Chapter Nine

Diversity in Growth Experiences:

The Role of Substitutes for the Fundamentals

I. Introduction

The economics literature has come to view good governance as fundamental for long-term economic growth. Yet, many countries that have been escaping poverty through rapid growth over the past few decades are deficient in some or all key elements of good governance—rule of law, impartial courts, representative government, effective bureaucracy, and open markets with minimum necessary regulation. These observations have prompted a host of questions about the process of economic growth and the policies that may enhance its pace. Do low income countries grow faster when they focus on building their fundamentals? How did countries that grew with weak fundamentals compensate for their deficiencies? Is their growth sustainable? What can slow growing countries learn from the experience of fast growers relying on substitutes for the fundamentals? Do developing countries have a choice between reliance on fundamentals and their substitutes? If so, what are the tradeoffs?

In addressing the above questions, this chapter summarizes the insights emerging from the case studies. To this end, we discuss in the next section similarities and differences in the growth performances across the developing countries included in the case studies as background for the substance of the chapter. In particular, we characterize the growth experiences of the sample countries over the past five decades, distinguishing between growth spurts and sustained growth. We also highlight the diversity of performance and the broad similarities and differences of the policy paths across those countries. In Section III, through analysis of the case studies and a technique called qualitative comparative analysis (QCA), we investigate performance more closely. More specifically, we examine the successful cases to see to what extent strength in the fundamentals distinguish them from other, slower growing countries. The analysis generally supports the notion that the conventional governance attributes associated with growth in the cross-country literature – categorized into *security*, *support*, and *signals* for the purposes of our analysis – are indeed associated with growth in the case studies, as one would expect. But, there are many exceptions and non-conformers. This, a key finding of the research, is the starting point for a more detailed and nuanced discussion of the growth process in the next two sections.

Section IV presents an overview or framework for thinking about growth as it emerges from the case studies. It lays stress on two key elements associated with successful growth. The first is a systematic attempt by the decision-making authorities to respect the basic political constraint faced by all countries, namely, that all citizens expect at least some improvement in their daily lives over time and, if that progress does not materialize, the ruling authority will be removed either peacefully or forcefully. And the second is a pragmatic willingness to respond to changed circumstances and failed policies. To illustrate the operation of these two elements, Section V shows how even the conforming countries – the fast-growers with all fundamentals in place – reveal a diversity of

experience but were all committed to broad-based growth and took whatever actions were necessary to achieve it in a non-ideological fashion. Similarly, we examine countries that have performed relatively well without the fundamentals detected, explain why they have grown faster than countries with similar fundamentals, and comment on the sustainability of their growth performances. We then reverse the process and examine countries that have not fared well despite having the fundamentals in place. We end Section V by examining the slow growers with weak fundamentals to assess the factors that may have prevented them from building their fundamentals or finding substitutes for them. Because our main concern in this chapter is sustained growth over decades, we do not focus on transition countries. However, our framework offers important insights for understanding the experiences and policy options of those countries. We discuss these insights in Section VI. Finally, Section VII presents our overall conclusions and draws the lessons of the analysis for poor performers.

Many of the points made in this chapter are in line with the recent literature on the diversity and specificity of institutions across countries, in particular Rodrik (2005, 2007, and 2008), who offers surveys of that literature and makes important contributions. Rodrik emphasizes the diversity of development experiences and argues that the first-order economic principles that underlie the fundamentals do not map into unique institutional arrangements and policy packages. This can be seen rather clearly in the case of developed countries, where high standards of fundamentals and similar outcomes are reached with institutional structures that vary in non-trivial ways. Moreover, Rodrik argues, institutional performance seems to depend greatly on context. As a result, in a developing country with many institutional imperfections, “appropriate” institutions may not be the "best practices" in developed countries or even in other developing countries, which multilateral organizations have tried to promote. In those contexts, "second best" approaches that address the specific constraints of each particular country may work more effectively (Rodrik, 2008). Our results conform with these observations and confirm Rodrik's (2005) conclusion that "reformers have substantial room for creatively packaging these [economic] principles into institutional designs that are sensitive to local opportunities and constraints. Successful countries are those that have used this room wisely." However, our analysis extends this framework by refining the distinctions among institutional arrangements that address the economic principles. In our view, the fundamentals are institutional arrangements that can induce growth in self-correcting processes over indefinite horizons. The substitutes, on the other hand, are typically solutions that may contradict the principles of good governance based on the fundamentals and may not enjoy longevity, but may nevertheless deliver the same function for economic growth in particular contexts over a few decades. For example, single party rule and interventionist policies may violate the principles of good governance such as impartial courts, representative government, and minimal regulation. But, in circumstances where the fundamentals are missing, such elements may help the politicians internalize more of the consequences of their policy actions, hence sustaining the incentives for investment at least for a while. As we will see, this distinction is significant because the substitutes may be more practical and a faster means of enhancing growth, which may in turn facilitate the development of the fundamentals and transform the process into a self-sustaining one.

II. From Market to State to Market to…

At the turn of the 21st century, all of the developing countries in the project were market based economies, with most economic decisions driven by market signals, which in turn were largely free to move to equilibrium levels with government interventions taking indirect forms—regulation, taxation, goods and service purchasing, and enforcement or rescinding of rules and contracts. However, few, if any, of the countries remained primarily market economies throughout the case-study period generally beginning in the mid-1950s to mid-1960s. Most were primarily market based economies when the study begins, shifted to a strong or leading role of the state in the context of import substitution industrialization (ISI) or (quasi-) socialism with direct government controls over markets and production in the 1960s or 1970s, and then reverted to the market in the 1980s or early 1990s. In recent years, due to dissatisfaction with the results of the market economy (or, as it is often referred to, neoliberalism), interest in a larger role for the state in the economy has resurfaced. However, to date, only a small number of countries, mostly in Latin America, have restored previous levels of state intervention in markets. Nevertheless, if markets do not bring larger and more widespread gains to the populace, there will be more rethinking and, at a minimum, deeper market reforms will not be implemented.

The colonial countries in the sample that gained independence after the end of WWII in 1945 almost all started with a market based economy. Trade was relatively open and outside of infrastructure services (roads, electricity, communications, and water), the number of state-owned enterprises was highly limited. The most common form of state intervention at the time of independence was the agricultural marketing board, which controlled the prices received by producers and, often, paid by consumers. While various reasons motivated the boards, they were usually used as a form of taxation on local producers. The non-colonial countries in 1945, mostly in Latin America, also came out of WWII with relatively limited state intervention in the economy, although some countries had begun a policy of ISI in the 1930s. Of course, China was soon to embark on one of the most important experiments in state socialism in history.

Various reasons can be advanced for the large increase in the state's role in the economy but the two dominant forces were: first, the belief that rapid industrialization was necessary for development and that market forces by themselves would not do the job, or at least not in an acceptable time frame; and second, the belief that market forces, even if relatively successful in their own terms, would not pull the poor masses (the overwhelming majority in all but a handful of developing countries at the time) out of poverty. These beliefs were rooted in the view that most of the non-Western world had stagnated before WWII under relatively free markets, while growth seemed to have started in a number of economies where the government had intervened. The most notable examples were Brazil and the Soviet Union, which had grown well during the 1930s when most of the world was experiencing the Great Depression. There was also evidence of a secular decline in the prices of raw materials relative to manufactured

products, suggesting that developing countries might continue to stagnate if they did not industrialize. Furthermore, theoretical insights in the 1930s and 1940s about the causes of economic stagnation at the time had provided ideas about why and how the government should intervene.

What is particularly interesting is the fact that most developing countries did relatively well with respect to economic growth in the late 1950s and 1960s. Many of them had a growth spurt, defined as an average annual per capita growth rate above **2%** for a period of at least 5 years, during this time span (see Table 1). In many cases, this was associated with increases in revenues from raw material exports due to either expansion of production at home or rising demand abroad. In former colonies, efforts after independence to establish and expand public services and the release of vast amounts of human resources that were highly constrained by the colonial regimes contributed to growth. In a host of countries, the move to ISI or some form of socialism also brought a growth spurt. Table 1 also shows the prevalence of spurts in the sample after the increase in the economic role of the state. The reasons for these spurts vary but the most common one was that the state was able to mobilize a large increase in savings and investment. In the early years of state-led growth, this could be allocated to much needed infrastructure and the most promising investment opportunities. There is also the possibility that some of the increase in growth was due to the statistical valuation of government expenditure at its face value, no matter what the efficiency level.[1] Most countries had high factor accumulation in the first years of ISI/socialism but sooner or later total factor productivity (TFP) growth became weak due to poor incentives and a deteriorating political economy, as ISI and socialism are very susceptible to rent-seeking. Before long, all countries following this path faced balance of payments and/or fiscal deficits. Curiously enough, the movement into an ISI policy in some countries was motivated by increases in revenues from raw materials exports that provided funding for new investments. But, growth tapered off when external revenues stagnated or declined. The situation became critical for many developing countries after the oil price shocks in the 1970s and the subsequent instability in the world economy.

[1] For example, investment in a steel factory that never produces a ton of steel is still counted positively in the national accounts, as are salaries to bureaucrats who are mainly involved in extracting rents and bribes from the public.

Table 1
Growth Spurts: 1950-1980

(A growth spurt is defined as having a per capita growth rate above 2 percent over the period, in both end years, and in any within period 3 year rolling average.)

Country	Years	Annual Per capita GDP Growth Rate (%)	State-Led Development Strategy (ISI / socialism)
Algeria	1963-70	7.13	Yes
Argentina	1964-71	3.82	Yes
Benin	1963-69	3.31	No
Botswana	1961-2000	7.12	No
Brazil	1950-76	4.78	Yes
Cameroon	1979-83	8.12	No
Chile	1966-71	3.68	Yes
China	1953-59	4.67	Yes
Congo, Republic of	1967-73	5.16	Yes
Cote d'Ivoire	1966-71	4.75	Yes (partial)
Egypt	1968-72	2.76	Yes
India	1958-64	3.37	Yes
Indonesia	1968-78	6.86	No
Iran	1957-73	6.71	Yes
Jordan	1958-67	5.75	Yes
Korea	1963-97	6.77	No
Malawi	1971-79	3.86	No
Malaysia	1959-84	5.12	Yes[2]
Mali	1974-80	3.69	Yes
Mexico	1954-60	4.04	Yes
	1963-68	4.80	Yes
	1970-75	3.35	Yes
Morocco	1958-64	7.71	Yes
	1967-72	3.77	Yes
Niger	1975-81	6.77	Yes (partial)
Nigeria	1969-77	6.22	Yes
Pakistan	1961-70	4.54	No
Paraguay	1972-81	5.47	No
Peru	1960-66	5.71	Yes
Singapore	1965-97	5.91	No
South Africa	1965-72	2.46	Yes
Sri Lanka	1960-74	4.33	Yes
Thailand	1957-96	5.63	No
Togo	1961-69	5.73	No
Tunisia	1963-80	3.93	Yes (mixed after 1970)
Uganda	1962-69	3.18	No
Uruguay	1974-80	4.70	No
Venezuela	1951-57	5.07	Yes
	1973-1977	6.10	Yes

Source: Heston, Summers and Aten (2006).

[2] From 1959-69, Malaysia was primarily market led, albeit with significant government intervention. From 1971-84, it followed an ISI policy.

Table 2
Growth Spurts: 1976-2004

A growth spurt is defined as having a per capita growth rate above 2 percent over the period, in both end years, and in any within period 3 year rolling average.

Country	Years	Annual Per capita GDP Growth Rate (%)	After Return to Market Orientation
Argentina	1991-98	4.89	Yes
Bangladesh	1996-2003	3.70	Yes
Chile	1986-2004	4.28	Yes
China	1977-2004	7.57	Yes
Cote d'Ivoire	1995-99	2.16	Yes
Egypt	1976-91	4.19	Yes (partial)
India	1984-90 1994-2003	3.87 4.49	Yes Yes (deepened)
Indonesia	1986-96	5.41	Yes[3]
Jordan	1978-86	5.48	No
Malaysia	1987-2000	5.64	Yes
Mexico	1996-2000	3.70	Yes
Pakistan	1979-88	4.23	Yes
Peru	1993-97	4.64	Yes
South Africa	1996-2004	2.59	Yes
Sri Lanka	1978-82 1990-2000	6.28 4.43	Yes Yes (deepened)
Tunisia	1996-2004	3.64	Yes
Uganda	1989-2000	4.31	Yes
Uruguay	1991-98	4.90	Yes[4]
Vietnam	1990-2003	4.52	Yes

Source: Heston, Summers and Aten (2006).

It bears emphasizing that while ISI/socialist policies may have helped counteract major causes of stagnation in developing countries at the time, their legacies have cast long shadows. The growth spurts generated by these policies served to validate them to large parts of the general public, and, in fact, often still make citizens nostalgic for the old policies and regime, without either the will or the ability to recognize that they could not have been continued. Moreover, in most state-led economies, relatively well-paid and highly secure public sector jobs were prevalent, creating a middle class, the size of which has never been seen since in many of these countries. The constituency and the expectations created under those conditions often made it difficult to consider alternative

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[3] Market reform in Indonesia began in the mid-1960s but there was a major new round of reform in the mid-1980s.

[4] Market reform in Uruguay began in the early 1970s but there was a major new round of reforms in the late 1980s and early 1990s.

policies and shift towards new and more productive development strategies. At the same time, the ISI policies may have contributed to the development of an industrial sector, especially in economies with large domestic markets, and the management of the process may have developed administrative skills that could eventually be put to other uses.

In the 1980s, often under pressure from international financial institutions (IFIs) and international creditors, the vast majority of developing countries switched back to a market based economy but most have had weak or mixed results due to inadequate foundations for the effective functioning of markets. They often suffered from poor institutions and governance structures with political economy forces and microeconomic behavior that were not sufficiently compatible with market development. There are, however, some countries—e.g. India, Vietnam, Mexico—that seem to be on a more sustainable path. Interestingly and somewhat ironically, many of the reforming countries had a growth spurt following their return to the market, but it was not sustained. Table 2 shows the growth spurts for countries that moved back to the market after 1980. The spurt was generally due to a reallocation of resources along the lines of comparative advantage, although the abundance of foreign credits that were customarily given to reforming countries played no small part in many cases. However, there have not been many cases where the reforms have gone far or deep enough to motivate the increase in private sector investment necessary for sustained growth.

