the trial to be implacably opposed by the opposition. In fact the BNP's electoral alliance with the Jamaat-e-Islami was an opportunistic alliance, no less than the Awami League's alliance with the same Jamaat against the BNP in the mid-1990s. Nevertheless, the Awami League probably expected a much more spirited opposition by the BNP based on their refusal to adopt Bengali nationalism which in their mind should have made the BNP protectors of war criminals. In fact despite the government's attempts to portray all opposition to its policies as a hidden attempt to disrupt the war crimes trials, these claims soon began to lose credibility amongst the general public. Opposition to the trials was actually almost non-existent except for occasional criticisms levelled in Bangladesh and in the international press that pointed out that the procedures were not as transparent and robust as they should be, and that the choice of the first batch of accused was politically motivated. There is perhaps hope that whatever the outcome of the trials, it will become more and more difficult to sustain the myth that the parties represent truly irreconcilable positions on secularism, nationalism or the sovereignty and independence of Bangladesh. That can only be for the good for any attempt at enabling a stable democracy.

Thus, despite the absence of any significant differences in practice or in their real interests as revealed by their practice, the conflict between the *Bengali* nationalism of the Awami League and the *Bangladeshi* nationalism of their rivals defined irreconcilable differences between competing camps in the democratic political arena of Bangladesh after 1990. The reference to nationalism was obviously mis-

leading because a substantive difference between Bangladeshi and Bengali nationalism would really imply different views on the desirability of the reunification of Bengal. But in fact, the supporters of Bengali nationalism in Bangladesh, and in particular the Awami League, have no political intention of redrawing the borders of India and Bangladesh. This should have made the debate between Bengali and Bangladeshi nationalism politically redundant but it did not. Going back even further, the 'Bengali nationalism' of the 1960s in East Pakistan was about autonomy or independence for the part of Bengal that was East Pakistan, not about the reunification of Bengal. In that sense, it was indistinguishable from what later came to be known as Bangladeshi nationalism. The later constitutional debate in the 1990s about the role of religion was an important debate, but here too there were very few irreconcilable differences between the parties because they actually agreed on most issues and their practice of secularism was very similar. Nor was there any significant difference between the parties on the desirability of the independence of Bangladesh in 1971, and both parties had similar numbers of freedom fighters within their ranks.

The misrepresentation of the differences between the two parties as irreconcilable issues about nationalism and secularism is significant because it is a manifestation of the fact that Bangladesh's political leaders still want to talk in the uncompromising language of decisive battles appropriate to a different context. As a result, the development of the informal institutions that would enable democratic politics in Bangladesh to 'mature' into a sustainable equilibrium with competitive clientelism has been slow to happen. Instead, the ruling coalition claims, and from its actions apparently also believes,

that the opposition is not only troublesome but also dangerous. The ruling coalition is therefore justified in taking upon itself the task of blocking the opposition or even attempting to politically wipe it out. The perpetual confrontation between the two uncompromising ladies in the 1990s and 2000s was organized with the same life-and-death intensity that marked the conflicts of 1971 and 1975. However, the real context was now entirely different and what was required was the emergence of a series of informal rules that would allow the coalitions to cycle into and out of power smoothly through democratic contests where their relative holding power was revealed. Unfortunately, the division of parties into mutually exclusive “nationalist” coalitions recreated two implacably opposed camps locked in a life-or-death battle. While clientelist coalitions do need distinguishing characteristics, the ways in which the two dominant parties sought to define their differences appears to be the result of a misreading of their own history and a misunderstanding of what a substantive debate about nationalism or secularism today should mean. The repeated descent into zero-sum games has prevented a stable operational equilibrium in the polity and as a result the growth-stability trade-offs for all institutions have been affected.

The Absence of (Informal) Rules for Live-and-Let-Live Cycling

The intransigence of the two parties during the 2000s appeared most directly during elections when it repeatedly threatened the viability of the democratic system under competitive clientelism. A fair election with competitive clientelism means that the political outcome reflects the balance of power between organizations on the ground with-

out ‘excessive’ interference from bureaucratic or military officials. While all interference in the administration of elections cannot be ruled out in a developing country, for viable democratic institutions, the interference cannot take place to the extent that the electoral outcome fails to reflect the balance of forces. If that happens, the outcome of the election will not be stability but more intense contestation and perhaps eventually violence by the losing side. A sustainable solution requires that the voting outcome roughly reflects the balance of organizational power, and the object of the electoral campaign is to reveal this. The primary objective of a fair election with competitive clientelism is therefore not to discover the true preferences of the electorate, partly because true preferences may not exist given the absence of serious differences in the policies that the parties are likely to implement. Rather, elections are processes through which the organizational strengths of competing coalitions are revealed. For stability to be achieved, a coalition of factions with significantly greater holding power has to be allowed to form the ruling coalition.

The critical requirement therefore is that no party should be able to artificially leverage its strength by using the administrative apparatus to repress or limit other organizations to give it an electoral advantage. If a ruling coalition uses administrative power or institutional rules to disadvantage the opposition, this is effectively a return to the institutional system of authoritarian clientelism with the inevitable conflict it generates in the organizational context of competitive clientelism. Thus, Figure 4 shows that democratic institutions did generate greater stability and therefore better growth-stability trade-offs for some growth-supporting institutions, but only when the democratic institutions were

perceived to be fair by opposition political organizations. Whenever the ruling coalition attempted to change institutional rules or implement them in ways that the opposition perceived would disadvantage them, this amounted to a *de facto* introduction of clientelistic authoritarian institutions. An upsurge of instability inevitably followed with a corresponding collapse of the growth-stability trade-offs for institutions from PS₂ to PS₃ in Figure 4.

A solution to this problem appeared to have emerged in the aftermath of the overthrow of Ershad's 'authoritarian' rule (authoritarian clientelism in our classification) in 1990. As Ershad's government had effectively fallen, the elections had to be held under a caretaker government led by a Supreme Court judge. The outcome was an election where the charges of rigging and repression were relatively muted. The victory of the BNP in this election led to demands from the opposition Awami League to institute the caretaker system for future elections. It was at this time that the Awami League was in alliance with the Jamaat. Initially the BNP did not accept this demand, but as a result, the 1996 election was boycotted. It had to be re-run after a constitutional amendment was passed by the BNP that institutionalized the caretaker system for conducting elections. The 13th Amendment set up a Caretaker Government system to organize elections. It was to be set up at the end of every government's term with the last Chief Justice of the Supreme Court becoming the interim head of government. Its sole task would be to organize the elections to determine the next ruling coalition. This was a unique formal institutional experiment to create a credible electoral process for selecting a ruling coalition. If it had been sustainable, this could have created a stable

operational equilibrium of democratic institutions with competitive clientelism.

However, this institutional arrangement was clearly not buttressed by a deeper set of informal political agreements that would ensure that the formal arrangements would not be informally modified as they can always be in a clientelist political settlement. The balance of power between the two parties had not yet established in their collective minds the fact that the cycling of their parties was now the normal state of affairs. Their subsequent actions suggested that both parties harboured a desire for a decisive victory that would establish one of them as the natural party of government and lead to the unravelling and disappearance of the other. The caretaker government system worked for two subsequent elections, despite minor attempts by both parties to interfere. However, the constitutional arrangements collapsed in the run-up to the 2007 elections when the incumbent BNP interfered with the dates of retirement of Supreme Court judges, apparently to ensure that its preferred candidate could head the next caretaker government. The result was an increasingly violent standoff which resulted in a series of general strikes (*hartals*) and violent street confrontations. In a context of increasing uncertainty a group of bureaucrats backed by the military and the international donor community took over power on the 11th of January 2007 as a new emergency interim government. Under the constitution, the caretaker government has to organize an election within two months, but this caretaker government stayed in power for two years under emergency powers it gave itself.

The emergency caretaker government turned out to have been a significant wasted opportunity. The emerging system of democratic institutions and competitive clientelism had clearly not yet acquired a stable opera-

tional equilibrium to be fully self-sustaining. The emergency could have been an opportunity for delivering a political shock to the system that might have helped to establish that the army could be deployed as third-party enforcement by a caretaker government to enforce an implicit rule of law for governing elections. But instead, the caretaker government, headed by an ex-World Bank bureaucrat and backed by the army, took a 'good governance' perspective on how to solve the problem. Their interpretation (no doubt strongly influenced by dominant international policy perceptions) was that the political instability in Bangladesh was caused by the involvement of political elites in corruption and by the personalization of politics.

The emergency government drew on the argument that the opportunity for political corruption created distorted incentives for politicians to interfere with electoral outcomes. This suggested that if political corruption could be rooted out and if parties could be made to compete on the basis of alternative manifestos of delivering public goods, the problem of electoral violence and standoffs could be rooted out. The second argument was that the monopolization of the leadership of the two parties by the families of the dead presidents was damaging and was the source of the implacable hatred between the two parties. As a result, the emergency government also sought to change the leadership of the two main parties (the so-called '*minus two*' strategy). Both strategies dismally failed.

On anti-corruption, the two-year emergency caretaker government took a series of radical steps to achieve a large number of convictions for high-level corruption. The underlying thinking was that the source of political violence was the engagement of political leaders in corruption. Hundreds and

possibly thousands of political activists were arrested and incarcerated, including the leaders of the two main parties, on charges of corruption. Hundreds of businessmen were also arrested and some of them handed over millions of dollars to the new government as 'ill-gotten gains' under pressure (which later on turned out to include torture and extortion). Based on evidence that was itself dubiously and hurriedly collected, thousands of cases of corruption and extortion were introduced in the courts. The whole exercise was deeply flawed not only from the perspective of its understanding of a clientelist political settlement but even in terms of the formal legal procedures that were followed. In the end, almost all the cases had to be abandoned on the grounds that evidence was missing or inadmissible. Many witnesses who came forward (perhaps under pressure and perhaps under promises of protection) during the emergency period disappeared and refused to continue to give evidence when the cases were continued under the democratic government which eventually took over.

More significantly, the caretaker government and its international advisors had failed to understand the nature of a clientelist polity. Political leaders running mass clientelist coalitions do not have sufficient resources from formal sources to finance the organization of politics and the redistributions that are required. A significant degree of informality in financing and in redistributive arrangements is therefore a characteristic of clientelist political settlements. Effectively, the caretaker government was trying to replace a clientelist political settlement with a Weberian-type capitalist one without changing the material conditions that have generated clientelist political settlements in every developing country. This was a failed enterprise

in the way it was set up. Not surprisingly, the military caretaker government's attempt to address this problem failed dismally. The two arrested leaders of the main political parties eventually had to be released, and one of them was elected prime minister in the 2009 elections.

The strategy to replace the two leaders (*'minus-two'*) also failed and this too represented a failure to understand the nature of clientelist politics. The leadership of clientelist parties is not based on a choice between different policy positions represented by different leaders. The most appropriate leader of a clientelist party is someone who has the best credentials for being able to construct the biggest coalition for the party by organizing a distribution of benefits that is both economically viable and acceptable across all factions and organizations within the party. Who is the person that all party factions are likely to trust the most? If a leader of an organization internal to the party were to become leader of the whole party, their own organizational or factional supporters would be likely to benefit compared to supporters of other internal organizations and factions. The promotion of such an individual therefore would be strongly resisted by other organizations and factions within the party. In contrast, the wife or daughter of a dead president could be expected to have the best interests of the legacy at heart and be the most fair in adjudicating the relative power and therefore the claims of competing organizations and factions when disputes break out. If one of the most important tasks that the leader of a clientelist party plays is the regulation of the rent distribution across factions, 'the family' is likely to have an advantage over other individuals in gaining trust across factions. In the absence of a better alternative the parties may well have sought and identified an alternative leader,

but as long as a 'natural' leader existed, the experiment of the interim government was almost doomed to fail. Indeed at the end of the experiment, the two ladies retained control over their own parties.

Not surprisingly, family control of clientelist parties is very common across the Indian subcontinent, including India and Pakistan. This does not mean that all developing country parties are of this type. More disciplined ideological parties can achieve greater internal discipline and can select their leaders through rule-following procedures. On the other hand, disciplined parties based on ideologies like Marxism or Islam are likely to remain relatively small in terms of their following because most people in poor countries prefer to belong to parties that can provide them with immediate material benefits, however small. Clientelist parties can gather large followings based on a pyramidal absorption of client organizations, but the price is that there are no external criteria like seniority or commitment to an ideology that can determine the relative benefits for different constituent organizations. Leaders of powerful groups within the party can threaten to leave and join other parties unless they can be offered benefits proportional to their power. Sometimes Communist or Islamist parties in developing countries can become mass parties, but usually this requires very special circumstances like prolonged wars against colonial powers as in the case of the Communist Parties of China and Viet Nam or the FIS in Algeria. The emergency caretaker government in Bangladesh did not understand that clientelist parties will not convert into internally disciplined ideological parties if only their leadership could be changed.

An interesting feature of this caretaker government period was that it demonstrated a significant change in the organization

and aspirations of the Bangladesh army. In the past a political crisis of this magnitude would have provided ambitious generals an opportunity to organize a coup, perhaps with a genuine desire to salvage the situation but no doubt also to pursue their own ambitions. This time they stayed in the background but actively backed a civilian caretaker government, making it clear that they were the power behind the scenes. And unlike previous interventions where the justification was to pursue economic development, this time the army joined forces with civil society champions to justify their indirect intervention in terms of promoting good governance. A significant change in the resource base of the army as an organization could explain some of these changes. It was now closely tied to the 'international community' through its lucrative involvement in international peacekeeping missions. It was dependent on formal international rents and did not want to jeopardize them with a domestic adventure to generate informal rents for the army through the political process. Its own recent history had also demonstrated the limits of authoritarianism and authoritarian clientelism. However, the army as an organization was not as centralized and coordinated as it would like to be. There were allegations from businessmen and politicians that different groups within the army acting in the name of the high command used the opportunity to arrest individuals in uncoordinated ways, often to extort payoffs in exchange for their release. These experiences suggested that the army too was no longer a centralized and coordinated organization. This was a problematic message for the political parties as the most important potential 'third-party' mediator and enforcer that might have been relied upon to intervene in the case of a real

impasse was shown to be itself fragmented and relatively weak.

The main effect of the two-year experiment was a collapse in investor confidence. The two main parties whose intransigence and violence had caused the problem in the first place did indeed receive a shock, but the abject failure of the strategy of anti-corruption and leadership change had a negative effect on the impetus for reform. Even more important than the problem of political corruption (which is unlikely to be eradicated as long as the informal aspects of the clientelist political settlement are reproduced) was the failure to develop a credible mechanism for organizing elections. The core activity of the emergency government was to improve the formal aspects of the electoral process such as creating much better voter lists and identity cards. These were necessary but not sufficient requirements for enabling a democratic system to operate in a clientelist polity. The critical missing element was of course the absence of the informal limits on the activities of the ruling coalition that are essential to make the electoral process a credible one in these contexts. The caretaker government appeared to have no conception of how to bring about what the Bangladeshi media described as a necessary change in the 'political culture' and which we would describe as the informal understanding of the limits to the modifications in formal rules beyond which the system is likely to descend into violence and instability. After two years in office, the overall legacy of the caretaker period for developmental reform and institutional change is very likely to have been negative.

The Awami League won a resounding victory in the elections of late December 2008, winning 230 out of the 300 parlia-

mentary seats. The landslide gave the Awami League more than two-thirds of parliamentary seats (though with less than half the votes cast). It was in a position to carry out constitutional amendments on its own and soon proceeded to do so. In 2011 it won a Supreme Court judgement that the 13th Amendment that had introduced the caretaker system of governance for conducting elections was itself unconstitutional. The brief judgement that was initially delivered said that the caretaker system may be continued for a further two terms given the time it would take to build confidence in alternative arrangements. However, without waiting for the full judgement to be delivered, which would have shown the arguments the court considered in recommending the caretaker system for the next two elections, the Awami League rushed through the 15th Constitutional Amendment to remove the caretaker system with immediate effect. The opportunistic nature of this move and the possible opportunities it would give the Awami League in the next election was not lost on the BNP, which immediately announced that it would boycott the elections unless the caretaker system was reintroduced. The absence of informal limits to the use of power by the ruling coalition could not have been more robustly expressed. In early 2012 negotiations were continuing between the Awami League and the opposition BNP on this issue. A possible compromise that was under discussion was to have a 'political' caretaker government to oversee the elections, composed of elected nominees from both parties, possibly headed by the President. But the formula would have to convince the opposition that administrative power would not be used during the elections to give an excessive advantage to the ruling coalition.

Economic Organizations under Vulnerable Democracy

As Figure 4 summarized, the failure of democratic institutions to achieve an operational equilibrium can result in a spike in instability and violence and a more or less serious collapse of the growth-stability trade-off facing potentially growth-enhancing institutions. The possibility that the approach of elections will result in a crisis is likely to disrupt the normal operation of the economy. The failure to organize an acceptable election can lead to violence that inflicts broader economic costs. Apart from the general costs of disruption across the economy, there are specific costs of attacks on the economic interests of opposition supporters and finally retribution against the economic interests of supporters of the current government when it is finally deposed. All of these possibilities reduce the time horizons of investors and politicians in a competitive clientelist system. The enforcement of growth-enhancing institutions becomes much more difficult at times of crisis as does contract-enforcement, particularly contracts involving the government. Thus, the electoral crisis is likely to result in a collapse in the trade-off curves of different institutions and sectors, but the effects are likely to be different across sectors and institutions.

Long-term investments are likely to suffer if electoral uncertainty is likely long before any instability actually emerges because the expectation of future instability is sufficient to make investors procrastinate. Institutions supporting long-term investments are likely to suffer, particularly where government contracts involving significant sums are involved. For instance, it has proved to be very difficult to raise private financing for investments in the power sector in Bangladesh. This is an area where future income streams depend on

governments honouring contracts made by previous governments. But if the opposition is being constrained by the incumbent government, and is eventually likely to have to force the incumbents out, investors are likely to be wary that the opposition may challenge the legality of some contracts if they come to power. Investors can expect further demands for payoffs on top of the first round that they have probably already paid to the incumbents, and this can significantly increase the cost of doing business. Thus, vulnerable democracies under competitive clientelism can face high transaction costs for some types of contracts and some investments may not be possible at all. Since infrastructure and power sector investments do require government guarantees for future payments, a vital set of investments are adversely affected on which the economic performance of other sectors ultimately depends.

For sectors that have already achieved competitiveness, the failure to enforce growth-enhancing institutions is likely to have less adverse effects compared to sectors like power and infrastructure or compared to sectors where global competitiveness is yet to be achieved. In established sectors like garments, competitiveness has already been achieved through the investment of significant time and effort in learning-by-doing. In garments, learning opportunities were created by a combination of rents together with strong incentives created by fortuitous conditions and institutions that ensured high levels of effort in learning. Once competitiveness was achieved, the need for special institutional support is no longer required. In already competitive sectors, political instability affects growth in more usual ways: by delaying investments, by disrupting exports when ports and transport systems are affected by strikes and *hartals*, and ultimately persuad-

ing risk-averse buyers to move their business elsewhere. Much of the contract enforcement in competitive export sectors involves the banking system and these formal institutions are unlikely to be significantly modified as a result of political instability, unless the latter reaches very high levels. Business organizations that are export-competitive and stand to lose orders have periodically organized collective action to campaign against *hartals* and to bring political instability to a rapid end. These collective organizations have included the Bangladesh Garment Manufacturers and Exporters Association (BGMEA). While some of these initiatives have had some marginal effect on the intensity of conflicts, their interventions have not yet had any decisive effect. Ultimately, the resources that the business sector could generate were insufficient for this sector to dominate the political system and to set the conditions for acceptable political conduct.

More serious have been the effects for sectors that have not yet achieved competitiveness but are close enough for learning-by-doing to be a potentially effective strategy. These sectors require more specific institutional support in the form of risk sharing and financing instruments to reduce the costs of the loss-making period of learning-by-doing. This requires institutions that can regulate the provision of financing and the enforcement of conditions that create incentives for high levels of effort during the learning process. But the provision of financing and the enforcement of conditions for ensuring effort are both particularly difficult to ensure in a context of instability and political fragmentation. The financing required for investing in new sectors and then investing in the learning-by-doing process is likely to involve a cycle longer than one or two years. The institutions pro-

viding the financing and defining the conditions for recipients of the financing have to remain effective over the lifetime of more than one government and this cannot be ensured under these conditions. The collapse of the trade-off curve for institutions supporting learning is likely to be quite steep. The garment industry developed as a result of a fortunate conjuncture of rents created by the Multi-Fibre Arrangement (MFA) organized by the USA, domestic political support in Bangladesh at the highest level, the availability of domestic investible resources for driving these investments and strong incentives for foreign technology providers to transfer the appropriate technologies to Bangladesh. This conjuncture happened during the earliest phase of authoritarian clientelism when the time horizon of investors and institutions financing the learning process could be long, given the stability of the new regime. The lesson that emerges is that the extension of this success to new sectors and under conditions of vulnerable democracy requires developing new institutions and governance capabilities. A necessary condition is that democracy at least achieves a moderate operational equilibrium with competitive clientelism so that the probability of electoral crisis is reduced.

The agencies and institutions that could assist Bangladesh to move up the value chain in new areas could take a variety of forms ranging from policies of support for critical sectors to the development of a new generation of industrial banks. However, given the weak operational equilibrium of democratic political institutions, it is not surprising that no significant institutional measures were taken to develop new sectors during the period of vulnerable democracy. A few new sectors did begin to emerge, like electronics manufacturing, but investments and financ-

ing for learning in these sectors were driven by enterprising entrepreneurs who took large personal risks in financing learning on their own. The challenge for the future is to develop both the institutions that can support these initiatives as well as initiatives to develop specific governance capabilities to ensure that institutional support is not captured by politically connected but inefficient entrepreneurs. Neither the ambitious industrial policies of the East Asian countries nor the 'good governance' agenda set by western development partners provide a feasible set of governance reform targets for countries like Bangladesh. But even a limited and very specific set of governance targets that are aimed at building competitiveness in progressively more sophisticated sectors faces an adverse growth-stability trade-off in the context of short time horizons and periodic political crises.

Finally, the collapse of time horizons and the slow development of competitive profit-making opportunities can also have adverse effects on the incentives of powerful entrepreneurs. By the end of the 2000s a number of economic organizations in Bangladesh had emerged with moderately high technological and entrepreneurial capabilities. The problem that faced many economic organizations was that apart from areas like garments, pharmaceuticals and ceramics, where significant capabilities were built, even high-capability business houses lacked competitiveness in many sectors, including low to medium technology areas. For big business groups like Salman Rahman's Beximco that could raise funds relatively easily, the problem was that even with their relatively high entrepreneurial and technological capabilities in some sectors they could not competitively enter most other areas of production. For big business houses, this created incentives to expand into unpro-

ductive and speculative investments in areas outside their usual areas of competitiveness. Big business houses were likely to have close political ties with at least one major party and sometimes with several. These connections were mutually beneficial, providing the political party with economic resources when needed and providing business houses with politically created profitable opportunities to recoup their outlays with significant profit. As political uncertainty reduced the time horizons of both economic and political organizations and made it more difficult to develop competitiveness in new sectors, it increased the attractiveness of creating unproductive profit opportunities.

The democratic competitive clientelist period after 1990 has thus had a mixed record. Paradoxically, in Bangladesh, the introduction of institutions of political democracy did not even achieve sustained political stability despite the existence of a competitive clientelism that made the institutions of authoritarian clientelism unviable (Figure 4). The instability reduced time horizons and raised the transaction costs facing some types of vital long-term investments, in particular in the power and infrastructure sectors. On the other hand, economic activities in sectors where competitiveness already existed were not significantly constrained. More damaging was the effect on sectors that needed institutional support for addressing the contracting failures constraining learning-by-doing and technology adoption. The immediate challenge for sustaining democracy under competitive clientelism is to achieve more credible and less violent methods of ensuring the replacement of the ruling coalition. If this can be achieved, the longer-term challenge is to transform the organization of coalitions to the extent that this is pos-

sible (for instance through the organization of more disciplined parties) and to devise developmental institutions compatible with this political settlement to assist the emergence of new competitive sectors.

8. CATCHING UP AND LEARNING: AN ANALYTICAL MODEL

This section summarizes a model of learning and catching up developed in Khan (2009) which we will use to explain critical aspects of the growth performance in two sectors in Bangladesh, garments and textiles, and electronics. The model also helps to explain why industrial policy achieved some growth during the authoritarian period in Bangladesh when the country was part of Pakistan, but also why Pakistan's growth, unlike that in the authoritarian states of East Asia, proved to be unsustainable. We then apply the model to explain the remarkable success of the garments industry and the very specific financing arrangements and institutional incentives that contributed to high levels of effort in learning in this sector. The model also identifies the extent of the challenge facing the electronics sector as it moves forward from the domestic start-up phase to attempt international competitiveness and export success.

Developing countries trying to absorb new technologies are attempting to produce products that already have a global price for different qualities set by the leading countries using these technologies. The machines and technologies for producing these products are likely to be well known but there may be many variants of competitive organizations using these technologies in different leading countries. These organizational variants

reflect differences in local conditions, habits of work of the workforce, infrastructural constraints that have to be dealt with and so on, but in every case, the existing organizations define levels of quality and price that the catching-up country has to match. Protecting domestic markets, granting export subsidies or implicit subsidies of different types can provide infant industries in developing countries with the 'loss-financing' to engage in production and learning-by-doing, but unless competitiveness catches up, these strategies become unsustainable in terms of the accumulating subsidy cost.

Competitiveness depends on both price and quality. For a catching-up firm to graduate out of subsidies, it has to achieve a price-quality mix that is globally competitive. Once this is achieved, explicit or implicit subsidies are no longer required. Products can be defined as combinations of characteristics. Broad clusters of characteristics define a particular type of product, but any product also has detailed characteristics of reliability, performance, attractiveness, design and a range of other functions that can distinguish the 'quality' of particular products within a broad group (Lancaster 1966; Sutton 2005, 2007). Products can therefore be indexed by quality, with higher quality cars (for instance) being (in general) more difficult and more expensive to produce, but also attracting a higher price that is high enough to make it worthwhile for producers to always seek to improve product quality.

Developing countries are generally not in the business of innovating new products. This is a relatively small part of the growth process even in middle income developing countries. Rather, the most important problem for developing countries is to learn how to produce an improving range of products from the qualities that already exist, at a price

that is equal to or lower than the ones already available. If a country can produce an existing product of a particular quality at a price lower than that currently prevailing it has a chance of capturing markets from already established producers or extending the market to new consumers. Lower quality products are generally easier to produce, but for any quality level a maximum price is defined in global markets and a new entrant will not be able to sell its products without a subsidy if it cannot match this price. The problem for developing countries is that they are often unable to produce products of the requisite price-quality combination even when their wages are lower than their competitors and even when they aim at relatively low qualities and technologies.

Higher quality products have, by definition, a higher selling price, so in general they allow either a higher wage or a higher profit mark-up or both. Improving the quality of products is therefore a way of achieving wage and profit growth. Secondly, productivity growth is likely to be higher in higher quality products to the extent that these are still the subject of innovation in advanced countries. Developing countries that shift to higher qualities and build the organizations that can effectively produce these qualities are therefore likely to enjoy faster incremental productivity growth by being able to copy or adapt these innovations. At the same time, lower quality products can become inferior goods as world incomes increase, and global consumers are likely to gradually shift away from goods of lower quality. Finally, lower quality products are more likely to be targeted as entry points by even poorer countries creating gradual downward pressure on prices. It is therefore both socially and privately desirable to produce the highest quality products that are feasible.

The catching up problem can therefore be defined as a) entering globally competitive production for a variety of products at the highest feasible levels of quality, b) spreading these organizational capabilities broadly to create jobs across the working population and c) systematically moving up the quality ladder across product categories to achieve wage growth and sustained productivity growth. In reality, many developing countries struggle to produce anything competitively. Some produce a very limited range of competitive products but of low quality and find it difficult to move up the product and quality ladder. A few more advanced developing countries produce a range of competitive

products, some of higher quality, but face challenges in achieving quality improvements and even greater challenges in entering new product ranges.

The essential features of the catching-up problem can be described using a simple mark-up pricing model for products of a given quality. The current global price of a particular product of quality Q is set by its cost of production in the country that is currently the global production leader. The unit price can be arithmetically broken down into the unit labour cost plus the unit input cost plus the unit amortized capital cost representing the unit cost of machinery and buildings. This is shown in eq. [1]:

$$P_Q^{global} = \left[\frac{W_Q^{leader}}{\Pi_Q^{leader}} + \sum_i \frac{P_{Qi}}{\alpha_{Qi}^{leader}} + \sum_k \frac{P_{Qk}}{\beta_{Qk}^{leader}} \right] (1 + m_Q) \quad [1]$$

(unit labour cost) (unit input cost) (unit capital cost) (markup)

To simplify the notation we do not denote products and simply refer to a particular quality indexed by Q , so $Q+1$ represents a higher quality product compared to Q . P_Q^{global} is the international price of a particular product of quality Q . W_Q^{leader} is the wage level in the leading country producing the product of quality Q . Π_Q^{leader} is the productivity of labour in this activity in the leading country, measured by the output per person in this activity. The first term on the right hand side is therefore the unit labour cost.

