I Introduction and Summary: Issues in Adjustment and Growth

Following the severe economic shocks—a sharp deterioration in the terms of trade and higher world interest rates—of the late 1970s and early 1980s and the ensuing debt crisis, a large number of developing countries undertook adjustment policies in order to restore growth on a sustainable basis. However, the medium-term response of growth and investment to these policies was frequently slow, even in countries that undertook significant measures. This study is born from that experience, and it aims to identify how adjustment policies could better contribute to reinvigorating growth in developing countries. The influence of macroeconomic policies and core structural reforms on the mainstays of growth—investment, saving, total factor productivity, and employment—is examined drawing upon the experience of eight developing countries. These are Bangladesh, Chile, Ghana, India, Mexico, Morocco, Senegal, and Thailand. The group was chosen to include both low- and middle-income cases as well as examples of countries that have, or have not, encountered external debt crises, and to include countries—most notably Chile and Thailand—that have achieved a markedly higher growth rate following a period of adjustment. The focus of this study is on policies and their effects rather than to estimate the independent effect of Fund-supported programs on growth. The analysis builds on separate studies prepared for many of the countries in the context of the IMF's regular consultations with member countries, known as Article IV consultations, as well as on many other books, articles, and work in the IMF and World Bank.[1] The main lessons emerging from studies other than this are summarized in Appendix I.

Methodology

The study uses a variety of methodological approaches, including growth accounting exercises, assessment of debt dynamics, and time-series regression analysis of private investment behavior, in addition to cross-country regressions contrasting the eight countries with a much larger sample. It also draws on other recent empirical work in the Fund on the determinants of national and private savings, and on work in the World Bank regarding structural reforms. The analysis is based on a case study approach, which offers a number of advantages, including the ability to examine the effects of policies in the context of complex economic and institutional settings that cannot be captured using cross-section studies. However, these benefits come at the expense of some inevitable questions about the generality of conclusions from a small sample of countries. The eight cases were chosen to reflect some geographic diversity and to include countries at different levels of development and different stages of adjustment, but the risks of sample selection bias cannot be excluded.

In view of the limited availability and quality of the data some potential methodological pitfalls with the approaches used in this study should be recognized. First, for some countries data constraints precluded sophisticated empirical techniques. Second, more elaborate approaches, such as estimating full structural models to assess the mix of stabilization policies and to generate counterfactual investment and growth scenarios, were not possible.[2] Third, even where econometric estimates are derived (for example, for investment), they may be biased if they do not take account of regime changes that alter how those policies influence the real economy. In practice, data limitations constrained the ability to correct for biases resulting from such regime changes;

[1]This work is referenced in the text and footnotes.

[2]In practice, no single model can capture all of the influences at work. One approach that attempts to generate "representative" estimates, from a panel of developing countries, for key macroeconomic parameters is described in Haque and others (1990) and Haque and Montiel (1991). Models with more complex production structures are needed to analyze many supply-side issues; data limitations prevent the estimation of such models for most developing countries, so a mixture of imposed and estimated parameters are typically used in simulations. This is the approach taken in Montiel (1993) and Bourguignon and Morrisson (1992). Also, see Khan and others (1991).

©International Monetary Fund. Not for Redistribution

time series are too short, and the problems of identifying a stable policy reaction function in such circumstances are large. The study therefore relies upon a variety of partial evidence.

Economic growth can be measured in several ways. In particular, one must distinguish between national income and domestic product by taking account of the need to service any external borrowing. Growth in GNP or GNP per capita may be a better indicator of welfare, but for a number of countries in the study consistent time series of sufficient length are only available for GDP. Growth can also be measured at domestic or international relative prices. Since growth at domestic prices is how the effects of policies are usually assessed, it is the measure used for most of the study. For most countries, it does not make much difference which set of relative prices is used, but there are a few exceptions, especially for countries undergoing a transition from highly distorted trade regimes (see Appendix II, section on Long-Term Cross-Country Comparisons).

Summary of Findings

Crisis, Adjustment, and Growth

The adjustment episodes in each country were typically triggered by large financial imbalances or extensive structural problems or both. Most of the countries had suffered adverse external shocks that typically interacted with an inadequate policy response and heavy external borrowing to precipitate a crisis and a severe external financing constraint.