Microeconomic behavior continues to be risk averse or of a predatory nature. In particular, entrepreneurship often seems to be lacking to fulfill the need following market liberalization for new production lines that match local conditions and can compete globally. This may be because the necessary institutions are lacking or not yet established enough to build confidence among potential entrepreneurs that the returns to innovation will not be dissipated by imitation or predatory policies (Rodrik, 1995; Hausmann and Rodrik, 2003). Capital and insurance markets in most reforming countries have also been slow to expand and to provide the necessary support for investment and risk taking. In addition, low income workers and consumers have often experienced increased risks as markets have been liberalized without commensurate development in social services and safety nets, making it more costly to engage the labor force in new activities.

In some countries, adverse political economy forces have exacerbated the institutional weaknesses behind the failure of market reforms. In such cases, the move towards the market, including privatization, has often resulted in elite group capture and the rules of the game have not changed sufficiently to give new investors—the most important of which are often foreigners or expatriates—the security that they demand. The political economy of such countries is still biased heavily in favor of the existing elite and the judiciary and legal framework are not sufficiently strong or independent. Moreover, as the gains from market reform often have not been widespread for these same reasons, there has frequently been a popular backlash against the reform agenda or specific policies (e.g., increasing the price of fuels or basic necessities).

In sum, as explained in depth in later sections, an environment that is secure and supportive, with regulations and signals that lead to efficient resource allocation rather

than rent-seeking investment, is still often underdeveloped, and it is not clear that the political leaders have the motivation to supply it. Elite groups may not see it in their best interest to take market-oriented reforms to a higher level and will only do so when political pressures are so strong as to force their hand.[5] Given the prevalence of poor or modest results with respect to both economic growth and poverty reduction in many reforming countries, there has frequently been a public backlash against the reforms, and it has often not been difficult for anti-market politicians to generate considerable public support for a movement back to an economic system with a greater role of the state. In practice, significant policy reversals have not been common, despite several exceptions in Latin America. Most countries are in some type of status quo or are trying to deepen reforms.

We noted in this section that most of the countries in the sample have followed a growth strategy that was market-led, then state-led and finally market-led again. Almost all countries had a growth spurt in at least one of these phases and many had growth spurts in all three phases. However, few countries were able to sustain growth over the period of the study or, at least, come out of the study on a sustainable growth path. In the next section we discuss the similarities and differences among the countries in our sample with respect to sustainable growth and various associated factors. In particular, it will be emphasized that many met the fundamental conditions for rapid growth—a reasonably secure and supportive environment with efficiency-inducing regulations and signals—albeit via different paths. Some have enjoyed more favorable initial conditions than others, but they all have had to focus on building the institutional foundations for market-based growth and to compensate for the missing and slow-to-develop components by appropriate policy choices.

III. Growth Fundamentals

This section reexamines the theoretical perspectives currently dominant in the growth literature in light of the experiences of the countries studied in the project on Explaining Growth. It starts by reviewing the "fundamental conditions" necessary for growth-promoting investment and innovation. It then presents new evidence that the variables identified as fundamentals in the literature are indeed correlated with good performance as revealed by the case studies. However, the analysis also shows that the observed correlation does not provide an adequate or complete explanation for growth and stagnation outcomes in many countries. Close inspection suggests that improvements in country conditions gauged in terms of the variables commonly viewed as fundamentals may be a result of growth as much as contributing to growth. Indeed, all such variables are "states" or "intermediate outcomes" rather than the basic elements or "primitive ingredients" of the growth process. As such, the correlation of the measured fundamentals with successful growth by itself says little about how countries manage to

[5] In recent years the most dramatic example of such political pressures occurred when countries in Central and Eastern Europe were invited to join the EU dependent on meeting a very large number of requirements in the "acquis communitaire." It was political suicide for any politician who did not embrace this offer, which then greatly transformed the existing political economy of the country.

acquire them. Nevertheless, it is important to examine the extent to which the measured fundamentals are present in fast growing countries and absent among the slow growers.

The literature on cross-country growth regressions has explored the significance of a wide range of variables thought to influence growth performance.[6] The rationale for including variables is equally wide ranging but a priori reasoning tells us that they should somehow be associated with the conditions that foster growth-promoting innovation and investment in both physical and human capital. Thus, many of the variables can be categorized under the following three headings:

Security: All investment and innovation requires time to gestate and some of the most productive may require an especially long time to yield a return. As a result the literature has stressed the importance of a secure environment that reasonably assures investors and innovators that the returns to their effort will not be subject to criminal action, fraud, expropriation, political turmoil, or civil conflict. This is why the rule of law, property rights, an independent and efficient justice system, and a stable political arrangement have received so much attention (for surveys of research on these issues, see Acemoglu, Johnson, and Robinson, 2005, and Rodrik, Subramanian, and Trebbi, 2004, among others).

Support: In addition to security, investors and innovators require assurance that the government has the means and the motivation to diagnose and tackle problems that may arise in the operation of markets or their supporting institutions (Kohli, 2004). This includes the ability to formulate and implement policy and provide efficient infrastructure, communications, education, and social services through well directed public expenditure (Easterly and Rebelo, 1993; Esfahani and Ramirez, 2003).

Signals: While the preceding characteristics can be expected to encourage investment and innovation, it is equally important that the incentive structure provides the right signals to yield genuine contributions to growth. Investment in physical capital to sell a product in a distorted market or in education to obtain a high-paying government sinecure does not contribute to growth. Maintaining a reasonable degree of openness and ensuring effective and fair regulations have emerged as key ingredients of efforts to ensure that markets are sufficiently competitive and operate with adequate, growth-relevant information and trust (Sachs and Warner, 1995; Frankel and Romer, 1999; Wacziarg and Welch, 2003).

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[6] The literature has grown truly large. Barro (1991) triggered the recent rise of interest in empirical research on growth by empirically examining the role of a variety of factors. Later work focused on particular sets of determinants. Here are examples of such work on the roles of various factors. Education: Benhabib and Spiegel (1994) and Temple (2001); macroeconomic policies: Bruno and Easterly (1998); fiscal policy: Easterly and Rebelo (1993); financial development: Levine, Loayza, and Beck (2000); trade openness: Sachs and Warner (1995), Frankel and Romer (1999), Rodrik and Rodriguez (2000), Alesina, Spolaore, and Wacziarg (2003); infrastructure: Esfahani and Ramirez (2001); labor market, Topel (1999); inequality: Banerjee and Duflo (2003); Ethno-linguistic heterogeneity: Easterly and Levine (1997); social capital: Keefer and Knack (1997) and Zak and Knack (2001); rule of law and institutions more generally: Knack and Keefer (1995), Mauro (1995), Hall and Jones (1999), Acemoglu, Johnson, and Robinson (2001 and 2005), and Rodrik, Subramanian, and Trebbi (2004).

Empirical Evidence on Growth Fundamentals

We want to draw on the wealth of information in the case studies to test whether these three fundamentals are present in the countries with strong long-run growth and absent in the others. To this end, we apply a technique – Qualitative Comparative Analysis (QCA) – that is particularly suited to a quantitative assessment of qualitative material gleaned from case studies to identify the association between the above three fundamentals and long-term growth. We use a sample of 37 countries chosen from the original 53 case studies of developing countries, with acceptable quality and appropriate coverage being the main criteria for inclusion. We assess the extent to which subjective judgments of the degree to which each country has realized the fundamentals are able to distinguish fast-growing countries from slow-growing ones for the period 1970-2005. For this purpose, fast growers are defined as countries that grew faster than the average for the high-income OECD countries during 1970-2005 (i.e., greater than 2.21 percent a year) and maintained that relative position during the last third of the period (i.e., grew faster than the high-income OECD average of 1.94 percent a year during 1994-2005). They have therefore been converging towards OECD levels of income without slackening after an early success. There are 13 such countries in our sample.

Table 3
Growth and Fundamentals Indicators Based on GRP Case Studies

(0: Does Not Meet the Criterion. 1: Meets the Criterion.)

Country	**High Growth**	***Security***	***Support***	***Signals***
Bangladesh	0	0	0	0
Botswana	1	1	1	1
Brazil	0	0	0	0
Burundi	0	0	0	0
Chad	0	0	0	0
Chile	1	1	1	1
China	1	0	0	0
Colombia	0	0	0	1
Egypt	1	0	0	0
Ethiopia	0	0	0	0
Ghana	0	0	0	1
Guinea	0	0	0	0
India	1	0	0	0
Indonesia	1	0	0	1
Iran	0	0	0	0
Jordan	0	0	0	1
Kenya	0	0	0	0
Korea	1	1	1	1
Malaysia	1	1	1	1
Morocco	0	0	0	0
Nigeria	0	0	0	0
Pakistan	0	0	0	0
Paraguay	0	0	0	0
Peru	0	0	0	0
Sierra Leone	0	0	0	0
Singapore	1	1	1	1
South Africa	0	0	1	0
Sri Lanka	1	0	0	0
Sudan	0	0	0	0
Thailand	1	0	0	1
Togo	0	0	0	0
Tunisia	1	0	1	0
United Arab Emirates	0	1	1	1
Uganda	0	0	0	0
Uruguay	0	1	0	0
Vietnam	1	0	0	0
Zambia	0	0	0	0

Qualitative analysis is usually associated with the examination of a small number of case studies which are both intensive, taking into consideration multiple aspects of the case, and integrative, looking at how these multiple aspects fit together. QCA makes it possible to extend such an approach to exercises that involve larger samples by making use of Boolean algebra. Each case is represented as a combination of causal conditions and outcomes using a data matrix called the "truth table." A truth table is a logical shorthand form of simplifying and minimizing the different combinations of conditions associated with a certain outcome (Ragin, Charles, 2003, Rihoux, Benoit and Ragin, Charles 2004).

Developed to bridge the gap between more traditional qualitative and quantitative approaches, QCA combines some of the advantages of both. It takes a holistic view of the phenomena studied, thereby avoiding the simplifying assumptions of the most commonly used traditional quantitative approaches (e.g. linear or additive causality, causal homogeneity). Unlike inferential statistics, QCA examines each case and each individual path. It simplifies complexity by identifying associational patterns. These identified patterns facilitate in-depth exploration of the ways in which conditions combine in different cases to produce similar outcomes.

We draw on a careful reading of the case studies to identify which countries may be considered to have met each of the three fundamentals noted above. For this purpose, we first specify the indicators that represent the three fundamentals in our analysis and then set as the cut-off point for each indicator the degree to which each country has approached the standards observed in OECD countries, except Turkey and the members that joined after 1990. The categorization of each country according to their growth performance and our subjective assessment of their progress with respect to the three fundamentals as revealed by the case studies in presented in Table 3.

Before proceeding to an analysis of the results, we comment on the 'subjective' aspect of this exercise. To capture the richness of the case studies, there is no real alternative to a subjective assessment. No single indictor will serve the purpose adequately. That is indeed the point of the case studies. Making judgments regarding which country achieved (or failed to achieve) which fundamental proved relatively straightforward in most cases and the main results we present below are in essence immune to re-categorization of marginal decisions. In addition, we checked our classification of countries against standard (but limited) indicators routinely used in the literature. The results, reported in the Appendix, show that our indicators are not too far from the standard ones in most cases and we explain the reasons why there is deviation among them in the other few cases.

Having confirmed the classification of countries, we can now turn to the QCA results. As a starting point, Table 4 compares the fast and slow growers in terms of fulfillment of the three fundamentals defined above. It is clear from the table that fast growers meet the criteria far more often than the slow growers lending overall support to the importance of these fundamentals as reported in much of the existing literature. What QCA adds to this observation is that it is the cluster of the conditions based on these three fundamentals

that generally distinguishes fast and slow growers. As shown, in Table 5, five of the 13 fast growers (38.5 percent) have all three fundamentals in place and 18 out of the 24 slow growers (75 percent) have none of them. Moreover, 5 out of the 6 countries (83.3 percent) that met all three criteria grew fast and 18 out of the 23 countries (78.3 percent) that failed to meet any of criteria experienced slow growth. This shows that presence of all three fundamentals more or less ensures fast growth, while their joint absence is typically associated with slow growth.

Table 4
Growth Performance and Fulfillment of Governance Indicator Thresholds

	Percent of the Group Exceeding the Minimum among High-Income OECD Countries According to Fundamental Indicator:		
Performance	*Security*	*Support*	*Signals*
Fast Growers (13 Countries)	38.5 (5 countries)	46.2 (6 countries)	53.8 (7 countries)
Slow Growers (24 Countries)	8.3 (2 countries)	8.3 (2 countries)	16.7 (4 countries)

The classification of fast and slow growers according to the number of criteria that they meet, as shown in Table 5, explores the connections between fundamentals and growth further. First, it shows that among the eight countries that had achieved only one of the fundaments, three (38.5 percent) have managed to persistently converge on OECD average income since 1970. This is a higher percentage than among the group of countries that meet none of the criteria and implies that progress towards endowment of some fundaments does help increase the chances of high growth, though the likelihood of failure still remains strong (62.5 percent). Second, we observe no country in our sample that meets two out of the three criteria. This suggests that if a country manages to achieve one fundamental and realizes broad-based growth (three countries), attaining all three fundamentals and sustaining growth may be a strong possibility, whereas one fundamental and low growth (five countries) may not have the same positive implication. Finally, eight out of 31 countries (25.8 percent) with weak or no fundamentals achieved fast growth, while one out of six countries meeting all fundamentals failed to reach high growth. This indicates that the connection between fundamentals and growth is far from perfect, especially in the case of weak fundamentals, and suggests that other factors are substituting for the fundamentals as commonly understood in the literature.

It is evident from these observations that while the measured fundaments point to relevant conditions associated with growth, they cannot serve as explanations for the ways in which countries actually achieve growth. The fundamentals themselves are endogenous and the causality between them and growth is likely to go both ways. We

explore these issues in the next section by drawing on the country case studies and the view of the growth process emerging therefrom to appreciate better how countries move towards the fundamentals. We also consider how some of the fast growers managed to find adequate substitutes for the growth fundamentals and whether these substitutes will eventually metamorphose into more standard versions of the fundamentals. Finally, we examine the reasons why 48.6 percent of the total sample (18 out of 37) achieved neither the fundamentals nor sustained growth. Is slow growth the fate of those countries, or are there lessons in this analysis that suggest potential ways for them to escape poverty?