The second term is the unit input cost. The production of the product requires i inputs as raw materials or semi-manufactured inputs. To simplify, we assume these inputs are globally traded, each with a global price of P_{Qi} . The efficiency with which inputs are used is measured by the productivity of input use (output per unit input). In the leading coun-

try, the input productivities of each of the i inputs are represented by. Input productivity primarily measures α_{Qi}^{leader} . Input productivity primarily measures wastage and input loss due to rejected final products. In many production processes this is a critical determinant of competitiveness.

The third term refers to the unit ‘capital’ cost attributable to the cost of machinery and buildings. There are k inputs of this type, and the most important elements are usually machines, which have a globally traded price, though land and buildings can also be significant cost components in some cases. The unit cost of capital is determined by the fraction of each component of these capital costs attributed to the particular period of production, represented by P_{Qk} divided by the output-capital ratio for each type of capital (the productivity of capital) measured by β_{Qk}^{leader} . As the capital stock

that is available in each period is fixed, the output-capital ratio depends critically on the scale of production that determines capacity utilization. The higher the output achieved with any given capital stock, the higher the productivity of capital measured by each $\beta_{Qk}^{\text{leader}}$. Low capital productivity could therefore be the result of a lack of technological capabilities on the part of the workforce resulting in improper use of machinery but it

could also reflect spare capacity if machines and fixed assets are underused because of a suboptimal scale of production. Finally, the mark-up determining price is set at m_Q .

In the same way, the cost of production (in a common currency) in the developing country is the domestic cost C_Q^{domestic} for the product of quality Q, given by an exactly equivalent equation but with the appropriate domestic productivities and prices:

$$C_Q^{\text{domestic}} = \left[\frac{W_Q^{\text{domestic}}}{\Pi_Q^{\text{domestic}}} + \sum_i \frac{P_{Qi}}{\alpha_{Qi}^{\text{domestic}}} + \sum_k \frac{P_{Qk}}{\beta_{Qk}^{\text{domestic}}} \right] (1 + m_Q) \quad [2]$$

The follower country achieves competitiveness when its $C_Q^{\text{domestic}} \leq P_Q^{\text{global}}$. The globally traded prices of inputs and machinery are typically similar in the follower and leader countries but wages and some input costs are likely to be lower in the former. The cost of borrowing, which affects the amortized cost of capital, may be higher in the follower (reflecting a higher risk premium), but the difference may not be very significant. It may therefore appear that the developing country should be able to achieve competitiveness for many simple technologies for which the appropriate formal skills exist since its wage level is lower: $W_Q^{\text{domestic}} < W_Q^{\text{leader}}$, and most other prices are either similar (globally tradable inputs and machinery) or lower (possibly for some non-tradable inputs like land and buildings). But in fact developing countries usually cannot break into the production even of relatively low technology (low quality) products because they typically suffer from significant productivity disadvantages that more than negate their wage and other cost advantages. Output per person is generally much lower, $\Pi_Q^{\text{domestic}} < \Pi_Q^{\text{leader}}$, as are many input and capital productivities, $\alpha_{Qi}^{\text{domestic}} < \alpha_{Qi}^{\text{leader}}$ and $\beta_{Qk}^{\text{domestic}} < \beta_{Qk}^{\text{leader}}$. These productivity dif-

ferentials explain why despite low wages, the follower country typically has a higher cost of production than the global price even for relatively low technology products.

It may appear that a low wages could compensate for these productivity differentials, but many cases, even zero wages may not be able to compensate for a lower efficiency of input and capital productivity. This is because inputs and capital equipment have global prices that have to be paid. If $\alpha_{Qi}^{\text{domestic}} < \alpha_{Qi}^{\text{leader}}$ for expensive globally traded inputs, the greater wastage of inputs alone could result in a higher domestic cost of production *even if the domestic unit labour cost could be pushed to zero*. This is why efficiency in controlling the wastage of inputs and reducing product rejection is often a critical variable in achieving competitiveness. In addition, the productivity of critical capital equipment is often lower, with $\beta_{Qk}^{\text{domestic}} < \beta_{Qk}^{\text{leader}}$ as a result of machinery not being properly set up, or the optimal scale of production not being achieved. Indeed, a small disadvantage in these productivity variables across a number of inputs and types of capital could mean that even with zero wages, the cost of production in the developing country may be higher. In fact, wages

are typically a relatively small part of the cost of production even in labourintensive manufacturing processes. Competitiveness, even in low technology products, therefore depends more on the level and growth of productivity rather than on cost advantages.

While it is conceptually useful to distinguish between labour, input and capital productivity, all of these productivity measures are affected by the ways in which production is set up and organized by the management and workers operating machinery of a specific type. The productivity of all inputs including labour depends on how effectively the production process is organized. Output per person, Π_o , depends on a variety of economy-wide and firm-level factors. The economy-wide determinants of firm labour productivity include the quality of public goods and utilities including the quality of education, infrastructure and the reliability of utility supplies. Firm labour productivity is also determined by firm-level variables like the capital equipment used by labour and the skill and experience of the workforce and management. The technological capabilities of workers are important determinants of firm-level productivity. These depend on their formal training and education but also on their tacit knowledge of operating equipment effectively as a result of learning-by-doing. However, an even more important determinant of firm-level labour productivity is the *organization* of the firm: how teams are set up to ensure a smooth flow of production, how machinery is set up to reduce bottlenecks, how management systems are set up to solve problems and so on. These organizational capabilities are also the result of effective learning-by-doing that results in the evolution of a work organization that achieves high labour productivity.

In the same way, the efficiency of input use, α_{oi} , depends on the same economy-level

variables determining the skills and education of the workforce, as well as firm-level variables like the type and sophistication of the capital equipment used and the technological skills of the workforce using this equipment, based on both formal skills and tacit knowledge. In addition, the firm-level organization of production is again often of critical significance. Organizational design is critical for limiting the wastage of raw materials and for maintaining quality so that final products are not rejected, thereby maintaining input productivity at a high level. Finally capital productivity also varies significantly across countries and firms even for machinery of exactly the same type. This too reflects differences in the organization of production and the skills and capabilities of the workers and managers. However, in addition capital productivity is also a function of the scale of production. For firms entering new lines of production, the scale of production can be constrained by the low competitiveness of the firm. This is because as long as a firm suffers from low labour and input productivity, it can only sell its products at a lower profit margin or at a loss. This can prevent it from expanding the scale of production, and the low capital productivity that results can further damage its competitiveness.

Thus, competitiveness and the underlying productivities that determine competitiveness are not just determined by having the right machinery for producing products of a particular quality and having workers and managers with the right levels of formal education and training. It depends more critically on the technological and organizational capabilities of the teams using the machines to produce products, and both sets of capabilities depend on the successful outcomes of difficult learning-by-doing processes. Early development theory and practice emphasized invest-

ment in modern machinery but we now know this is not sufficient without strategies for achieving competitiveness. Crippling differences in productivity persist across countries using identical machinery (Clark and Wolcott 2002; Sutton 2007). While the economy-level constraints on productivity are widely recognized, the firm-level *technological and organizational capabilities* of workers and management are probably much more important in explaining why some countries take off when they do. Takeoffs are rarely triggered by prior improvements in economy-wide infrastructural conditions, though sustaining growth clearly requires an improving efficiency in the delivery of education and infrastructure.

The importance of firm-level organizational capabilities as the critical determinant of competitiveness is based on two interrelated observations. First, there is the observation from observers of technological capabilities that much of the technological and organizational knowledge necessary for competitiveness is *tacit knowledge* embedded in routines (Nelson and Winter 1982; Dosi 1988; Pelikan 1988; Perez and Soete 1988). Engaging in effective productive activity requires a mix of formal or codifiable knowledge (knowledge that can be communicated in words or symbols) and uncodifiable 'knowing-how-to' knowledge that is embedded in unconscious and often complex routines. The latter is defined as tacit knowledge and the significance of its non-codified form is that acquiring this knowledge requires learning-by-doing rather than attending formal courses (Polanyi 1967). The process of learning efficient routines inevitably involves practice and the adaptation of practice to local conditions rather than reading off blueprints from a manual. Compared to the difficulty of 'acquiring' this tacit knowledge, buying the machines and setting up the factory are often much the easier parts

of the process of technology acquisition and growth.

The difference between technological and organizational capabilities is often difficult to distinguish in practice because the former can depend on the latter. Technological capabilities refer to the productivity of individual workers which can depend on their tacit knowledge of how to use particular machines effectively. Organizational capabilities refer to the design of the organization that determines the productivity of each individual worker, and this also determines input and capital productivity. The organization of production refers to things such as setting up the layout of the machines so that production bottlenecks are avoided given the pace of work that can be achieved with local conditions, implementing effective quality control routines with incentives that are appropriate for local conditions, managing inventories taking into account local infrastructural constraints, meeting orders on time and so on.

The importance of the organizational capabilities of a production team as a whole becomes obvious when workers migrate from developing countries to more advanced ones. Their individual productivity jumps when they join a modern organization. In migrating to join an already efficient organization, an individual worker rapidly slots into existing routines and thereby rapidly improves their individual productivity, even in terms of the learning-by-doing that improves their individual technological capabilities. In contrast, if the whole team is operating with the routines of an inefficient organization or still experimenting with new routines, the individual productivity of each worker is likely to remain low. Evolving these routines takes effort from all the stakeholders as it involves experimentation and re-allocation of duties and responsibilities till the organization as a

whole achieves competitiveness. Even relatively low-technology production of relatively low quality products like garments requires acquiring a huge amount of tacit organizational knowledge embedded in the routines of interaction between the hundreds or even thousands of workers and managers in the organization.

Secondly, the literature on technological and organizational capability also points out that tacit knowledge is largely acquired through processes of learning-by-doing (Lall 1992, 2000a, 2000b, 2003). If a firm has to engage in learning-by-doing to achieve competitiveness, the implication is that it has to begin production before it achieves competitiveness. This is very significant. Investment in a firm using new technologies in a developing country therefore requires some implicit or explicit form of loss-financing as the organization cannot *by definition* achieve competitiveness for some considerable time. This marks a very significant difference between advanced and developing countries. In the former, the financing of machinery and buildings to set up production may face uncertainties in terms of markets and prices if the product is a new one, but the organizational capabilities of the firm and its workers are typically not in question. In developing countries, the markets and prices are well known by definition because the product is a well-known one, the uncertainty is about the organizational capabilities of the team attempting to produce the product. While the uncertainty faced by innovating firms in advanced countries is well understood, the uncertainty faced by learning firms in developing countries is often ignored in economic theory and policy.

In principle the lower profits or even losses that firms face during their period of organizational capability development could be privately financed as there is the potential of fu-

ture profits. The absence of significant private engagement in investments in learning-by-doing in developing countries suggests the presence of important contracting failures that keeps private investors away from this difficult task. The difficulty is not surprising given that a locally specific organizational design is required to achieve competitiveness. External investors who may finance the learning have neither a blueprint of the organizational design that may work nor can they easily observe the effort the production team is putting in to achieve the competitive organization rapidly. In practice, governments in the past have therefore played a significant role in financing infant industry strategies. However, the relative paucity of successful infant industry programmes demonstrates the difficulty of getting the governance capabilities right for ensuring successful outcomes in these public financing strategies. Clearly, ensuring high levels of effort in these learning processes is by no means a simple affair.

The loss-financing required to engage in learning-by-doing depends on the gap between the domestic cost of production and the global price at that quality. The loss financing that would allow production (and learning-by-doing) to commence can be measured as a per unit 'subsidy', s_Q , which brings the initially higher domestic cost of production $C_Q^{domestic}$ into line with the global price P_Q^{global} . The 'subsidy' does not have to be a transfer from government and could be private loss financing in the form of investors accepting a lower mark-up or putting in additional cash to cover a period of loss-making. When the loss-financing involves a public subsidy, this can also be delivered in a variety of ways, some explicit, others more subtle. The possibilities include export subsidies, import protection, subsidized interest rates, subsidized inputs or infrastructure, or a cash subsidy.

Thus a variety of financing instruments are available to enable learning-by-doing to commence, and in general we can describe these instruments as ways of providing ‘rents for learning’ (Khan 2000a).

The essential features of the problem can be described by focusing on the situation where the domestic firm can produce prod-

ucts of quality Q, but at a higher cost than the current global price. The required effective rate of subsidy, s_Q , is given by the equality:

$$C_Q^{domestic} (1 - s_Q) = P_Q^{global} \quad [3]$$

Inserting eq. [2] that defines $C_Q^{domestic}$ into this gives the required s_Q :

$$s_Q = 1 - \frac{P_Q^{global}}{(1 + m_Q)} \left[\frac{W_Q^{dom}}{\Pi_Q^{domestic}} + \sum_i \frac{P_{Qi}}{\alpha_{Qi}^{domestic}} + \sum_k \frac{P_{Qk}}{\beta_{Qk}^{domestic}} \right]^{-1} \quad [4]$$

It follows from [4] that:

$$\frac{\partial s_Q}{\partial P_Q^{global}}, \quad \frac{\partial s_Q}{\partial \Pi_Q^{domestic}}, \quad \frac{\partial s_Q}{\partial \alpha_{Qi}^{domestic}}, \quad \frac{\partial s_Q}{\partial \beta_{Qk}^{domestic}} < 0$$

The required rate of subsidy declines if the global price rises, or if domestic labour productivity, input productivity or capital productivity rise. It follows that the more rapidly domestic labour, input and capital productivities grow, the sooner the subsidy can be removed. The subsidy per unit required for entering production is also likely to be higher for higher quality levels. Lower and higher quality versions of the same product are indexed by Q and Q+1. Using [3], the per-unit subsidy required in each case is shown in equations [5] and [6].

$$s_Q = 1 - \frac{P_Q^{global}}{C_Q^{domestic}} \quad [5]$$

And

$$s_{Q+1} = 1 - \frac{P_{Q+1}^{global}}{C_{Q+1}^{domestic}} \quad [6]$$

Under plausible assumptions $s_{Q+1} > s_Q$, meaning a higher subsidy is required if a firm wants to engage in producing higher quality products. The organization required to produce a more complex product is generally also more complex. The gap in tacit knowledge is therefore likely to be greater for constructing the more complex organization. Both the gap in labour productivity and gaps in input productivities are likely to be greater in higher quality products because the latter typically require more sophisticated production routines and more sophisticated management of inputs. The greater labour and input productivity gaps between the two countries in quality Q+1 compared to quality Q can be represented as a set of inequalities:

$$\frac{\Pi_{Q+1}^{leader}}{\Pi_{Q+1}^{domestic}} > \frac{\Pi_Q^{leader}}{\Pi_Q^{domestic}} \quad \text{and} \quad \frac{\alpha_{Q+1}^{leader}}{\alpha_{Q+1}^{domestic}} > \frac{\alpha_Q^{leader}}{\alpha_Q^{domestic}} \quad \text{for some or all } i \quad [7]$$

The bigger gap in organizational knowledge for higher quality products is also likely to show up in lower initial capital productivity (capacity utilization) for higher quality products. In addition, capital productivity in higher qualities is likely to be further affected by the fact that higher quality production often requires more expensive machinery and is therefore likely to require a larger scale of production to become competitive. The low initial competitiveness of the firm can therefore create a further problem because the firm may find it difficult to achieve the scale economies to reduce its output-capital ratio, implying a greater gap in capital productivity in higher quality products:

$$\frac{\beta_{Q+1}^{leader}}{\beta_{Q+1}^{domestic}} > \frac{\beta_Q^{leader}}{\beta_Q^{domestic}} \text{ for some or all } k \quad [8]$$

Returning to equations [1] and [2] we know that the costs of production in both countries are inversely proportional to their labour, input and capital productivities. Given the likelihood that some or all of the inequalities in [7] and [8] are likely to hold, it must be the case that

$$\frac{P_{Q+1}^{global}}{C_{Q+1}^{domestic}} < \frac{P_Q^{global}}{C_Q^{domestic}} \quad [9]$$

The inequality in [9] says that the cost of production in the developing country is greater (relative to the global price) for the higher quality product compared to the lower quality product. Using inequality [9] and comparing equations [5] and [6] it follows that a greater subsidy per unit will be required to overcome the initial competitiveness gap in the higher quality product compared to the lower quality product.

$$s_{Q+1} > s_Q \quad [10]$$

These results suggest a number of propositions.

Proposition 1. The loss-financing required to begin production is in general higher the higher the quality of the product and moreover, the subsidy will be required for longer as more complex organizational capabilities have to be developed.

As against this, the development of more complex organizational capabilities has a number of advantages.

Proposition 2. The production of higher quality products is desirable simply because their production adds more value relative to lower quality products.

A further proposition is plausible. Economics textbooks often show technical progress as an outward shift of a production frontier for a country. In reality, this is misleading because improvements in technological capabilities are likely to be localized around specific technologies (Atkinson and Stiglitz 1969; Stiglitz 1987). The localization of productivity improvements is even more likely if competitiveness is embedded in the routines of particular organizations. In this case successful learning is likely to benefit the future adoption of technologies that are similar or closely related, rather than raising potential productivity across all technologies. Thus, we are likely to see ‘bumpy’ improvements in productivity clustered around particular technologies. This can explain why countries specialize in clusters of related products, possibly triggered by the random success of learning-by-doing in particular sectors. This is why it can be advantageous to acquire organizational capabilities in more advanced technologies producing higher quality products. Innovation in advanced countries is also more likely in higher quality products like electronics than lower quality products like garments. A follower country

that has organizations capable of producing higher quality products is therefore more likely to benefit from further productivity growth by adopting incremental improvements in these products as innovation happens in more advanced countries.

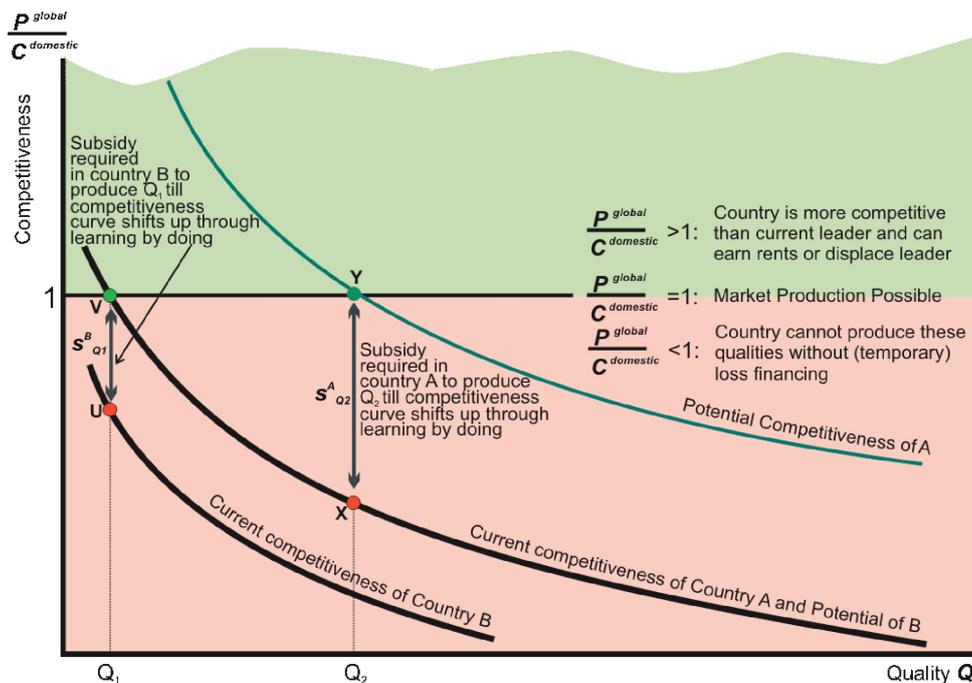
Proposition 3. *Learning-by-doing improves organizational capabilities for producing related products and if future productivity growth is likely to be faster in higher quality products, it is beneficial to develop more complex organizational capabilities.*

The development challenge is therefore to accelerate the movement up the quality ladder subject to feasibility defined by the loss-financing capabilities of the society and its ability to solve the contracting failures that result in adverse outcomes for loss financing strategies.

Figure 5 summarizes some of the fundamental issues facing catching up and technology acquisition in developing countries. The competitiveness curve for a country sum-

marizes its distance from global competitiveness across different quality products. The x-axis measures the quality of the product, and the y-axis the follower's competitiveness in producing that quality. Competitiveness is measured by the ratio $\frac{P_Q^{global}}{C_Q^{domestic}}$. A higher ratio therefore implies greater competitiveness of our country given the prices set by the leader. When this ratio is 1 or higher our country can sell a product of this quality in global markets and therefore the horizontal line at 1 can be read as the global competitiveness frontier for our country. When the ratio is less than 1 for a particular quality, our country will either not be able to produce that quality or will require (temporary) loss-financing to allow production. The required rate of 'subsidy', s_Q , equals $1 - \frac{P_Q^{global}}{C_Q^{domestic}}$ in eq. [5], and is shown in Figure 5 as the gap between the global competitiveness frontier (the horizontal line at $P/C=1$) and current competitiveness at quality Q

Figure 5. Loss Financing and Learning-by-doing



defined by the current competitiveness curve.

The competitiveness curve is downward sloping because although world prices of higher quality products are higher (which is why they are more desirable to produce), the cost of production in the follower country is even higher, giving it a greater disadvantage in higher quality products. The greater productivity gap in higher qualities will force market-reliant developing countries to specialize in low quality products. This may have nothing to do with the relative price of labour and capital as in standard neoclassical theory. Consistent with proposition 1, it is possible to imagine a developing country like B in Figure 5 where current organizational capabilities are so low that it cannot even produce the lowest quality of the product. In extreme cases, some developing countries may struggle to produce competitive qualities of any product. The competitiveness curve can be extended to apply to related products of different complexity. For instance, we could see different ‘qualities’ as parts of a vertically organized value chain. Low qualities could be low value added parts of the value chain (like packing and assembling), medium qualities could be the production of intermediate products going into the assembly and higher qualities could be design, product development and marketing. Once again, the typical developing country would struggle to locate itself at the lower ends of the value chain where the organizational gap was less challenging, and many may not even succeed in that. At an even more general level, we could use the capability curve to think about choices across all products ranked by production complexity for which ‘quality’ is a proxy.

Figure 5 suggests that a country like B will need loss-financing of s^B_{Q1} from the outset to begin production even of low-quality prod-

ucts Q1 at point U. The success of a strategy of loss-financing would be measured by the pace at which productivity increased as a result of learning-by-doing. Successful learning-by-doing should result in the competitiveness curve moving upward till the loss-financing was no longer required at V. Note that this does not necessarily require achieving levels of productivity equal to the leader country because the follower is likely to have a wage and cost advantage for some inputs. Sustained productivity growth is therefore likely to raise the follower’s competitiveness to more than 1, in which case the follower could either earn a rent (a mark-up higher than m_Q) at the global price or it could bid down the global price in these qualities to below a price acceptable to the leader, thereby displacing the leader from these segments of the market and achieving more sales. If the latter is the more profitable option, the developing country becomes the leader for that quality and the global price is eventually defined by the cost of production and market power of the new leader.

Finally, proposition 3 tells us that if future technological progress is localized around higher qualities and technologies, it may be desirable to further accelerate the move up the quality ladder to the points where innovation is still happening in more advanced countries. In Figure 5 the potential future productivity growth at quality Q1 may be relatively low because the technology is already mature and no further product and process innovations may happen at this quality level. Thus, for country A, which can produce Q1 competitively, the imperative may be to move to a higher quality not only to prepare for future competition from country B, but also to enjoy faster productivity growth clustered around quality Q2. Thus, for country A, there may be a policy justification to assist learning-by-doing around quality Q2 by organizing temporary

loss-financing of s^A_{Q2} . The challenge for A would be to go from point X to point Y to achieve competitiveness at this higher quality level. This would not only allow the country to raise its domestic value added and living standards, it may also ensure faster productivity growth in the future.

But if temporary loss-financing can assist a country to raise its productivity through learning-by-doing, how high should a country aim? Proposition 1 tells us that given existing capabilities, the higher the quality level that the country tries to achieve, the greater the financing cost measured by sQ . Moreover, the greater the gap with leading countries at that quality, the longer is the catching up likely to take to reach the global competitiveness frontier. As a result, trying to aim too high may involve excessively long periods of subsidization. Moreover, the competitiveness gap is only partially due to the absence of tacit knowledge. Some of the gap could also be due to levels of formal education and skills and the poor quality of economy-level public goods. If the initial gap is too big no amount of firm-level experience and learning-by-doing may remove it entirely. As both the social time preference and the cost of finance in poor countries are likely to be high, there is a limit to how high up the quality ladder it is feasible to go.

Learning, Effort and Governance

Investments in new sectors can be constrained by a variety of contracting failures. However, the contracting failures that affect learning are different from other contracting failures that can constrain investments for other reasons. These include several different types of appropriability problems limiting future profits in the presence of externalities and the costs of coordinating complemen-

tary investments. The solutions to different contracting failures can appear to be deceptively similar, for instance many of them can involve some form of subsidy or assistance. In principle, several contracting failures may also be operating simultaneously to constrain investments in technology acquisition. Nevertheless, distinguishing different contracting failures is important because the governance requirements for effectively addressing them can be markedly different. Policies supporting technology acquisition in the past often yielded poor results because the relevant contracting failures were not properly identified and understood. As a result, policies were not designed to be effective in solving these contracting problems with existing governance capabilities, nor were the governance capabilities necessary for the success of specific policies identified and developed.

Table 4 outlines a number of critical contracting failures affecting technology acquisition, the likely policy responses and the governance capabilities required to make the policies effective. Most of these contract failures been discussed in the literature but the differences in the governance capabilities required to address them have not received sufficient attention (Khan 2009). The positive externalities of investments in skills can result in an appropriability problem for investors and underinvestment in skills (Dosi 1988; Khan 2000a). Corrective policy involves subsidizing skills development and the required governance capabilities are to monitor outcomes and withdraw public funding if expected outcomes are not achieved. Spillovers can also affect investments in innovation, which requires the temporary protection of technology rents. While this is primarily a concern for advanced countries that rely on innovation for growth, developing countries may have to protect the intellectual property rights of multinationals in order to attract ad-

Table 4. Major Contracting Failures Affecting Technology Acquisition

<i>Contracting failures Affecting Investment</i>	<i>Likely Policy Instruments</i>	<i>Governance Capabilities required for Implementation</i>
Appropriability problems facing investments in skills: investors cannot capture full benefits of training	Public co-financing of labour training and investments in skills	Capabilities in relevant agencies to ensure financing for training is not misallocated or wasted
Appropriability problems facing innovators: Poor protection of technology rents can discourage advanced technology investors	Protection of intellectual property rights (IPRs). But multinational companies (MNCs) may have weak incentives to transfer technologies	Enforcement capabilities for IPRs but also policies and strategies to encourage technology transfer by MNCs
Appropriability problems facing 'discovery': First movers cannot capture full benefits of discovering comparative advantage	Subsidies for first mover start-up companies in new sectors	Capability to make subsidies time limited
Failures of Coordination: Complementary sectors do not develop, constraining investment	Indicative planning or strategies for coordinating investments	Significant governance capabilities required to coordinate and discipline investments across sectors
Problem of Contracting High Effort in Learning: Financing technological-organizational learning fails because of low effort	Public co-financing or sharing of risks of financing absorption of technological and organizational capabilities	Financing instruments must be compatible with governance capabilities to ensure credible compulsions for high effort in learning-by-doing

Source: Author

vanced technology investments (Hoekman, et al. 2004). Apart from a capability to protect intellectual property rights, technology transfer also requires significant negotiating skills on the part of policy-makers in developing countries to negotiate technology transfer strategies with multinationals (Khan 2000a; Stiglitz 2007).

A further set of spillovers affect investments in 'discovering' new areas of comparative advantage (Hausmann and Rodrik 2003). Although the proposition that countries have hidden comparative advantages that need to be discovered is not particularly convincing,

the possibility that first movers may not be able to capture the full benefits of their investment can justify subsidizing investments in new sectors. One reason that first movers may fail to get the full benefit of their discovery is that profits may be bid down by imitators whose entry pushes up wages. To the extent that this problem dampens investment in discovery, the appropriate policy response is to subsidize investments in new sectors and the governance capability required is to ensure that the subsidies are only available to reduce the costs of the start-up phase.

A further problem is that of coordination failures affecting investments across sectors (Rosenstein-Rodan 1943; Nurkse 1953; Scitovsky 1954; Murphy, et al. 1989). This problem is well-known in the development literature, but solving it is difficult and requires significant capabilities in information gathering, understanding demand and supply complementarities and implementing the coordination effectively. These capabilities are typically missing in developing countries and development planning efforts therefore usually achieve very little. Our focus is on the last of the contracting problems in Table 4, the problem of contracting high-effort learning. Solutions to all the other problems in the table presume that the technological and organizational capabilities to set up competitive organizations already exist. In reality, developing countries lack the capabilities to use modern technologies and without this, attempted solutions to other problems are unlikely to have any effect. Unfortunately, this too is a particularly difficult problem to solve. Strategies of subsidization without incentives and compulsions to induce high effort in the learning process are likely to fail.