Table 5
Fulfillment of Governance Criteria by Fast and Slow Growers

Criteria Met	Fast Growers	Slow Growers
All 3	*5 Countries* *(38.5% of Column, 83.3% of Row)*: Botswana, Chile, Korea, Malaysia, Singapore	*1 Country* *(4.2% of Column, 16.7% of Row)*: United Arab Emirates
2 out of 3	*0 Country* *(0% of Column, 0% of Row)*:	*0 Country* *(0% of Column, 0% of Row)*:
1 out of 3	*3 Countries* *(23.1% of Column, 37.5% of Row)*: Support: Tunisia Signals: Indonesia, Thailand	*5 Countries* *(20.8% of Column, 62.5% of Row)*: Security: Uruguay Support: South Africa Signals: Colombia, Ghana, Jordan
0 out of 3	*5 Countries* *(38.5% of Column, 21.7% of Row)*: China, Egypt, India, Sri Lanka, Vietnam	*18 Countries* *(75.0% of Column, 78.3% of Row)*: Bangladesh, Brazil, Burundi, Chad, Ethiopia, Guinea, Iran, Kenya, Morocco, Nigeria, Pakistan, Paraguay, Peru, Sierra Leone, Sudan, Togo, Uganda, Zambia

IV. Rethinking Growth

The perspective spun by the theoretical and empirical literature on the role of growth fundamentals has served as an important step in shedding light on the process of economic growth. However, the experience of development across countries seems to be much more diverse and complex than can be explained by the available measures of fundamentals. As seen in the previous section, the fundamentals typically identified in the

empirical literature are indeed correlated with growth outcomes but there are enough "non-conformers" to suggest that other factors are also playing a role. Moreover, the associations are typically between growth outcomes and "states" of various fundamentals or values of key variables. As such, the available evidence says little about how the required states are realized. The case studies are however perfectly suited to a deeper investigation of growth, an investigation that sheds light on both the non-conformers and the process. The case studies are helpful for this purpose because they provide considerable detail on the "how" of growth. The exercise is also particularly insightful concerning the policies that a poor country may be able to adopt to take full advantage of its existing fundamentals and to compensate for missing fundamentals. We start our analysis with a review of what may be considered the more basic elements of the growth process as they emerge from the case studies and, indeed, from some of the recent political economy literature. Evidence in support of this view is presented in Section V where we try to show how it helps to explain the non-conformers by highlighting various key aspects of the growth process.

Basic Elements of the Growth Process

Textbook economic theory identifies three elements governing the growth process, namely:

Preferences. Standard welfare analysis assumes a representative household or a social planner who is both omniscient and beneficent over an infinite horizon and who maximizes a well-specified, long-term social welfare function on behalf of all citizens subject to resource, technology, and behavioral constraints.
Technology and behavior. The functioning of the economy is governed by technological and behavioral relationships, all of which are known to the social planner.
Resource constraints. Economic outcomes are limited by available quantities of basic factors of production and natural resources.

A key implication of this theory is that all sources of long run growth must be exogenous, and are accordingly lumped into something called "technological change" which is determined outside the system. In the short run, growth can deviate from its long run rate, but will converge to it along a path predicted by the technology, behavior, and resource constraints of the system. This is obviously unsatisfactory as an explanation of the observed economic growth experiences and as a guide for possible policy actions. The assumption of a representative household or a social planner may seem particularly strong, but replacing them with decentralized market interactions does not change the results unless there are imperfections in information and contracting that cause inefficiency in markets. When such imperfections are present and decentralized interactions drive the process, then the system can generate endogenous growth (Romer, 1986; Helpman and Grossman, 1991 and 1994; Aghion and Howitt, 1992). This approach has proved useful for exploring many issues. However, it still leaves many questions about differences in performance across economies and the role of policy unanswered.

A different picture emerges from the case studies. The current economics literature has already recognized the critical role of political economy and institutions as factors influencing the process of growth and these factors emerge especially strongly from the case studies. In addition to technology, micro behavior, resources, and market imperfections, the case studies suggest that four additional aspects are critical to a full understanding of the growth process:

Decision-making authority. The key decision-making authority varies greatly in different countries. It may be an individual with autocratic control, a group of individuals exerting power through a single ruling party, or a competitively elected government. Politicians may gain and exercise decision-making authority by force, by public acquiescence, or by interest group or public support. Broad acceptance or support by the subjects (legitimacy) may originate from tradition, charisma, or rationally-devised legal rules (Weber, 1914). The main policy decisions may be made by one individual or body or by decentralized interaction among many actors. The different types of decision-makers can be expected to have different goals ranging from self enrichment to national well-being. The processes through which decisions are reached also matter for the outcomes.

Fragmentation/cohesiveness. As events unfold, the decision-makers in charge of state institutions typically need to respond to different interests in society, including the public's demand for improved living conditions and public services. When those interests are diverse and the decision-making process lacks mechanisms to bring about effective coordination, the state becomes *fragmented* and may not be able to pursue consistent and efficient policies. This can be a particularly serious problem for new democracies with a diverse polity, where the rules for reaching coordination suffer from rudimentary design or lack of widespread acceptance. The state is *cohesive* and more effective when the decision-makers can coordinate themselves and respond to different interests with a consistent and strategic approach.

Imperfect information. Decision-makers have highly imperfect information regarding the effects of policy either in a pure economic sense or in a political sense. They fill those gaps and form mental models of the way the world works by conjectures based on the culture, ideology, and thought trends prevailing around them. The approach to those conjectures and actions based on them could be flexible and pragmatic or ideological and dogmatic. Given the complexity and dynamism of the world, *pragmatism* and *responsiveness* to changing conditions and to ineffective policy initiatives are likely to be much more compatible with growth than ideologically based strategies.

Political constraints. Constraints arise either through the electoral process in a democratic context or through threat of public protests, revolutionary movements, or disaffection and dissipation of political support for the regime in non-democratic contexts. A government remains in power only if it can keep the relevant political constituencies happy or ensure a minimal level of legitimacy (acceptance among the interest groups and the population at large). The methods through which political support is mustered have significant consequences for economic efficiency and growth because they affect the provision of public goods or involve distortionary rent redistribution to different degrees. In the short run, small elite groups may be able to capture the rents at the cost of the majority or at the cost of growth, but eventually whether in an autocracy or

a democracy the voice of the majority will be heard. Policies that enhance growth with a broad sharing of the fruits may thus have a self-reinforcing effect; *broad-based growth may be necessary for sustained growth*.

With these four points as background, imagine the thought process of a newly established decision-making authority (government). This authority, whatever its legitimacy, can be expected to conduct a crude cost-benefit analysis in which it will weigh personal gain (wealth or continued power) against the well-being of the population and possibly other social objectives. Individual preferences of the decision-making group may differ within countries and the group outcome will certainly differ across countries depending on preferences and the degree of cohesion. Awareness of the fundamental political constraint – the ultimate requirement that the population at large must benefit from the development process – may or may not be part of the cost-benefit analysis. Even if it is recognized, understanding when it might become binding is extraordinarily difficult and mistakes will be made. Nevertheless, the authority can be imagined to arrive at some form of overall strategy, self-serving, nationally responsive, or somewhere in between.

The preceding discussion gives a flavor of the range of political motivations and aspirations evident in the country case studies. The distance between the policy-maker's intentions, whatever they may be, and outcomes, however, is huge. The ability of the authorities to act may be constrained by political factors as well as technical skills. Even if the decision-making authority is cohesive and well served technically, the ability to predict the consequences of policy in either the economic or the political sphere is limited at the best of times. In addition, unexpected changes in the external environment or in domestic conditions such as drought, discovery of new resources, etc, can knock even the best laid and best implemented plans off course and possibly cause a reconsideration of the initial political calculus. The difficulty of policy implementation, and the consequent importance of a willingness to reconsider and to do so quickly, is evident in the case studies.

The view emerging from the case studies, therefore, is one that emphasizes diversity of experience. We illustrate this point in the next section by showing the considerable range of experience even within the five fast growers that have reached relatively strong fundamentals. As we shall see, the success of these countries has involved more than just developing the fundamentals. Indeed, most of them had started growing rapidly well before achieving strong fundamentals. However, they all seem to have *met their political constraints with broad-based sharing of growth benefits* and they all seem to have *responded well to changed circumstances and to policy errors*. These characteristics have been important in dealing with new and unforeseen circumstances and have contributed to establishing a sense that the system strives towards *security*, *support*, and *signals*, i.e., the fundamentals. A related observation that is particularly interesting in this respect is that the decision-making authority has been different in the five countries and the policies pursued have also varied among them. This is in a sense to be expected in the context of our framework because the pragmatic approach associated with good performance naturally implies different choices under different circumstances in these countries.

Following the discussion of five conformers, we then use this ‘diversity’ interpretation to ‘explain’ performance in the non-conformers.

V. Diversity in Performance

Successful Long-run Growth with Strong Fundamentals

It might be expected that the five countries achieving strong fundamentals and experiencing sustained growth would look fairly similar with respect to governance structures, institutions and policies. In fact, even within this group the story is one of considerable diversity except in two important respects. First, all five were committed to achieving a broad distribution of the benefits of development and took context-specific measures to achieve this. And second, all five were prepared to respond to changing economic circumstances in a pragmatic manner free of ideological sterility. In sum, the cost-benefit calculation in these countries pointed the decision-making authority in the direction of broad-based growth and, free of ideological constraints but determined to pursue their goal of widely distributed benefits, they responded quickly whenever economic outcomes proved disappointing and/or the political constraint began to bind.

Governance Structure and Political Constraints

The states in the five countries – Botswana, Chile, Korea, Malaysia, and Singapore -- that have both instituted the fundamentals and achieved rapid growth over the period 1970--2005 have had different political characters and structures. At one end of the spectrum, Malaysia and Singapore can be characterized as cohesive, though relatively autocratic, with the basis for authority being rational legal processes, rather than tradition or charisma. Also, both regimes derive legitimacy from delivering broad and rapid growth. Beyond this, however, even these two countries have different structures. In Singapore, a single political party, the People's Action Party, has ruled the country since self-government in June 1959. In Malaysia, a coalition (the Alliance) of political parties representing the country's three main ethnic groups, namely, Malay, Chinese and Indian, took over in 1957 and remained in power as the National Front throughout the period under consideration (Chew and Wong, 2002). Thus both countries experienced a long period of political continuity albeit with different underlying structures.

In contrast, Chile and Korea, have experienced periods of autocratic military rule as well as democracy. They were cohesive states under their military regimes and their smooth and well-managed transitions to democracy allowed them to maintain that characteristic to a large extent. In Chile, after a few years of chaotic rule, the socialist government elected in 1970 was removed in the military coup of 1973, and democracy did not return until 1990 (Chumacero and Fuentes, 2002). Korea followed a similar pattern with the military government coming to power in 1961 before being replaced by a democracy in 1987 with the election of Roh Tae-Woo, followed by the installation of a civilian government in the presidential election of 1992 (Park, 2002).

The fifth country, Botswana has followed yet a different path. It started with a multi-party democratic system of government at independence. The leadership built on the "strong tradition of participation and consultation at all levels of public life from the village to central government" that has strong roots in the "*Tswana* custom of holding 'town meetings' known as *kgotla*" (Maipose and Matsheka, 2004). This has led to a cohesive "one-party dominant democracy," but this outcome is the result of an electoral process that is relatively neutral and fair.

Thus, there is no single governance structure common to all five countries. Moreover, two of the countries experienced different governance structures within the period under study. Nevertheless, all five benefited from a high degree of cohesiveness within the decision-making authority regardless of its political structure and its relative position on the spectrum from autocracy to democracy. And all five, perhaps because of their cohesion, recognized the basic political constraint. In some countries, the decision making authority pushes the political constraint as much as possible in order to enrich itself or a small elite. Invariably, the political constraint binds and there is a change of regime sometimes accompanied by violence, sometimes not. The five fast growers implicitly conducted the same cost-benefit analysis gauging the strength of the political constraint and weighing the relative merits of long-term national welfare versus short-run personal gain, and clearly decided in favor of the former thereby increasing their prospects of remaining in power. Whether or not the cohesiveness influenced the implicit cost-benefit calculus, it helped these governments to design policies in a manner consistent with their objective. Moreover, as we now discuss, they possessed the ability to implement public policy and programs, and they managed the political constraint with relatively low costs in terms of growth.

With respect to implementation capacity, all five countries are well known for their effective administrative systems. At independence, Botswana, Malaysia, and Singapore inherited well-run, British-style colonial public administrations. All three further developed and strengthened their bureaucracies, relying largely on merit-based promotions and recruitment, career continuity, and decent compensation. In Botswana and Malaysia, some compromises were made in favor of equity and political balance considerations. However, Singapore focused on the principles of meritocracy and probity in the bureaucracy and managed to establish an exemplary system well-known for competent and clean administration, efficient public services, and successful economic management.

Korea also developed a highly effective bureaucracy based on its colonial heritage, though in that case the system had to be rebuilt in the 1960s after a couple of decades of decay due to war and neglect in the 1940s and 1950s. Another important difference between Korea and the above three cases was the Japanese style of administration, which unlike minimalist British bureaucracies was more interventionist, developmental, and operated in close cooperation with business (Kohli, 2004).

Chile's public administration provides another contrasting case because it was home-grown and owed its initial strength to the efforts in the early decades of the twentieth century to quell working class activism by providing efficient public services, especially widespread education. These efforts in turn provided a rich basis for recruiting capable and well-educated administrators after the mid-1970s when the government shifted its strategy from direct intervention in markets to sophisticated and innovative regulation (Barr-Melej, 2001).

Thus, all five fast growers in our sample had the good fortune of inheriting a well functioning administrative system. However, a more salient observation concerning their success is that they made conscious policy decisions to develop and foster their inheritance. This in turn helped these counties to manage the basic political constraint. Government action in all five countries abided by the need to provide broad-based benefits *if the government was to stay in power*, but did so in ways that avoided excessive distortion and waste. The manner in which this constraint manifests itself and the government's response, however, varies.

In Botswana the constraint manifests itself through internal party politics and the five-year electoral cycle, which the ruling party has successfully won, precisely because it managed to deliver broad and long-term growth. In the non-democracies it manifests itself through non-electoral means such as the ethnic conflict in Malaysia in 1969 that led to the New Economic Policy, and the student and worker protests in Korea before the 1971 presidential election that prompted a change in development strategy. Further labor unrest in the 1980s also was met by government efforts to improve working conditions and wages. Singapore has not faced actual popular protests because it has been quite pro-active in terms of both enforcing strict discipline and consistently achieving a broad distribution of the benefits of growth thereby effectively meeting the political constraint.

In Chile, an intense redistributive struggle under a democratic regime led to the election of a socialist president, Salvador Allende, in 1970 with a narrow plurality over his two electoral rivals (36.2 vs. 34.9 and 27.8 percents). Allende pursued major redistributive policies backed by low-income groups, but not well liked by the population more broadly. The political constraint became binding and in 1973, the military overthrew Allende's government in a violent coup and started a period of severe political repression combined with more market-oriented economic policies. While large parts of the middle classes were against the methods of the junta regime, they largely supported most of the economic program (see Chapter 4). The junta's approach kept the leftist forces at bay for several years, though largely by force. However, after a financial crisis in the early 1980s, the military government deepened the market reforms, privatized pension schemes, and established targeted social programs which jointly enhanced the stakes of larger parts of the population in the efficient operation of markets. A clear sign of the broad support for the policies was their survival after Chile's transition to democracy in 1990 and even after socialists won the presidency in 2000.

Whatever the means, political or non-political, the underlying force behind the constraint is dissatisfaction on the part of a significant segment of the population with their standard

of living. Or to put the same point differently, the governments in these five countries stayed in power because they recognized the overwhelming significance of this constraint and sought to deliver broad-based growth. The case studies make clear the extent to which this constraint was met in all five countries, and not simply in terms of the well known increase in their incomes but also in terms of its broad distribution across all segments of the population and in terms of efficiency of the mechanisms used, particularly in the form of widespread provision of public goods. Thus support to the People's Action Party in Singapore has largely been built on its ability to deliver first-rate public services and to ensure high living standards and prosperity for the multi-ethnic population. Botswana, unlike many countries in Africa, did not neglect rural interests and undertook efficient policies and programs to reach rural populations.

Recognition of the political constraint and efforts to deal with it went farthest in Malaysia. Poverty, through targeted programs, infant mortality and adult literacy all have improved while life expectancy rose considerably. Inequality was also reduced during 1965-1990 to the benefit of the Malay population, at least in relative terms. Some of those redistributive actions may seem inefficient, but they had substantial payoffs in terms of increased investment and innovation by minority entrepreneurs who were assured of security and social harmony in exchange for a more equitable distribution of growth benefits. Korea had a head-start in redistribution through a major land reform in the 1950s. Although the initial stages of export-promotion strategy in the 1960s entailed a drop in real wages, the continuation of the strategy into new and more sophisticated products together with improvements in education and training led to rapid increases in productivity as well as real wages. Finally, in Chile, after major redistributive conflicts, the government found ways of providing social insurance and broader growth through innovative enhancement of market institutions. Whatever the method, each country succeeded in spreading the benefits of growth and in doing so strengthened their legitimacy in a virtuous circle.

Pragmatism and Responsiveness

The above discussion shows that all five countries recognized the basic political constraint and had the administrative capacity to conceive and implement development strategies in pursuit of their goals. This, however, is only part of the story. Implementation of any development strategy is conducted in a context of highly imperfect information about the functioning of the economy and, perhaps more importantly, the elasticity of the political constraint. As a result, ex ante cost-benefit analyses may quickly unravel as ex post outcomes depart from expectations. To deal with this uncertainty, all five fast growers drew on two key attributes. First, they were pragmatic. They never felt obliged to pursue some policy or program based on rigid ideology, but were instead willing to draw on various strands of economic thinking that seemed best suited to their purpose. And second, they were responsive and willing to experiment with new policies. They responded quickly in innovative ways to changed economic conditions and to evidence that particular policies were not contributing to their goals as expected. These two aspects are illustrated below.

In some important respects, all five successful growers followed similar economic policies. Thus, all countries pursued prudent macroeconomic management (fiscal and monetary policy). Korea's military government, for example, adopted a policy of macroeconomic stabilization with monetary and fiscal tightening to control rampant inflation in the 1970s. All countries also followed relatively open trade policies (but see below) with some initial import substitution and some special support for exports. One of the most profound reforms was Chile's elimination of NTBs and across-the-board reduction in tariffs to 10% in the early 1970s. Each government also invested in physical infrastructure and human capital to promote growth. Singapore for example emphasized primary education to improve basic literacy in its first decade, while years of schooling grew fastest in Korea among the Four Tigers and Malaysia made a special effort to educate Malays. The countries also maintained high levels of investment by encouraging domestic savings, while also using foreign capital and external borrowing, often quite prudently.

Nevertheless, there were important differences in policy-making. Korea's Five-Year plans were designed to achieve growth targets through a centralized power that intervened in the market more often than not even though market distortions were limited. In contrast, Chile liberalized prices, aggressively opened the economy to trade and international capital flows, and reduced the size of the government. Policy towards foreign direct investment (FDI) provides another example. Thus, Malaysia adopted a liberal policy towards FDI, whereas FDI remained insignificant in Korea's external financing. Malaysia relied much more heavily on targeted programs to reduce poverty than the other countries. Thus, within an overall common framework of economic policy, countries adopted different tools to achieve specific goals.

Pragmatism was a hallmark of policy-making in these countries. Botswana is a striking example. It's pragmatic development planning stands in stark contrast to the ideological dogma, particularistic concerns, or arbitrary approach that drove economic strategy in most African countries. The ostensible adoption of socialist agendas throughout the African continent was avoided in Botswana, making it much more like the other fast growing economies in this respect. Nor was there necessarily a rigid application of free-market policies in these countries. Chile imposed limited taxes on the movement of short-term capital as a means of avoiding international contagion effects, after it learned the high costs of such effects under fully liberal capital account policies in the early 1980s. As noted above, Korea intervened extensively in various markets, though the government was ready to reconsider when an intervention did not seem to bear fruit. When an effort in the 1970s to promote a number of capital intensive industries proved problematic in some cases, the government shifted its support towards new industries, especially those with burgeoning technologies.

Responsiveness to changed circumstances and to the need to correct past mistakes is also evident in the history of these countries. The authors of the case study of Malaysia capture this well: policy making was a “continuing process of adjustment, of adaptation, of experimentation, and learning and unlearning in an ever changing world and an increasingly competitive global economic environment” (Chew and Wong, 2002) A

major rethink of economic planning following racial riots led to NEP under the Second Malaysia Plan (1971-75). The Non-Financial Public Enterprises, however, proved a major burden on the budget, and, realizing its fiscal blunder, the government began privatizing and shutting them down. In Singapore, the 1986 Economic Committee Report commissioned in the midst of a recession, argued that by the 1990s Singapore's niche as an offshore production platform would be eroded and it should become an international business center and attract MNCs to establish operational headquarters in Singapore to undertake product development, manage treasury activities and provide administrative and management services. A final and especially interesting example comes from Botswana where 1990 marked a major shift in strategy with the decision to promote growth through the private sector and to encourage economic diversification. Botswana also conducted an effective counter-cyclical policy to manage the booms and slumps arising from shifts in the price of diamonds in contrast to performance in other African countries such as Nigeria (oil) and Zambia (copper), where the government did not manage to steer away from highly destabilizing pro-cyclical policies.

Pragmatism and responsiveness regarding the conduct of policy formulation are the counterpart of the recognition of the basic political constraints. Assuming governments want to stay in power then they cannot afford to adopt ideologically driven agendas and they cannot fail to adjust to changing circumstances. Inevitably, however, there will be mistakes. A crucial attribute of successful policy making is therefore the ability to recognize a mistake and to take corrective action. Thus, the fast growing countries have decided *ex ante*, implicitly or otherwise, to pursue long-term improvements in national wellbeing broadly defined rather than short-run personal enrichment *and ex post* they managed matters pragmatically and responsively to meet the political constraint. Both these elements are necessary for a lengthy period of rapid growth.

<u>Strong Growth with Weak Fundamentals</u>

In Section III, we identified thirteen countries that had strong growth—that is, they continually converged toward the average of OECD income levels—from 1970-2005. Five of these countries fulfilled the three fundamentals for growth, albeit in different ways, as discussed above. What is surprising is that the other eight countries exhibit weakness in some or all the fundamentals, yet achieved impressive growth. Thus, seven of them — China, Egypt, India, Indonesia, Sri Lanka, Thailand, and Tunisia—had strong growth throughout this period and earlier, while Vietnam had very rapid growth starting in the 1980s when the dust of a long war on its soil had settled, and yet five of them failed to achieve *any* of the fundamentals while Tunisia realized the *support* fundamental and Indonesia and Thailand delivered reasonably efficient *signals* (Esfahani, 2005; Warr, 2006). The question we now want to address is whether these eight countries displayed the basic underlying features—recognition of the political constraint and pragmatic and responsive policy formulation—observed in the five fast growers that did achieve the three fundamentals. A review of the case studies reveals that the governments in all eight countries in this group seem to have been quite observant of the *political constraint* and to have become more *pragmatic* and *responsive* during the period of study, even if

they were not so from the beginning. This stands in sharp contrast to the experience of the slow growers.

An important common element in the growth process of these eight countries is that they all initially followed socialist or strong ISI development strategies and experienced relatively high growth rates for a while under these regimes. This may to a considerable extent reflect a size-of-the-domestic-market effect (see below). Be that as it may, it helped these countries to meet the basic political constraint of reasonably broad-based growth. Indeed, compared to most other countries that pursued similar policies, the members of this group seem to have derived greater benefits from ISI policies in terms of growth and industrial development. In five cases— China, India, Sri Lanka, Thailand, and Vietnam—the countries came out of the ISI/socialist phase with a large manufacturing sector that was inefficient by OECD standards but not by the standards of other developing countries.

Moreover, in all these countries ISI was combined with active policies to reduce inequality and make growth broad-based, though the extent of such effort varied.[7] Interestingly, this feature of policy was maintained to different degrees in most countries in the group when they started to move towards new development strategies. Indeed, in four cases—namely China, Egypt, Tunisia, and Vietnam—the coexistence of the old and new strategies entailed establishing some form of "dual-track" system. Their experience then seems to be consistent with an implicit or explicit recognition of the political constraint and a determination to act accordingly.

Pragmatism in the formulation of policy and development strategy is reflected in their practical responses to the failings of ISI and their efforts to find and adapt new strategies more appropriate to their specific conditions, including partial maintenance of their old policy regimes to manage the risks of political constraints.[8] In China, Indonesia (before 1997), Tunisia, and Vietnam, cohesiveness of state has enhanced its ability to be pragmatic and responsive. Egypt and India have at times enjoyed that feature under charismatic leaders.

With the exception of Egypt, this group of countries created a supportive policy regime with respect to exports and FDI once the dividends from ISI strategy started to diminish (India after 1990, Sri Lanka and Thailand after 1977, and China, Indonesia, Tunisia, and Vietnam[9] since 1980s). This clear demonstration of a pragmatic, responsive approach to policy is developed further in the next section by means of a comparison with those

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[7] For example, emphasis on broadness of growth seems to have been much stronger in Sri Lanka and weaker in Indonesia and Thailand.

[8] One a priori that we had was that a general climate of peace was important for strong long-run growth but clearly this does not seem to be the case as all of the 8 countries have been embroiled in civil or external conflicts to some extent during the period (although Thailand significantly less than the others), with a high proportion of government spending on defense.

[9] Note that Vietnam is in this strong growth group only because of its very high per capita GDP growth in the 1990s (5.5 percent per year) offset a poor performance in the 1970s (about –0.7 percent per year during 1970-75 and 1.3 percent per year during 1976-80) and average performance in the 1980s (about 2.1 percent per year).

countries that failed to change course, or took more dogmatic and less responsive turns, and consequently suffered disappointing growth. In the case of Egypt, there were visible policy initiatives in the mid-1970s and again in the 1990s to promote exports and FDI. However, those policies were not pursued vigorously. Large flows of aid and remittances seem to have served as a substitute for export promotion and have kept the country's growth rate substantially above what it would otherwise have been.[10]

As noted earlier, pursuit of ISI/Socialist policies is not unique to the successful growers. Indeed, most slow growing countries have also adopted such policies in the past. However, the drive to achieve broad-based growth under ISI and beyond is less common. Indeed, in many staunch followers of the ISI strategy such as Brazil and some other Latin American countries, inequality increased during this phase of industrialization and later came to undermine their liberalization and privatization efforts and even create a backlash against reform in some cases. Chile, as we have seen, overcame such problems in the 1980s and beyond when it paid attention to the need for spreading the benefits of growth more widely. Another important difference between the fast and slower growers seems to be the extent and nature of reforms they adopted as the returns to ISI started to diminish. As we argue below, fast growers typically opted for more active export promotion rather than passive or limited market liberalization.

In the following sub-sections, we examine the ways in which these eight countries were able to find *substitutes* for their deficits in terms of the three fundamentals and why other countries were not able to do so and suffered low growth as a consequence. We start with the analysis of the situation under ISI/socialist policies. We show that the set of characteristics that contributed to growth in that situation and the capabilities acquired in that process played important roles in the formation and success of later growth strategies. We also explore the reasons why similar elements did not emerge or did not work in slow growing developing countries. Finally, we discuss the development of the fundamentals and their interactions with these other elements of growth that served as their substitutes.

Growth under ISI/Socialist Policies

As noted above, interventionist ISI/socialist policies stimulated growth for a while in developing countries to various extents, some starting in the 1930s and many others in the 1950s and 1960s. Despite relatively free trade in the earlier periods, developing countries had failed to grow because they lacked the necessary pubic services and physical and institutional infrastructure for effective operation of markets. In particular, capital and insurance markets were typically underdeveloped, distorting the incentives for investment and for entrepreneurial and labor market activities. At the time, many developing countries had neither the knowledge nor the capacity to tackle these problems

[10] While it could be argued that the availability of relatively large amounts of aid or remittances reduces the pressure on governments to develop stronger fundamentals, many countries have received a lot of one or both but in our sample the only such countries that still were in the strong growth category were Sri Lanka and Egypt.

in economically most efficient ways. However, based on the experience of developed countries and natural experiments they knew that protection and state-led resource mobilization can help shift resources towards more rapid industrialization. Raising the protection walls was an easy and attractive option for most of them, though the consequences depended on the economy's conditions. More importantly, getting the state to take a leading role in resource mobilization required stronger political and administrative organization. As a result, the country characteristics and the nature of the regime—its ideology, organization, sources of legitimacy, means of control, and the like—mattered for the outcome of interventions. Here we examine a number of such factors that seem to stand out based on the case studies. Our aim is to understand why the group of countries that we have identified as fast growers with weak fundaments was relatively more successful under ISI/socialist regimes compared to many other developing countries that followed similar policies.