Private investment in financing learning may be motivated by the following type of calculation: An investment of s_Q in loss-financing has the prospect of achieving a competitiveness of $\frac{D_Q^{global}}{C_Q^{domestic}} \geq 1$ after n years. As the follower country has lower wages, productivity growth could eventually result in cost of production lower than the world price. If productivity improves sufficiently, the investor can earn a normal profit of m_Q or even a rent in the form of a higher mark-up of $m_Q' > m_Q$ (after n years) with an expectation that the rent $m_Q' - m_Q$ will last for x years. The mark-up can decline over time for a number of reasons including the entry of new firms in the sector that bids up wages. The magni-

tudes of s_Q , n , and if relevant, $m_Q' - m_Q$ and x , and the discount rate or cost of finance facing the entrepreneur will determine whether the investment in learning-by-doing is privately profitable. Private investments in learning may happen even without the prospect of rents because the normal mark-up m_Q may be attractive enough given the alternative opportunities of the investor even taking into account the extra investment in loss-financing. This is therefore a different problem from the discovery problem where a private investor in a new sector will not invest without a subsidy because the social benefit from discovery is always greater than the private benefit, which may even be negative.

In the learning problem, the contracting failure is internal to the firm and its investors as the latter find it difficult to ensure effort in learning. If this problem can be solved then private investments may happen. If the contracting problem of ensuring high effort cannot be solved, public policy has to co-finance or share the risk of financing learning. However, in some cases the configuration of costs and benefits may require a higher return to justify the investment in learning than the return that is achievable even with high effort. The required higher return may not be achievable because it may not be feasible to achieve a low enough cost of production to generate the required private rents even with feasibly high effort *or* it may not be possible to achieve the rents for long enough because new entrants reduce the returns of the first mover by raising wages rapidly (as in the discovery model). In these cases there may be a second reason why public policy should co-finance learning and that is that the social return on learning may be higher than the feasible private return. This provides additional justification for subsidizing first-mov-

ers investing in learning in a particular sector. But even in cases where investments in learning have positive spillovers for society, if the public support for learning does not solve the problem of ensuring high levels of effort the exercise as a whole is likely to fail. This is what makes the solution of the learning problem different from the solution of the pure discovery problem and other positive externality problems which only require the provision of time-bound subsidies.

Effort is important for the learning problem because the development of technological and organizational capabilities requires both time and effort. Time and effort are inversely related: the lower the effort, the longer the learning takes. In Figure 5 firms in country B may be unable to begin production at point U without loss-financing, but the feasibility of the financing depends on *how long* firms take to go from U to V, or even whether V will ever be reached. The rate at which the competitiveness curve rises depends on the degree of effort that is put into the learning process once loss financing allows learning-by-doing to commence. Unfortunately, disciplining the learning process is a difficult problem to solve. Without incentives and compulsions, a production team can keep on repeating procedures without the innovations and experiments that improve its productivity. This is particularly the case if the firm can make a political case for continuing with the subsidy. The political alliances of firms can make subsidy withdrawal too costly for many governments. The institutional and political background can therefore set constraints on what can be done. The 'learning' process can then continue indefinitely, as countries with infant industries that refused to grow up have discovered. Indeed, even if the learning process is just a little too slow, financing may become unviable in terms of opportunity costs.

Moreover, if the public or private investors who may have financed the learning suspect its viability, they are unlikely to engage in the financing in the first place.

The time required for achieving competitiveness, defined as the break-even period Bt , can plausibly be determined by a number of variables. First, it depends on the initial gap between the country and the global leader which we can measure by the initial competitiveness gap that the subsidy s_0 is required to cover. The greater the initial gap, the longer it will take to catch up. Second, time required for learning depends on the *effort* of the participants in the learning process. This includes both the individual efforts in acquiring technological capabilities, but even more so the management effort in acquiring organizational capabilities. Whatever the initial gap, a higher effort in learning is likely to result in faster convergence. The effort exerted in learning should not be confused with effort in general, for instance, the intensity of the work process. Workers in high productivity firms do not necessarily work harder than workers in low productivity firms, but the work organization in the former is more efficient. We are referring to the effort in discovering and adapting the work organization that achieves high productivity.

This *learning effort* can be measured by the intensity of application of workers and managers to continually improve productivity. This can be observed as the rate at which managers and workers experiment with and adapt production processes to achieve improvements in productivity. As experimentation and trials impose costs on individuals, the result can be conflicts as there may be distributive implications in redefining jobs. Thus, higher levels of effort imply costs for participants and particularly for managers. As already noted, the effort referred to here is not the intensity

of the work process in general, but the effort expended in learning to raise productivity. Typically, low productivity is *not* the effect of laziness or low effort in general on the part of the workforce (though that may be a marginal contributor) but rather of a failure of effort on the part of the production team as a whole to evolve routines and organizational structures that raise individual productivity, improve quality control, reduce the wastage of inputs, reduce bottlenecks in production and improve capacity utilization.

Finally, the break-even period can also depend on country and firm specific factors.

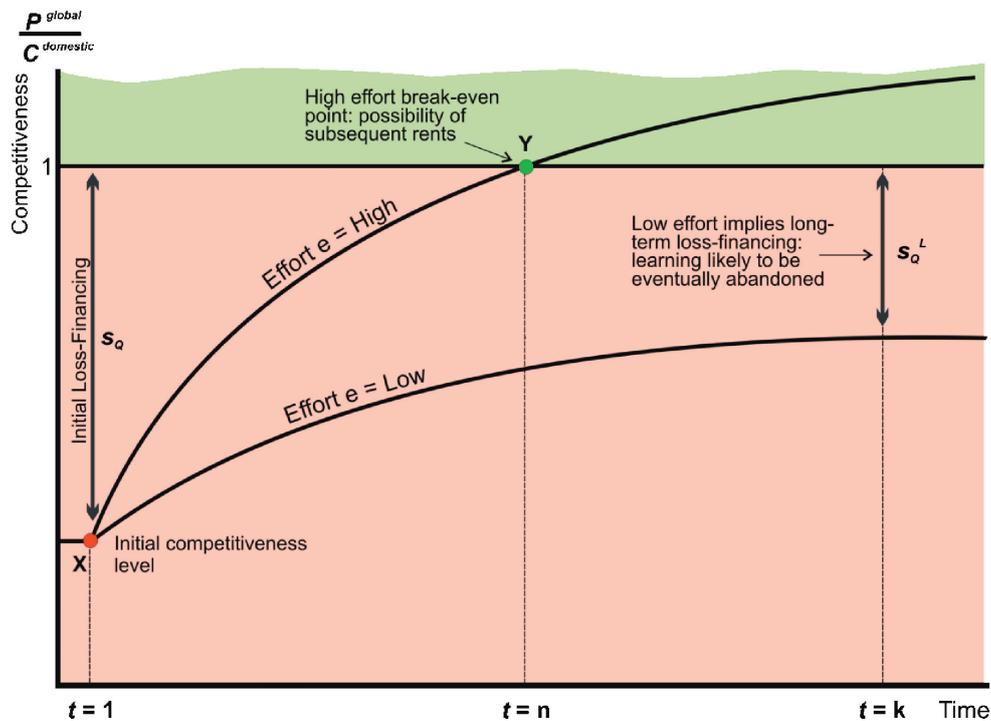
Country specific factors refer to general levels of education, exposure to technology, the prior history of organized modern production, infrastructural quality and so on. If a country is significantly behind in its formal technological capabilities it may fail to approach required levels of competitiveness

within any feasible time period. An example of this would be the absence of a sufficient number of formally trained engineers of a particular type required in the production process. Firm level factors refer to idiosyncratic differences in the quality of entrepreneurship, the quality of technicians and managers inherited by a firm and so on. These variables are summarized in eq. [11]:

$$B_t = f(s_Q, e, C, F) \quad [11]$$

The break-even period B_t is likely to be longer the higher the initial gap in competitiveness measured by s_Q , the lower the level of learning effort, e , and if C and F , which describe country-specific and firm-specific factors respectively are also adverse. Figure 6 tracks the pace at which the competitiveness curves in Figure 5 move up as a result of different levels of effort. To simplify, we assume

Figure 6. Effort Levels and the Viability of the Learning Process



that the value of other variables is such that it is potentially possible for the country to achieve competitiveness in quality Q . At time $t=1$ country A 's competitiveness is too low for it to begin the production of quality Q without loss-financing. The initial loss financing is s_0 in Figure 6. If effort levels are high, the break-even period $B_t = n$ periods. At that point, loss financing can be abandoned and indeed if improvements in productivity continue, the country may even be in a position to earn rents in subsequent periods.

The problem for the successful firm is that its reward for success is the loss of the rent it was getting in the form of loss-financing. The firm will have substituted a future of uncertain market profits and rents based on continuing efforts at productivity growth for a subsidy that allowed it to perform with low productivity. There is obviously an incentive compatibility problem here that can result in '*satisficing*' behaviour on the part of management. The existing routines of production within the firm may be difficult and costly to change and it may be easier to spend management effort in protecting the subsidy. Not surprisingly, managers typically put a lot of effort into developing organizational capability and competitiveness when there are credible compulsions and pressures on them from outside the firm, possibly from the financing agencies. Otherwise a satisficing strategy may emerge that puts low effort into learning and more effort into protecting the subsidy. Competitiveness may never be achieved even with some productivity growth as productivity is also increasing in the leader. The infant industry will fail to grow up and eventually the catching-up strategies will have to be abandoned, but this may be many years later and managers and workers may not be too concerned about this right away.

Owner-managers financing learning-by-doing in their own organizations would not

have to subcontract the management of the learning effort. However, it is unlikely that a single owner-manager will be able to finance a period of loss-making for any organization of substantial size. When external financiers are involved, they have to contract with the owner and managers of the firm to ensure high levels of effort since their returns depend on the achievement of competitiveness. The contracting problem is that the enforcement of complex contingent contracts is usually ruled out in a developing country given the weakness of contract enforcement. The overall lossfinancing s_0 is therefore likely to be partly or entirely from public sources, particularly in cases where a significant organizational gap exists between the country and the market leader. The financing instruments can however vary widely, including import protection, export subsidies, subsidized credit and other forms of interventions that change relative prices and reduce or remove the losses of the learning company. However, while some level of public co-financing may be necessary, appropriate governance conditions are also required to ensure high effort. The outcome depends on the details of the financing instrument and the enforceability of the conditions critical for the success of that instrument. Enforceability depends on the governance capabilities of the relevant public agencies and the holding power of the organizations involved in the financing arrangement to resist enforcement. An important determinant of enforceability is therefore the macro-level distribution of power between firms, political organizations and enforcement agencies of different types, and we call this the *political settlement* (Khan 1995, 2010).

Our understanding of industrial policy has been influenced by the experience of countries like South Korea where centrally

allocated learning rents achieved the rapid development of technological and organizational capabilities in the 1960s and 1970s. For a variety of historical reasons, East Asian states were untypical because their political settlements allowed the enforcement of tough conditions on domestic firms receiving support (Khan 2009; Khan and Blankenburg 2009). The financing provided to the *chaebol* through low interest loans, protected domestic markets and export subsidies came with conditions, for instance for achieving export targets. These conditions ensured high levels of effort because the enforcement of these conditions was credible. The state could not only withdraw subsidies; it could also re-allocate plants to different owners if they were more likely to enhance competitiveness.

Note that it was not ‘good governance’ that enabled the South Korean state to achieve rapid learning with its centralized industrial policy. The enforcement of performance conditions was not based on the enforcement of detailed formal contracts. Moreover, the withdrawal of subsidies or the re-allocation of plants usually did not respect property rights and the rule of law. Nor was corruption low in South Korea in the 1960s and 1970s. What mattered was that state agencies had the capacity to enforce conditions that it was in their interest to enforce, and that had the effect of ensuring high-effort learning (Khan 1996, 2000b). The conditions themselves were subject to negotiation and the industrial policy system as a whole evolved as state agencies discovered and developed their enforcement capabilities. What is distinctive here is that firms discovered that subsidies could be withdrawn and even their plants could be re-allocated if they failed to raise their productivity. In contrast, in Pakistan at around the same

period a similar system of centrally directed subsidies could not be matched with equivalent enforcement capabilities. The greater dispersion of power across political and bureaucratic organizations in this political settlement allowed firms to make alliances and satisficing rent-sharing agreements with particular political and state organizations to protect their rents (Khan 1999). Not surprisingly policy did not evolve in the direction of enforcing conditions on firms receiving support as state agencies and firms knew that setting such conditions would not be credible. As a result, technological and organizational capabilities developed much more slowly and many sectors did not achieve competitiveness at all.

Clearly, financiers of learning would like the highest level of effort to be forthcoming so that not only is there convergence but also convergence in the shortest possible time. In contrast, workers and managers engaged in learning may have mixed motives. They may understand that jobs and perhaps income growth may eventually depend on productivity growth. But since learning is costly in terms of effort and may result in adverse outcomes for individuals who fail, workers and managers have an individual interest to free ride on the effort of others, which can lead them to distort true information about their own levels of effort. They may also articulate a collective interest to pursue a more preferable learning path by insisting that the government or financiers continue to finance the learning over a longer period. These individual or collective strategies can extend the period of loss financing beyond the period that is acceptable to public or private financiers and may also make the learning exercise unviable as productivity growth is also happening in more advanced countries. In extreme cases,

such as the low effort trajectory shown in Figure 6, the result may be that financiers are stuck in a situation of permanent loss making and the project has to be eventually abandoned with significant losses. Alternatively, financiers may suspect that this will be the case and the investment will not be forthcoming in the first place.

Since in the long run it is plausible to argue that high levels of effort would have potentially benefited all participants and society, there is a contracting failure here that can be described as a failure of credible ‘contracting’ between investors and the firm engaged in learning. The problem is therefore not necessarily one of an inadequate rule of law and the insufficient enforcement of formal contracts in courts, but the more general political economy that prevents the commitment of sufficiently high levels of effort by different agents engaged in the learning exercise. The underlying institutional failure here is similar to principal-agent problems that can result in breakdowns in credit markets and result in inadequate investment (Stiglitz and Weiss 1981; Shleifer and Vishny 1997). However, the problems here refer to a wider range of issues than the asymmetric information literature on monitoring or credit contracting failures normally addresses. In particular, we want to highlight the issues of enforcing discipline on the recipients of support in the context of particular political settlements. The broad ‘variables’ that are likely to affect the level of effort are listed in eq. [12]:

$$e = f(FI, GA, FS, PS) \quad [12]$$

The learning effort e is defined as the intensity with which learning is carried out, measured by the pace of experimentation and trials within the production process. The higher

the level of effort, the faster the movement up the competitiveness ladder, as Figure 6 shows. *FI* is the specific *financing instrument* through which the learning is to be financed. The financing instrument is a micro-level institution because it defines the rules for a particular type of financing. These ‘rules’ define who contributes what, the expectations of the different parties, and the rules to be followed if expectations are not met. Different financing instruments have design features that aim to compel high levels of effort while sharing risks and returns in ways that all parties find acceptable. The other three variables define the context in which these financing instruments are located and are components of the macro-level political settlement.

GA describes the characteristics of the *governance agencies* charged with monitoring and enforcing the contracts underpinning the financing instrument. Governance agencies are bureaucratic organizations that are part of the bureaucratic subsystem of a political settlement. The enforcement of the rules implicit in each instrument can vary widely depending on the formal and informal enforcement capabilities of the bureaucratic agencies responsible for their enforcement.

FS is the *firm structure* within which the learning is being organized, and refers to characteristics of the firm(s) including size, age and internal organization, and the type of market in which it operates. The firms that are involved in the catching up process are economic organizations that are part of the economic subsystem of a political settlement.

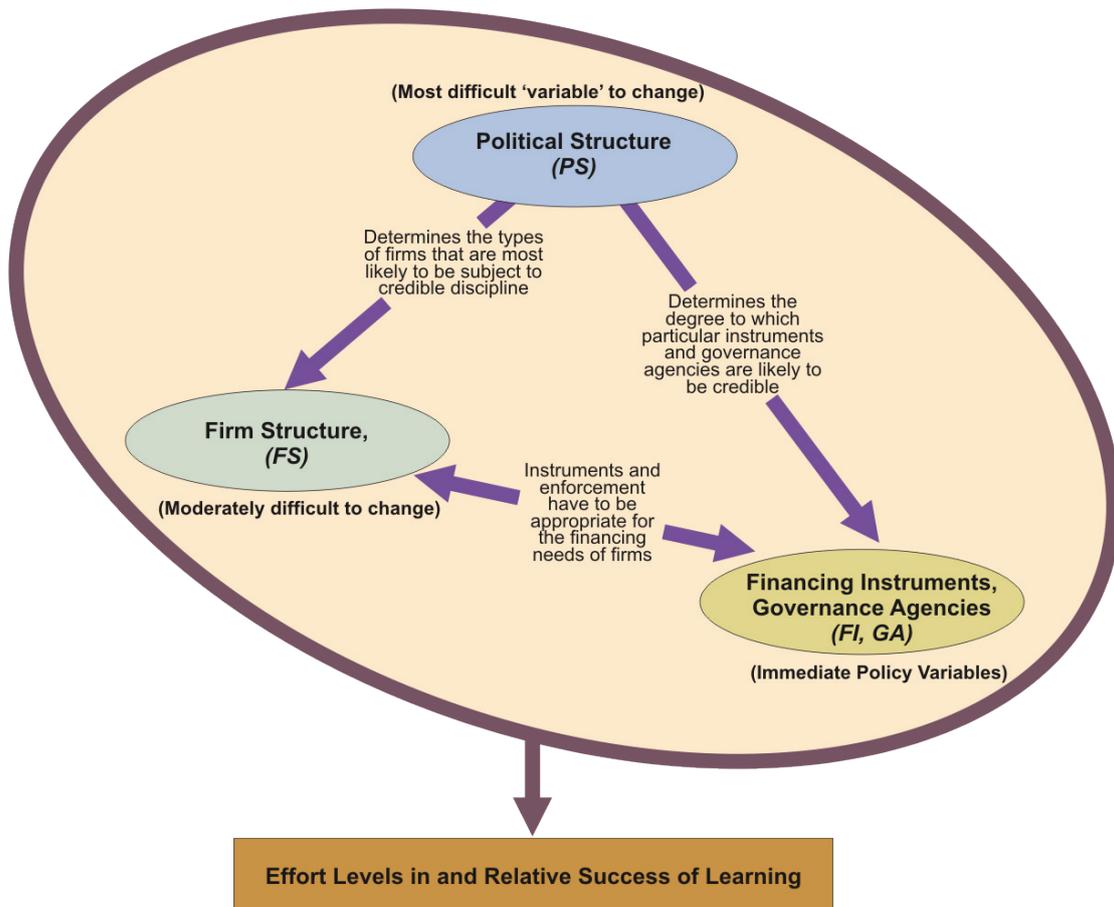
PS describes relevant characteristics of the *political structure*, in particular the distribution of power across political organizations in the political subsystem of the political settlement.

The function f allows interactions between these variables so that the effect of any variable can depend on the ‘value’ of the other variables in a non-linear way.

The likely interdependence of the last three variables (describing aspects of the macro political settlement) and a particular financing instrument is shown in Figure 7. From a policy perspective, it is also important to distinguish between variables that are difficult to change and which can therefore only be the targets of policy in the long term, and variables that are easier to change. The variables that are most difficult to change are best treated as ‘exogenous’

and policy is likely to have to accept them as ‘given’ in the medium term. In Figure 7, the political structure, PS , appears at the top as it is likely to be the ‘variable’ that is most difficult to change. However, even the political structure can of course change as a result of ‘political’ policy, for instance through the organization of new political coalitions or movements. Indeed, if the political structure is very unfavourable for overcoming growth constraints, the only meaningful policy may be a process of political reorganization. Of course, this is only a task that political organizations with legitimate leaderships can hope to achieve.

Figure 7. The Interdependence of Variables Determining Effort



Next in terms of difficulty of changing is the firm structure variable, *FS*. This can be affected by policy (by selecting particular groups of firms or sectors for support) but it may be difficult to change this rapidly. Therefore, the variables that are usually the most direct targets for policy are the financing instruments, *FI*, and the associated governance agencies, *GA*. However, both may be difficult to change if the existing structure of instruments and governance agencies (bureaucratic organizations) are in an operational equilibrium that satisfies powerful economic and political organizations. Nevertheless, in most cases, it is likely to be relatively easier to affect these variables than the others. However, the most important point from our perspective is that the most appropriate financing instruments and associated governance agencies cannot be identified without at least identifying the constraints set by the other variables even if those variables cannot be easily changed. The former policy variables are unlikely to be ‘separable’, meaning that it is unlikely that ‘good financing instruments’ or ‘effective governance agencies’ can be identified independently of a macro political settlement in which they are to be located.

The most important interdependencies between these variables are shown in Figure 7. The political structure describing the configuration of political organizations describes the operational equilibrium in the political system. This has important implications for the other variables. The cohesiveness or fragmentation of political organizations determines the ease with which economic organizations can protect their interests, even if these damage the collective benefit. The time horizon and enforcement capabilities of political organizations are directly relevant because if powerful political organizations

feel that the distribution of benefits from particular institutions is unacceptable, formal or informal modifications are likely to follow. And finally, the competition between political organizations can affect the coordination and enforcement capabilities of bureaucratic organizations. The effect of the formal financing instrument can therefore depend not only on its formal details but also on how its enforcement is modified. Economic organizations that are affected may have both the incentive and the holding power to modify the implementation of these institutions, indirectly with the assistance of political organizations. Governance agencies may also have a limited ability to enforce important aspects of the instrument because of weak capabilities, or because these organizations work under and with political organizations that may have other goals.

A successful learning strategy requires an iterative search across feasible changes in variables to find a combination of variables that is both feasible *and* likely to achieve moderate to high levels of effort, even if in a restricted subset of firms and sectors. We will see later that some of these interdependencies can explain why particular types of learning processes worked in particular contexts but not in others.

Financing Instruments

Learning can be financed through a variety of financing instruments. Financing instruments are institutional rules and the question is whether the efficacy of a particular financing institution can be assessed independently, regardless of the context defined by the other variables in eq. [11]. Each financing instrument implicitly defines rules of contribution and reward and therefore the incentives and responsibilities of the different participants in

the learning process. Learning effort is likely to be maximized if the individuals putting in the effort gain significantly from their effort or suffer potential losses if they fail to put in effort. But effort will only be financed if financiers also get a return. In team production where large numbers of people have to cooperate, sustaining high levels of effort is a challenge. Supervision and coordination at different levels become important because individuals can attempt to conceal their levels of effort. Sustaining effort may require supervision, and incentives for those supervising the effort, for instance by making them 'residual claimants' (Alchian and Demsetz 1972). But even this may not be sufficient unless the residual claimants also have the effective authority to impose discipline on team members. The residual claimant model describes in a partial way the basic 'capitalist' firm and its underlying property rights. It is partial because it underplays the significance of the political power that gives owners the effective authority to carry out disciplining functions.

In early developers, compulsions for high levels of effort and labour discipline were based on a configuration of property rights described as 'capitalist'. Capitalist rights define a class of asset owners (residual claimants) and a class of property-less workers who are compelled to accept workplace discipline. This configuration of property rights was sufficient to ensure productivity growth in early developers who could grow through incremental innovations in products and processes. As technology leaders, the early capitalist developers had to innovate, but they did not have to achieve significant jumps in their productivity through learning to become globally competitive.

The learning requirements of contemporary (late) development are different. Firms

do not have to innovate to the same extent, but are faced with a massive gap between their initial technological capabilities and the minimum required to produce anything in global competition. An important consequence of the catching-up problem is that 'capitalist' property rights are no longer sufficient for ensuring effort. Contemporary late developers need to organize and finance learning-by-doing to learn to use technologies far in advance of their existing capabilities. This now requires loss financing for entry into new sectors and technologies, and often requires financing by outside investors, including the state. More complex financing instruments and complementary governance structures need to emerge at a much earlier stage of development. It also follows that more complex systems of incentives and compulsions to ensure effort are required at a much earlier stage.

In theory, learning could still be financed by owner-entrepreneurs investing in their own firm. For instance, an owner-entrepreneur can accept a longer period of losses to set up in a higher quality sector. This is no different from any other investment, where the entrepreneur temporarily accepts low profits to achieve higher profits later. The only difference is that here the investment is in the acquisition of tacit knowledge. As the owner is the residual claimant, there are strong incentives to monitor effort to reduce the period of loss making. This case is closest to the simple capitalist firm with its strong incentives and compulsions for sustaining effort. Whether high levels of effort can be sustained in this case is likely to depend on exogenous political factors that determine the extent to which owners can enforce discipline on their workforce, and social and political factors determining collective discipline, cooperation and trust (Leibenstein 1982).

But owner-financed learning is likely to be relatively rare given the long periods of learning required and the uncertainty of ensuring effort in new products. The typical developing country entrepreneur lacks technological capabilities and the learning process therefore involves learning-by-doing by the entrepreneur. There is therefore a high degree of uncertainty in the success of the enterprise and in most cases the risk-return profile is too adverse to attract the sole investor. There is also likely to be a significant gap between the resource base of the typical entrepreneur in a developing country and the investments required to acquire machinery and finance periods of loss making of uncertain length. The risks and the financing may both be beyond the capacities of most individuals attempting to become entrepreneurs in a developing country. Therefore successful development is likely to be associated with more complex 'financing instruments' where the entrepreneur does not directly provide the entire finance but raises it in different ways.

If the entrepreneur borrows from a bank with debt backed by collateral, the incentives could be quite similar to the first case. If the bank has the power to sell collateral in case of non-performance, the entrepreneur bears all the risk of learning. For large investments or new technologies, where there is a chance of failure despite the best effort of the entrepreneur, investment on these terms is unlikely. But banks in many developing countries are unlikely to have effective powers to realize collateral and the weak compulsions on the entrepreneur can result in *low* effort and potential losses for banks. If banks know this, they in turn may be unlikely to lend for new technologies or to new entrepreneurs. If the financing comes from equity investors or other investors outside the firm, standard principal-agent problems emerge. Will the

manager put in sufficient effort; will workers accept the discipline that managers try to impose on them under these circumstances?

More complex issues arise when financing comes from the state. This can take various instrumental forms, ranging from tax breaks, low interest credit, subsidized inputs, subsidized utilities or infrastructure, export subsidies, or the protection of domestic markets. In theory, it should be possible to devise financing instruments that allow periods of learning to be financed with strong compulsions for rapid productivity growth. For instance, the instrument could be designed to progressively increase exposure to competitive international prices by announcing *ex ante* the rate at which the level of export subsidy or the level of protection of domestic markets will be reduced.

Governance Agencies

Financing instruments can be enforced with different degrees of success and may also be informally modified in different ways in the typical clientelist political settlement. A financing instrument may appear to make sense seen as a formal contract because it may allocate incentives and compulsions, rewards and penalties in an appropriate way. But the financing instrument can only be effective if there are bureaucratic organizations that can serve as governance agencies in terms of enforcing this contract. The capabilities of the bureaucratic organizations and their location within a specific political settlement that may constrain or enable the enforcement of particular institutions can therefore play an important role in explaining the performance of particular institutions. The bureaucratic organization that is relevant depends on the financing instrument. For instance, if the financing for learning is provided through

export subsidies, the compulsion on effort depends on an institutional rule that export subsidies will be reduced over time. This is only likely to be credible if the agency responsible for managing subsidies can do so without pressure from firms and their allied political organizations who may want to change this policy in the future. This could be the finance ministry or the industries ministry. If the loss financing is based on credit from industrial banks, the relevant organizations operating as governance agencies are the banks and other agencies like courts and arbitration bodies that they rely on for enforcement. Do they collectively have the capabilities to monitor loans effectively; do they have the power to withdraw loans if firms are failing? If the loss financing is organized through subsidies, the relevant bureaucratic organizations are those responsible for administering the subsidies. Do they have capabilities for monitoring performance and withdrawing the subsidies if necessary?

In an owner-managed firm, if learning is financed by owners, the enforcement of learning effort is largely a matter internal to the firm. Loss financing could take the form of owners accepting a lower mark-up or a loss before the project becomes profitable. The enforcement of effort in this case is indistinguishable from 'normal' conflicts over discipline and effort within a capitalist firm. The governance organizations relevant here would be formal bureaucratic organizations regulating and enforcing labour contracts, or contracts between owners and firm managers as third party enforcers. In the 'good governance' literature, contract enforcement and the rule of law are considered to be necessary and sufficient capabilities for achieving growth (Acemoglu, et al. 2004; Khan 2007). The assumption is that with sufficiently robust contract enforcement, firms looking for

financing for their internal learning will be able to raise it in the market. In theory this is a plausible claim, in practice there are no examples of developing countries that have successfully improved contract enforcement to the extent that additional policies for financing learning are no longer required.