One factor that may account for this advantage is the relatively large sizes of population and, therefore, potentially large internal markets among the fast growers, which enabled them to benefit from economies of scale.[11] Except Sri Lanka and Tunisia, they all had large populations; 30 million and greater in 1970, reaching well over 60 million and more by 2005. In large economies that were not run by central planning, such as India and Thailand, market size may have also allowed some internal competition, thus inducing greater productivity.[12] It was more difficult for the policies to be completely captured by a small group of industrialists and rent-seekers who, at least, had to compete among themselves in some sectors. Other large countries in our sample that pursued ISI vigorously in the 1950s and 1960s—in particular, Iran, Pakistan, and Brazil—experienced high growth rates in that period, though broad distribution of the benefits was not on their agendas and, for this and a number of other reasons that we discuss below, did not continue to perform well later on.[13]

Another important factor that contributed to the relative success of interventionist policies in some fast growing countries is the *cohesiveness* of their states. In particular, in China and Vietnam, the dominance of strong and disciplined parties organized around the idea of improving the lives of the poor through increased production helped prevent most industrial projects turning into "white elephants" or sources of monopoly rent extraction. The autocratic regimes in Egypt, Indonesia (before 1997), and Tunisia were also relatively cohesive and had strived for good performance under ISI with different degrees of effectiveness. Iran, Pakistan, and Brazil also experienced ISI policies in the 1950s and

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[11] For direct evidence on the impact of markets size on productivity under import substitution, see Pack (1987) among others.

[12] Egypt is an exception here, likely due to the fact that it was more similar to centrally planned economies and its industrial sector was largely owned by the state. Also, after 1973 when it shifted towards a dual-track it may have faced little pressure to reform its public sector due to the availability of large amounts of remittances and foreign aid as will be discussed further below. It was only in 1990 that serious attempts began to move the economy to one led by the private sector.

[13] Many other relatively large countries in our sample also experienced non-trivial growth, though not fast enough to catch up with the OECD average in the 1960s. These are Ethiopia, Morocco, Nigeria, and South Africa.

1960s under relatively cohesive regimes, which is consistent with their good performance at the time.

The broad-based orientation of ISI/socialist policies among fast growers may have had a two-sided impact on performance under ISI, though on balance it seems to have contributed to longer term growth. At least until the mid-1970s, the regimes in China, Egypt, India, Sri Lanka (under the Sri Lanka Freedom Party), and Tunisia considered themselves communist or socialist and sought public acceptance based on their attention to wide distribution of the fruits of economic growth. This often meant pressure to increase employment even at the cost of productivity, especially in the form of overstaffing in state-owned enterprises. However, delivering higher incomes was also a central component of the promise, which entailed an added pressure on the government to seek solutions when the existing policies yielded poor performance. Moreover, commitment to broad-based growth meant greater attention to education, health care, and other social services, which were investments in human capital and social insurance with substantial long-term payoffs. Such services are also a part of the government *support* needed for facilitating investment. Finally, the broad-based approach ensured that the *political constraint* was observed and the regimes could enjoy longevity. This ultimately enabled the government to offer better *security* to investors and workers in the form of more credible promises, thus substituting for the country's weaknesses in formal institutions of rule of law. A prime example of a regime that collapsed by ignoring broad growth and the political constraint is the Shah's government in Iran during 1953-1978. Even though it was highly successful in stimulating growth in the 1950s and 1960s, it increasingly alienated broad segments of the population and by the mid-1970s could no longer offer security even to its own supporters despite its control over massive foreign exchange revenues.

Thus, broad-based ISI strategy carried out by cohesive states seems to have provided some *support* and *security* that helped supplement the weak fundamentals in the fast growing countries. Did the strategy also address the *signals* problem in those countries? The answer based on our earlier discussion is a qualified yes, in the sense that the ISI offered a "constrained best" strategy for addressing a host of institutional and market failures in those countries, given the knowledge and capabilities of their governments at the time. In contrast, the large number of countries that lacked the fundamentals and failed to grow typically had difficulties in the ISI stage because it was less well suited to their specific contexts. In particular, many of them were too small to benefit from the strategy anyway, and from the early stages should have sought alternative strategies that matched their conditions. Most African and some Latin American countries fall into this category. Among the larger countries in our sample that did not meet with much success under ISI, the key missing elements seem to be cohesiveness (e.g., Ethiopia and Nigeria) and policies to make growth broad-based (e.g., Colombia, Morocco, South Africa).

Beyond ISI: Exports and FDI

As noted above, once the signs of slowdown under ISI became visible, sooner or later the fast growers that lacked adequate fundamentals shifted towards new strategies that promoted exports and FDI to various degrees. Egypt ended up being an exception, which we will discuss separately below. Meanwhile, many other countries that opted for reform by adopting more pure liberal trade and free market policies did not do nearly as well as the fast growers in our sample. These observations raise three major questions:

(1) What factors enabled these countries to arrive at new and productive strategies, a step that so many other developing countries have failed to take?

(2) How did they manage to succeed in their new strategies without adequate fundaments?

(3) Why did the more interventionist policies of export and FDI promotion, rather than simpler free market approaches, come to be associated with fast growth?

Concerning question (1), the above analysis of country performances under ISI/socialist policies highlight some head-start advantages that the eight countries under consideration had gained under that strategy: They had developed sizable industrial sectors, had broadly raised the levels of income and human capital, and had gained experience with the intricacies of development policies. In addition, all the countries in the group had implemented some land reform or already had equitable land distributions, hence reinforcing the broad base for economic growth. While they had managed their political constraints well and their existence was not in question, the regimes understood clearly that their futures depended on continued improvement in economic conditions. As a result, they were sensitive to the developments in the economy and when the signs of weakness in economic performance under ISI emerged, sooner or later they brushed aside any dogma that may have driven their policies, adopted *pragmatic* approaches, and became *responsive*. In doing so, the relative *cohesion* of the regimes running these countries facilitated the decisions regarding reform. In particular, the more cohesive regimes, especially China and Vietnam, were more effective and managed to take bolder and more innovative steps.

Let us now turn to question (2). As under ISI policies, the longevity of the regimes in this group of countries substituted for their deficit in terms of the more formal mechanisms of the *security* fundamental; i.e., the *rule of law*. Their cohesion, experience, and commitment to broad growth further led them to search for ways of enhancing the government services needed to *support* investment and innovation in new lines of production. Finally, the shift to export promotion was crucial in improving the *signals* to producers. While the signals under ISI had served as second-best corrections to market and institutional imperfections, economic development had changed the situation and the old ISI signals had become obsolete and misleading. Export promotion entailed letting producers face international prices and, therefore, receive efficient signals on that front. For any remaining domestic market or institutional failure, the government had to find a way to deal with the problem more directly. For example, capital and insurance market problems must ultimately be addressed by developing the institutional and regulatory capacity necessary to improve the functioning of those markets. However, given that such

developments take a long time, alternative mechanisms that generate similar results could be employed, albeit at a cost. An example of such a mechanism for dealing with insurance failures is the so-called "dual-track" strategy, which involves maintaining a sizable state-owned sector along side the growing market-oriented one and using it as a means of managing employment, aggregate demand, subsidized inputs, etc. (Lau, Qian, and Roland, 2000).

Finally, let us consider question (3). The above point about the way substitutes are used in place of missing fundamentals is important because it highlights why market interventions may still be necessary when the government moves away from ISI/socialist strategies. Countries with weak fundamentals have many imperfections in their markets that need to be addressed. But, that is a long term process. Substitutes for good fundamentals are basically interventions that use the existing means and institutions to come up with interim, second best solutions. For this reason, the solutions are highly specific to contexts in which they are employed. However, some form of export promotion seems to be part of the solutions adopted by all successful countries because it happens to address a number of common problems:

> (i) It offers a means of improving the signals for the output side of enterprise activity.
>
> (ii) Export promotion generates foreign exchange revenue, enhances creditworthiness in international capital markets, and mitigates the sovereign risk and external credit problems that have traditionally constrained imports and caused instability in developing countries. Reliable access to credit is important because it allows the country to weather external shocks more easily and to maintain a stable environment for investment and imports needed for technological progress.
>
> (iii) The government's engagement in export promotion can help overcome some externalities involved in entrepreneurial activities needed for discovering the products, processes, and export markets that fit the country's conditions best. As Rodrik (1996) argues, once an entrepreneur comes up with such an innovation, other producers may imitate the process and dissipate the returns to his investment. To counteract the adverse incentives spun by such externalities, the administrators must be sufficiently involved to be well-informed about the issues and contributions of various players in each market.
>
> (iv) Net foreign exchange earnings can provide a useful and tangible measure of performance that may be utilized for monitoring government programs and projects and for compensating producers or public agencies that do not receive full reward for their contributions. For example, it is often less difficult to assess the negative impact of inadequacies in infrastructure on exports than on domestically-oriented activities. As a result, when the government focuses on export promotion, it becomes easier to pin-point the bottlenecks and to ensure that they are addressed. Although the outcome could be biased in favor of export production, it may not be inefficient to the extent that exports do generate external

benefits and the alternative mechanisms for addressing infrastructure are not very effective.

The above discussion shows that while liberal trade and free market policies focus on the *signal* aspect of growth fundamentals, they ignore a host of other issues that need to be addressed when the *security* and *support* fundamentals are weak. Export promotion policies seem to have served as a productive means of filling in for the deficiencies in the fundamentals. Interestingly, governments that manage to successfully implement such policies may receive unfairly low scores on some common measures of the fundamentals because they seem excessively interventionist and removed from the ideal model of a liberal economy where the government focuses on law and order and public service provision and leaves the rest to markets with minimal regulation.

This analysis can help explain why many market-oriented reforms, especially those in Latin America, have failed to generate good results. To begin with, these reforms have been adopted by countries that lacked the necessary fundamentals. While the reforms may have improved some of the signals received by the producers, they have tended to miss on the more basic problems that those producers faced in terms of inefficient public administration and failures in factor markets. The problems were further compounded by the fact that in many of the countries adopting such reforms, there was little industrialization under ISI or other strategies. As a result, the government often lacked the necessary capability for identifying and implementing appropriate development strategies fitting the country's specific conditions. In the countries that did have experience with industrialization, such as Brazil, Iran, and Pakistan, the strategy lacked a broad base, which meant that the social infrastructure and education tended to be weaker and managing the political constraint after liberalization was more difficult. As a result, many of these countries experienced major political turmoil in the process of ISI or afterwards. This further weakened their *security* and *support* fundamentals and undermined their growth in the post-ISI period even though they were implementing the best market signals. Peru during the 1990s was an example of such an outcome. Indeed, it scored quite high on the *signals* measure of the fundamentals, but failed in other respects and in terms of growth.[14] Another example from the Middle East is Yemen, which followed the World Bank advice to implement a fairly open trade policy in the mid-1990s, but has experienced little growth since then (Al-Asaly, 2003).

In sum, fast growers with weak fundamentals were countries that were successful under ISI and had already built some capacity to implement relatively complex policies. In addition, they were typically cohesive regimes with longevity and had learned to be pragmatic and responsive. When they decided to shift away from ISI, they chose to remain interventionist to various degrees to facilitate export led growth. They also took advantage of that strategy and adapted their interventions to fill in for the missing fundamentals. This adaptation of policies to specific conditions along with the higher levels of human capital and the more equitable distributional mechanisms that these countries had built under ISI enabled them to escape the political economy traps that

[14] Peru has been growing faster since 2002, but it remains to be seen to what extent this growth is sustainable.

engulfed many other countries that attempted to go in more liberal policy directions, while lacking adequate growth fundamentals. In two other countries, other sources of foreign exchange reduced the need for aggressive export promotion policies (Egypt) or else offset the other damaging costs of civil disturbance (Sri Lanka) as we now explain.

The case study of Egypt suggests strongly that it would not have had average per capita GDP growth rates high enough to be considered a strong growth performer or meet its political constraint without large amounts of foreign aid and/or remittances. During 1977-1995, foreign aid averaged about 18 percent of imports and about 8 percent of GDP. Remittances were on average about 22 percent of imports and about 10 percent of GDP.[15] These large inflows are due to the rather unique geopolitical position of Egypt in the Middle East and North Africa. Its policy performance seems to have been relatively weak over much of the period but it has still managed strong growth due to foreign assistance from the West and very large flows of remittances from migrant workers in the oil rich Arab states. It has also enjoyed sizable foreign investment flows from Arab countries. These inflows have been crucial in enabling Egypt to invest and grow by funding the gap between domestic savings and investment, which averaged about 12% of GDP during 1975-1995.

The massive inflows had obviated the need to pursue export promotion policies, with detrimental consequences for institutional and economic development in Egypt. In the mid-1970s, Egypt looked in many ways like many other fast growers. It had grown relatively fast based on an ISI/socialist strategy with the benefits being broadly distributed. In 1974, it announced a major policy reform, *Infitah*, to open up the economy through a dual-track process and encourage exports through private, especially foreign, investment. However, soon after, foreign aid and remittances increased substantially and the export promotion aspect of *Infitah* turned into support for the expansion of the domestic capitalist class. Most other aspects of the dual-track system, including its interventionism as well as redistributive and social insurance features were maintained. These developments enhanced the longevity of the regime and its ability to provide some *security* and *support*. However, in the absence of export promotion, its progress in those dimensions was sluggish and did poorly in providing appropriate *signals*. As a result, for many years its growth remained mostly dependent on large volumes of investment and not so much on productivity growth. Interestingly, as the amount of aid and remittances declined in the 1990s, Egypt managed to enhance its earnings from exports and tourism and maintain its pace of growth closer to the other fast growing countries.

Sri Lanka is another case where aid and remittances seem to have played an important role. As noted above, Sri Lanka moved to an export and FDI based strategy earlier than most of the countries in the extended sample (1977), which had very important positive consequences for growth. However, during most of this period, Sri Lanka was also fighting a costly civil war—for several years, two civil wars simultaneously—which has prevented the economy from reaching its full potential. In the early part of the 1977-2000 period, the low domestic savings was offset by foreign aid in what could be called

[15] These figures have sharply declined since the mid-1990s.

the "poster child for liberalization" effect.[16] In more recent years, the gap has been offset by very high remittances of migrant workers, over 5% of GDP on average since 1980. This seems to have partly offset the large costs of the civil war, though ultimately the country's successful growth can be credited to the government's strategy to develop an effective export promotion policy built on its broad-based growth and high human capital attainment under ISI.