Firm Structure

The firm structure describes the distribution of economic organizations in the economic subsystem. The degree to which effort can be enforced is likely to depend on the internal organization of firms, and on the structure of economic organizations in the market. We have already seen that effort is more likely to be forthcoming in firms where owners are investors and they control the firm. This case comes closest to the classical model of a capitalist firm driving productivity growth (Alchian and Demsetz 1972; Wood 2002). The ideal type of capitalist firm has a number of characteristics that ensure that it can mobilize high levels of effort. First, it has strong internal hierarchies and a workforce disciplined by a competitive labour market (possibly with a reserve army of unemployed labour creating a credible threat of replacement in case of low effort). Secondly, the theoretical capitalist firm has significant retained profits giving it the financial strength to invest in itself and the incentive to protect its own capital. Thirdly, the theoretical capitalist firm already has the capability to use its technology and is not facing an indeterminate learning period. Finally, the ideal capitalist firm analysed in textbooks is not individually politically connected or powerful, though the class of capitalist firms may collectively have significant holding power. This means that the ideal-type capitalist firm does not have the capacity to override contracts with external investors

or the state using political connections and power, but does have the power to ensure that property rights and the rule of law are in general well enforced. The real capitalist firm may significantly differ in some or all of these respects, but the differences are particularly important in developing countries, with significant implications for the effort expected in a context where outside investors invest in learning.

Internal hierarchies are unlikely to be strong in many firms in developing countries. Firms with strong internal hierarchies are likely to be older more established firms where employees, particularly at managerial levels, have large investments in firm-specific career structures. These employees stand to lose their investments and their career prospects if the firm collapses, and are likely to put in effort in learning and experimenting with new technologies when new investments take place. Newer firms that are skill-intensive and where the production team has high human capital are also likely to be good at organizing high levels of effort, particularly if the team leaders also own the firm. Firms engaged in software development in developing countries are an example. In contrast, start-up firms using conventional technologies in developing countries are likely to face significant problems with their internal organization of effort, slowing down their learning process. Secondly, internal finance is likely to be significant only in well-established and larger firms. The owners are likely to have a greater incentive in ensuring effort if they have committed more of their own money in internal financing. On the other hand, most firms in developing countries are likely to require significant outside finance, diluting the incentives owners have to put in high levels of effort in the absence of effective governance by external agencies.

Thirdly, by definition, most firms in developing countries do not have high enough levels of technological and entrepreneurial capabilities to be competitive in the qualities that they want to produce. This is a general problem, not related to the problem of firms trying to produce products that are too sophisticated for them. There is a gap between existing capabilities of economic organizations and the level required to achieve competitiveness for almost all quality levels, though this gap is higher for more sophisticated products and qualities. Most start-up firms also have to spend a considerable amount of time to learn how to learn before they actually start learning (Stiglitz 1987). Finally, real world firms are likely to have strong political connections and indeed many firms may be set up by entrepreneurs closely connected to politics, particularly in developing countries. Alternatively, entrepreneurs are likely to patronize politicians, providing the owners with significant political power to resist or influence the enforcement activities of external agencies. Older, larger and well-established firms are more likely to be well-connected to different political organizations and it may be difficult to discipline them in a context where external loss financing is coming from instruments controlled by the state.

These considerations mean that external financiers of learning have to look at a complex range of issues in determining which types of firms, products and financing instruments are more likely to result in competitiveness through effective learning-by-doing. Large economic organizations may have greater technological capabilities, better internal discipline and are perhaps able to commit more of their own finances. But they may also have oligopolistic political power based on close connections with particular political organizations that makes it difficult

to impose credible threats on them to enforce effort. Given the interdependence of political and technological factors determining effort and efficiency, it is not surprising that the characteristics of the efficient firm varies significantly across countries (Whitley 1992).

For instance, both Pakistan and South Korea in the 1960s assisted large domestic conglomerates to acquire and learn new technologies and move into export markets, using similar financing instruments like subsidized credits, import protection and export subsidies. However, effective compulsions for high levels of effort for firms of this type could not be achieved in Pakistan but were achieved in South Korea. To a significant extent this was because large conglomerates in Pakistan acquired the political capacity to protect their rents from threats of withdrawal in a way that South Korean *chaebols* could not. In Taiwan, a large-firm strategy may also have failed because such firms would be owned by local Taiwanese entrepreneurs. The immigrant political leadership of the Kuomintang (KMT) in the 1950s and 1960s may not have had the political authority to stand up to powerful locally owned conglomerates so early in the development process. Fortunately for Taiwan, government strategies of technology acquisition initially focused on supporting smaller firms in high-technology sectors, either by accident or design. As a result, the Taiwanese state's ability to enforce discipline was not politically constrained as it otherwise might have been.

The interesting counterfactual is whether countries like Pakistan and India might have fared better if they had designed support schemes for smaller firms that did not enjoy strong political backing rather than the well-connected firms that their policies actually supported. Financing learning in politically well-connected firms generally failed because the latter were able to protect their

rents politically and thereby lost the incentive to put in high levels of effort in learning. In the 1960s, industrial policies in India and Pakistan used different financing instruments (export subsidies, import protection, subsidized credit, licensing of investments) to provide subsidies for supporting learning. But the recipients were generally large well-connected firms that could protect their subsidies from the threat of withdrawal by allying with powerful political organizations. The low likelihood of subsidy withdrawal in turn resulted in low levels of effort in learning. In Pakistan the primary recipients of subsidies were a small number of large holding companies popularly known as the 'twenty-two families' while in India the biggest beneficiaries of the licensing regime were the big business houses (Wade 1988; Amsden 1989; Wade 1990; Whitley 1992; Khan 1999; Khan and Blankenburg 2009).

Of course, in many product and quality lines, scale economies may rule out a strategy based on promoting a large number of relatively small firms. When it is unavoidable for technology acquisition strategies to work with economic organizations with market and political power, the learning strategies have to be designed appropriately. Bureaucratic organizations entrusted with enforcement have to be sufficiently strong in terms of their capabilities and even more so in terms of the political support they have for preventing the big players from resisting discipline. In some developing countries the answer may be to delegate the governance of the financing to external agencies like industrial banks. If the management of the industrial bank is capable and committed to competitiveness, and less vulnerable to capture by political factions, the credibility of withdrawal may be high enough to enable learning to be financed in sectors with scale economies.

The Political Structure

The political structure describes the operational equilibrium in the political subsystem based on the distribution of power between political organizations and the political institutions regulating their interaction and competition (Khan 1995, 2010). The political structure affects all other subsystems but is also the most difficult to change in terms of policy interventions. Differences in underlying political structures can explain why apparently *similar* governance agencies, firm structures and financing instruments have resulted in very *different* outcomes across countries. For instance, South Korea and Pakistan in the 1960s both used fairly similar strategies of providing long-term bank credit to large conglomerates involved in capability development in export-oriented sectors. The organization of the bureaucracy regulating these interventions was also similar, with coordination and monitoring organized by planning agencies operating under the President.

However, the outcomes were significantly different because the distribution of organizational power in their political systems had significant implications for the enforcement of the conditions required for generating high levels of effort (Khan 1999). Since the design of the financing instruments was similar in these two cases, the major difference was in their monitoring and enforcement. An attempt to enforce these financing instruments in Pakistan to the extent that they could be in South Korea, threatened to result in a steep decline in stability and in unacceptable political costs given the protection provided to economic organizations by organizations within the political structure. The operational equilibrium in Pakistan therefore required a significant modification in the operation of important

financing instruments. The result was that the incentives and compulsions to put in high levels of effort were seriously attenuated. The effects on effort in turn resulted in a slow growth in competitiveness and ultimately the abandonment of the strategy.

Equally, differences in political structures across countries can help to explain why effective financing instruments and governance agencies responsible for their enforcement have *differed* significantly across *similarly successful* catching-up countries. South Korea, Taiwan, China and Malaysia demonstrate significant differences in their catching-up strategies in terms of how they financed learning, the agencies enforcing and managing the financing strategies, and the types of firms and sectors supported. Success required that the ensemble of variables determining effort in eq. [11] were consistent in terms of the configuration of political power so that the mechanisms for imposing compulsions required for high effort were credible and enforceable (Khan 2000b, 2008b; Khan and Blankenburg 2009).

Interdependencies Affecting Policies for Learning

Effective learning strategies require as a precondition an ensemble of conditions to ensure high levels of effort. This is not always easy to achieve, and the failure to address these problems has been responsible for the abandonment of many learning and technology acquisition strategies across developing countries. Effective policies have been difficult to devise because the variables in eq. [11] determining levels of effort are *interdependent* and so their effects are likely to be non-linear. This means that the best instrument for financing may depend on the type of political settlement that a

country has inherited. As a result, there is no single set of financing and governance arrangements that characterizes all successful catching-up countries. It also follows that it is not possible to simply imitate the policy or governance structures of more successful developers.

Given this interdependence, there are likely to be non-linearities in the relationships between these variables and effort. A financing arrangement that would result in an acceleration of learning in a particular political settlement and applied to a particular structure of firms may have a different effect in another political settlement or applied to a different structure of firms. For instance, historical evidence shows that financing learning-by-doing through conditional export subsidies to large firms may work very well if the political relationship between firms and governments allows subsidy withdrawal to be credible. But export subsidies to large firms may be a poor way of delivering financing if large firms have powerful political friends who can protect them from state attempts at subsidy withdrawal.

This means that the effects of institutions and governance arrangements on the pace of learning in particular countries can only be identified by looking at possible interactions between (at least) the variables identified in Figure 7. Historical case studies support this argument by demonstrating that the efficacy of particular instruments and governance arrangements have varied across countries according to their underlying political settlements (Khan 1999, 2000b; Khan and Blankenburg 2009). While almost every developing country attempted some form of state-led catching up, their relative success depended very critically on combinations of variables that determined the level of effort in the catching-up exercise.

9. THE GARMENTS TAKEOFF

When Bangladesh became independent in 1971, there was hardly any Bengali-owned industry, and the little that had developed was destroyed by the sweeping nationalizations of the 'socialist' regime. By 1974-5, the dominant economic organizations were public sector corporations that included almost the entire manufacturing and industrial base. 92 percent of industrial assets were nationalized by 1975 (Sobhan and Ahmad 1980: Table 10.1; K. A. S. Murshid and Sobhan 1987: 3-4). The public sector corporations were largely inefficient and served as venues for job creation for the clients of the regime and enabled political accumulation based on price fixing, the political allocation of contracts and even outright theft. Bengali economic organizations in the private sector were for a while excluded from large-scale industry, and concentrated on trading and acquiring government contracts for infrastructure construction. These activities were lucrative because political connections resulted in very attractive terms and the quality of the output was not closely monitored. The result was a significant and rapid accumulation of money in new hands.

Processes of accumulation based on the direct and indirect exercise of power can be described as 'primitive accumulation'. The independence of Bangladesh created opportunities for primitive accumulation on an unprecedented scale. It created a new moneyed class that was different from the older but tiny Bengali industrial bourgeoisie that had developed during the Pakistan period. The beneficiaries of this primitive accumulation were political entrepreneurs closely connected with the public sector and the new private sector entrepreneurs based on trade and public contracts who had close political

links with the dominant party. By the late-1970s Bangladesh had hundreds if not thousands of politically connected entrepreneurs who had accumulated relatively significant blocks of capital and who had become as a result potential investors who could eventually hope to be small to medium capitalists. These individuals began to look around for simple technologies to invest in, if only to preserve their capital. It was at this stage that a lucky accident involving internationally created rents had a significant impact on Bangladesh's prospects.

The growth of the ready-made garments industry in Bangladesh has often been presented as a vindication of the success of free market policies combined with the virtual absence of labour market protections in Bangladesh. The overthrow of the Awami League in 1975 allowed a reversal of the policies of socialism. In the years that followed, both liberalization and privatization gradually followed. But in fact investment even in the simplest of technologies involves significant risks for domestic investors when these technologies are new to the economy. The machines may be relatively simple and the formal skills of the potential workers may appear to be more than appropriate. But setting up a factory that can achieve international quality standards, meet orders on time, and manage internal timekeeping and waste management to achieve global competitiveness is a different order of requirements altogether. The time it will take a firm to achieve global competitiveness is not known, since this depends on the time the production team takes to acquire the tacit knowledge required to operate the factory competitively. Nor is it viable for foreign firms to invest and finance learning-by-doing in low-margin, low-technology sectors simply on the promise of future profits. The future profits are unlikely to

be high enough in most cases to compensate for the risks. This is of course why global production does not rapidly shift to the poorest countries. But a combination of factors made this transfer of technology feasible for Bangladesh in the early 1980s.

The takeoff of the garments industry is important because it demonstrates that liberalized product and labour markets are not sufficient for achieving a globally competitive industry. The takeoff also required a set of 'financing instruments' that were governed by different types of agencies, and located in a specific political context, which collectively ensured that the financing both allowed learning-by-doing to begin *and* also ensured that high levels of effort would be put in. Indeed, an important financing instrument that enabled this learning-by-doing to happen in Bangladesh was based on a violation of free market principles. This part of the 'financing' was created by the Multi-Fibre Arrangement (MFA) that the USA negotiated to help its own garments and textiles industry in 1973, administered by the General Agreement on Tariffs and Trade (GATT). MFA set bilaterally negotiated quotas on established developing countries exporting textiles and clothing to protect the US garment and textile industry. As a concession to global opinion, the MFA did not put quotas on a number of least developed countries, like Bangladesh, which did not have any garment industry at the time and were therefore no threat to the US (Goto 1989). For Bangladesh, it was fortuitous that just at that time a potential investor class was emerging. These investors did not have the requisite tacit knowledge to be globally competitive in garments production despite the low wages in Bangladesh. The MFA created 'quota rents' for countries like Bangladesh and thereby helped to finance a period of learning-by-doing. Once estab-

lished garments exporters like South Korea hit their quotas, newcomers could sell their products at a slightly higher price, thereby enjoying a 'quota rent'. The quota rent served as a partial financing instrument that temporarily reduced the cost of financing learning in the Bangladesh garments industry. And finally, the authoritarian clientelism characterizing the ruling coalition of the time enabled a good enough growth-stability trade-off for the introduction of a few critical domestic institutional innovations required for the take-off of the garments industry.

The MFA created a serious problem for established producers of garments in countries like South Korea who suddenly found themselves quantity-constrained. They had a strong incentive to relocate production to countries that did not have quotas so that at least their textile output could be marketed. But developing countries that did not already have a textile and clothing sector were relatively poor countries that lacked the tacit knowledge to set up competitive production even though their wages were much lower. Moreover, they suffered from contracting failures that affected the financing of acquisition and learning. To attract investors from more advanced countries who wanted to relocate, developing countries had to offer something more than just their quota-free status. After all, many poor countries were quota-free, but only a handful benefited from MFA. Bangladesh was one of them and its success has to be explained in terms of specific mechanisms through which these contracting failures were addressed.

By the late 1970s, primitive accumulation had created numerous potential investors for a sector like garments where the minimum efficient scale of investment was at most in the hundreds of thousands or low millions of dollars. Technology transfer came about in

Bangladesh through collaboration between a retired Bangladeshi civil servant turned entrepreneur, Nurul Quader Khan, and a South Korean multinational, Daewoo. The Bangladeshi entrepreneur set up Desh Garments in 1979, acquiring the land and machinery with its own capital and arranging government support for the requisite institutional changes required to support a potentially risky investment in a new area. The South Korean multinational advanced the cost of training a critical number of supervisors and managers, but this advance was effectively a loan that was to be repaid in the form of a claim of a percentage share of future exports. Daewoo's up-front investment was to host the visiting Bangladeshis at their plant in Busan and train them in modern garment manufacturing processes. Effectively, what was being transferred here was the tacit knowledge of setting up the plant, managing quality control, minimizing wastage of raw materials, managing time-keeping and all the other aspects of factory production that determine the difference between profit and loss in a competitive world where every quality of garments has an international price that is predetermined.

The role of the quota rent was to reduce the competitiveness gap that a new entrant like Bangladesh would have to immediately overcome. But the quota rent was clearly not sufficient for Desh to simply set up its factory and start production. Further investments in learning-by-doing were necessary and these were organized by the private contract between Desh and Daewoo. However, the quota rent reduced the mountain that Desh had to climb and made it more credible that the Bangladeshi company would be able to learn enough to be able to begin paying back Daewoo's up-front investment relatively rapidly. Moreover, the fact that a retired civil servant from Bangladesh could sit across the table

from a global multinational and offer credible equity to set up a collaborative venture can only be understood if we remember the primitive accumulation that the country had just gone through. Daewoo's calculations were straightforward. Bangladesh's access to the US market through MFA was an attractive business proposition which would enable them to market their textile output. But they would probably not have been willing to take the risk of participating in a Bangladeshi collaboration without a number of factors that reduced the risk of failure.

The equity invested by the Bangladeshi firm came from internal financing by the investor and provided commitment that the top management at least would put in high levels of effort in raising competitiveness rapidly. This reduced the institutional requirement of enforcing contracts between outside investors and stakeholders within the firm who would be expected to put in high levels of effort in learning. No less important was the explicit support provided by President Zia ur Rahman to the project. President Zia's support had credibility because it was his initiative to link up Nurul Quader with Kim Woo-Choong, the chairman of Daewoo. His support assured the South Koreans that unexpected institutional problems would be dealt with or at least addressed. This political support ensured that relatively small but critical institutional innovations like the back-to-back letter of credit (which allowed Bangladeshi producers to borrow from local banks to finance their imports of raw materials using their export orders as collateral) and the bonded warehouse (which allowed complex customs duties on imported inputs to be avoided) were quickly introduced. The president had sufficient control over the (authoritarian clientelist) ruling coalition to implement discrete institutional changes like

these without significant modification or cost in terms of political stability. Interestingly, the owner of Dosh Garments, Nurul Quader Khan was a civil servant who had made his money in the previous Awami League regime. Zia's objective in supporting him was clearly to develop the economy, not because he was a primary political client of his own party.

Dosh was remarkably successful. Between 1981 and 1987 its export value grew at an annual average of 90 percent (Rahman 2004). The learning and transfer of technology that was unleashed by this single project was remarkable. By the end of the 1980s, of the 130 people who were first trained by Dosh in Daewoo's factories in South Korea, 115 became *entrepreneurs* and set up their own garment firms (Rhee 1990: 341). This apparently did not do much damage to Dosh, whose output continued to grow at close to 100 percent per annum during this period. The loss the company suffered when it lost a manager was made up many times over by the high levels of effort that these individuals invested in the first place as a result of this implicit incentive. From virtually a zero base in 1980, by 2005 there were around 3,500 active firms in the garments sector employing upwards of 2 million people (World Bank 2005). Primitive accumulation continued to be an important source of entrepreneurial supply. In a survey carried out in 1993, 23 percent of garment factory owners responded that they had originally been civil servants or in the army (Quddus and Rashid 2000). We can assume that many others had close contacts with politics and had made their initial capital through political processes.

The rapid emergence of Bangladesh as a garment-exporting country is shown in Table 5. Exports grew at double digit rates for more than two decades. By the early 2000s, the sector accounted for around 70 percent of

Table 5. Bangladesh Garments: Growth Rates of Dollar Exports 1985-2006

Year	Woven	Knitwear	Total Garments Dollar Export Growth Rates
1985-1990			45.9
1990-1995			24.1
1995-2000			14.3
2000-2001			11.7
2001-2002	-7.1	-2.5	-5.7
2002-2003	4.3	13.3	7.2
2003-2004	8.6	29.9	15.8
2004-2005	1.7	31.3	12.9
2005-2006	13.5	35.4	23.1

Sources: (based on Mlachila and Yang 2004: Table 1; World Bank 2005: Table 1).

Bangladeshi exports. By 1985, such was the success of the Bangladesh garment industry that Ronald Reagan negotiated quotas for Bangladesh under the MFA (Rashid 2006). Bangladesh has continued to benefit from preferential treatment, particularly in European Union markets, but effectively, the first five years of quota protection were enough to trigger a major shift in the country's technological capabilities. By the 2000s the garments and textile sector in Bangladesh was globally competitive without the need for additional protections. Clearly, this was a case where an initial competitiveness gap was met by protection and financing of learning in a way that achieved eventual success and a globally competitive industry. The industry continued to grow through the global recession of 2008 as the lower end of the garments and textile industries gradually began to relocate to Bangladesh from China as Chinese wage costs and exchange rate appreciated in the late 2000s.

The rapid growth of the garments industry has meant that the share of manufacturing in GDP in Bangladesh had become comparable to that in India by the turn of the century. Indeed, the share of manufacturing in Bangladesh is higher than is expected given Bangladesh's overall economic characteristics (ADB 2007: 294). But the bulk of Bangladesh's manufacturing is labour-intensive and low-technology. Moreover, globally competitive production is almost entirely specialized in garments even three decades after the country's breakthrough in this sector. This is indicated by the fact that around 70 percent of the country's total export earnings still comes from the garments sector in the 2010s. Moreover, the challenge for the Bangladeshi garment industry is to move up the value chain as it continues to be dominated by the lower value-added segments that depend on low wages to be globally competitive.

The history of the first phase of the garments industry has important implications

for Bangladesh as it attempts to move higher up the value chain. Much of its growth so far has been at the lower ends, even though there is evidence of growing backward linkages and diversification. By 2005, roughly 45 percent of export value was value added in the domestic economy due to growing backward linkages in spinning, weaving, dyeing and accessories (Bhattacharya, et al. 2002; World Bank 2005; M. N. Ahmed and Hosain 2006). The story of the first phase of the garment industry's success tells us that contracting failures constraining learning were overcome through very specific policy and governance arrangements. The blocks of capital required for the next stage of upgrading are much larger, and primitive accumulation cannot be relied upon to provide these investments. A survey of the garment sector in 2007 revealed that the available terms of financing were an important constraint to technology upgrading in the sector (Khan 2008a). Banks were willing to lend, but the fixed return and collateral requirements meant that investors were only willing to borrow to invest in segments of garments they were already competitive in. They were deterred from investing in new sectors where they were not sure about the length of time learning would take. The sharing of risks and returns across a number of investors could in theory address this problem, but in the absence of an overall rule-following contracting structure, economic organizations could not credibly commit to reveal profits or pay dividends in the future, making these market solutions fail.

Our interpretation of the causes behind the rapid growth of the garment industry in Bangladesh casts doubts on the argument that Bangladesh's success was based on open markets, cheap labour and labour market flexibility. It is true that Bangladesh scores

higher than India on labour market flexibility (it is easier to fire workers compared to India) and indeed both Pakistan and Bangladesh often score higher than India on the overall ranking of 'Doing Business Conditions' of the World Bank. But the specific mechanisms through which the garment industry developed suggests that cheap and flexible labour by itself did not help Bangladesh much before the contracting failures constraining investment in the sector were overcome. Moreover, the persistence of cheap and flexible labour has not helped investment in the next stages of the value chain even though wages have remained low. The implication is that further movements up the value chain will depend on solving specific contracting failures. The break that was provided by the MFA cannot be relied on for other sectors or for moving up the value chain in garments and textiles. The Indian experience in automobiles and pharmaceuticals also suggests that if contracting failures impeding capability development and technology acquisition can be addressed, low wages and excessive labour market flexibility are not even necessary conditions for manufacturing success.

Contracting Failures and Institutional Solutions in the Garments Industry

The standard economic explanation for the breakthrough in garments is that this growth was based on comparative advantage and flexible labour markets in Bangladesh. But this is not entirely convincing. Why did Bangladesh's comparative advantage in labour-intensive industries not emerge before 1980? There do not appear to have been any significant labour market or other reforms exactly around that period. Nor did any other labour-intensive industries take off in quite

the same way. Clearly, there were contracting failures that had prevented the acquisition of technological capabilities even in the least technically sophisticated types of manufacturing like garments. It is widely recognized at least by economic historians that the MFA may have contributed in some way to relaxing some of these contracting failures, thereby allowing Bangladesh to enter this market. But what type of contracting failure did the MFA address? The answer to this question has significant policy implications for countries like Bangladesh if they want to devise policies to move into other sectors of manufacturing, labour-intensive or otherwise. In particular, can the experience of the Bangladesh garment industry under the MFA be fitted into the metaphor of 'discovery' suggested by Hausmann and Rodrik (2003)? Perhaps entrepreneurs had not invested in trials in new sectors fearing that their discovery rents would be lost if new entrants rushed in. In that case the role of the MFA may have been to reduce the cost of trials, resulting in discovery. The type of contracting failure that was solved is critical both for a proper analysis of what happened in this sector, but even more for designing institutional solutions that can help with the emergence of new sectors.

The discovery analysis of Hausmann and Rodrik suggests that investments in new sectors in developing countries are blocked because investors have to first invest to 'discover' the sectors in which the country has comparative advantage. However, they may not want to do this because any rents they may earn by discovering profitable sectors will be rapidly eaten away by imitators rushing in and pushing up wages. If this is the contracting failure constraining investments, it can be solved by governments subsidizing trials, so that the first investors do not face high risks which need to be compensated

by the promise of future rents. The problem with this apparently plausible explanation is that deeper reflection suggests that it is very unlikely that countries simply have a comparative advantage in some low-technology sectors and not others. Why should countries have such intrinsic capabilities of being more efficient in producing hats relative to bed sheets? Indeed, the MFA was not a fund that allowed many 'trials' to be organized through which Bangladeshi entrepreneurs discovered what the country was good at doing. The MFA created rents in just one sector, garments. It brought in just one South Korean company, Daewoo, in collaboration with one Bangladeshi entrepreneur who set up just one factory called Desh Garments in 1979. Everything followed from that. If this was really a case of a singular trial that discovered a huge latent capability in Bangladesh, it would truly be a case of incredibly good luck. The coincidence would be even more remarkable because somewhat earlier in its history other 'trials' were conducted in Bangladesh, often assisted by public policies of protection and subsidy. These ranged from protection and subsidies for production in moderate technology sectors like textiles and chemicals to low-technology sectors like leather products and agro-industries, but no other sector like garments emerged. Something rather special was going on in the singular trial organized by the Desh-Daewoo investment.

A more plausible explanation and analysis is possible, using our learning approach. The learning approach suggests that low-wage countries like Bangladesh could potentially engage in many different types of labour-intensive or low-technology activities and achieve global competitiveness. What constrains them is the absence of the appropriate tacit knowledge. The absorption of tacit knowledge requires investments in learning-

by-doing and while the learning is being absorbed, investors will not be making profits. The fundamental problem is that if sufficient *effort* is not put into the learning exercise, the investments in learning are wasted. The reason why other trials failed is because inadequate effort was put in. It is not plausible that Bangladeshis had no innate capabilities to produce any of those other labour-intensive products. It is more plausible that other sectors did not develop because appropriate financing arrangements for learning-by-doing were not set up in those sectors that also created strong incentives and compulsions for high levels of effort. So the really interesting question is: what was the structure of incentives and compulsions that ensured high levels of effort in this particular project?

The role of a partial public financing or risk sharing in the learning exercise is that without this, the risk facing private investors in sectors requiring learning may be too great. Nevertheless, as we have seen, if initial capabilities are high enough and effort can be assured, private financing of learning can well drive capability development. On the other hand, public financing of learning may fail and has often failed in the past, if effort is not forthcoming. The key determinant of success in the learning explanation is *learning effort*, not the source of the financing. Effort depends on the governance agencies and the broader conditions determining the enforcement of the different types of contractual arrangements through which the financing for learning is provided. This is very different from the discovery analysis, where public financing of discovery is important because the contracting failure stems from a positive externality that results in a loss of rents for the successful entrepreneur after a successful sector or capability has been discovered.

This does not mean there are no positive externalities in new start-ups, but in many technologies, these positive externalities are minor and need not, on their own, prevent investments. Compare the risks for the investor coming from the difficulty of ensuring high levels of effort with the potential losses that could follow as a result of positive externalities. The risk that follows from the difficulty of ensuring effort is that private financiers cannot predict *ex ante* how long it will take to achieve profitability. This is not because innate capabilities are not known, but rather because success in enforcing effort is difficult in most developing countries where investors typically cannot fully rely on either formal contracting or informal enforcement mechanisms. The more confidence investors have in their own abilities and in the relevant governance agencies that can enforce contracts, the less important the cost sharing with government becomes. We see strong evidence in support of this argument in the garment sector in Bangladesh.

The risk involved in learning is highest for the first investors because tacit knowledge is most difficult to adopt and adapt when it is not known locally. But once the tacit knowledge has been transferred to a locality, it becomes relatively easy for other producers and investors to understand the routines. Once the knowledge becomes 'local', subsequent investors take a lesser risk. The routines are now locally known and *can be observed in operation*, benchmarks of effort exist and one or two key personnel can even be poached from successful enterprises. The required learning becomes less and less risky and uncertainty about learning times reduces dramatically. One indication of the dramatic reduction of risk when tacit knowledge becomes 'local' is that local commercial banks suddenly become willing to lend because the required 'invest-

ment in learning' can now be more readily quantified. Yet the same banks may be very unwilling to play a 'developmental' role by coming forward to finance learning in sectors where the tacit knowledge does not exist locally. This is exactly what we observe with banking practices in the Bangladesh garments industry. These are positive externalities of the first successful learning exercise in the sector, but this knowledge is almost a public good because the loss to the first investor can be rather small, and too small to explain why investments do not happen in the first place. Again, there is strong evidence of this in the Bangladesh garments industry.

The real constraint on the first investors is that they take a big and unquantifiable risk because the transfer of the first tranche of tacit knowledge is most exposed to the uncertainty that existing institutional and contractual arrangements may fail to enforce adequate effort. The entry or otherwise of subsequent imitators has no plausible bearing on this calculation, even if minor positive externalities exist. Their appearance is not likely to have any significant effect on profits in labour surplus economies. The Desh-Daewoo investment performed a vital function for Bangladesh precisely because it successfully organized the critical *initial* transfer of tacit knowledge. The MFA helped critically in two ways, but the MFA alone cannot explain the success of the technology transfer process in terms of effort. First, the MFA reduced the requisite private loss financing by creating quota rents for Bangladesh. By imposing quotas on exports from more competitive countries, MFA allowed follower countries to sell at higher prices, once more competitive countries hit their quotas. This implicitly improved the competitiveness of follower countries like Bangladesh for as long as the quotas were in place. Secondly, the MFA cre-

ated compulsions for the South Koreans to actively seek to transfer some sites of production to countries like Bangladesh. Quotas on South Korean garments exports not only affected their garment industry but also their sales of fabrics and accessories that were indirectly exported through garments. If they could find alternative sites like Bangladesh, they would be able to keep more of their textile industries going. This was the context in which Daewoo was looking for partners in least-developed countries to develop a garments industry.

The MFA therefore created a 'public' subsidy for countries like Bangladesh, and incentives for some private foreign investment in learning as well. But all of this would have gone to waste if the firm that was set up failed to put in high levels of effort in learning. Without that, the subsidies for setting up garment firms would be no different from countless other subsidies that have been available for trials in other sectors. We would then have 'discovered' that Bangladesh cannot make garments either. From the perspective of a learning-based explanation of the success of the garment industry, the most critical issue therefore is to understand how high levels of effort were sustained to make this particular exercise a success. We will argue that this can be explained in terms of the features of the interactive variables identified as determinants of effort in Figure 7 and eq. [11].

The important features of the MFA experience in Bangladesh are summarized in Figure 8. The initial capabilities in the garments and textile sector were low in terms of what was required to achieve international competitiveness. There were of course some small-scale operations consistent with a low-technology garment industry going back many decades in Bangladesh, but there was nothing on a global scale. The MFA provided an implicit financ-

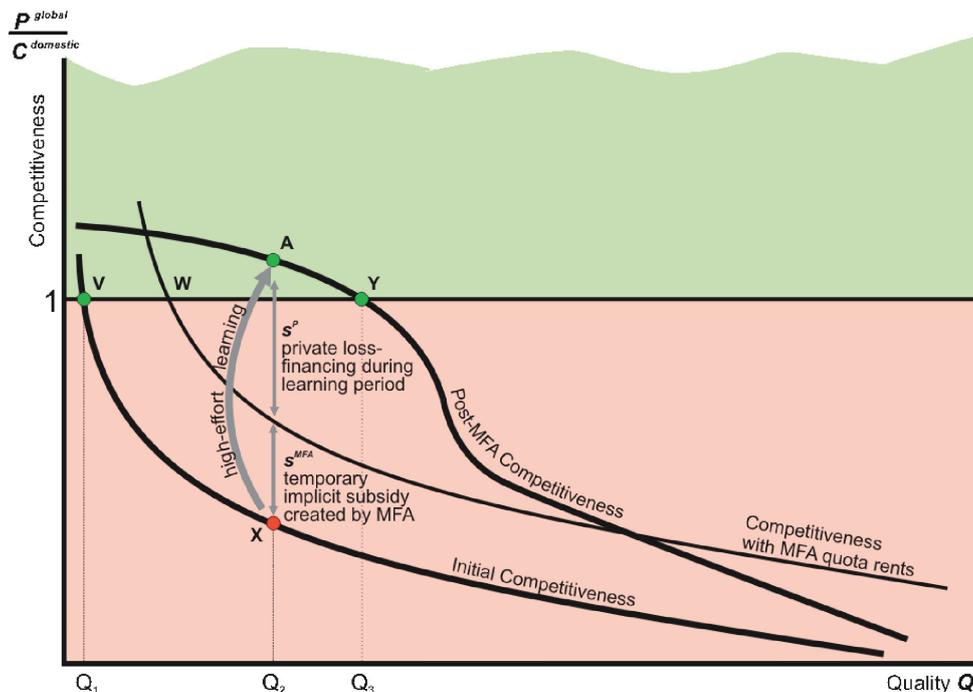
ing instrument for learning by raising global prices of qualities subject to quota. This temporarily raised the competitiveness of quota-free countries like Bangladesh, shown by the higher dotted competitiveness curve that Bangladesh enjoyed with its quota-free access to US markets. To simplify, we assume that quotas on more competitive garment producers were imposed for all qualities, and that prices for all qualities increased by the same factor. This is obviously not how MFA operated, but the simplified diagram captures key aspects of the story. The implication is that MFA provided a quota rent of s^{MFA} that could serve as temporary loss financing for firms engaged in learning how to produce quality Q_2 in Bangladesh.

The problem was that even with this improvement in competitiveness, garments operations did not immediately become viable. Tacit knowledge was still too low to enable production of quality Q_2 . We know this was

the case, because significant additional investments in learning had to be financed by the Desh-Daewoo partnership. This is shown in Figure 8 by an initial capabilities curve that is so low that the improvement in competitiveness with MFA would have allowed an improvement in qualities from V to a marginally better position at W, but not to Q_2 which we assume is the quality level required for mass export markets. For a significant improvement in prospects, private investment was required to raise capabilities to a globally competitive level at this level of quality. Indeed, all least developed countries enjoyed quota-free access to US markets under MFA but most did not experience export growth. Nevertheless, MFA clearly helped countries like Bangladesh by effectively reducing the competitiveness gap that needed to be bridged by learning financed by private investments.

The Desh-Daewoo partnership began production of quality Q_2 in Figure 8, which repre-

Figure 8. High-Effort Learning under the MFA in Bangladesh



sents the quality that could sell in mid-level retail outlets in the US and other global markets. This required a period of partial private loss financing (shown as s^P in the figure) *in addition to* the ‘public’ financing (of s^{MFA}) provided by the quota rent that was temporarily made available by the MFA. This private investment was organized by the extraordinary partnership between Desh and Daewoo described earlier. The characteristics of this contract and its enforcement are interesting because the result was a remarkably successful phase of learning that was in fact concluded faster than the partnership had initially estimated. The overall capabilities in the sector rapidly moved up, allowing not just competitive production of the qualities initially introduced by Desh, but the improvement of capabilities in this region very soon allowed the production to move to somewhat higher qualities like Q_3 , as well. Why was this investment so successful in achieving rapid learning?

Effort, Learning and the Success of Desh Garments

The Desh-Daewoo collaboration began in 1979. Desh effectively purchased learning from Daewoo, sending its future managers, supervisors, and some production-line workers to Daewoo’s Busan plant in South Korea to do the learning-by-doing on site in a working and competitive garments factory. Daewoo was also to assist in identifying the modern machinery that Desh would purchase, provide access to inputs like fabrics at world market prices and provide assistance with marketing the garments using its established marketing network. Daewoo would be making some up-front investments, including hosting and training the Bangladeshi visitors at Busan, but this would be repaid in the form of a royalty of three percent of sales for

the technical training and another five percent of sales for marketing (Rhee 1990). All investments in machinery, salaries and the project costs in Bangladesh were covered by Desh. Clearly, both sides were taking some risk for an appropriate share of the return. Fortunately, the incentives and compulsions implicit in these contractual arrangements and the degree to which they were enforceable ensured very high levels of effort being put in by both sides.

The collaboration was initially expected to last for five years, but so successful was the learning and technology transfer that Desh was able to cancel the collaborative agreement in 1981, after just one and a half years. Within a year the collaboration succeeded in transferring a large part of the requisite tacit knowledge required to actually produce garments using modern production techniques. The Bangladesh garments industry would not have succeeded if it had simply produced garments using existing capabilities under the protective barrier created by the MFA. The latter may have allowed Bangladesh to produce at the point W in Figure 8, but the removal of MFA would have resulted in the collapse of the industry. The fact that tacit knowledge was actually acquired and brought to the local economy is proved by the fact that *once the new production routines had been established and understood*, many new garments factories opened up in Bangladesh within two or three years and they gradually improved their product qualities beyond the initial levels. Indeed, so dramatic was the growth of the garments industry that the USA imposed quotas on Bangladesh in 1985 just a few years after Desh Garments actually began exporting. But very high growth rates continued beyond the new quota entitlements, proving that new competitive capabilities had been established.

The quotas imposed in 1985 on Bangladesh defined the quantities of different categories of garments that could be exported to the US without paying tariffs. These quotas were generous, but for a variety of reasons, many exporters were soon exporting outside the quota, and therefore without benefiting from the quota rent. This was sometimes because some producers were not part of the ‘in-group’ of the BGMEA, the Bangladesh Garments Manufacturers and Exporters Association, that was responsible for distributing the quota between different garments producers. In addition, quotas for popular lines were soon fully allocated so new producers could not have got an allocation anyway. Thus, within two or three years of the garment industry coming on stream, probably as little as one third of all producers were ‘quota-protected’. But growth continued rapidly. By the time the MFA was effectively removed in 2007, Bangladesh had a diversified garments industry that was engaged in some amount of backward and forward linkages as well. This evidence suggests that MFA was possibly only important for the first few major investments in the garments industry, but these investments were vital in achieving a significant transfer of know-how through learning-by-doing.

In terms of eq. [11] and the relationships between the variables suggested in Figure 7, we can identify a number of fortunate conditions that can help to explain the successful acquisition of technological capabilities by Desh and its transfer to the emerging Bangladesh garments sector. First, the ‘*financing instrument*’ involved in financing the learning-by-doing was a combination of a public ‘quota rent’ subsidy and private investment in learning, primarily on-site in Busan and subsequently on-site in Bangladesh. This co-financing of learning characterized not just the

Desh investment, but also the investments that were made by new entrant companies benefiting from MFA in other product lines in the months and years after Desh started production in Bangladesh. All of these companies were beneficiaries of quota rents and yet had to make relatively uncertain investments in learning to produce different types of garments to global standards. Co-financing in this form meant that the Bangladeshi investor had very strong incentives to put in high levels of effort because the quota rent was not sufficient to achieve global competitiveness with existing levels of capabilities. If the quota rent had been sufficient for Bangladeshi firms to be immediately profitable without exerting any effort in learning, the takeoff would have been immediate without the need for the Busan collaboration. But equally, most of these enterprises may later have collapsed when the quota rents disappeared with the gradual withdrawal of MFA. The partial boost provided by the quota rent proved to be sufficient to induce private investment, but also ensured that private investors would only be successful if genuine capability development happened at the outset. This was a very fortunate aspect of the levels of protection provided by the MFA.

Second, the *governance agencies* responsible for allocating the MFA rent were initially entirely exogenous to the internal political structures of rent-management in Bangladesh. Initially, the quota rents were available to every producer exporting garments of the requisite quality. A permanent export subsidy of this type may not have had the desired effect, but everyone knew that there was no reason to expect the MFA to be a permanent feature of the global economy. Indeed, within a few years, Bangladesh was subjected to quotas by the USA and the quotas were distributed between firms by the garments producers as-

sociation, the BGMEA. If quota rents had still been important for learning at that stage, the management and allocation of the quota rents by the BGMEA would have been an important determinant of subsequent learning success. Aspects of the political settlement (in particular the distribution of power between economic organizations within BGMEA and their relationships with political organizations) would have been critical. As it turned out, by the time quota rents began to be allocated by the BGMEA, the core capabilities required for achieving global competitiveness had already been absorbed by the first firms, and second and third tier entrants had already started imitating them. New entrants already knew how to become globally competitive on the basis of their private investments in learning, even if they no longer benefited from quota rents. This is proved by the fact that many *new* entrants after 1985 did not receive any quotas.

In other words, the transition from competitiveness levels of X that had initially characterized the sector to competitiveness levels like A, where a firm could be globally competitive *without any quota rent*, happened rather rapidly. This transition was based on an upward shift of the capabilities curve from its pre-MFA to a post-MFA position. Once firms learned how to achieve competitiveness (and they continued to enjoy a significant wage advantage compared to most competitors), they were not afraid to set up production without a quota. It took them slightly longer to turn a profit, but they knew they could do it because the type and extent of effort was known by then. The fortunate aspect of the technologies that were protected by the MFA was therefore that protection was only required to induce learning in the very first firms where the learning was most risky and uncertain. In later cases, the MFA rents were not essential,

and therefore the governance structures allocating the MFA rents were not decisive. The core routines had already been transferred to the local economy. This lucky characteristic was related to the simplicity of the technologies involved in the garments industry. For more sophisticated technologies, the 'public' component of the financing for learning may have had to last for longer and the agencies monitoring and governing these investments would be of much greater significance for determining the incentives and compulsions they created for high effort in learning.

The *firm structures* of the early firms involved in the learning were very important for effective learning and high levels of effort. The collaboration between Desh and Daewoo involved significant investments from both sides, but particularly significant from the Bangladeshi side which had to put in most of the capital and effort. The founder of Desh, Nurul Quader Khan, provided the bulk of the capital required for investment in plant and machinery for the venture. Daewoo's investment was to invite a large team of Bangladeshis to visit and study its operations in South Korea and understand on-site how production was actually organized. The characteristics of this firm-to-firm relationship and the internal incentives and compulsions within Desh are perhaps the most critical characteristics explaining the success of the technology transfer. On one side was a relatively small Bangladeshi firm led by a motivated investor who clearly had the capability to motivate his team of enthusiastic middle managers. On the other side was a disciplined South Korean conglomerate that had no interest in retaining commercial secrets in a very mature sector, and every interest in rapidly transferring this technology to its new partners. Moreover, the speed with which it would get a return on its investments in training would depend on the

rate at which it could transfer tacit knowledge to the visiting Bangladeshis and assist them in transferring this to their production site in Bangladesh. Much of the tacit knowledge was communicated in South Korea in the form of hands-on experience on the South Korean factory floor and the strong incentives on both sides ensured that this was a rapid and rigorous process. It is clear from the subsequent experience of Desh that this hands-on learning experience was decisive for achieving success. Between 1981 and 1987, Desh Garments grew its exports at a staggering average rate of 90 percent every year (Rahman 2004).

An important factor that also helps to explain the high levels of effort of the early Desh managers is that they believed that one day they could become garments entrepreneurs on their own. The relatively insignificant scale economies in the sector made this a credible hope. Motivated managers and even supervisors could expect that if their learning was successful, they could one day become an owner themselves. Desh, the pioneering company of garments production in Bangladesh, did nothing to deny this possibility. To its credit, it realized that the motivation of its staff was more important than trying to internalize all the positive externalities of its investment in learning. Perhaps, it also recognized that the clustering effect of many garments factories would be an advantage for itself. Even today, high levels of effort in the best garments factories in Bangladesh are sustained by entrepreneurial motivations of middle managers who work hard to continuously upgrade processes within the firm with an implicit incentive that this know-how could eventually be advantageous for them. Of course, the nature of the technology was important for sustaining these incentives. The relatively easy transferability of the routines required to maintain competitiveness

meant that Desh could sustain its breakneck growth despite the turnover of managers. As long as some continuity could be maintained between generations of managers, Desh and later other garments factories could continue their growth despite losing some managers. Moreover, many routines became embodied in the workforce where turnover was much slower in percentage terms. These characteristics of the technology and therefore of the firm structures they supported are important for understanding the incentives for high levels of effort

The technology of the garments industry was therefore fortunate in several respects. However, this should not be taken to mean that the tacit knowledge involved in this industry was very simple to absorb. Before Desh there was no medium-to-large-scale modern garment industry in Bangladesh. Even after the routines became local knowledge and were widely imitated, the failure rate in the industry was extremely high. Published figures for failures are not available, but industry insiders suggest that between 30 and 40 percent of early start-up firms failed to survive. The knowledge required for success is not just about how to set up the factory floor, but also how to manage a complex service relationship with demanding buyers and difficult supply chains in a changing environment. The critical point is not that tacit knowledge was not important here, but rather that features of the technology and firm structure provided very strong internal incentives for effort. In sectors with significant scale economies where managers could not expect to set up their own firms in a few years, internal firm incentive structures motivating middle management would be extremely important.

The success in sustaining effort in the early stages of learning was also assisted by features of the *political structure* that characterized

Bangladesh at that time. The late 1970s were a period characterized as authoritarian clientelism. The new government wanted to undo the economic damage done by the 'socialist' experiment under the previous dominant party period. The abandonment of the attempt to create a one-party state had important implications for strategies of pushing through pro-business institutional reforms on a piecemeal basis. A one-party state or even a dominant party in a competitive political system has to try and accommodate every political organization that has significant power. The downside of this is that there are contrary interests within the dominant party and decisions that hurt any powerful internal organization or faction are likely to be successfully blocked. The clientelist authoritarian strategy of political management was different. Powerful organizations were encouraged to compete outside the ruling coalition and only a subset of these organizations was selectively accommodated within the ruling party. This meant that there were fewer centres of opposition to policies within the ruling party and in particular, weaker organizations that were not necessary to the ruling coalition could be excluded and ignored. A range of organizations who may otherwise have objected to the pro-business strategies of the new regime, and who may have demanded high payoffs to enable the implementation of these institutions and policies, could now be overruled or ignored without significant political cost.

The new political structure played an important role in allowing the leadership to focus on a small number of targeted reforms that did not significantly affect established interests, but which could not be blocked by powerful political organizations looking for a share of the rents. President Zia ur Rahman backed the Dosh project at the highest level and was instrumental in introducing Dosh to

the South Koreans. He also backed the introduction of vital institutional innovations like back-to-back letters of credit which allowed firms to import raw materials on the basis of their export orders and of bonded warehouses that allowed duty-free imports of inputs designated for re-export after processing, thereby freeing garments manufacturers from complex customs payments and reclaims. The perception that these institutional changes would not be held back by internal political obstruction was important for encouraging both the Bangladeshi and South Korean investors to begin investing even before the institutional problems had been fully resolved. On a broader front, the changes in the political settlement meant that political organizations that may have sought to block these changes in the name of 'socialism' or as a bargaining tool to extract concessions were now excluded from the ruling coalition and were unable to do so. Thus, the new political structure was important for enabling investments and institutional changes that made the new sector potentially viable if learning could be organized. The changed political settlement therefore significantly increased the likelihood that stakeholders would invest significant effort in learning rather than simply using investment in the sector as a strategy of short-term rent capture in the presence of quota rents.

The clientelistic authoritarian political settlement allowed the introduction of required institutional innovations like back-to-back letters of credit and customs rules that allowed bonded warehouses. The new income flows (rents) that could be potentially captured as a result of these institutional changes were not essential for the ruling coalition for two sets of reasons. First, the amounts involved were initially small, and secondly, the new ruling coalition did not attempt to include all po-

litical organizations and therefore it had relatively more limited internal rent requirements compared to the previous one-party state. As a result, the new institutions were not significantly modified due to significant rent-diversion by powerful organizations nor did their enforcement face strong resistance from political organizations that were deprived of a share of these rents. Moreover, the quota rents created by the MFA were obviously not domestically created and the global institutional arrangements on which they were based could not be significantly modified by domestic political organizations. The quota rents could only be captured by garments exporters in certain categories and Bangladeshi political organizations could not determine the allocation of these rents through domestic institutional modifications. Once quotas were introduced for Bangladesh in 1985, BGMEA became responsible for allocating quotas across its members. However, the BGMEA was relatively successful in allocating quotas according to historical export performance so that politicization did not become excessive. These favourable background conditions, partly based on the international institutional origin of some of the rents and the political settlement that ensured that complementary institutional changes were not significantly modified, combined to ensure that the rents available to the garment sector in its early days created the right incentives for effort in learning.

Thus there were good reasons at the micro and macro level why the configuration of incentives provided by the MFA quota rents, private financing, the nature of the technology and the associated firm structure and finally political conditions interacted to sustain high levels of effort in the learning process. The outcome was by no means accidental even though all these variables were

not designed by policy to be compatible and achieve a high-effort learning result. In sectors where the technology is different, where accidental trade-related rents do not exist to the appropriate extent, or where political conditions prevent critical incremental institutional changes that support investment in a sector, it may be much more difficult to create new financing instruments and governance structures that ensure high levels of effort in learning. This explains why devising effective instruments for financing development has proved to be so challenging in developing countries and why financing instruments for new sectors have frequently achieved poor results.

From a policy perspective, it does matter whether the success of the garment industry was based on ‘discovery’ or ‘learning’. If the absence of effort in learning explains the failure of previous trials, then carrying out a number of further trials using public funds is unlikely on its own to ‘discover’ further sectors like the garments industry. What is needed is policy that can invest in the transfer of tacit knowledge in other sectors *and ensure effective learning through high levels of effort*. Subsidies without mechanisms of enforcing high levels of effort in the experimentation and adaptation that constitutes learning have failed in the past and are likely to do so again. The Desh-Daewoo experiment succeeded because it achieved high levels of effort, and the policy lesson is to try and design further rounds of learning with appropriate financing instruments and associated conditions that ensure similarly high levels of effort.

The metaphor of discovery may allow us to be too sanguine and argue that failure simply shows that innate capabilities were missing for producing a particular product in a particular country. The policy implication that follows from the discovery metaphor is that

we only need the credible capacity to terminate subsidies for discovery in time and try again in another sector. The learning model says that we need to probe more deeply into success stories and design new policies with greater attention to the interplay of factors that determine the level of *effort* put into the learning. The challenge for policy in Bangladesh, even within the garments and textile sector, is to follow up on the implications of the importance of learning and to consciously design policies to accelerate further moves up the technology ladder.

Technology Upgrading in the Garments Sector

More than 30 years after the garment sector's growth began the sector is still rapidly growing. However, technical progress up the value chain and into new technologies has been slow, while lateral expansion multiplying existing types of plants has been very rapid. A number of characteristics can help to explain these features. The MFA gradually declined in significance and no new arrangement of this type emerged for new or more technologically sophisticated garments and textile sectors. In the latter, there was therefore no part-public financing of the learning process. Secondly, the political settlement changed after 1990 with the replacement of authoritarian clientelism by a vulnerable democracy based on competitive clientelism. These changes meant that the private financing need was higher and even more so because the technologies were now more sophisticated and the learning gap was larger. And the political context of competitive clientelism meant that the capacity of the ruling coalition to make targeted and specific institutional changes to support particular technological requirements of catching-up sectors was reduced.

This does not mean that a broadening of the technical base did not happen. There was significant growth in backward and forward linkages. By 2005, roughly 45 percent of export value was added in the domestic economy, demonstrating the growing backward linkages in spinning, weaving, dyeing and accessories (Bhattacharya, et al. 2002; World Bank 2005; M. N. Ahmed and Hosain 2006). Discussions with entrepreneurs in the sector reveal a number of systematic problems that are closely related to our analysis of learning. Moreover, with the garment industry accounting for roughly 70 percent of exports, there is a strong case for greater diversification. This requires transferring lessons from the successful experience of learning in this sector to devise policies for other sectors.

A widespread observation in the industry is that once the learning requirements for a particular technology become known, banks are willing to lend freely (though the real interest rate for investors has been high in Bangladesh). The difficulty is that for new technologies and sectors, banks understandably have no metric for estimating their exposure to risk. In fact the entrepreneurs themselves do not know how successful the learning exercise will be. The fixed interest and collateral requirements of bank loans do deter investors who are not sure how long their learning will take. Nor can the absorption of new technologies be easily financed by profit-sharing agreements with outside investors because the latter are deterred by poor guarantees of disclosure, weak contract enforcement and weak mechanisms for compelling effort on firm-level managers. Thus, there were significant contracting failures constraining investments in learning, which in turn constrain the rapid acquisition of new technological capabilities. While supporters of market-enhancing 'good

governance' argue that this is one reason to improve contract enforcement, the realistic possibility of making a significant impact on contract enforcement in the medium term in clientelist political settlements is very limited. Other governance approaches therefore have to be devised to address critical contracting failures.

New technologies continued to come in, but only when supported by very specific financing mechanisms. One variant driving technical progress in the industry is of enterprising entrepreneurs who are willing to accept high risks and negative returns for an indefinite period. These investors are investing in learning by reinvesting profits from their existing businesses in new higher-risk technologies. A second variant that can drive learning in new sectors is when foreign partnerships help to finance investment and learning. As foreign partners cannot rely on very credible contract enforcement, these relationships typically work in developing countries when they are based on established relationships of trust between the domestic and foreign partner. But there is widespread recognition within the industry that if appropriate instruments of financing for new technologies could be developed while ensuring incentives for high levels of effort, the adoption of new technologies and investment in the acquisition of tacit knowledge would be much accelerated.

The companies who were able to absorb the risks of financing investments in technology upgrading, using their own retained profits, were typically bigger companies with strong modern managements. They had already established positions in other segments of the market that could generate the profit stream for financing learning and technology absorption in new segments of the market. We surveyed technically dynamic firms in the

garments sector in 2007 and again in 2011 and found that a gradual technical upgradation *was* taking place based on the reinvested profits of successful firms and the ability of established entrepreneurs in these firms to absorb the risk of learning in incremental new sectors based on the profit stream coming into their established businesses. An example in 2007 was the Bengal Jeans and Bengal Denims group that was moving up into denim manufacture. This was entirely based on reinvested profits, which ensured strong incentives for effort within the firm. The firm achieved 80 percent of the rated productivity of its new denim weaving machines within a year. But integration across all inputs and differences in costs of inputs meant that Chinese imports of denim with all the transport costs were USD 1.50 per yard compared to their internal cost of production of USD 1.70. Thus, an implicit internal loss financing of learning was continuing after a couple of years.

Still the use of the Bangladeshi fabric was viable because the group had its own jeans stitching business and in-house production allowed better quality control and quicker response times for their jeans manufacturing. Moreover, as a least developed country (LDC), Bangladesh benefited from the generalized system of preferences (GSP) that allowed developed countries to lower tariffs for LDCs without having to lower them to the same level for other WTO countries. This gave users of local fabrics a cost advantage of up to 12.5 percent in some markets. They were taking a bet that achieving scale economies in their domestic production and rising costs in China would eventually make the denim production globally competitive. Clearly, without their integration into jeans production (and GSP privileges), the backward linkage would have been unviable given

the time it was taking to compete with the Chinese.

Another example of a modern factory that had become sizable through incremental internally financed investments was Far East Knitting and Dyeing Industries. This had around 1,300 workers in low value-added garments making, but the stream of income from that was financing sustained moves into higher value-adding knitting and dyeing. Around 800 workers were employed in these more technically advanced areas in the late 2000s, and these numbers were growing. The company's strategy was to retain 5 percent of its gross export earnings for reinvestment in technology upgrading. The owners and managers were individuals with a long exposure to western markets, had good relations with buyers and understood how to create incentives for high levels of effort by their workers. The firm had devised internal incentive schemes like a rolling fund where the firm paid in around 300,000 taka every month (around USD 5,000) which accumulated into a sizable fund over the years. Employees who stayed with the firm more than five years were entitled to a per capita share of the fund when they left, creating incentives for staying on. This was to reduce the perennial problem of leakage of trained workers.

Firms in Bangladesh are obviously aware of the 'positive externality' problem, which means that new entrants or other existing firms have an incentive to poach on the training efforts of firms that engage in skilling up new workers or workers in particular segments of quality. But it appears that firms have adjusted to these positive externalities and are not excessively constrained by it. A mechanism that is widely used is to force workers to share some of the initial training costs by hiring them as 'helpers' in the first place. They often have rates of pay that are

below the market wage because the assumption on both sides is that the training has a value which can be lost to the firm if the worker leaves. The bargaining power of firms in a labour surplus economy has meant that this arrangement has been widely adopted, though the pressure to implement minimum wage laws for helpers became unavoidable by 2010. Clearly, firms can and have misused these arrangements, but it is one mechanism through which the external benefits of training were internalized by the firm in the form of initially lower employment costs.

The other model sustaining investments in new technologies has been partnerships with foreign partners. This requires strong relationships because foreign partners providing some of the capital or technology for upgrading have to be assured that the Bangladeshi firm will put in high levels of effort. Contracts protecting the investments of foreign partners are recognized as being of limited value in the general context of weak enforcement. In the small-scale garments sector where corporate reputation still has limited value, personal relationships and industry knowledge have been very important. An example is K.S. Embroidery where personal relationships between Chinese investors and a Bangladeshi entrepreneur allowed a small investment and some technology transfers in new segments of the industry such as mechanized embroidery.

A potentially very interesting model of foreign partnerships driving technology acquisition is the Danish Business-to-Business (B2B) programme run by the Danish development agency DANIDA in the mid-2000s in Bangladesh (Ministry of Foreign Affairs Denmark 2006). This programme identified viable and reputable Danish companies and introduced them to developing countries and potential local partners with whom joint ventures or

partnerships could potentially be set up. The Danish programme vetted high-quality Danish technology providers, financed their visit to the developing country and set up meetings with domestic entrepreneurs. Its main purpose was to cover the costs of potential Danish companies to come to a developing country that they did not know and where they might otherwise not have come. In other words, the programme covered the coordination costs but not the direct investment and learning costs faced by the joint venture.