Growth, Fundamentals, and Substitutes

In this sub-section, we will examine four questions with regards to the relationship between growth, fundamentals, and alternative elements that can act as substitutes for the fundamentals:

(1) Have fundamentals improved over time for the 8 countries that lack them but grew fast?

(2) Is the strengthening of some fundamentals the driving force behind the growth performance?

(3) For the strong growth performance to be sustained, is it important that the fundamentals are strengthened, or can the substitutes serve the purpose indefinitely?

(4) How do countries shift from reliance on substitute mechanism to the fundamentals?

To answer question (1), we inspected the direction of change in the fundamentals based on the criteria that we used for the indicators in Table 3. We also examined the trends in the relevant variables from the Heritage Foundation's Index of Economic Freedom and Governance Indicators. Since the periods covered by these datasets are relatively short, we used similar variables from Fraser Institute's *Economic Freedom of the World* and Political Risk Service's *ICRG* datasets, which have longer time coverage. The latter sources as well as our own indicators suggest that since the 1970s, all the fundamentals have generally improved in all eight fast growing countries under consideration, except Thailand where *security* and *support* may have weakened in the recent past. It is also clear from the data that this progression has visible ups and downs. This lack of uniformity in shorter periods is reflected in the trends in Governance Indicators. The only indication of improvement in fundamentals during 1996-2005 based on this dataset is for the *Rule of Law* in Sri Lanka, Tunisia, and Vietnam. Interestingly, there is a decline in *Regulatory Quality* indicator during the same period across all eight countries. All other indicators have remained essentially unchanged in all these countries during the 1996-2005 period. These observations suggest that while improvements in fundamentals are taking shape over long periods, the progress tends to be slow, with ebbs and flows, and in some cases reversal.

[16] As a relatively early economic reformer, there was a great deal of interest among many donors that Sri Lanka do well economically, leading to large amounts of foreign assistance.

The above finding offers an answer to question (2): The evidence that strengthening of the fundaments has been driving growth in the eight countries is quite equivocal. For their performance so far, they seem to have essentially relied on the alternate mechanisms that they had built. However, it is by no means clear that this process is sustainable in the long run. Indeed, the declining *support* may point to the types of problems that emerge as the government uses obsolescing interventions to address its fundamentals deficits. *Signals* may also become increasingly distorted as the government strives to provide *security* or *support* though inefficient distributional mechanisms that it has inherited from the past. Therefore, the correct answer to question (3) seems to be that eventually the fundamentals need to be strengthened. However, the transition from the substitutes to the fundamentals as a foundation for growth does not seem to be straightforward.

To answer question (4), we return to the five fast growers with strong fundamentals. They have in the past made the transition, but each in its own way and not always smoothly. For example, Korea experienced major economic transformation and went through some political turmoil in the 1970s and 1980s before it managed to build its fundamentals. In Chile, on the other hand, a good part of the fundamentals had developed over the course of the 20th century and were complemented in the 1980s by a careful design of political and economic institutions in the 1980s as the country prepared to re-establish its democracy. These observations suggest that the experiences of transition in the eight fast growers with weak fundamentals are likely to be quite diverse, as the systems that they have put in place to achieve growth are specific to their conditions. However, it is clear that they will have to go through major political and institutional change over the next few decades as they grow and face new conditions. Their success at reform and continued growth hinges upon the pragmatism and responsiveness of the political leadership as the new situations arise. There are no predictable scenarios and no guarantee of success.

One final observation regarding the development of the fundamentals is that once countries make the transition, then they seem to continue to strengthen the fundamentals as they grow. It is quite notable that in contrast to the situation in the eight countries considered in this section, the fundamentals indicators have continued to generally improve in the past couple of decades for the five fast growers that were already well endowed, suggesting that causation works both ways: from the fundamentals to growth and vice versa.

Slow Growth with Strong Fundamentals

As we have seen, among the slow growing countries in our sample, five countries—Colombia, Ghana, Jordan, South Africa, and Uruguay— met one of the fundamentals requirements and one country, the United Arab Emirates (UAE), fulfilled all three fundamentals criteria. In this section, we examine these cases to see how they achieved some level of development in terms of fundamentals, yet failed to grow much. We start with case of UAE, which is perhaps the most puzzling one, and then discuss the rest.

To understand how the UAE achieved decent levels of fundamentals, but not per capita economic growth, it is important to note that the country is a federation of small traditional monarchies built around tribal connections, where the monarchs are expected to look after the welfare of their subjects. When substantial oil reserves were found in the country after World War II, the monarchs used the export revenues to raise the standard of living of their citizens by subsidizing consumption and providing improved public services. Since domestic labor was scarce and lacked the necessary skills, the monarchies resorted to massive importation of goods and services as well as labor, which required extensive involvement of foreigners in the domestic economy. To ensure that the process remained orderly and delivered sufficient benefits to the nationals, the engagement of the foreigner had to be carefully regulated. Consequently, the governments in UAE had to focus on establishing clear and effective rules for economic activity and used their substantial wealth to build the necessary mechanisms for backing those rules. To this end, the UAE politicians took pragmatic approaches and did not hesitate to recruit foreign expertise to develop their policymaking and administrative capabilities. The result was a quick process of institution building that ensured *security* and *support*, with the *signals* fundamental almost automatically achieved because of the substantial role of imports in the economy. But, why did GDP per capital not grew alongside the fundamentals? One key reason seems to be the considerable share of rent distribution in individual income, which has created significant incentives for rapid population growth. Given the fixed size of the resources and the largely exogenous amount of resource rents that the country can earn, population growth has been translated into declining per capita income. However, this does not explain the slow growth of non-oil GDP in the UAE. The answer to this puzzle may be partly connected to international conflict and instability in the Persian Gulf region and possibly to uncertainties in oil prices. However, a more important factor is likely to be the nature of the UAE's labor market (Elhiraika and Hamed, 2002). Most people employed in UAE are foreigners who cannot reside in the country permanently. Moreover, at times large groups of expatriate workers have had to leave UAE due to regional instability or large drops in oil revenues. All these factors have entailed major turnover and incentive costs. On the other hand, the nationals in the UAE have enjoyed very high rents that have dampened their incentives to engage in productivity enhancing endeavors. The strong fundamentals have played a role in attracting the migrant workforce and ensuring a decent level of productivity, but not sufficiently effective in raising productivity continually and yielding high rates of growth.

We now turn to the case of slow growers that met one of the fundamentals criteria and start with Uruguay, which met the *security* fundamental, but not the others. This case is particularly important and insightful because there is a great deal of similarity and parallel between Uruguay and Chile in terms of political and economic development prior to 1980s. Yet, Chile became a fast grower and Uruguay hardly grew. The regional synthesis for Latin America (chapter 4) and the case study of Uruguay point out that the country had indeed grown in the first half of 20th century relying on its rich agricultural resources and using interventionist and redistributive policies with sophisticated public service and welfare systems, which laid the foundation for strong fundamentals as well. After the Great Depression and World War II, the strategy needed a reform to deal with the changes in the global conditions and relative prices. In the event, Uruguay opted for a

full-fledged ISI strategy with widespread public ownership, following the dominant pattern in Latin America. However, given the small size of the country with a population of about 2.5 million at the time, ISI possibilities were quickly exhausted and the economy began to stagnate by the late 1950s. At the same time, the past economic development had given rise to new diverse forces in Uruguayan politics that exerted influence on the state and reduced its cohesiveness. The result was a long period of relative instability with no decisive action to shift the growth strategy. Mirroring Chile, a coup in 1973 abolished democracy and established a military government, which started to re-orient the economy. But, unlike Chile, the political constraint on the military regime remained stronger. This difference proved crucial when both countries were hit hard by the global financial crisis of the early 1980s. As McMahon explains (chapter 4), the Chilean junta had managed to strengthen the executive and imbed that allocation of power in the constitution, while its Uruguayan counterpart remained more constrained by a number of political forces in the country. Moreover, because the redistributive conflicts in Uruguay had not deepened as much as in Chile, its middle classes did not see ISI as a major cause of economic crisis and had not turned away from that strategy much compared to the case of Chile. These factors were instrumental in Uruguay's earlier return to democracy, greater conflict over economic policies, and lack of responsiveness to policy failures. As result, while the country enjoyed a decent degree of rule of law and met the requirement for the *security* fundamental, its achievement in terms of *support* and *signals* remained inadequate. It is important to note that the evolution of Uruguay's political economy system has also prevented the country from developing good substitutes for the lacking fundamentals. The relative weakness of the Uruguayan executive compared to that of Chile means that the country's policymaking regime is fragmented and its ability to pursue consistent growth policies is limited. An example that highlights one source of constraint on coherent policymaking is the relative ease with which citizens can use referenda to challenge laws approved by Parliament or to propose changes to the Constitution. During the last 15 years the method has been used several times, including referenda to stop privatization of public utilities companies and to defend pensioners' incomes.

The third slow grower that we examine in this section is South Africa, which met the *support* fundamental, but did not achieve the other two fundamentals, *security* and *signals*. A unique feature of South Africa is its history of apartheid and the switch to majority rule in the 1990s, inheriting relatively strong institutions from the white minorities that had ruled the country earlier. However, the shift to majority rule was a shock to those institutions and getting them to work has been a challenge for the new government, which started inexperienced and had a lot to learn about managing growth and the fundamentals. Since the mid-1990s, the country has managed to improve its fundamentals with respect to *support*, but has experienced setbacks in terms of *security* and *signals*. The costly transition and the lack of policymaking experience have in the past impeded the emergence of alternatives for the fundamentals. As a result, growth has not gained momentum yet. Given the country's history and its current capabilities, its best bet for enhancing growth seems to be strengthening of the fundamentals.

The remaining three slow growers with partial fulfillment of fundaments—Colombia, Ghana, Jordan—did well in terms of *signals*, but not in terms of *security* or *support*. Beyond these general similarities, the three cases are very different. Colombia is a relatively large a country with non-trivial endowments of natural resources and a history of periodic growth in the 19th and early 20th century. An accord in 1956 between two major parties to rule the country in turns through a National Front ushered in a period of relatively rapid growth under an ISI policy. After 1967, the government started to reduce its policy bias against exports, which helped growth continue until 1980. However, the domination of the National Front had in effect disenfranchised many other political groupings and led to heightened political discord and armed conflict, sowing the seeds of political instability after 1980, which was exacerbated by the rise of drug trafficking from Bolivia and Peru through Colombia to the rest of the world. The National Front gradually fell apart and was replaced by a fragmented political system that suffered from a great deal of violence. Although the government continued to liberalize trade and improve *signals*, it failed to offer adequate *security* or *support* as growth fundamentals or via substitutes.

Like many other developing countries, Ghana pursued ISI/socialist policies after its independence in 1957, but its growth episode was very brief and its GDP per capita began to decline in the mid-1960. Lack of economic growth led to political instability and a number of coups and countercoups, with brief returns to democratic elections in between. An important consequence of this instability was obliteration of rational economic policymaking, which entailed extensive and arbitrary interventions, thus exacerbating insecurity and distortions in the economy. This situation, together with a major drought in the early 1980s led to serious economic hardship. Between 1974 and 1983, GDP per capita declined by about 40 percent. However, the ideological basis of the interventionist policies under a junta that had come to power in 1981 was shallow and before long the government decided to adopt market oriented policies. Encouragement from multilateral institutions and the offer of substantial foreign aid helped convince the government to open up the economy. Nevertheless, the switch signified an element of pragmatism and a willingness to experiment with new policies, which greatly helped improve the *signals* fundamental of the economy. Still, lack of institutional capabilities to offer strong *security* and *support* constrained the economy's growth beyond the early years of reform, except for the times when commodity prices have been high and the country has had access to greater inflow of foreign resources, as in recent years. Comparison of Ghana with the fast growers that lacked the necessary fundamentals—such as Indonesia—offers some insights about possible reasons why its has not made much progress in terms of *security* and *support* either by building the necessary institutions or by finding substitutes for them. A key factor that may explain Ghana's weaker performance is the absence of a strong party or broad-based political movement to bolster the cohesiveness of the government. Pressure from various interest groups has caused fragmentation in the policymaking process, particularly after the country's return to democracy in 1992.

Finally, the case of Jordan has interesting similarities and contrasts with that of the UAE. Like UAE, Jordan's political system is based on a monarchy with a relatively cohesive

state that has had some success towards strengthening its growth fundamentals, but with resource rents that it has received indirectly. This process has continued in the past ten years, especially in the form of a reduction in corruption. However, due to its geopolitical situation and a number of other reasons, it has so far failed to achieve sustainable high growth. We examine these reasons below.

Jordan is a traditional monarchy, tempered with a constitutional structure that allows a limited degree of participation, especially for tribal leaders and other prominent individuals and families. The political institutions of Jordan as a state are relatively new (originating in the 1920s). They were crafted after the British model, though ensuring the king's ultimate control over all matters of state. The personnel administering the state apparatus were recruited and promoted largely based on merit from the pool of graduates of the British educational system in mandatory Palestine (Kanaan and Kardoosh, 2003). This foundation and the continuity in the leadership helped the country develop its fundamentals to some extent and by the early 1960s deliver public services—education, healthcare, etc.—that were higher than those in all other countries in the Middle East except Israel. The policymakers were also quite pragmatic and, realizing that ISI was not a suitable policy for a small country such as Jordan, opted for a relatively open economy. They also were conscious of the political constraint and tried to keep inequality and poverty low through public services, subsidies, and cash transfers (when feasible). However, three important factors prevented the country from sustaining high growth. First, the creation of Israel and the subsequent wars and refugee problems created major external and internal tensions for the country that persist to the present day with major negative consequences. Second, Jordan has been negatively affected by the military adventures and engagements of its neighbor, Iraq, both due to increased instability in the region and because of the adverse effect on employment of Jordanians in other Arab countries. Third, while employment in oil-rich Arab countries has been a substantial source of income for Jordanians, fluctuations in that market induced by the price of oil has created major problems for labor, finance, and asset markets in Jordan. The government has tried to respond to such shocks and to adopt reform measures that help the economy weather the shocks more effectively. But, the magnitudes of the problems at hand seem to have overpowered those responses in many occasions. It should be noted that Nevertheless,

In summary, strength in fundamentals increases a county's chance of achieving high growth, but does not guarantee success. As the case of UAE shows, a country may be able to devote substantial resources to building its fundamentals, and yet grow slowly. However, this exception is, in a sense, evidence of the broadness of the rule. It shows that in the presence of strong fundamentals, it takes unusual circumstances for growth to remain low. In situations where some fundamentals are met, weaknesses in the others can hold back growth, unless the government is *cohesive* and *pragmatic*, and manages to deal with the growth bottlenecks and political constraints in a *responsive* manner, as in the cases examined in the previous section. Three of the five sample countries in this category— Colombia, Ghana, Uruguay—had fragmented states for most of their recent histories, which hindered their quests for more effective growth policies. Fragmentation was particularly costly in those cases because perspectives inherited from the heydays of

ISI strategy lingered on among some key political players. Furthermore, fragmentation and poor management of the political constraint may have interacted and exacerbated each other. In South Africa since the end of apartheid in 1994, the ANC has managed to maintain the country's *security* fundamental and has worked to improve *signals* and *support*, rather than focusing on substitutes for them. However, strength in those respects has not yet reached levels that can sustain rapid growth. Finally, Jordan has had a relatively *cohesive* and *responsive* government and has managed to meet the *signals* fundamental, but it has yet to overcome the tough external and internal challenges facing it. These cases show that progress towards fulfilling the fundamentals may remain partial for a long time and sustainable high growth may not be attained unless the government finds substitutes for the missing fundamentals.

Slow Growers with Weak Fundamentals

In our discussions above, we have already referred to a number of countries with slow growth and weak fundamentals to contrast them with the fast growers. In this section, we examine this group more systematically to identify the characteristics of their growth strategies (building fundamentals or creating substitutes for them) and the reasons they have not succeeded. We will argue that to various degrees, lack of cohesiveness, pragmatism, and mismanagement of the political constraints were at the heart of these failures. There are 18 countries in our sample that belong to this category (see Table 5).

Slow growers that lacked fundamentals can be put into two groups: Those that started with relatively cohesive governments and those that lacked such regimes at the beginning. The first group managed to reach relatively high growth rates for over a decade, largely relying on ISI and removing their initial growth bottlenecks. At the time, their main distinction from the long-term fast growers was the relatively narrow base of their growth processes, which proved consequential. They failed to effectively build either their fundamentals or to find substitutes that would work in their specific context. Their growth spurts ended with political transitions that slowed down or destabilized the economy for long periods. The second group was even less lucky. Due to political instability or lack of proper perspective, they started with incoherent policies and did not search for institutional alternatives that might have fitted their circumstances—not even a trial and error process with learning from the past mistakes. Some of these countries eventually managed to find their ways towards more sustained growth. Although the experiences of this group are still too recent to judge with confidence, they offer useful lessons for the ways a country might overcome growth obstacles.

A key observation regarding both types of countries in this group is that none has systematically pursued a strategy of developing the fundamentals over the past half century. They all attempted to improve *security*, *support*, or *signals* during some periods, especially after the mid-1980s. But, those efforts have generally lacked sufficient depth and persistence to entrench any progress made in the fundamentals. The efforts were also quite limited in scope, mostly focusing on macroeconomic and trade policy reforms intended to improve *signals*, while letting *security* and *support* remain low or even

deteriorate—e.g., Bangladesh, Burundi, Chad, Guinea, Kenya, Paraguay, Pakistan, Sierra Leone, Sudan, and Togo in the 1980s, Peru in the 1990s (see chapters 3, 4, and 6 on South Asia, Latin America, and Sub-Saharan Africa). Uganda since the late-1980s seems to be an exception, a case which we will discuss in more detail below.

This lopsided approach to the fundamentals was typically the case under authoritarian regimes with weak administrative capabilities. They could reduce trade barriers and market interventions with the support, and often at the behest, of multilateral institutions, but they had little organizational means to offer adequate security for new investments or to identify and deal with the intricate problems facing potential investors—e.g., Bangladesh in the 1980s, Paraguay in the 1980s, Burundi, Sierra Leone, Sudan, and Togo in the 1990s. Many of these regimes failed to manage their political constraints and collapsed, triggering political instability or takeover by extremist groups and, thus, preventing any progress in the fundamentals. This was the case even for the governments with relatively stronger administration such as Ethiopia in the early 1970s (Geda, 2002), Iran in the 1970s (Esfahani, 2002) and Pakistan in the early 1970s and late 1980s (Kemal et al., 2002). The situation in the more democratic countries in this group was not much better because they all lacked the necessary institutional mechanisms to coordinate their political actors and, as a result, ended up with chaotic growth policies—e.g., Brazil in the 1980s and Paraguay in the 1990s (see chapter 4), Uganda in the 1960s (Kasekende and Atingi-Ego, 2004).

In the last two decades, a few of the countries in this group, particularly Brazil and Uganda, have made more serious efforts to build their fundamentals. Uganda's reforms since the late-1980s deserve particular attention because they have been innovative and have yielded promising results. Brazil's experience has been less spectacular so far. Here we focus on Uganda's case and discuss Brazil below as part of analysis of its earlier efforts to establish substitutes.

Uganda had started after independence in 1962 with decent endowments of infrastructure and governance based on broad participation through local chiefs, somewhat similar to the system in Botswana (Kasekende and Atingi-Ego, 2004). In the 1960s, growth was relatively fast, but the initial political equilibrium fell apart in the late 1960s and let to a brutal dictatorship and a dramatic decline in per capital income during the 1970s. There was an attempt to return to democracy in the early 1980s, but it ended in political turbulence and civil war until the end of the decade. However, a coalition of forces, National Resistance Movement (NRM), managed to take control of the government in the late 1980s and begin to build a new participatory governance system rooted in the one in the early 1960s. With support from multilateral institutions, the Ugandan government has implemented market reforms, innovative service delivery mechanisms, and improvements in the rule of law (Kasekende and Atingi-Ego, 2004). This process of building the country's fundamentals seems to be paying off and has the potential to become self-sustaining. Growth rates since the late 1980s have hovered around 3 percent.

Given the general lack of development in the fundaments, the next question is to what extent the slow growers in this group had experimented with possible substitutes. Judging

the extent to which a slow grower has tried to find substitutes is rather difficult because the circumstances and options for substitutes are not easy to know. However, in most of these cases the government does not seem to have had any coherent strategy anyway, and there is no sign of organizational structures or other preparations to implement strategies beyond bunching sets of often unrelated projects in "investment plans." Some governments tried to imitate the more successful examples of ISI/socialist approach, but lacked the means to adapt and implement the strategy locally. As a result, they could not even capture the benefits that the strategy could offer, or use it as a basis for a substitute in a post-ISI phase. For instance, Sudan tried to follow Egypt's ISI/nationalization policy in the 1960s, but had far less success (Ali and Elbadawi, 2003). Another example is Bangladesh's attempt at similar policies in the 1970s.

The situation is different in a number of cases where the government had relatively more cohesion and administrative capability in earlier stages. Brazil, Ethiopia, Iran, and Pakistan seem to fit this description better than the other slow growers without fundamentals. All four are large countries that started the 1950s with significant organizational and infrastructure bottlenecks. At the time, they had highly centralized governments that tried to address those bottlenecks and jumpstart growth through ISI and pubic enterprises. They achieved relatively high growth during the 1960s, but began to experience difficulties soon after. However, unlike the fast growers in similar situations, they failed to establish growth fundamentals or find substitutes for them.

A key problem in all four cases was the absence of broad-based growth, which proved fatal for the prevailing authoritarian regimes. The new regimes that immediately followed (Ethiopia and Pakistan in the early 1970s, Iran in the late 1970s, and Brazil in the mid-1980s) started under crisis conditions, had relatively more democratic bases, and were keen to deal with redistribution issues. Ethiopia and Pakistan in the early 1970s and Iran at the end of that decade shifted to deep ideologically-driven ISI with public enterprises as part of their attempts to redistribute and to deal with their economic and political crises. In Ethiopia, this process led to virtual economic stagnation until the 1990s, when a more pragmatic regime took over and started a reform process, this time focusing on possible substitutes for the fundamentals consisting of elements of socialist approach combined with market reforms with some success (Geda, 2002). In Pakistan, the transition was associated with a major economic slowdown and continued political instability under democratic regimes, interrupted by military coups and authoritarian rule, preventing the formation of a clear growth strategy. In Iran, the Shah's authoritarian regime was overthrown by a revolution, which led to a sharp drop in per capita income and significant loss of human capital and organizational capabilities. Although the new elite managed to consolidate their control over the country, they remained too fragmented and had access to too little expertise to pursue any vigorous growth strategy. Consolidation of the post-revolutionary institutions and the sharp increases in oil revenues have raised growth rates in recent years, but the progress towards fundamentals has not gone very far, nor is there any clear sign of a strategy focused on growth.

Brazil had shifted to combine export promotion with ISI in the late 1960s and tried to maintain its growth momentum in the 1970s despite major external shocks. The ruling

military regime at the time seems to have been quite conscious of its political constraints and had anticipated a democratic transition in the 1980s. But, rather than looking for the options to broaden the growth experience, it focused on keeping the overall growth rate high, viewing it as a substitute (Castelar Pinheiro et al., 2005). In the face of the adverse external shocks, the strategy required high levels of foreign borrowing, which might have worked if the shocks were short-lived. But, in the event, the shocks continued in one form or another and by the early 1980s Brazil found itself engulfed in a major debt crisis. The democratic government that took office in the mid-1980s tried to mix redistribution with market liberalization in haphazard ways. It lacked cohesiveness and could not establish a growth strategy until the mid-1990s. Since 1994, Brazil has embarked on a strategy of building its fundamentals, first by improving the *signals* through privatization, liberalization, and better macroeconomic management. Importantly, it has done so through a systematic political process that helps build *security* and *support* as well. The fruits in terms of sustained high growth have been slow to emerge, but they may become evident in the coming decades if the process continues.

A final consideration regarding slow growers with weak substitutes is that some of them have experienced relatively fast growth in recent years. As we noted earlier, such growth may be related to the success in improving the fundamentals in the case of Uganda and building substitutes in Ethiopia. However, in most other cases, the current growth seems to be closely related to the rise in their terms of trade, especially among oil-exporters (Chad, Iran, and Sudan). In other cases, especially Bangladesh (Mujeri and Sen, 2002), various forms of foreign aid seem to have played a major role in boosting economic growth, despite the absence of fundamentals or any substitutes for them. In these cases, where there are few signs of developments in the fundamentals or their substitutes, the sustainability of the current growth spurt remains highly uncertain.

What Is To Be Done?

What are the implications of our analysis for economic policy debates concerning slow growers with weak fundamentals? The first implication is that each country has a choice between focusing on the fundamentals and establishing substitutes. Improving the fundamentals take a long time and require resources that may not be available to most developing countries. Substitutes based on the country's conditions and capabilities may be second or third best solutions to the growth problem, but they can yield quicker results and may in fact generate the resources needed for constructing the fundamentals in the longer run. The downside is that the interventions designed to substitute for the fundamentals can lead to rent seeking and predatory behavior. Success with substitutes, or the fundamentals for that matter, depends critically on the decision-maker’s awareness of, and willingness to operate within, the political constraint of a broad distribution of the benefits of growth.

Second, for slow-growing, low-income countries, cohesiveness of policymakers and their pragmatism and innovativeness may be far more important for raising long-term growth rates than the extent to which they abide by the rules for building the fundamentals. The latter rules often serve as guiding principles in structural adjustment programs and in

conditions for receiving assistance from multilateral institutions. Our analysis suggests that a higher order set of guiding principles may be needed for enhancing growth in most low income countries. Under the highly imperfect conditions of such countries, cohesive, pragmatic, and innovative policymakers may be more effective in bringing about growth than rule abiding bureaucrats.

Third, in designing growth policies for a low income country, it is crucial to keep in mind that no one really knows the best policies for the situation at hand. As a result, the choice is not so much about good policies and bad policies as it is about good experiments and bad experiments. This perspective has two important implications for policymaking: (1) The experimental nature of most policies should be explicitly taken into account and in choosing among policy alternatives, some weight should be placed on their learning externalities. (2) Policy programs should always include evaluation components, with criteria for success and failure as well as provisions for adjustment.

Fourth, policymaking in slow growing countries should emphasize local capacity building and the transfer of knowledge regarding general principles. This is in contrast with the commonly used recommendations based on the so-called "best practice" in each policy area. Because of the complexity of the interactions among the myriad of factors involved in shaping economic performance, experiments in one country, even when successful, cannot be easily transplanted to another country. Transfer of knowledge should focus more on broader lessons about the approach to problems rather than specific solutions.

Fifth, past interventions, even extensive and intrusive ones, often contain lessons and may have generated valuable organizational skills and assets that may prove useful in the design and implementation of new policies. Discarding a policy, whether viewed as mistaken or obsolete, should not be equated with the dismissal of the organizational assets associated with it. Indeed, all fast growers in our sample that had weak fundamentals built on their ISI/socialist experiences.

Finally, managing the political constraint and ensuring that growth has a broad base should be high on the agenda of policymakers and multilateral institutions providing assistance to low income countries. This often entails interventions and market distortions that may seem inefficient. However, it is important to keep in mind that, in the long run, violating the political constraint could prove far less efficient by triggering political upheavals and instability and by creating opportunities for extremist or dogmatic groups to gain influence.

VI. Transition Strategies: Fundamentals or Substitutes

We did not include transition economies in the main body of our analysis above because their histories of economic growth after the end of Soviet control are rather short. However, our framework can shed light on transition experiences with important policy implications. We briefly discuss those insights in this section.

The most notable pattern that emerges from reading the case studies of transition countries is the variation of reform strategies based on distance from borders of Western Europe (Ofer and Pomfret, 2008). Central European countries (Czech Republic, Hungary, Poland, Slovakia, and Slovenia) which were the closest and had had a long history of economic and cultural exchange with Western Europe were in a very good position to join the European Union if they could raise their fundamentals to reach the minimum standards set by the EU. Meanwhile, Western European countries also had the incentive and the means to help those countries implement the necessary reforms through policy advice, foreign aid, and massive foreign investment. As a result, after the disintegration of the Soviet Block, the strategy of building the fundamentals was a clearly superior choice for those EU neighbors. Indeed, in all five countries, "the implicit decision was made to rely on foreign rules to discipline business, which was provided by membership in EU, and to rely on spillovers from foreign investment and technology transfer to generate growth" (Fidrmuc et al., 2008). They did experience income decline in the early years of transition as they were re-orienting their economies, establishing new institutions, and learning to use them effectively. But, that was a worthwhile investment and sooner or later paid off as their economies eventually turned around and started a process of integration into the EU.