But consistent with our argument of risk, this limited support resulted in new investments in relatively sophisticated technologies. As an example, the International Trade Connection, a Bangladeshi business group, implemented a project setting up a composite textile knitting factory at Bhaluka with German and Danish technicians providing assistance in 2007. As a result of the linkages established by the programme, there was also a private Danish investment with a 33 percent stake in the project. The Danish programme is obviously restricted to Danish companies, and this significantly limits the range of technologies and sources of financing accessible to Bangladeshi firms through this programme. Nevertheless, it is a good example of how relatively small investments in coordination and information provision can help bring about investment in new technologies in developing countries. It is a model that other development partners could consider, and indeed the Bangladeshi government could use some of its own resources to reduce the coordination costs of foreign investors in new technologies.

The characteristics of the Danish B2B programme mean that care would need to be exercised to scale it up. The financing instrument here is like a public subsidy that reduces the overall costs of investing in new

technologies by reducing some of the information and coordination costs. The partial contribution to investment means that private financing of learning is still required to achieve competitiveness. Here the small scale of the programme and the intensive knowledge that the Danish programme coordinators have both of the Danish business they invite and the Bangladeshi businesses they introduce them to means that the business partners start off with some degree of confidence in each other. The rest is then based on intensive action to establish trust and confidence in the mutual business models. As the Bangladeshi side cannot become competitive without an investment in effort, and as the foreign investor in technology knows what is involved in the technology and can help the local company set up the operation, there is once again a mutual incentive in putting in high effort in learning. The political context by this time was less favourable for incremental institutional changes supporting particular investments, but given the very small scale and specificity of these investments this failing did not matter excessively.

By 2011 the garments sector in Bangladesh had become fairly differentiated with some technically sophisticated firms at the top and some very basic technology ones at the bottom and a range of variation between. Some of the more sophisticated firms at the top had gradually progressed to very sophisticated technologies and production techniques. An investigation of a few of the sophisticated firms at the top reveals that some of these firms have achieved a self-sustaining dynamic of technical progress based on the investment of their internal profits for gradual movements up the technology ladder. We look at two examples. Viyellatex Group is a dynamic firm based in Khortoil in Gazipura Tongi near Dhaka. Its history goes back to

1996 when it was set up with 450 workers and six production lines and today employs 14,000 people, with backward linkages into spinning, knitting, dyeing, customized packaging, and accessories including buttons, hangers.

Its chief executive, David Hasanat, does not recall getting any external assistance in building up the company, which has grown based on its reinvested profits. The original capital was entirely a bank loan backed by the collateral of the partners. Clearly, the risk of succeeding in learning was entirely borne by the partners based on their observation of the technical capabilities that other Bangladeshi firms had achieved at that time. In the basic lines on which they initially focused, it was possible to estimate the learning-by-doing that was required. Subsequently, in moving up the value chain and into new lines, their secret was aggressive reinvestment of profits based on a long-term commitment by the owners to build a technically sophisticated company. In 2011 the firm was investing in green technologies to become a carbon-neutral company. The design features were commissioned from the Bangladesh University of Engineering and Technology (BUET), with the design financed by German aid as part of a GTZ project. This company was therefore capable of gradually moving up the quality ladder based largely on reinvested profits and the learning capabilities that the top management had acquired over time.

Far East Knitting and Dyeing Industries had moved on further in 2011. Asif Moyeen, its chief executive, explained that the company always solved its problems by itself. The company was making a significant investment in a high-technology spinning plant and weaving plant. There had been no government help but neither had there been government expropriation or obstacles set up

to enable rent collection. The primary problem for the company in moving up the value chain was power supply and this too had to be solved in-house as in all major garments factories with the development of captive power plants. The company had a gas-based generator but with the shortages of gas it was now building diesel and furnace oil generators. The prioritization of gas supplies to some firms did require government assistance and therefore kickbacks and bribes and for this reason the company preferred to diversify its power sources, even at a relatively high cost. The main constraint to the expansion of the company was the dire situation in national power generation and infrastructure.

The growth of the garments industry has obviously resulted in an increased political influence of its two associations, the Bangladesh Garments Manufacturers and Exporters Association (BGMEA) and the Bangladesh Knitwear Manufacturers and Exporters Association (BKMEA). However, the two associations wield less power and influence in national policy-making decisions than the economic dominance of the garments sector in exports and manufacturing may suggest. Shafiqul Islam Mohiuddin, second vice-president of BGMEA, describes a relationship with government that suggests a limited engagement between the two sides, either positive or negative. The low rents (profits higher than competitive market levels) that the sector generates possibly makes it less interesting for political organizations, either as a target for predatory activities or as a sector to assist in exchange for a share of future profits.

The BGMEA was involved in a fifteen-year long negotiation with successive governments to set up a 'garments village'. The aim was to bring a large number of garments factories together in a cluster, solving the problem of land acquisition and infrastructure facing

start-up companies in the sector. The land would be bought by firms locating within the village, but government support was required to acquire the land in the first place. After 19 meetings with Saifur Rahman, the last finance minister, the government promised a 300 acre park in Kachpur. But at the last minute, the decision was changed to offer the garments industry plots in the huge Adamjee Jute Mills site, which was now empty after the public sector jute mill had been closed down. The problem for the garments industry was that the proposed price of land at Adamjee was too high to be viable. Saifur Rahman offered land at Adamjee at 9.5 million takas per bigha (one-third of an acre in Bangladesh) when land was available at industrial sites like Savar and other areas at around 2 million takas per bigha around 2002-3 (when the exchange rate with one US dollar was approximately 55 takas). Not surprisingly, this long negotiation to solve the locational problems of the industry ended in failure.

At an institutional level BGMEA has some successes to its credit. These include its successful taking over of the functions of allocating Utilization Declaration (UD) and Utilization Permission (UP) certificates, which determine how much cloth per dozen shirts a garment factory is allowed to import duty free. This assessment is technically the function of the Customs department. By acquiring the right to assess and allocate these certificates within the industry, BGMEA reduced the ability of Customs to harass manufacturers, but Customs can still occasionally take bribes for conducting the annual audit comparing the aggregate imports and exports of raw materials. The allocation of these certificates also gives the BGMEA a certain leverage over its member firms that it has used to advantage in its additional role in facilitating arbitration between firms, buyers, workers

and buying houses. Arbitration is important in a context where the formal court and legal system is notoriously slow and open to influencing activities. The BGMEA has its own arbitration processes and structures, using retired high court judges and with its own body of case law. As the arbitration is done by insiders who know how the industry works as well as its undeclared practices, like informal cost- and profit-sharing agreements, the arbitration works relatively well. Intransigence on the part of firms who may otherwise have ignored judgements that went against them is mitigated because firms do not want to antagonize the BGMEA as it has real powers in allocating UD and UP certificates.

The BGMEA can also help its members with problems like late payment of utility bills by some factories because of delayed payment receipts from abroad. Without its intermediation and its confirmation that some delays are legitimate, power may have been cut off to some firms. BGMEA guarantees to the power company thus helps to keep some firms in business. The BGMEA has also begun to play a more important role in negotiating government support for the sector during a crisis. For instance, after the 2008 recession, BGMEA lobbying led to government promises of support. For new markets (that is markets outside the USA, Canada and the EU) such as Australia and Turkey, the government offered an export cash support of 5 percent for 2010, gradually reducing to 0 percent after five years. In addition, small producers whose sales were less than USD 3.5m, the government offered a two percent cash incentive for up to 25 percent of the firm's FOB value of exports or its value added beginning in 2010. The association also negotiated an exit policy for bankrupt firms in 2010. The policy provided bankrupt firms around seven years to pay off bank loans with government giving

implicit interest rate support. The strategy allowed owners of bankrupt firms to avoid bankruptcy certificates that would have prevented them from doing other businesses.

10. THE EMERGENCE OF THE ELECTRONICS SECTOR

Electronics is one of the promising new sectors in Bangladeshi manufacturing with some capacity already developed at the beginning of the 2010s. Its promise lies in the fact that many basic electronic items like fridges, televisions, air-conditioners, CD-players or DVD-players have a relatively significant assembly component that a labour-surplus economy can easily adopt. Moreover, many of the lower-technology parts can also be locally produced. As Chinese wages and exchange rates rise, many of these assembly and basic manufacturing activities will inevitably shift to lower-wage countries. Some of the critical components like chips will undoubtedly have to be imported till a much higher level of overall industrialization has been achieved, but there are significant manufacturing and assembly operations that could be done at the level of manufacturing capabilities that exist in Bangladesh. However, this takeoff has to happen in a context where the political settlement already has characteristics of competitive clientelism with weak democratic institutions. Bureaucratic organizations have also become relatively fragmented and uncoordinated and are unlikely to play a coordinated role in organizing support for learning in these new industries. The only counterweight to these negative developments is that some economic organizations have developed sufficiently to be able to finance a gradual process of learning-by-doing by themselves. As

a result, we see the same gradual technology adoption strategies in electronics that we see in the more mature garments firms, with personal assets and profits being used to gradually finance relatively risky learning. The significant difference with the garments industry is that while the latter had a lucky break at its earlier stages due to a more favourable political settlement and fortuitous public financing in the form of the MFA, the electronics industry did not, and therefore has had to accept a slower process of learning and capability development, and therefore slower growth from the outset.

The pioneering company that has led the learning processes involved in introducing electronics manufacturing in Bangladesh (as opposed to small-scale assembly operations that had existed for some time) is Walton Hi-Tech Industries. Despite its name this is a Bangladeshi company that took the unusual step of advertising and marketing its products as ‘Made in Bangladesh’. Its marketing strategy reflects the economic nationalism of the five brothers who are its owners. As one of the brothers, Shamsul Alam, explained, their mission is not just to make money but also to introduce new manufacturing capabilities into Bangladesh. Indeed, without such a commitment it would be difficult to explain how a company could enter a sector that was entirely new for Bangladesh and take the private risk of financing a relatively long period of learning-by-doing.

The brothers entered business by setting up a trading company in the early 1980s, trading corrugated iron, imported zinc ingots and engaging contract manufacturers to produce the products which they marketed. Their trading company subsequently became involved in importing 19 electronic items. It was at that time that they began to visit China to see why they could not manufacture

some of these items in Bangladesh. Initially the project was totally self-financed, drawing on profits from trading. The construction of the first electronics factory began in 2004 with trial production from 2006. The range of products that are already part-manufactured in its new plant in Gazipur near Dhaka includes fridges, motorcycles, and televisions, with different levels of domestic content. The production of assembled air conditioners is targeted from late 2011 with mobile phones next in the pipeline. The big ambition of the brothers is to produce the first Bangladeshi motor car. Clearly, the range of products that the firm is experimenting with suggests that its desire at this stage is primarily to absorb these technologies and show they can be produced in Bangladesh, and this outweighs purely commercial interests in achieving scale economies and high levels of profitability. The company's lasting contribution may therefore be to introduce new technologies to Bangladesh even though it is unlikely to achieve competitiveness across all these different lines.

In 2011 the company employed between 5,500 and 6,000 workers. Its production was still small, at around 25,000 fridges and around 4,500 motor cycles per month. Its motor cycles were around 20,000 takas (USD 300) cheaper than similar quality imported ones. Its refrigerators were also somewhat cheaper than imported fridges, but in addition its extensive network of retail and service outlets throughout the country ensured that it could provide better after-sales service than its competition in the more basic segments of the market. The motor cycles already had 60 percent domestic content and the plan was to begin producing engines very soon based on Chinese models. The fridges were entirely manufactured in Bangladesh except for the compressor. According to

Walton engineers, the compressor was also easy to make in Bangladesh but for the capital investment to be viable a larger scale of production was required. Export markets were being explored with small trial exports to Qatar, Oman, Myanmar and Nepal. Total exports in 2011 were only around 1,500 units, but if these markets could be opened up there were good prospects for expansion that could justify the investment in making compressors. The company also assembled cathode ray televisions, with the tubes imported from Malaysia, and LCD assembly was due to begin soon using South Korean panels. Clearly, panel-making capabilities were far away in the future and there were no plans to attempt this soon. Apart from this, the company was selling Chinese-produced mobile phones and DVD players under its own brand name to build name recognition in preparation for the gradual assembly and part manufacture of these items in Bangladesh.

There was some government support in the form of customs duties and taxes that supported domestic production and assembly of electronic items. But this tariff structure had existed for some time without triggering any significant assembly or manufacturing of electronic products. Table 6 shows the duty and tax structure for refrigerators and air conditioners in 2010. The tariff protection together with lower duties and taxes on imported parts provided an advantage to domestic manufacturing and assembly. The duty and tax structure had remained unchanged since before Walton began its operations, and the only incremental support that was associated with the emergence of Walton's operations was that in 2009 the supplementary duty (SD) on imported refrigerators went up from 20 to 30 percent. Shamsul Alam, one of the brothers who owned Walton, plausibly argued that as this policy support had come after Walton

Table 6. Duties and Taxes on Selected Electronics Imports June 2010

	Refrigerator	Refrigerator Parts	Air Conditioner	A C Parts
Customs Duty CD	25	25	25	25
Regulatory Duty RD	5	5	5	5
Supplementary Duty SD	30	0	60	20
VAT	15	15	15	15
Advance Income Tax	3	3	3	3
Advance VAT	2.25	0	2.25	0
Total	80.25	48	110.25	68

Source: National Board of Revenue, Bangladesh.

had set up all its plant, its production decision had not been contingent on this additional duty support. The additional support probably emerged because the new government discovered that Walton was emerging as a significant manufacturer and supporting it would make economic and political sense. Exports do not get any subsidies but there are duty drawbacks on imported materials that are re-exported.

The tariff structure had clearly not been sufficient for triggering domestic learning, and this is in itself a good indication of the initial competitiveness gap. Further evidence that the private initiative to absorb the costs and risks of learning played a critical role in refrigerators comes from the case of air conditioners. Air conditioners received at least as much duty and tax support but were not yet being produced in 2010. Indeed, according to Walton, government policies made air conditioner production more difficult, as we discuss later. However, with the loss-financed learning carried out by Walton and perhaps helped by the incremental increase in supplementary duties in 2009, fridge production

achieved competitiveness with imported alternatives by 2010. Walton's 'Made in Bangladesh' fridges rapidly achieved price and quality competitiveness compared to imports. Production is also potentially price-competitive in regional export markets, though brand recognition is still low and volumes need to increase.

The real protection provided to domestic manufacturing by duties and taxes is in addition significantly less than the nominal rates in Table 6 suggest, because customs duties are routinely evaded by under-stating the value of imports or evading duties altogether. After repeated complaints from Walton and latterly other refrigerator manufacturers, individually and through the Bangladesh Refrigerator Manufacturers Association, the National Board of Revenue launched an investigation into undervaluation and dumping. Till 2010, Bangladesh used pre-shipment inspection companies to verify import values at the port of export and granting pre-shipment inspection (PSI) certification. But according to domestic producers, importers were able to by-pass these valuations too. After 2010 the

financing did not have to continue for long. Competitiveness was further augmented by the additional increases in supplementary duties in 2009. By all accounts, the latter was not decisive in explaining the takeoff, and may have had a relatively small effect because of weak governance capabilities that resulted in the avoidance of duties by many importers of refrigerators.

Apart from the direct support provided by government through duties and taxes on particular electronic products, indirect assistance was also provided by a lower income tax on incomes generated by the production of certain products. The emergency interim government that governed during 2007 and 2008 had recommended that the income tax holidays allowed for sectors like garments should be extended to electronics but left it for the next government to implement. The subsequent Awami League government reduced the income tax imposed on electronics manufacturers from 37.5 percent to 5 percent in line with the practice in the garments sector. This could be described as a further instrument for sharing the loss-financing costs of organizing learning in a new sector. In 2009 VAT was also waived on the domestic value added by motorcycle and fridge manufacturers but *not* air conditioning manufacturers. Value-added tax at 15 percent was still payable on the imported material part of the finished product. This was temporary help to these sectors according to the government. Walton played a part in lobbying for these changes and provided the detailed information about imported parts to the National Board of Revenue (NBR) that would need to be provided to calculate the domestic value added.

These processes show that the government was fairly receptive as a follower and did carry out policy changes. However, lobbying was not always successful. Walton failed to

extend the VAT reduction for domestic value added to air conditioners. Interestingly, this disadvantaged Walton, not because the VAT remission on domestic value added was critical for making domestic production of air conditioners viable. Rather, Walton officers argued that this anomaly meant it could not start producing air conditioners in a unified plant with refrigerators because book keeping of similar parts going into the different products would be difficult. It would be possible for ‘enemies’ to claim that Walton was shifting value added from air conditioners to refrigerators to reduce its VAT liability. This would create opportunities for the tax bureaucracy to create problems for the company and this was sufficiently unattractive for Walton at that time to slow down its investments in air conditioners.

The role of government was therefore to follow Walton’s initial investments in land, plant and machinery with some additional tax and duty assistance, but some of this assistance was not actually delivered because of weak enforcement of customs duties. The overall effect was therefore likely to have been relatively small and is shown in Figure 9 as a smaller but additional upward movement of the competitiveness curve. This additional protection may have allowed Walton to immediately produce higher qualities, like Y in Figure 9 as opposed to qualities like B. The government support for the sector had a number of interesting features. Walton did not achieve favourable policy changes to support its investments *before* it set up its production facilities. The family-owned business claims not to have had close political connections with any political party, although it is possible they did have private contacts and access. The absence of close links was possibly fortuitous in the context of competitive clientelism and weak enforcement capabilities of bureaucrat-

ic organizations. While Walton's owners were clearly motivated to develop new manufacturing capabilities in the country, opportunities for making easy profits through political connections at the start-up phase of their projects may have created adverse incentives. If anything, bureaucratic enforcement capabilities tended to become weaker during the 'vulnerable democracy' phase of Bangladesh's political settlement after 1990 as a result of a creeping politicization of the bureaucracy. With such weak enforcement capabilities, a government strategy of assisting learning based on committing implicit subsidies *in advance* of investment decisions may have created adverse incentives. Investors may have justifiably believed that official conditions for receiving and using subsidies for learning could be easily circumvented. If so, less serious investors may have entered the field with the objective of capturing subsidies, and they would inevitably put in low, if any, effort in raising productivity rapidly. The subsidies may then have financed a lasting competitive weakness in the sector.

The sequencing of government support to assist an already established firm that was likely to have become competitive with its own investments was therefore fortuitous. It sustained the incentive structure supporting high levels of effort. In addition, it had a positive effect in inducing additional companies to follow Walton, as we see below. However, the weakness of governance capabilities meant that the assistance was less effective in inducing high levels of effort in learning than it may have been. For instance, the government did not announce a time period for the support or the rate at which support would decline over time. As a result, firms may have been led to believe that the support was indefinite. If they did, they would not put in high levels of effort in learning and the un-

derlying competitiveness curve would then not rise or not rise rapidly enough. In Figure 9 this is shown as a strong learning effect from the internal financing of losses but a weak learning effect associated with the supplementary assistance provided by government. This is because the firms involved in internal loss financing of learning would have strong incentives to put in high levels of effort to raise their underlying productivity to reduce their loss financing. The higher productivity would allow loss financing to be reduced without the competitiveness curve declining. However, the learning effect from the supplementary policy support may be relatively weaker, as some firms may see this support as indefinite. Their effort to move the actual competitiveness curve higher would then be adversely affected. In that case the higher position of the competitiveness curve would only remain as long as the implicit subsidies were there, with a decline in competitiveness with the removal of support.

The weak design of additional government support can be attributed to weak governance capabilities in these areas. A time-bound or declining set of supplementary duties (which may also have been initially set at a much higher level) would have required stronger governance capabilities to track and implement. They would also have required a credible distance from political interference in the future to ensure that effort was expended by firms in raising productivity and not in persuading government to change the terms of the support. With stronger bureaucratic enforcement capabilities, government could also have provided more direct support with loss financing in learning sectors. For instance, Walton's finance director identified the cost of financing as a critical constraint for their learning efforts. If government could devise targeted financial instruments that provided

low-cost loans for financing operational costs during the learning phase, this would be a critical policy instrument that could assist firms to move rapidly up the value chain. But such financing instruments would require specific governance capabilities on the part of the state to ensure that the financing came with credible conditions and was monitored and regulated effectively.

Following Walton, a number of other firms involved with the import of refrigerators found that their traditional business was at risk with the rapid success of Walton's product. These firms then moved rapidly into domestic manufacturing to preserve their cost competitiveness with Walton, particularly after the changes in duties and taxes that followed Walton's emergence on the scene. The companies affected were the more significant players in trading who would be much less inclined to engage in significant and sustained duty avoidance activities, and who already had some capabilities in assembly and manufacturing. The dominant second-tier followers in manufacturing were Butterfly, MyOne and Transcom.

Butterfly Marketing Ltd., as its name suggests, was primarily a seller of electronics products, and one of the largest electronics distributors in Bangladesh. It took its name from the Butterfly brand sewing machines from China that it used to distribute in the late 1980s. It kept its name even after it moved into other products, with a focus on electronic items. From 1995 its business began to be dominated by its partnership with the South Korean *chaebol* LG when it became its distributor, managing the process of local pricing, marketing and after sales service for LG products in Bangladesh. The entry of Walton into local refrigerator manufacturing reduced the prospects for imported brands and induced Butterfly to look into domes-

tic production. In 2010 it was engaged in a partnership with Hisense Group of China in a joint venture to produce refrigerators in Bangladesh. Hisense would have a 30 percent stake and provide the compressors. The rest of the refrigerator would be domestically manufactured, as in Walton. Production was projected to begin by end 2011 and the company believed that exports to Myanmar, Laos and maybe even to China were possible and necessary to make the enterprise profitable. The investment in this project including the cost of land was around 20 million US dollars and the projected output was around 200,000 units per annum. Raising the financing was not a problem with banks because of the brand name of Butterfly. As in the case of garments, once the first significant firm had established itself and shown that the learning problem could be overcome and a competitive product could be produced within an acceptable timeframe, the risk for external financiers fell dramatically and follower firms did not have the same problems in raising finance.

Butterfly was also moving into the assembly of colour televisions and air conditioners with LG. The full local production of colour televisions was not yet possible because this required a broad range of local component suppliers and these industries had not yet developed. The move into television assembly was also prompted by changes in the domestic market of a different kind. Higher-quality imported televisions were being competed out of the market by low-quality assemblers who imported colour and black and white tubes from China, Malaysia and India and then assembled them in boxes with ancillary electronics. An imported fourteen inch LG colour television cost 9,000 takas in 2011 (around 130 dollars) with all taxes. In contrast, assemblers could often evade the

(lower) import duties on components and sell a similar-sized television for less than half this price, at around 4,000 takas. Interestingly, here the lower duties on components and the weak governance capabilities of enforcing even these lower duties on smaller companies importing tubes and components created pressure on a large formal-sector distributor like Butterfly to move into its own assembly operations with LG. It could not hope to achieve the prices that the unbranded assemblers could offer, but by reducing the price gap on a branded television, it hoped to increase its market share. However, as Butterfly's management pointed out, they were limited to assembly operations as far as televisions were concerned because of the limited development of the domestic component industries.

MyOne Electronics Industry Ltd. also started life as a trading company in 2001 and gradually moved into assembly operations. This was primarily due to a duty and tax structure that encouraged assembly. As early as 2002 the company was assembling black and white televisions. The import of a finished TV faced overall duties and taxes of 78 percent, but the picture tube on its own faced 32 percent, the cabinet 52 percent, and the printed circuit board (PCB) 78 percent. If the PCB came unfinished, the taxes were further reduced to 32 percent. The average duties and taxes on imports of components were therefore around 40 percent and the difference with a total of 78 percent on fully assembled imports provided the margin that allowed domestic assembly operations to begin. Domestic value added was around 25 percent. After two years the PCB was also brought in unfinished further improving margins. Production was initially around 100-120 pieces per day growing to around 200-220. But the assembly of black and white televisions has now

stopped as a result of changing consumer demand. The assembly of colour televisions began in 2005, with current production around 400 sets a day. The company also assembled DVD players and voltage stabilizers using imported Chinese components. MyOne was the market leader for television sales in Bangladesh in 2011 with 33 of its own showrooms, a further 150 exclusive franchise showrooms and another 200 or so dealers who stock their products along with other brands. It was finishing the construction of a new factory in Gazipur that would begin production in 2011 assembling colour televisions and LCDs. The domestic manufacturing part was limited to cabinets with all electronics components being imported. The investment in the new factory amounted to almost 3 million dollars, excluding the cost of the land. MyOne also planned to assemble air conditioners in the future given the duty and tax differential on imports of components compared to finished products.

The experience of MyOne and Butterfly in assembly operations suggests that the learning required to achieve competitiveness in assembly was very limited given the duty and tax structure. However, assembly operations for televisions and air conditioners were very different from the manufacture of refrigerators because the domestic value added in actual manufacturing processes was much lower in the former. The risk involved in learning and the investment by the firm in learning-by-doing were correspondingly lower. The competitiveness gap with imported products could be fully met by the tax and duty differentials on imported components and imported finished products. The importance of the duty and tax differentials for assemblers meant that they had a strong incentive to monitor tax avoidance and report avoidance to the authorities. According to the Managing Director of My-

One, Razzak Khan, the Bangladesh Electronics Merchandisers Association and Bangladesh Television Manufacturers Association and others monitor the market and report suspiciously cheap imports to intelligence and other agencies. Government finds it difficult to keep ignoring persistent reports about specific illegal importers and they are eventually forced to stop. This was a more favourable assessment of current enforcement capabilities compared to that of Walton and Butterfly.

It was certainly the case that the implicit subsidy to assemblers based on differential duties and taxes on parts compared to the finished product were sufficient, even allowing for partial enforcement, to allow domestic assembly to achieve competitiveness. Undoubtedly some learning-by-doing followed in the large assembly factories that were being set up by Butterfly, MyOne and other assemblers. We would also expect this learning-by-doing to have some long-run impact. But it has to be seen if the companies involved in assembly see the duty and tax protection as temporary and put in enough effort in the learning process to ensure that eventually assembly operations can be competitive even in the absence of duty and tax differentials on components. This may not be possible at all if components prices in international markets available to small-scale assemblers in Bangladesh precluded the assembly of competitive finished products. This would be the case for instance if producers of finished products in more advanced countries produced many of their own components at a lower internal cost of production than the international price or could buy components at a significantly lower price from components suppliers because they could buy on a greater scale or were in long-term relationships with them.

The Managing Director, Razzak Khan, was very aware of the limitations of assem-

bly operations as a strategy of moving up the value chain in electronics. Indeed, he argued that a substantial change in the orientation of the Bangladeshi electronics industry was required if it were to achieve sustainable competitiveness in some sectors. The domestic market for electronics in Bangladesh would remain relatively small in the near future (despite its very large population) and therefore manufacturers could not hope to achieve significant economies of scale by focusing on protected domestic markets. At the same time it was difficult for Bangladesh to compete in international markets with countries like China which had an integrated components industry. It would be difficult to enter large-scale production of say televisions without a diversified domestic components industry, which in turn could not develop without a diversified range of final electronics products being produced. It was therefore not a viable strategy for Bangladesh to try and move towards the full production of finished products like televisions. Rather it should focus on a few more basic components that go into a number of electronic products. If Bangladesh could achieve scale economies in these selected components it could become a competitive supplier to countries like China. This would require genuine learning-by-doing, but Bangladesh would have a real chance of achieving competitiveness in a few sectors based on its much lower wages. This was a very plausible argument, but its realization would require very different policies. It would require the achievement of global competitiveness in manufacturing a range of basic electronics components as opposed to the assembly of finished products like televisions. This would require the setting up of production lines with more significant scale economies and would also involve financing significant periods of loss making to enable the learning-by-

doing that would create genuinely competitive productive sectors. This would clearly be a different strategy than assembly behind tariff barriers. Moreover, while the growth of assembly operations could be helping to develop basic knowledge and capacities in the electronics sector, this would not necessarily help Bangladesh in moving into globally competitive component manufacturing. The production facilities and tacit knowledge required for competitive production in the latter are likely to be quite different.

A similar focus on local assembly of televisions and a pressure to move into the manufacturing of refrigerators was also reported by a third electronics trading company, Transcom Electronics. The company has a long history, but its electronics business emerged in the late 1980s when it took over the electronics business of Phillips who left Bangladesh in 1989. At that time Phillips used to make light bulbs (using imported glass bulb shells) and assembled its own brand of television using imported knock-down kits. Transcom continued to assemble televisions under its own Transtec brand name, but these were knock-down kits with no domestic manufactured content. It also imported finished televisions from Samsung. There was a rapid growth in the production of assembled own-brand televisions, from 6,000 sets in 2007 to 27,000 planned for 2011. The company also progressed over this period from the assembly of CRT televisions to LCD televisions, using South Korean screens and Chinese motherboards. However, this type of assembly operation was simply based on duty and tax differentials on imported parts as opposed to imported finished goods, with limited domestic value added and learning-by-doing. The effect of these assembly activities on raising know-how and achieving competitiveness was likely to be limited.

However, like Butterfly, Transcom also found that the emergence of the local Walton brand of refrigerators negatively impacted its business of importing refrigerators. Transcom too was forced to adopt a strategy to manufacture refrigerators, as imported ones were no longer competitive against Walton. Refrigerator manufacturing is clearly different from the assembly of televisions because the refrigerator is almost entirely manufactured rather than being assembled from imported components. In early 2011 Transcom was some way behind Butterfly in terms of setting up plant for producing refrigerators, but it was clear to its management that without domestic production it would lose significant market share.

The electronics sector in Bangladesh in 2011 was therefore at a very early stage of development. The only significant breakthrough in manufacturing was in refrigerators where there was substantial domestic value added. Here, the pioneering role of Walton as a loss-financing investor committed to capability development was critical. Walton's growing market share based on its investment in domestic production demonstrates its success in developing significant productive capabilities through learning-by-doing. The subsequent additional assistance that government provided helped Walton to some extent, but the most important effect was to make the imported refrigerator business even less viable for the big trading companies. The major importers were unable to significantly evade the border taxes on finished refrigerators because they were big companies that could not operate entirely outside the formal rules. This resulted in a number of initiatives on the part of these companies to begin their own domestic refrigerator manufacturing and this is likely to create pressures for further quality and price improvements and a search for ex-

port markets. All of this is likely to assist the development of this segment of the electronics market.

In contrast, the move into television assembly appears to face more significant challenges. It has been almost entirely an assembly operation based on the incentives for assembly created by differential duties and taxes on the imports of parts compared to the finished products. However, here the gap in the capabilities required for any significant domestic manufacturing of the finished product is so great that there has been no substantial attempt to produce any components domestically. This would require setting up significant production processes and finance the learning-by-doing. The level of protection offered by the border taxes is clearly sufficient for inducing assembly but not for financing the learning-by-doing that would be required for producing any of the components that go into producing a television. Indeed, there are good reasons to believe that the domestic production of all or even most of the components that go into a sophisticated product like a television cannot be a viable strategy for Bangladesh. The most viable pathway into electronics is likely to involve the development of a few specialized components industries that can operate at a sufficiently high scale of production to achieve international competitiveness in those areas. These components could also service a domestic assembly industry for televisions or other goods, but the relatively small domestic market would not make a globally competitive components industry viable.

The development of such a components industry will require dedicated policy support and mechanisms of financing the required learning-by-doing. Given the short time horizons and weak enforcement capabilities of a competitive clientelist polity and

weak bureaucratic organizations, this is not likely to be forthcoming without significant pressure from the sector and the development of financing instruments and policy mechanisms whose enforcement requirements can be plausibly met given the political settlement. The experience of industry-led changes in policy suggests that if a case can be built by the electronics industry for a narrowly defined and targeted set of policies to support such an initiative, progress may be made, particularly if investments are led by pioneering companies like Walton. The experience of the electronics industry is positive in the sense that it demonstrates that concerted voice from industry associations can result in some improvements in enforcement, for instance against duty evasion. A similarly coordinated pressure from industry to support a small number of targeted interventions to assist the establishment of a components industry may not be too unrealistic.

II. THE CRISIS IN POWER GENERATION

The power sector crisis reveals a different set of problems associated with features of the political settlement in Bangladesh. Power shortages are a major constraint on economic development, particularly for the growing manufacturing sector. Power shortages are identified by close to 80 percent of firms as a major constraint on the expansion of their business in different surveys (Asian Tiger Capital Partners 2010). Yet successive governments have failed to make a significant breakthrough in power generation. In 2009, Bangladesh had around 4,162 MW (megawatts) of available generating capacity, compared to around 15,000 MW in Pakistan

with a similar population. As Pakistan suffers from serious power shortages of its own, this gives an idea of the severity of the crisis in Bangladesh (World Bank 2010). The industrial sector cannot rely on the power supplied through the national grid and almost every manufacturing unit therefore has to rely on its own captive power generation. Government policy has also been to encourage this by supplying cheap gas to industry, and estimates of captive power generation are close to another 2,500 MW in 2009. But shortages of gas have affected captive power generation too, making the power crisis very serious indeed for industry. Many producers have been forced to back up their gas-based captive power generation with oil and diesel generators, significantly increasing their production costs.

The constraint facing power generation is also a financing problem but one which is somewhat different from the financing of learning-by-doing and the acquisition of tacit knowledge. Power sector investments in fuel extraction (gas or coal in the case of Bangladesh) and in the subsequent electricity generation are long-term investments where costs and returns have to be managed over long periods to be feasible. The problem is that long-term contracts and calculations are difficult when the political settlement has features of competitive clientelism with short time horizons of the ruling coalition and with low and declining governance capabilities of the bureaucratic organizations regulating investment in these sectors. The institutional structure regulating investments in this sector has therefore proved inadequate. A description of the nature of the financing problem suggests that marginal improvements in existing institutions are unlikely to be effective and entirely new ways of financing long-term investments are required, with governance

consistent with the features of the political settlement. The investment problems in the extraction of fossil fuels are related to the problems in power generation but our focus is on the latter, as the generation problem has to be solved even if Bangladesh has no indigenous fossil fuels and has to rely on imports.

Around 83 percent of Bangladesh's electricity was generated using domestic natural gas in 2009. Proven reserves of natural gas in Bangladesh are around 13 trillion cubic feet in 2010, which are estimated to cover consumption growing at 6 percent a year for only about 13 years. But it is also estimated (with a 90 percent probability) that undiscovered reserves may increase the total to more than 30 trillion cubic feet (Asian Development Bank 2010: 23-24). For a variety of reasons, gas exploration was slow in the 2000s, partly because of a High Court injunction to stop new production contracts with foreign companies after an explosion in a gas field in 1997. Bangladesh has also been reluctant to allow gas companies to sell gas abroad as there is a public perception that the country needs to keep its limited gas for its own development. This has discouraged foreign investment in gas exploration as multinationals believe that cost recovery will be much faster if they are able to sell the gas rapidly at international prices. The injunction was lifted in 2006 for exploration in offshore blocks. In 2011 the government signed an agreement with ConocoPhillips of the US to explore gas in the Bay of Bengal with the right to export gas. Perhaps because of the long hiatus in exploration, the deal was arguably too advantageous to the multinational. Apparently Bangladesh will have to build pipelines to transport its share of the gas from 150 miles offshore at its own cost, and if it is unable to do so, the multinational can export Bangladesh's gas share too. Not surprisingly, the deal was strongly

criticized by the National Committee for the Protection of Oil, Gas and Mineral Resources, Power and Ports, a citizen's group that includes influential academics and professionals.

Imported oil was the second most important fuel for electricity generation, accounting for 8 percent of generation in 2009. Since 2010, the government has attempted to bypass difficult investments in cost-effective large-scale power plants by commissioning expensive short-term 'rental' power projects. The rental plants use imported fuel oil and were awarded contracts of from three to five years' duration and for this period at least, the share of oil-generated power would be significantly higher. The contracts were granted soon after the new Awami League government came to power in 2009 without proper tendering, ostensibly to speedily address the power shortages facing the country. Short-term rentals are a costly way of generating electricity, with the cost of generation per kWh (kilowatt hour) at least four times higher compared to larger-scale generation facilities. In addition, perhaps because of the lack of transparency and competition in the award of the contracts, the prices offered to generators by the purchaser, the Power Development Board (PDB), were particularly unattractive for the taxpayer. The taxpayer was affected because PDB purchases power from generators at a price that is typically a little higher than the price at which it sells to final consumers. As a result, when the PDB purchases electricity at a very high price, its losses go up exponentially and these have to be financed by transfers from the budget. In 2011, the effect of the rental contracts was to increase already significant PDB losses to around one billion dollars per annum, clearly an unsustainable situation (*The Daily Star* December 25 2011).

Coal ranks third, accounting for 5 percent of electricity generation in 2009. Bangladesh is estimated to have around 2.5 billion tons of coal in five coal fields in Dinajpur and Rangpur that could provide enough fuel for several decades of electricity generation at current levels. However, coal mining has also been held up by debates about the environmental impact of open pit mining which has strong local opposition but is possibly the most effective method of extracting most of the coal. There is also strong domestic opposition to foreign involvement in coal mining. The Awami League government that came to power in 2009 approved a number of coal-fired power plants based on imported coal. The last 4 percent of electricity generation in 2009 came from renewable sources such as the Karnaphuli dam and some limited biogas and solar generation. These could grow somewhat in the future, but hydroelectric potential is limited within Bangladesh because of the nature of the terrain. At the moment there is no nuclear generation, but the Awami League government also signed a framework agreement with the Russian Federation to construct a nuclear power plant at Ruppur. The suggested date for completion is 2017 but this is not likely to be realized given technical challenges and the environmental and other opposition to such a plant.

While problems facing the exploration and extraction of fossil fuels need to be solved, the immediate question is why the generation of power could not be increased with imported fuels. After all, the experience of short-term rentals during 2010-11 shows that the government was willing to subsidize the generation of power, indeed to an unrealistic extent. Yet it failed to deploy subsidies to facilitate the installation of cost-effective and sustainable power plants. The institutional failures here are related to the ways in which

the political settlement (Khan 2010, 2012) affects the operation of institutions relevant for enabling investments in the power generation sector. An examination of these determinants suggests that the constraining factors are unlikely to be significantly affected in the short to medium term using traditional policy tools of improving 'good governance'. This includes, as we shall see, attempts to improve procedures so that the awarding of contracts is made more transparent. However, an examination of the political economy creating constraints in this sector suggests that a way to break the cycle of constraints would be for government and development partners to create a substantial long-term investment fund that can lower the cost of long-term finance for the power sector. For this to be effective, there would also have to be effective governance reforms to create capacity in the bureaucratic agencies charged with managing the conditions for accessing these funds. Bureaucratic capacity building is not easy in a competitive clientelist polity, but if the goals of capacity building are restricted to one or two critical agencies there is a better chance of success. Few sectors can be more critical than power and the focus of capacity building on these agencies can be justified as vital for sustaining development.

Significant Characteristics of the Power Generation Sector

The power generation sector in Bangladesh in the late 2000s and early 2010s appeared to be trapped in a vicious cycle. The interlinked characteristics of the problem can only be understood if we simultaneously look at features of the political settlement and features of specific economic policies that affected the evolution of the power sector for some years. The political settlement had evolved

into a competitive clientelist one, with a gradually increasing fragmentation of the political organizations out of which the ruling coalition was constructed through political competition. The relevant economic history of the power sector refers to the factors that resulted in a relatively low share of the public sector in power generation in Bangladesh. Government policies for some time had been aimed at increasing private sector participation in generation. However, private sector investors in power generation faced growing risks which could not be adequately addressed. The main risk was the credibility of the long-term contracts made by the sole purchaser of electricity, the Power Development Board or PDB. The latter contracted to buy electricity at prices fixed by the contract that was granted to producers through a process of competitive bidding. But the prices at which the PDB could sell electricity on to final consumers were constrained, partly by the political imperative of keeping power prices low. In addition, if the supply of power had positive externalities by accelerating the growth of employment in the productive sector, small subsidies to power could be justified in terms of a standard economic logic.

The problem was that the growing deficit of the PDB created a very specific 'risk premium' for new investors in terms of the credibility of the long-term contracts they were signing. In this context, the political settlement with its implications for the enforceability of formal contracts ensured that the only likely investors in long-term projects would be firms that had close political connections with political organizations. Political connections could help to ensure contract enforcement in the future, but given that the ruling party could not be expected to remain in power through the lifetime of the project, political connections

could at least ensure enough up-front profits to ensure the financial viability of the investment regardless of contract enforcement in the distant future. However, these types of calculations result in a further worsening of the risk premium for subsequent investors, because the adverse selection of politically connected organizations has consequences for the pricing that PDB contracts and therefore the future viability of subsequent contracts. This logic can set off a vicious cycle of escalating risk perceptions and costs of financing investments in long-term projects. We begin by looking at some of the evidence, then present an analytical argument that links these characteristics in a causal framework that is located within a specific political settlement, and finally discuss the institutional escape routes given the likely persistence of the political settlement.

i) *The share of the private sector in electricity generation is already high and set to significantly increase.* In Bangladesh the private sector generated 38 percent of electricity in 2010 compared to less than 15 percent in India. Moreover, the strategy of recent governments has been to base expansion almost entirely on the private sector. The Awami League government of 2009 in its 'New Initiative' planned to attract an additional USD 9 billion of investment in power generation by 2015, of which USD 8 billion was expected from the private sector. If this had been achieved, then ignoring other private sector projects such as rental projects, the proposed additional capacity would raise the share of the private sector to around 65 percent of generation capacity (based on figures in Government of Bangladesh 2010). The reasons for the focus on the private sector can be traced back to weak bureaucratic capabilities in Bangladesh, and the significant weakening of these capabilities as a result of the disruptions and politicization

of the bureaucracy that happened in the years after 1971. The attempt to nationalize almost everything between 1972 and 1975 had the perverse effect of weakening the civil service by involving it in politics and primitive accumulation. The post-1975 political settlement moved towards a much greater reliance on the private sector and capabilities in the public sector were further neglected. However, in a poor country with weak contract enforcement, the expectation that the private sector will invest in long-term projects where revenue is derived from government contracts to buy electricity over a period of many years or decades faces serious enforcement and incentive problems.

The political economy of investments in power generation in Bangladesh can be compared to that in the Indian power generation sector. India has achieved significantly greater power generation relative to Bangladesh, even though Indian power generation also faces significant challenges ahead. In 2007 India's per capita consumption of electricity was 714 KWh compared to 155 KWh in Bangladesh (World Development Indicators 2010). In contrast to Bangladesh, the public sector has played a much more significant role in India's power generation. Till 1990, electricity generation was almost entirely reserved for the public sector. Even after liberalization and the recognition of private sector participation in the Electricity Act 2003, the private sector generated less than 15 percent of Indian electricity in 2010. In addition, the expansion plans of Indian policy makers realistically foresee a relatively limited role for the private sector. For instance, the 11th Plan (2007-2011) envisaged a total additional investment of USD 87.5 billion in power generation of which only USD 18 billion or around 20 percent was expected from the private sector (Altaf 2009: Table 2.1). These figures

do not necessarily reflect a bias against the private sector, because the Indian government has been trying hard since 2003 to attract private participation in infrastructure. Rather, they reflect the difficulty of attracting private investment in generation even in India. Of the several hundred memoranda of agreement (MOUs) that were signed for independent power producer (IPP) projects since 2003, only about 20 had actually come on stream by 2010. An important reason for most withdrawals was the lack of sufficiently credible payment guarantees.

ii) *The risk premium for private sector financing for power generation is high and growing and affects the long-term feasibility of private investment.* Private investors in power generation and ultimately their financiers have to absorb the risks that affect long-term investment in a poor country. These include political risk that future governments will not honour contracts made by previous governments who may also be their mortal enemies in a competitive clientelist context. The difficulty of contracting against all future contingencies and the risk that even contracted contingencies may be difficult to enforce combine to raise the risk premium, and this is reflected in the cost of financing large long-term infrastructure projects using market financing. In addition, there is the specific problem of the viability of the PDB as the purchaser of power, when it is well known that the subsidies that the PDB requires must grow in line with the growth of the power sector and with any increase in the purchase price of power that is greater than the selling price. The typical PDB contract to purchase power is based on current fuel costs, and the price has a 'pass through' clause that adjusts the purchase price if the fuel price increases. This protects the particular generator but by making PDB more

vulnerable, increases the risk for the power sector collectively unless the PDB can be expected to pass on all fuel cost increases to consumers. This is unlikely in a poor country. For instance, in 2010 the World Bank estimated that the projected transfers to PDB were likely to grow from around 8 billion taka in 2008-09 (around USD 115 million) to around 29 billion taka in 2011-12 (around USD 415 million) as a result of the rental power project contracts coming on stream (World Bank 2010: 21). In fact, as referred to earlier, the actual annual subsidy was reported to have grown to around USD 1 billion by 2012. This was a result of an escalation in fuel costs faster than retail tariffs and perhaps also because some of these rental contracts were even less favourable than the World Bank had initially estimated. Clearly, subsequent private sector investors contracting with the PDB would take its worsening financial viability into account when signing long-term contracts. More than that, banks and financial institutions providing loans to these investors would add a risk premium to the price of their lending that would depend on their own perception of the future viability of the PDB and its finances.

The post-2008 financial crisis in the West has further raised the risk aversion of international banks and therefore the cost of finance for developing countries like Bangladesh. The relatively limited financing available from local banks, the higher costs of organizing international financing packages and the relatively limited cover currently available from international financial institutions like the World Bank, make it implausible that the ambitious expansion of private-sector-led investments in the power sector envisaged by the Bangladesh government can materialize. In particular, the cost of financing power sector investments will increase, partly as a

result of worsening international financial conditions but primarily because of the higher risk premiums that financiers will add to successive power projects where the buyer is the PDB. The cost of financing is a significant determinant of the cost of generation. The consultants Asian Tigers Capital for instance have calculated the impact of a small change in the cost of financing a relatively small 400 MW plant requiring an investment of USD 340 million. In their example, the investor covers 30 percent of the financing cost with equity and 70 percent from loans. In one scenario, the investor has to raise this in the higher-cost domestic market, and in the other they can borrow in international markets at a lower interest cost. Power sector investors in Bangladesh do have access to low interest domestic loans from the Investment Promotion and Financing Facility (IPFF). This can lend at around 6 percent, but their lending is restricted to 8 percent of the total project cost. The other 62 percent in this example comes from domestic banks which would charge at least 12.5 percent in 2010. In contrast, foreign financing of the entire 70 percent may have been available at around 7 percent. The extra 5.5 percent interest charge on just 62 percent of capital results in an additional 16.4 percent in the cost of generating a kilowatt-hour of electricity (Asian Tiger Capital Partners 2010: 24-5). These figures illustrate that a relatively modest increase in interest costs can have a relatively big impact on the percentage increase in the cost of power. This in turn stretches PDB finances and can raise the risk premium and therefore the cost of financing for the next power project.

In contrast, India's greater success in generating electricity is closely associated with the availability of relatively low-cost public financing, initially for public sector generators but increasingly also for the growing number

of private sector generators. This financing has come from fiscal resources going directly to finance investments by public sector power generators and also through a number of financial institutions, in particular the Power Finance Corporation (PFC), set up in 1986. The PFC is particularly interesting as it was set up as a special-purpose development bank for power utilities given the perceived chronic underfunding in the Indian power sector. The Indian government initially capitalized it with equity and tax-free bonds. The timing of its creation was serendipitous. Within a few years the Indian capital markets had matured enough to develop an appetite for infrastructure bonds. In 1997 the PFC underwent securitization and emerged with its balance sheet healthier. In 2007 the government of India divested close to 10 percent of its holdings in the company in one of the most successful initial public offerings by a public sector enterprise.

Even though the corporation now provides funds to both public and private sector companies its disbursements remain skewed towards the public sector given the dominance of the public sector in Indian power generation. The PFC is the main provider of funds for investments in generation and does this through term-and-bridge loans, supplier's credit, debt refinancing and lease financing, among other methods. It provides the public sector with up to 80 percent loan coverage for generation projects and up to 50 percent for private sector projects. The corporation itself raises money through bonds which enjoy the highest credit ratings in India, and according to Moody's its international rating was identical to India's sovereign rating. The ability of the PFC to access public finances and borrow at credit ratings available for Indian sovereign debt significantly reduces the cost of capital in the Indian power generation sector. For

instance, in 2010 India's prime lending rate was 12.25 percent and most PFC loans were actually cheaper: between 10.75 percent for highly rated states and AAA-rated companies to 12.25 percent for some non-rated private sector borrowers.

iii) *A very small number of players with close relationships with government remain at the final stages of bidding for significant power generation projects.* A recent example is the bidding for major new projects under the Awami League government that took power in 2009. The three major projects were the Bibiyana 1 and Bibiyana 2 plants and the Meghnaghat 2 plant. Each of these plants had a capacity of between 300 and 450 MW, primarily using gas, and located near known gas fields. Meghnaghat 2 was to have the capability of using fuel oil as well. All three contracts were granted to Summit Group, a power sector company whose CEO was the brother of the Commerce Minister of the day. Summit was also one of the companies that benefited from favourable rental power project contracts. The prices bid by Summit for power generation in the three major contracts were not high so there were obvious questions about how realistic its bid was and how it intended to finance its investment in these projects. Interviews with Summit financial officers revealed that it did have a financial plan but it was based on achieving indirect access to favourable public financing. The company had till February 2012 to finalize its financial package but by end 2011 this had still not been completed. At best one or two of the three projects may eventually be financed, but even that might be an optimistic assessment.

iv) *There appears to be significant leakage at the procurement stage in power sector projects.* This is in contrast to countries like India where significant leakages are more likely to happen at the distribution stage. Procurement problems have resulted in persistent problems with the

World Bank and other international financial institutions about procedures and transparency. To enable rent capture at the procurement stage, technical specifications are often tailored to ensure that bidders preferred by particular insiders are favoured (by tailoring the specifications to the machines supplied by that bidder), or specifications are deliberately set to be very demanding to ensure that outsider bidders (who have to comply fully with specifications) can only bid relatively high prices for their electricity, while insiders can bid lower generation prices because they can expect lax monitoring of the specifications when it comes to implementation (World Bank 2010: 17-19, 22-30).

All clientelist political settlements can be expected to be associated with weaknesses in the enforcement of rules and therefore with some leakage of public resources. But the mechanisms through which leakages happen are important and can be different across countries and political settlements. For instance, unlike Bangladesh, power generation projects in India do not appear to result in serious losses at the procurement stage. The major leakage of rents in the Indian power sector takes place at the transmission and distribution (T&D) stage through the State Electricity Boards (SEBs) in each state. Unaccounted-for electricity (mainly due to theft or non-payment, but also some technical losses) amounts to an astounding 30 percent, equivalent to almost USD 9.6 billion in 2010 according to the Government of India's own figures. These losses are projected to grow further to almost USD 14.5 billion by 2011. The likelihood of a possible future default in payments to power generators is therefore similar to Bangladesh and may have resulted in a similar vicious cycle of high risk premiums, high generation costs and shrinking time horizons for rent seekers if growth in

generation capacity had been driven largely by the private sector raising capital in private financial markets.

v) *The award of contracts in power generation projects is subject to prolonged decision-making delays and is often blocked at the final stages.* The absence of significant private sector investments since 2002 is remarkable and distinguishes Bangladesh from most other developing countries. This is despite several attempts at repeating the experience of the two early (and very successful) IPPs. In subsequent cases, insiders were divided about the award of the contract in question, which was typically blocked at a late stage. Examples include the decision not to award the Sirajganj 450 MW IPP in 2004. This was ostensibly on the grounds that the sponsor (Summit) did not have adequate experience, even though the World Bank made the case that the tariff offered by the sponsor was competitive and the procurement procedures were tolerable. The first round of Bibiyana I also ended in a stalemate because of unrealistic bidding and construction timetables that deterred outside bidders, while the local bidder (again Summit) was disqualified this time for not meeting the net worth qualification requirement. The sole remaining bidder was Malaysian Powertek, but their bid price was rejected by the emergency caretaker government that took power in 2007. Multiple decision-making points, weak technical assessment capacities within government, the existence of different factions within government supporting different sponsors, and risk aversion on the part of some bureaucrats fearing future charges of corruption are amongst the reasons cited. The Awami League government that took power in 2009 did award a number of contracts but the most important ones were to Summit, a company very close to the government.

vi) *There have been remarkably few major successes in the completion of independent power producer projects so far.* In fact, there have been no significant successful private investments in generation since the Haripur and Meghnaghat 1 investments that became operational in 2001 and 2002, respectively. In both these cases, the cost of capital was reduced as a result of World Bank involvement, directly in the case of Meghnaghat 1 through the financing provided by the Infrastructure Development Company Ltd. (IDCOL) which in turn received World Bank financing. In the case of Haripur, the World Bank contributed to reducing the cost of capital indirectly by providing a Partial Risk Guarantee. Procurement processes were also effective in both cases and achieved two of the lowest costs per KWh in the IPP sector and even relative to average public sector generation costs (World Bank 2010: 16).

It is very significant that favourable institutional finance played a critical role in successful private sector power generation projects in the past. IDCOL's USD 80 million dollar contribution to Meghnaghat 1 was the largest loan ever made by a Bangladeshi financial institution and it made a significant contribution to the cost of capital in that project. The government contributed USD 350 million in local currency to IDCOL in 2009-10 and the Asian Development Bank (ADB) committed another USD 165 million (Asian Tiger Capital Partners 2010: 12). However, IDCOL does not currently focus on power generation and its priorities have shifted elsewhere. The biggest potential financing source for power sector investments in the early 2010s was the Investment Promotion and Financing Facility (IPFF), a World Bank-supported fund that has disbursed USD 47.5 million in low-interest loans since 2006. A number of

small power plants have benefited from this financing facility (Asian Tiger Capital Partners 2010: 12). The importance of low-cost institutional financing for infrastructure projects is well understood but compared to the billions of dollars required to make a significant impact on the scale of power required in Bangladesh, the dominant public sector financial institutions like the IPFF have at most a capital base in the low hundreds of millions of dollars, and only a small part of that is potentially available for power sector investments.

Analytical Framework

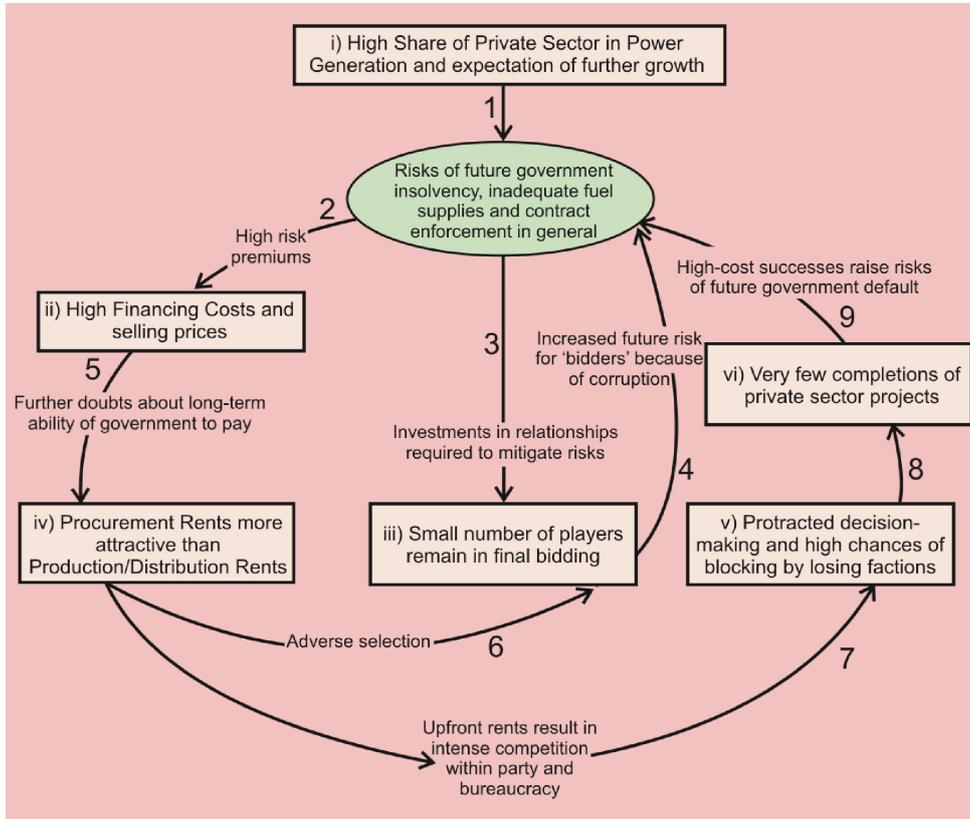
The six characteristics of Bangladesh's power generation sector described above are closely connected in terms of mutual causation. The most important directions of causality, drawing on our understanding of the contemporary political settlement in Bangladesh, are summarized in Figure 10. The multiple lines of causality show that many critical features are both cause and effect in an interdependent causal framework. Understanding the lines of causation is important for designing effective responses to the constraints that collectively both cause and describe the challenges facing the electricity generation sector.

Our starting point is characteristic (i) in Figure 10 that describes the dominance of the private sector in electricity generation in Bangladesh and the strategy of increasing power generation by relying almost entirely on the private sector. This in turn reflects the fact that the public sector and public funds are no longer perceived to be sufficient for financing the expansion of power generation in Bangladesh. The share of IPPs in power generation is therefore projected to grow rapidly in Bangladesh, if the plans of governments can actually be implemented. Nevertheless, a

comparison with India suggests that policy makers may be expecting the mix between public and private to shift too rapidly in the direction of the private sector in Bangladesh given the unwillingness of private sector investors to invest in a sector with high risk characteristics. Indeed a rapid initial growth of private investment may have severe implications for the risk premium facing new investors in power sector projects.