The next set of countries—the Baltic and Balkan states—also sooner or later came to focus on the fundamentals strategy because of the prospects of joining the EU. However, they had harder times implementing reforms and sustaining growth for a number of different reasons. Albania and Romania had been badly mismanaged under communism and Bulgaria and the Baltic states had been strongly integrated into the Soviet economy causing them to suffer more and longer as a result of the break up (Fidrmuc et al., 2008). On the other hand, former Yugoslav republics other than Slovenia, engaged in destructive wars with Serbia, which distracted from focusing on growth. This changed as the wars ended and the tensions subsided and the newly formed countries moved fast, taking advantage of the greater economic flexibility they had enjoyed under the Yugoslav economic system. Albania and the Baltic states pursued the fundamentals steadfastly and managed to overcame their initial disadvantages. In contrast, Bulgaria and Romania initially saw the prospects of joining the EU too far off and took a gradualist approach to reform. But, their approaches were largely based on efforts to manage disruption in the economy rather than developing substitutes that could stimulate rapid growth. As a result, before long, sluggish growth and a rising chance of EU membership drove them towards the paths taken by the EU neighbors.

Russia and the former Soviet republics in Eastern Europe—Belarus, Ukraine, and Moldova—tried to jump start reform by rapid liberalization and privatization. However, at least in the initial years, they faced too much political chaos to pursue these policies in effective and coherent manners. In the past several years, Russian leaders have tried to set up substitute mechanisms in the form of political alliances to bring some order to the political and economic system and generate growth based on the country's enormous energy wealth. However, the system seems to be highly personalized and its durability remains unclear.

Growth performance and the development of fundamentals or substitutes have been far weaker in the Caucasus and Central Asia. Lack of a strong pull factor such as EU membership is certainly a key element explaining this weakness relative to the situation in Central Europe (Ofer and Pomfret, 2008). However, other factors have also contributed to underachievement in institutional reform. Caucasian countries have suffered significant internal and external strife, most of which remains unresolved. Some Central Asian countries, especially Tajikistan, have also experienced severe conflict. Most of the countries in that region also have had less favorable initial conditions because their economies were less developed and their societies remain partly tribal. They are also all landlocked economies and remain largely dependent on Russia. More importantly, the dominance of Russians and the Central Committee of the Communist Party in Moscow meant that most former Soviet republics were left with weak bureaucracies and less capable politicians or politically organized groups, especially in Central Asia. As a result, unlike the Central and Easter European countries or even Russia itself, they had greater difficulty contemplating appropriate growth strategies and pinpointing substitutes when the fundamentals were too costly to build. Like slow growing developing countries with weak fundamentals discussed at the end of the previous section, these countries can benefit from making conscious decisions about fundamentals vs. substitutes and from using the approach to find the right institutional arrangements that could help them reach faster growth paths.

VII. Conclusion

The literature on economic growth has increasingly recognized that a multiplicity of factors with a myriad of constellations shape the growth process. Moreover, there seems to be a variety of ways to start and maintain growth momentum under each specific constellation (Rodrik, 2005). Economic theory has so far offered important general lessons about the requirements of successful long-term growth, but not a whole lot about the specific policies and mechanisms that may deliver growth in each context. To learn more about the intricacies of the growth process, the research reported here has taken an inductive approach based on detailed case studies. Our reading of the case studies has led us to new insights into the pattern of growth strategies, with important policy lessons.

Economic theory suggests that sustained long-run growth ultimately requires a set of institutional mechanisms that offer *security* and *support* to producers and entrepreneurs and ensure that the *signals* that they receive reflect social scarcities and preferences. These elements, which we have dubbed the "fundamentals," are impersonal rules and arrangements conducive to growth in self-correcting processes over indefinite horizons. They typically entail representative government, rule of law, impartial courts, effective bureaucracy, and open markets with efficient regulations. Indeed, empirical evidence shows clearly that sufficient endowment of the fundamentals is strongly associated with rapid convergence of a country toward the most developed ones. However, this is not a short-run and unidirectional process. For countries that do not have sufficient endowments, building the fundamentals is often part of the growth process, not a pre-requisite. Indeed, many developing countries have grown quite fast for more than four decades without adequate fundamentals. So, one wonders what institutional mechanisms can substitute for the fundamentals, at least during the process of catch up with high income countries.

Based on our interpretation of the recent literature on the political economy of growth and our reading of the country cases, we have argued that the substitutes for the fundamentals are organizations or arrangements that serve the purposes of *security*, *support*, and *signals* to some degree, but are not necessarily based on representative government, rule of law, etc., and are not necessarily expected to have longevity beyond particular phases of development. They are typically rooted in the existing political and institutional structure, but with crucial innovations that enable the economy to move away from a low level equilibrium. They prove effective when they enable the government to act in a *cohesive* manner, to be *responsive* to the often unforeseen problems that arise along the economy's growth path, to identify and to implement solutions in *pragmatic* manners, and to respect its *political constraint* by ensuring broad-based growth. China's use of the Communist Party organization, fiscal decentralization, and dual track strategy is a prime example of good substitutes for the fundamentals and has produced phenomenal economic growth over the past three decades.

This point does not mean that slow growers should always search for substitutes. Building the fundamentals has indeed been a good strategy for some countries in the past. It should eventually payoff, though it may take a long time. Substitutes are round about ways for jump starting growth and surmounting the obstacles in the first few decades of

the process. Of course, at some point, the country has to transit from reliance on substitutes to growth based on the fundamentals. This transition can be rough and may need to be handled with the same innovative approach that brings about the fundamentals. As a result, countries face an important choice whether to focus on developing their fundamentals and waiting for growth, or pursuing substitutes. Since few countries have the means to build their fundamentals before growth starts, substitutes may be more effective options. Success in using them, of course, depends on the ability of the policymakers to translate the general principles of economic theory into innovative and pragmatic solutions that fit the specific circumstances that they face.

Appendix
Fundamentals Indictors: Case Study vs. Standard Governance Indicators

This appendix compares our classification of countries against standard (but limited) indicators routinely used in the literature. For the three fundamentals that we have identified, we use the following indictors as checks on our subjective judgments. We examine the relationships of those indicators to ours and highlight the reasons for their differences.

Comparator Indicators for Security: Among the institutional indicators used in the literature on growth, the one closest to the concept of *Security* fundamental is the *Rule of Law*, particularly the version included in the Governance Indicators dataset of Kaufmann, Kraay, and Mastruzzi (2007). This variable measures the extent to which agents have confidence in and abide by the rules of society, and the quality of contract enforcement, the police, and the courts, as well as the likelihood of crime and violence. In addition, *Political Stability and Absence of Violence* and *Control of Corruption*, two indicators also available from the Governance Indicators dataset, may capture some aspects of *Security* as well. The former measures the perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including domestic violence and terrorism. The latter measures the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests.[17]

Comparator Indicators for Support: The *Government Effectiveness* index included in the Governance Indicators dataset is a reasonable measure of public support for investors and innovators. It measures the quality of public services, the quality of civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies. We also compared a number of other indicators such as educational attainment and infrastructure development against our measure of *Support* without significantly changing the results.

Comparator Indicators for Signals: Since openness receives so much attention in the literature, we compare our indictor of *Signals* with the binary openness measure

[17] One may also consider *Voice and Accountability*, another variable compiled by Kaufmann, Kraay, and Mastruzzi (2007), as an indicator of *Security* or *Support* fundamentals because it measures the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media. We do not use this variable because, from the perspective of investors and innovators, the key issue is long-term security and not the nature of the political arrangements themselves. Indeed, despite a major quest to assess whether democracy is a fundamental condition for long-term growth (Barro, 1996; Przeworski, 2004; Acemoglu, Johnson, Robinson, and Yared, 2007), there is no evidence that it contributes to growth at lower levels of development. This is probably because in the absence of complementary institutions, high coordination costs may counteract with the benefits of broad political participation even though democracy does coincide with high levels of income (Olson, 1982; Przeworski, 2004).

calculated for 1990-1999 by Wacziarg and Welch (2003), which is a modified version of the indicator developed by Sachs and Warner (1995).[18] We also compare our indicator with Trade Freedom index included in the Heritage Foundation's Index of Economic Freedom and the *Regulatory Quality* index from Governance Indicators. The former is based on a combination of trade barrier measures. The latter measures the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development.

The Governance Indicators dataset may seem to pose a problem for assessing our categorization of countries because it only provides information on the last part of the time period covered by our study. However, this dataset helps in one important respect. If subjective judgment indicates that a country has achieved a particular fundamental during the period under study, then it should be in a better position to pass the test using the Governance Indicators of the last period of the study. A similar issue arises for the *Signals* indicator because the best available comparators focus largely on more recent times, while our measure refers to a longer term (at least since early 1980s) presence of reasonably efficient signals in the economy.

To assess our subjective categorization, the measures borrowed from the Governance Indicators and the Index of Economic Freedom need to be turned into binary variables that show the presence or absence of that particular attribute. To be consistent with our subjective categorization, we classify a country as sufficiently endowed with an institutional attribute based on a variable from these sources, such as *Government Effectiveness*, if it scores above the minimum levels observed during (1996-2005) among OECD countries except Turkey and the members that joined after 1990. This cut-off point ensures that all developed countries fall into the endowed category based on their scores among Governance Indicators. Adjusting the cut-off point within a reasonable range does not change our main results because it has little effect on the categorization of countries.

Table 1A compares our *Security* indicator with the dichotomous indices we have derived from *Rule of Law*, *Control of Corruption*, and *Political Stability and Absence of Violence* variables in the Governance Indicators. As the table shows, about 95 percent of the cases match and the mismatched cases vary depending on the Governance Indicator used. This suggest that our indicator is capturing the common denominator of the Governance Indicators related to the *Security* concept, but goes beyond that and incorporates aspects of from the other variables as well.

Table 2A makes a similar comparison between our measure of *Support* and the dichotomous version of *Government Effectiveness* index of Governance Indicators. Again, there is a very good match between the two indices. The only case of mismatch between the two indices is Tunisia, which we believe meets the criteria for *Support*

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[18] This 0-1 indicator equals 1 if: (a) Average tariff rate is less than 20%; (b) Nontariff barriers coverage is less than 20%; (c) Black market premium is less than 10%; (d) There is no state monopoly on major exports; (e) The economic system is not socialist (as defined by Kornai, 1992).

indicator, but falls marginally short of the demarcation line based on the *Government Effectiveness* index. Our rating is based on the case study of Tunisia that shows how, starting from a controlled and centrally planned economy in the early 1970s, the government managed to devise a successful dual track strategy that led to high investment and rapid growth of the private sector long before other countries such as China opted for such policies (Bechri and Naccache, 2006).

Table 1A
Comparison of *Security* Indicator with Related Indices Based on Governance Indicators Dataset

		Rule of Law (Governance Indicators)		*Control of Corruption* (Governance Indicators)		*Political Stability and Absence of Violence* (Governance Indicators)		**Total** (*% of column total*)
		0	**1**	**0**	**1**	**0**	**1**	
Security **Indicator**	**0** (*% of column total*)	30 *93.8*	0 *0.0*	29 *96.7*	1 *14.3*	29 *100.0*	1 *12.5*	**30** ***81.1***
	1 (*% of column total*)	2 *6.3*	5 *100.0*	1 *3.3*	6 *85.7*	0 *0.0*	7 *87.5*	**7** ***18.9***
	Total (*% of row total*)	**32** ***86.5***	**5** ***13.5***	**30** ***81.1***	**7** ***18.9***	**29** ***78.4***	**8** ***21.6***	**37** ***100.0***
Mismatched Cases		Malaysia Uruguay	None	South Africa	Korea	None	Vietnam	
Mismatched Cases as Percent of Total		*5.4*		*5.4*		*2.7*		

Table 2A
Comparison of *Support* Indicator with a Related Index Based on Governance Indicators Dataset

		Government Effectiveness (Governance Indicators)		**Total** (*% of column total*)
		0	**1**	
Support **Indicator**	**0** (*% of column total*)	29 *96.7*	0 *0.0*	**29** ***78.4***
	1 (*% of column total*)	1 *3.3*	7 *100.0*	**8** ***21.6***
	Total (*% of row total*)	**30** ***81.1***	**7** ***18.9***	**37** ***100.0***
Mismatched Cases		Tunisia	None	
Mismatched Cases as % of Total		*2.7*		

Table 3A
Comparison of *Signals* Indicator with Related Indices

		Wacziarg and Welch's Openness Index			**Heritage Foundation Trade Freedom Index**		***Regulatory Quality* (Governance Indicators)**		**Total (*% of column total*)**
		0	**1**	**Missing**	**0**	**1**	**0**	**1**	
***Signals* Indicator**	**0 (*% of column total*)**	20 *90.9*	4 *33.3*	3 *33.3*	20 *95.2*	6 *37.5*	26 *78.8*	0 *0.0*	**26** ***70.3***
	1 (*% of column total*)	2 *9.1*	8 *66.7*	0 *0.0*	1 *4.8*	10 *62.5*	7 *21.2*	4 *100.0*	**11** ***29.7***
Total (*% of row total for each comparator index*)		**22** ***59.5***	**12** ***32.4***	**3** ***8.1***	**21** ***56.8***	**16** ***43.2***	**33** ***89.2***	**4** ***10.8***	**37** ***100.0***
Mismatched Cases		Botswana Indonesia	Guinea Peru S. Africa Uruguay	Sudan UAE Vietnam	Jordan	Peru Paraguay Sri Lanka Togo Zambia	Colombia Ghana Indonesia Jordan Korea Malaysia Thailand	None	
Mismatched Cases as Percent of Total		***17.6***			***18.9***		***18.9***		

Table 3A contrasts our *Signals* indicator with three other measures that reflect the extent to which market inefficiencies are kept under control. Again, our indicator has a high correlation with the other three indices, but deviates from them individually for two reasons. First, unlike its comparators that focus either on foreign trade or domestic regulation, our measure covers both aspects.[19] Second, the comparator indices represent trade openness or regulatory effectiveness after 1990, while our measure deals with the nature of signals for longer periods of time. In particular, these factors easily explain the mismatched cases where the *Signals* indicator points to lack of efficiency, whereas the trade related indicators imply openness. Also, the countries labeled with 1 by our *Signals* indicator and 0 by the *Regulatory Effectiveness* are largely those where our reading of the case studies suggest that openness must have kept the signals relatively efficient, even if there was some slack in regulation of domestic markets.

[19] We are using variables that capture the two aspects separately because we could not find a corresponding variable in the literature that combines both.