Arrow 1 describes the general problem with IPP investment in developing countries. Private sector investments in power are not in general constrained by classic 'public good' problems of non-excludability and non-rivalry, as power is not a pure public good. Nevertheless, contracting failures are significant because of potential problems with contract enforcement due to political risks and unforeseen future contingencies. These are important in a sector with significant structural risks due to inevitable uncertainties surrounding future fossil fuel supply and fuel pricing over long periods. To reduce the risks facing private sector investors, public-private partnership (PPP) contracts specify a number of contingencies that are covered by the government. In particular, they typically guarantee payments for a minimum quantity that will always be purchased and at a 'pass-through price' (which means the government absorbs all risks of fossil fuel price inflation), often with Partial Risk Guarantees from the World Bank. However, even contingencies that are covered by contract may be difficult to enforce in the distant future if the financial condition of the government becomes significantly adverse. Moreover, given the weakness of contract enforcement by courts, the risk faced by different investors may not be the same in a potential crisis. Entrepreneurs with better political connections can expect to be 'last out' in a potential crisis.

Figure 10. Causal links between critical characteristics in power generation



Power plants may have a life in excess of 20 years and many years of operation may be required to recover significant capital costs. Investors therefore need to be satisfied about revenue income over many years in the future before they can feel confident about taking these risks. This risk can grow rapidly if a significant expansion of IPPs is being contemplated and sales of power to final consumers are significantly subsidized. Both happened to be the case in Bangladesh in the early 2010s. The solvency of future governments may therefore become significantly worse directly in proportion to their success in implementing IPP projects! (This is described later in Arrow 9). Given that the financial conditions of governments and economies many years in the future are difficult to predict, power sector contracts are fundamen-

tally incomplete. The risk is not necessarily one of expropriation but of potentially disruptive future transaction costs in renegotiating contracts in different local and global circumstances. These features of the sector mean that the construction of power plants faces uncertainties that cannot be easily addressed through full contracting and this in turn has two important effects.

Arrow 2 shows the most obvious implication of these non-contracted risks: The risk premium results in higher private sector financing costs for power sector projects. This explains our observation of characteristic (ii) in Figure 10 that private sector financing for power projects is expensive and likely to have an impact on the final price of power. The cost of finance is therefore both a dependent variable and a variable whose magnitude

determines other characteristics of the market that in turn affect the risk premium. This circularity opens up the risk premium to the possibility of vicious or virtuous cycles of causality that we will discuss later. Regardless of what a PPP contract guarantees, the market is likely to factor in a growing risk premium if the systemic capability of the government to deliver on contractual commitments to the sector is perceived to have deteriorated. For instance, the unsolicited and very high cost rental contracts that the government entered into in 2010 are very likely to have already had this effect on market sentiment regarding the government's commitment to protect the future solvency of the PDB. As a result, we should expect the risk premium built into the average cost of commercial financing for the next IPP to have already become a little higher than in the past.

High financing costs in turn have a number of important effects for investments in this sector. Indeed, the self-fulfilling characteristic of high risk premiums that follow from our causal analysis partly explains why the public sector or at least public financing and/or financing by international financing institutions (IFIs) have historically played an important role in the power sector in developing countries. Both the public sector and state-assisted financing for the private sector continue to play this role in India despite the significant opening up that has happened in that country. The contracting failures that prevent full contracting mean that a significant role for public financing of power sector projects may be more efficient, even though power is not a pure public good. In particular, in very poor countries, private risk perceptions may suggest a price for power generation that may be beyond the purchasing capacity of emerging industry and retail customers, requiring unsustainable levels of

government subsidy if the cost of capital cannot be reduced *ex ante*.

Arrow 3 shows the other important and simultaneous effect of the high risks associated with IPP investments. The private investor knows that whatever the contract says, in potentially adverse future conditions the contract may be difficult to enforce and there are many unknown and therefore non-contracted risks that can also affect the overall viability of the investment. As a result, it is rational for firms to invest in 'relationships' with government and with political organizations more generally, to mitigate these risks by keeping open preferential and personalized channels of negotiation that allow ongoing informal contracting and enforcement. In case of future difficulties with payments or access to fuel, investors know that contacts and informal bargaining are more likely to be important than contracts and formal processes of redress. Given the high cost or even implausibility of enforcement through the formal legal system, firms are more likely to be able to negotiate required changes on an ongoing basis, or to ensure that they will be higher up the chain of claims in case of financial difficulties if they can call on long-term relationships with politicians and bureaucrats in critical positions. This is not a sufficient guarantee because politicians and bureaucrats will certainly not remain in place for the lifetime of a power project, but it is unlikely that firms will even begin to engage in this sector in the absence of these relationships.

This explains characteristic (iii) in Figure 10 that only a small number of bidders remain at advanced stages of bidding in this sector. As complex negotiations cannot rely entirely on legal procedures, given the weak legal framework in developing countries, only firms that have strong relationships with insiders are likely to sustain progress in these negotiations. As these privileged relation-

ships are based on historical accidents and relationships already developed through existing businesses, it is likely that only a relatively small number of firms have the requisite investments in informal networks to enter these negotiations. This also explains why firms as diverse as furniture and cement manufacturers in Bangladesh have demonstrated a comparative advantage in entering the bidding process for investments in the power sector. Their comparative advantage is not based on their technical expertise in the power sector, but rather their extensive informal contacts with government and the bureaucracy.

Arrow 4 shows that the close links between political and economic organizations also enable collusion and corruption that further increase the risk for investors, because contracts are likely to be re-examined by subsequent governments if new relationships are not rapidly established. Thus, while there are structural reasons privileging firms and individuals with established relationships with government and bureaucracy, these conditions also enable collusion between insiders. For instance, as discussed earlier, technical specifications can be set to privilege suppliers associated with particular local sponsors. The interesting observation is that even if firms and governments did not initially want to engage in corruption or collusion, the high level of contingent risks that cannot be contracted for can create strong pressures for long-term personalized relationships between business and government. These relationships provide some confidence to investors that contingencies will be reasonably addressed if and when they arise. But once these relationships exist, it is very difficult to prevent a slide into additional privilege-seeking collusion.

Ironically, even if a firm resists capturing additional advantage using its relationships, it is very difficult to signal this to the gen-

eral public or to subsequent governments, given the structural factors that ensure the uncompetitive nature of the market and the clear presence of strong personalized relationships. The presumption will be that insiders have benefited and new governments are likely to demand payoffs to establish new relationships that will need to be developed to sustain the projects. Firms therefore have every incentive to keep some rents on reserve to meet these requirements. This argument is not intended to excuse the ongoing corruption and collusion of participants, but to demonstrate that this type of corruption is unlikely to be addressed using standard anti-corruption tools such as greater transparency in the award of contracts. Personalized relationships here are not the result of limited transparency. Rather, limited transparency is a result of relationships that are required to sustain investments in a context where risks cannot be contractually mitigated.

Firms know that the relationship between government and opposition is likely to be acrimonious in the context of a 'competitive clientelist' political settlement (Khan 2010). In this context, the ruling coalition is severely constrained in its ability to offer credible formal assurances to potential investors that they will not be expropriated by future governments. If the relationships between the ruling party and investors are *perceived* to have resulted in 'rent sharing' with the ruling party, the process through which the contracts were offered may be questioned by an incoming party after an electoral victory as a way of punishing particular investors who were close to the outgoing party. In Bangladesh there is a history of companies winning major government contracts being targeted on technical legal grounds by a new ruling coalition if they are perceived to have had significant economic relationships with the previ-

ous regime. These attacks are in most cases of temporary significance because there are political processes through which such companies and individuals can eventually protect themselves. For instance, it is common for companies to establish relationships with the new ruling party. Arrow 4 simply shows that this requires resources and involves additional uncertainty.

Returning to the high financing costs, characteristic (ii), this has a number of additional and very important effects that are relevant for understanding challenges in the power sector. Arrow 5 shows that high financing costs can in turn contribute to a preference for procurement rents as opposed to rents in production or distribution. The distinction refers to whether significant rents are captured by business and government at the procurement stage by colluding in the price and quality of the *capital equipment* that is delivered or in the production and distribution of *electricity* by colluding in the pricing of power and fuel or indeed the calculation and collection of bills. The former creates significant upfront rents at the very inception of the project, while the latter can create a stream of somewhat more modest rents through the lifetime of the project. The latter may add up to be significantly higher in aggregate, but if parties are unsure about the economic viability of the project over time, or have very short time horizons, they may prefer procurement rents over production and distribution rents. Thus, high financing costs that raise the cost of power generation and create doubts about the long-run viability of the underlying contracts can increase a preference for procurement rents. This is because the higher the cost of generation, the greater the subsidy required to PDB to sell on this power, and therefore the greater the doubts about future viability and future streams of rents. A pref-

erence for one or other type of rent is not neutral in terms of the likely effects on power generation. An interest in procurement rents may result in very inferior investments that further increase the actual cost of production and put pressure on the future viability of the contract. An interest in production and distribution rents may have a high social cost later but may be consistent with immediate strategies to increase the generation of power.

Arrow 5 suggests a plausible but adverse rational response of private investors in this context of uncertainty about the future solvency of PDB and ultimately of the government of Bangladesh. Regardless of payment guarantees in PPP contracts, it is implausible that the government will continue to pay if it is financially unable to do so. The greater the number of IPPs that already exist ahead of a particular investor, the less confident that investor is likely to be about the remedies available in case of a systemic insolvency of PDB at a future date. Rational investors, particularly local sponsors who may be more aware of local political economy, are therefore likely to want to make as much of their return as possible upfront and rely less on the stream of future incomes for guaranteeing an overall return on investment. This could explain characteristic (iv) in Figure 10, the strong preference for maximizing 'procurement rents' as opposed to collecting rents on production and distribution.

It is not rational for government and investors to focus on capturing production rents by colluding to set the price of generated power, except perhaps in the case of very short-term projects like rental projects. For longer-term projects, where more significant capital costs have to be incurred, collusion in setting a somewhat higher price for power purchases is less attractive because sustaining these future payments may not be cred-

ible. It is more rational to collude in overpricing procurements of capital equipment. In extreme cases, the lack of confidence in the future can be so severe that future projects and the future of the current project lose any attractiveness for public officials and investors and both become mainly interested in procurement profits in the immediate project under consideration. In this extreme case the project under consideration resembles a one-shot prisoner's dilemma where neither government nor investors have any incentive to rein in their immediate incentives to capture rents through procurements. Once again, our aim is not to say that conventional explanations of procurement irregularities focusing on greed and the absence of transparency are wrong. However, there are overlapping structural factors that create strong preferences for this form of rent capture as opposed to others, and this has further implications for the viability of investments in power generation.

The preference for procurement rents in turn has two other effects. Arrow 6 suggests that in this context there is likely to be an adverse selection of bidders. Those who are unwilling to play by these rules will be weeded out because the structure of incentives will not attract them nor are they likely to find champions amongst government insiders. This in turn reinforces the observation of a small number of serious players in the bidding game, characteristic (iii). In addition, the tendency of these bidders to prefer procurement rents means that some or all of their projects are likely to suffer from high cost and low efficiency. This in turn implies higher risks for all investors in the future (Arrow 4) and eventually (through Arrow 2) to even higher risk premiums for the sector. This is one example of the cumulative causation that can lead high risk premiums to be self-fulfilling in the sense that the effect of a

high risk premium is to drive risk premiums even higher next time.

Arrow 7 suggests another equally serious consequence of high financing costs and the preference for procurement rents. Procurement rents can offer significant upfront prizes for the individuals and factions in government and the bureaucracy who are championing particular sponsors. While greed and limited accountability does drive some corruption in developing countries, we know that political leaders also have a structural requirement for rents to sustain the political system (Khan 2006; North, et al. 2009; Khan 2010). However, the types of rents that are available do matter in determining the strategies of different actors and the economic outcomes of their rent capture strategies. A focus on procurement rents has particularly adverse implications not only for the quality of projects, but also for the intensity of conflicts within the ruling party and the bureaucracy. Different factions within government typically champion rival bids and have strong relationships with competing suppliers. If the primary source of rents comes at the procurement stage, the likely result is that there will be more intense conflicts between factions and groups within the ruling party and the bureaucracy than if the rents came from production and distribution over longer periods of time. Large sums that can be made over short periods of time greatly increase the stakes in intra-party and intra-bureaucracy factional conflicts, particularly if the overall financial vulnerability of the power sector makes it unlikely that there will be a significant stream of projects over time. The one-shot nature of the rent capture game can result not only in prisoner's dilemma incentives for investors and government, but also in intense conflicts within government because the likely winners from the current procure-

ments round may well be the last ones for a while. This can help to explain a critical characteristic of the Bangladeshi power sector: protracted decision-making procedures and high chances that projects will be blocked by disaffected factions at the last moment, characteristic (v) in Figure 10.

Protracted decision making and delays in the power sector are typically explained by the lack of technical capabilities within the power bureaucracy in Bangladesh and by multiple decision-making points within the government. But it is possible to interpret these structures in another way. If significant up-front rents are available through power sector investments, these rents acquire a great deal of importance within the ruling coalition. The importance of power sector rents and the strategic importance of the sector are underlined by the fact that the power portfolio comes directly under the Prime Minister in the 2009 Awami League government and major investments have required prime ministerial clearance in all governments. Yet multiple points of decision making are also retained. For instance, the post-2009 Prime Minister works not only with a state minister but also with a power advisor. We know informally that there are other powerful individuals both in the party and the bureaucracy who have an input into the decision-making process under the umpiring role played by the Prime Minister. This structure is perhaps not accidental and suggests the sensitivity of managing factional conflicts over significant rents within the ruling party. The aim appears to be to enable factions to compete for these rents because attempting to override powerful factions entirely may be very costly for the ruling party. Unfortunately, the nature of the rents available makes this competition dysfunctional (low-quality investments are the likely outcome) as well as intense.

The intensity of these intra-party conflicts can be better understood by remembering that in a ‘competitive clientelist polity’, the ruling parties are themselves coalitions of factions. Individual investors have relationships with particular politicians and factions within the ruling party. If the incentive structure is such that bidders are likely to make significant ‘procurement rents’ at the early stages of the project, there is likely to be a scramble between factions within the ruling party to be associated with lucrative investments from which the faction can benefit. This increases the stakes and therefore the intensity of the conflict over the award of particular projects. If the rents had accrued over time, the immediate stakes would have been lower and the benefits would have accrued to a more diffuse group within political organizations over time. There would be no incentive to destroy rent streams created by the previous ruling coalition and strong incentives to add to that rent stream by approving new projects. Indeed the type of rents available could create incentives for ‘live and let live’ compromises emerging between rival clientelist coalitions to enable them to share some rents whose flows continue over time. Something like this is seen in India in power sector projects where competing clientelist parties implicitly cooperate in capturing rents in sequence without blocking or destroying the work of others. In contrast, if the power sector rents come in the form of a small number of lucrative projects that are not likely to be repeated very often, it becomes rational to contest intensely. Intra-party competition can appear to take the form of government indecision about projects and procrastination in the granting of contracts. In extreme cases no decisions are made.

Arrow 8 shows that occasionally IPP projects can go through but the success rate

is relatively small, characteristic (vi) in Figure 10. Finally, Arrow 9 describes the paradox that after a few successes, subsequent projects may become *less* viable if the gap between the buying and selling prices in the projects already signed imply a significant growth in transfers to PDB from the budget. The more financially strained the PDB and the Government of Bangladesh become, the higher the risk premium in Arrow 2, and the more binding the succeeding constraints become. This insight allows us to explain why the early IPPs at Haripur and Meghnaghat 1, went through so much more easily compared to subsequent attempts at closing deals. Without a strategy for cracking the interdependent links identified in Figure 10, it is unlikely that Bangladesh will achieve the scale of power sector investments that the country requires.

In the context of this analysis it is worth asking how the major Bangladeshi player in the power sector, Summit Power Ltd., managed to bid relatively low prices for the three major projected plants, Bibiyana 1 in 2007, and Bibiyana 2 and Meghnaghat 2 shortly after the new Awami League government came to power in 2009. The answer is that the prices bid by Summit were based on the assumption that cheap credit from the International Finance Corporation (World Bank), the Asian Development Bank and other concessional lenders would be available. However, not only was this pipeline of cheap funds limited, the crisis over high-level government corruption scandal in the (unrelated) Padma Bridge project in 2011 resulted in the World Bank halting project lending to Bangladesh. The disappearance of potential low cost funding had the predicted result. Summit withdrew from Bibiyana 1 and put Bibiyana 2 on hold. Eventually in 2012 it made progress on the Meghnaghat 2 project by putting up first class collateral to raise 167 million dol-

lars from three local banks at a relatively low interest rate of 5 percent. This was possible because of Summit's high quality collateral in a number of related businesses that were performing well. But clearly not even Summit could provide enough first-class collateral on unrelated businesses to raise low-cost financing for more than one project.

Evaluation of Policy Responses

The most common policy responses to the constraints facing the power sector have usually attempted to directly address characteristics (iii) and (iv), namely the small number of bidders based on personalized relationships with political insiders and the apparent leakage of procurement rents. Development agencies and partners, including the World Bank, have insisted on transparent procurement guidelines and bidding procedures. Moreover, political reform and in particular reforms supporting greater political accountability have sought to address characteristic (v), the protracted decision making that seems to block investments in the sector. The conventional strategy here is to try and make political parties more accountable to the voting public and less responsive to internal factional conflicts. If some of these strategies had been successful, one or more of Arrows 4, 6, 7 or 8 may have been knocked out or significantly weakened with the possibility of setting up positive or virtuous cycles instead of the vicious cycles that otherwise characterize the links between these factors. In addition, general good governance and rule of law reforms have attempted to improve contract enforcement in courts and thereby reduce risk premiums (Arrow 2) and the need for personalized relationships to support informal contracting arrangements (Arrow 3).

However, these reform efforts have not

yielded significant results and some of the interdependencies in Figure 10 suggest why this may be the case. Many of the characteristics that have been targeted are dependent rather than independent variables. For instance, the characteristics (iii) and (iv) may appear to be the causes of poor procurement and bidding processes when they are actually the *outcomes* of deeper problems associated with high risk premiums and contracting costs in contexts of political uncertainty. Not surprisingly, good governance reforms in poor countries that have tried to directly tackle these characteristics have generally failed to reduce risk premiums and personalized relationships. Our analysis of why a Weberian rule of law cannot be enforced in the political settlements of developing countries helps to explain why the weak enforcement of particular institutions has to be traced to the way in which institutions are modified because of the rent requirements of powerful organizations. A policy intervention is only likely to be effective if it is plausible that its implementation is consistent with the rent-sharing conflicts that will be unleashed within that political settlement. A focus on transparency and procedural reforms can make some difference, but it is unlikely to make a difference that is significant enough to alter the interdependent causal links shown in Figure 10. Moreover, the politics of developing countries require the allocation of rents to powerful factions as part of the political process of maintaining political stability and this too militates against the achievement of impersonal rule-based allocative systems (North, et al. 2007; Khan 2010, 2012). It is not surprising therefore that good governance reforms attempted during the emergency caretaker government of 2007-09 that hoped to achieve greater political accountability within Bangladeshi political parties achieved very disappointing

results. Given the features of the macro political settlement it is not surprising that rule-following procurement and bidding processes have not emerged, nor have political parties become more accountable to the extent that they are able to make faster decisions in the public interest.

The implication of these observations is that a focus on directly attacking these characteristics of the problem is unlikely to make a significant difference to observed outcomes, even though it may be desirable that pressure for reforms in these areas should continue. The two other points of entry in Figure 10 are more promising, but one is more feasible as a point of entry than the other. An excessively ambitious set of expectations for private sector investment in the power sector, characteristic (i), may paradoxically be part of the problem. It sends negative signals to financial analysts looking at the viability of investments over time and the capability of PDB to service its obligations if more than one or two of these investments came to fruition. The outcome is a steep rate of increase in risk premiums with self-fulfilling effects, as discussed earlier. But long before this happens, progress on power sector projects slows down and project development is converted into heavily contested games where attention shifts to rent capture at the procurement stage. However, the capacity that would be required within the state to take on a significant share of the expansion of generation capacity within the public sector is not likely to be immediately credible.

This leads to the second point of entry which is by exclusion the most promising route for policy makers and the political leadership. This is the high financing cost and risk premiums for power sector investments, characteristic (ii). While other political economy factors are difficult to change directly, a

significant shift in the cost of financing can alter or weaken some of the interdependencies shown in Figure 10, sufficient for progress to become achievable. One possibility that could be considered is a carefully designed financing facility with a sufficient flow of funds in the pipeline that could significantly lower the cost of financing proposed power generation projects, together with a dedicated governance arrangement for its proper utilization. Clearly, the flow of funds required to make a difference to the cost of finance would have to be orders of magnitude greater than was available in IDCOL or IPPF in the early 2010s. But as a least developed country, Bangladesh could make a bid for such a funding stream through the World Bank, the ADB and other international financial institutions. Such a facility could be structured and administered in a number of different ways, but these alternatives are not the subject of our discussion. We will only identify some of the characteristics that such a facility should have in order to achieve an impact in the specific political economy of Bangladesh.

By signalling the availability of a credible flow of funds at an interest rate that can sustain the generation of power at a price that is within the bounds of PDB purchasing capabilities, a number of effects are likely to be set in motion that can be exploited with carefully designed institutional strategies. Clearly, the availability of such a facility would have to be combined with dedicated governance arrangements to ensure that the financing available on beneficial terms was only available for projects that satisfied technical and other governance criteria. The IDCOL experience suggests that this may be achievable, and the causal map in our Figure 10 suggests why it may be. By directly intervening to change this characteristic and reducing the financing costs for important power generation

projects under consideration, the intervention can break or weaken the critical arrows 5, 6 and 7 that lead to the emergence of unviable projects or of sustained blocking. First, the lower cost of financing can enable the power project to offer to sell power at a price closer to the final selling price, thereby making the viability of long-term purchase agreements more credible. This can sufficiently reduce the incentive of insiders to focus primarily on the upfront procurement rents and thereby enable dedicated procurement conditions to be enforced to an acceptable degree. This may appear to be an optimistic expectation, but in fact procurement procedures were much better for Meghnaghat 1 when credible financing was available compared to some later cases. This is not surprising because by offering a credible project, financial institutions also have credible leverage for insisting on better procurement conditions.

Secondly, with better procurement conditions and weaker incentives for fixing technical specifications, the adverse selection that results in serious bidders dropping out is less likely to happen. Thirdly, if upfront rents are less in evidence, the intensity of inner-party and bureaucratic lobbying can be expected to decrease, with the focus of interested parties shifting to a greater extent to the long-term rents from the production and distribution of power. Moreover, if the long-term low cost financing makes the project under consideration viable, it is more likely that other projects will follow without PDB becoming insolvent. The prospect of successive projects is likely to reduce the intensity of zero-sum conflicts, and with a sufficiently large pipeline of credible projects this could prevent the blocking of projects by disappointed factions. None of these potentially beneficial results are likely to automatically follow without considerable attention being given to the governance de-

sign of any facility of this type in the future. But our analysis suggests that without a substantial facility which can promise to reduce the cost of financing and contribute to improving the viability of investments in the power generation sector, direct interventions targeting adverse characteristics of this sector are likely to fail.

The governance structure of the Indian Power Finance Corporation (PFC) is not likely to be replicable in Bangladesh because the PFC benefits from the checks and balances provided by India's federal structure. As a central government financial organization, the PFC is answerable to the central government, while most power generation projects that it finances come under state governments. This, together with strong professional bureaucratic leadership has ensured that PFC financing does not get excessively captured by inefficient projects, such as ones where the prime interest is in procurement rents. In the context of a smaller country like Bangladesh, more attention would have to be given to the governance of a similar financial organization to ensure that credit allocation could not be captured by clients of the ruling party. On the other hand, Bangladesh has the advantage that the private sector is already a significant player in power generation. Potential financing for power generation at preferential interest rates would not be targeted towards the public sector alone, but would be open for the private sector to bid. It is possible to imagine how a governance structure could be constructed which combined access to funds at preferential rates with strong requirements for competitive bidding.

Since the underlying finances for the financing instrument would almost certainly come from international financial institutions like the World Bank or the ADB, these organizations could insist on strict govern-

ance of procurement and other conditions for these loans. It is likely that combination of a reduction of incentives for procurement rents, the plausible provision of profitable investment opportunities to investors and pressure from the business community and international agencies on the ruling coalition could allow the creation of a limited bureaucratic governance agency with external assistance that could ensure an acceptable use of this funding. In particular, the availability of capital at reasonable prices would also attract serious bidders both domestic and foreign, who would find the overall contractual context more credible in the presence of these facilities. Despite its differences, the Indian experience does show that by combining viable financing with appropriate institutions, power sector investments are possible even in competitive clientelist settings. A focus on developing the governance structures for financing power generation at preferential rates in Bangladesh is therefore likely to be a fruitful point of entry for cracking some of the political economy constraints facing investments in this vital sector.

We surmise that some of these conditions were in place when the first two successful IPPs went through. A combination of conditions created virtuous feedbacks in the links identified in Figure 10 for both the Meghnaghat 1 and Haripur projects. The scale of the projected role of IPPs was initially relatively small, gas supplies were promising and the cost of financing was kept low as a result of the role of the IFIs, as discussed earlier. This combination of conditions lowered the risk perception of private financiers and further contributed to the low selling price offered by the IPP operators in these projects. The viability of the projects ensured that adverse selection or the focus on procurement rents did not happen to the extent that blighted

subsequent projects. One implication of our political economy analysis is that if the cost of capital has to be kept low and if this requires negotiating a financial facility at concessionary rates and appropriate governance conditions, there is likely to be a ceiling on the pace of expansion set by the magnitude of the facility available. We would argue that if the achievement of a lower cost of capital requires greater modesty in the rate at which the supply of power is projected to increase in Bangladesh, it may be a price well worth paying. Paradoxically, the actual rate of increase in the power supply may be higher if the private financing that is called upon and the rate of subsidy that is implied for PDB are reduced to more realistic levels.

12. CONCLUSION

The evolution of the political settlement in Bangladesh has affected both the broad mix of policies and institutions at the macro-level and the implementation and effectiveness of particular institutions and policies at the micro-level. Our understanding of economic policy and institutional performance can be augmented by investigating how the evolution of the political settlement sets limits on the implementation and effective management of particular institutional arrangements. Institutional innovations are important for overcoming particular contractual (market) failures and, in general, the problems of financing learning-by-doing constitute an important area of contractual failures in developing countries.

The major success story of Bangladesh, the garments sector, took off in the context of the institutional framework of authoritarian clientelism and a favourable international

environment that Bangladesh was able to exploit. It had the right level of organizational capabilities amongst a broad-based group of potential entrepreneurs, a ruling coalition that had the self-interest and the political capability to enforce a small number of critical institutional innovations, and the MFA reduced the competitiveness gap between Bangladesh and its immediate competitors. In this context, a leading entrepreneur in Bangladesh and a collaborator in South Korea devised a financing instrument that provided the incremental financing for learning-by-doing with enforceable conditions that generated compulsions for high levels of effort in learning. The organizational knowledge that was thereby transferred to Bangladesh was rapidly copied as managers left the first firm and set up clustering firms of their own. The lessons that we derive from this experience are that market opportunities are important but insufficient for explaining success or for creating the conditions for the next line of successful industries. Financing instruments that can help to finance learning-by-doing are critical but they have to be designed such that the incentives for high levels of effort are maintained given the characteristics of the political settlement.

A second sector that is emergent in Bangladesh and is likely to play an important role in the future is the nascent electronics industry. This began its takeoff when the political settlement had already transformed with democratic institutions in a vulnerable operational equilibrium with competitive clientelism. Moreover, this sector did not enjoy the accidental international rent support of the type that the garments industry enjoyed under the MFA. The learning-by-doing in the pioneer firms in this sector depended on another fortunate 'accident', the presence of a pioneering nationalist compa-

ny. This company took the risk of financing a significant amount of the initial learning-by-doing in refrigerator manufacturing because it wanted to build national productive capabilities. To a large extent, this forced the government to become a follower, supporting its success with policies that then helped the company to consolidate some of its investments. This triggered a number of other traders and assemblers to move into manufacturing because their import-based businesses, particularly in refrigerators, were no longer viable in some market segments. Our analysis here shows that even in an overall context that is fairly unfavourable, learning-by-doing was still being financed in some sectors. An analysis of the prospects of the electronics industry in Bangladesh suggests that it should be possible to design financing instruments to assist the development of manufacturing of selected electronics components as a feasible long-term strategy.

Finally the very serious crisis in power generation and the failure of successive governments to significantly increase power generation in a sustainable and cost-effective way can also be understood in terms of characteristics of the political settlement. Here the political settlement has a different explanatory role. Some features of the failure in the power sector appear to fit a standard explanation based on the absence of 'good governance'. The lack of transparency in the allocation of contracts, government corruption and the lack of accountability can appear to explain the failure to get serious bids. As a description of the problem this is not wrong, but many of these characteristics are themselves dependent variables which have to be located within the operation of a particular political settlement and a specific set of economic features of the power sector in Bangladesh. This explains why the standard

good governance reforms have had a very limited effect on the power sector and helps to identify a possible entry point for reform. The availability of moderately priced financing, ultimately sourced from international financial institutions, with dedicated governance capabilities for monitoring its use could create a mix of incentives and opportunities that may allow increased productive investment in the power sector within a political settlement that continues to require rents for political organizations. The example of the more successful Indian power sector, though different in important respects, suggests that it is important to explore these alternative approaches to mitigating some of the constraints in the power sector.

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