The *short-term response* to adjustment policies differed: output and investment declined severely in Chile and Mexico and modestly in India, Morocco, Senegal, and Thailand; there was no immediate impact on output and investment in Bangladesh. In Ghana, growth picked up quickly as the external financing constraint was reversed. The *medium-term growth response* also differed considerably. Simple time-series comparisons as well as the results of panel regressions based on a control-group approach suggest that Chile, Thailand, and to a lesser extent Ghana, shifted to a higher growth path following the implementation of adjustment policies. In Chile and Thailand, this outcome was supported by large and sustained increases in private investment and domestic saving, as well as capital inflows. The investment and growth response in India and Morocco was more muted and in Senegal was weak; Bangladesh showed no marked shift toward a higher growth path. In Mexico the recovery in investment was eventually quite significant but did not translate in substantially higher rates of recorded output. This performance was perplexing in light of the progress toward macroeconomic stability and structural reform.[3]

How Can Adjustment Policies Foster Growth?

The links between growth and economic policies—both in the macroeconomic and structural areas—are complex and do not lend themselves easily to empirical analysis. Nevertheless, cross-country regressions using a large sample of countries suggest that growth, investment, and productivity developments are negatively correlated with *macroeconomic instability, structural distortions,* and *adverse terms of trade movements.* Shifts over time in the growth performance of the eight countries are examined in control-group regressions that take account of physical and human capital accumulation, differences in initial income levels, exogenous factors such as the terms of trade, as well as macroeconomic policies. The analysis suggests that countries that experienced especially severe episodes of macroeconomic instability, including very high inflation (Chile, Ghana, and Mexico), had growth rates well below the world average during these episodes. Although other exogenous factors may influence both growth and other macroeconomic indicators, making it difficult to identify the direction of causation, the results do reinforce the judgment that macroeconomic instability has generally been associated with an adverse impact on growth. In contrast, the confidence generated by a track record of stable, nondistortionary economic policies appears to have been important in generating a growth rate in Thailand consistently above the world average.

An inappropriate design of adjustment policies may prolong macroeconomic instability and uncertainty and thus sap private confidence. The experience of the eight countries points to three crucial aspects of policies: *timeliness, sustainability,* and *consistency*. Delaying adjustment invites a crisis environment that results in a necessarily abrupt contraction of domestic absorption. This contraction typically fell heavily on investment—public and private—and often gave little time for resources to switch toward the tradable goods sector. This appears to have been due partly to a rational "wait and see" attitude among private investors when faced with increased uncertainty and partly to ad hoc crisis measures that reduced confidence. Promoting more rapid resource switching and reducing the lags in the

[3]This study does not address explicitly the causes of the 1994 Mexican financial crisis.

©International Monetary Fund. Not for Redistribution

response of private investors require the implementation of mutually consistent policies, an integral component of which is a medium-term fiscal position that is sustainable. Considerable progress toward fiscal sustainability was achieved in many countries, most notably in Chile, Mexico, Morocco, and Thailand, according to a relatively narrow public-debt-stability criterion. Yet this gauge of sustainability does not necessarily ensure that fiscal policy is consistent with objectives for growth and the external position, because of possible unpredictable shifts in private saving and investment behavior in response to comprehensive macroeconomic and structural adjustment.

The Response of Investment and Saving

Theory suggests that a *"pause" in private investment* may be a rational response to adjustment policies if relative prices are highly uncertain and policies are poorly coordinated and likely to be reversed. A number of countries in the group experienced such a pause, which in several cases lasted two–four years before private investment began to respond to improved macroeconomic balances and structural reform measures. Econometric evidence of investment behavior indicates that—in addition to "conventional" factors such as past growth of economic activity, real interest rates, and private sector credit—private investment was significantly influenced by uncertainty and macroeconomic instability. Indeed, during episodes of macroeconomic instability, private investment generally declined more than could be predicted on the basis of these investment equations. Also, a comparison of program targets with actual outcomes suggests that, on average, targets under Fund-supported programs in the eight countries were generally too sanguine about the prospects for an early rebound in private investment.

The largest and most lasting increases in *saving* were achieved in Chile and Thailand, suggesting that in these two countries higher saving and growth were mutually reinforcing over the medium term. Other countries had a more muted response. As has also been suggested by a number of other studies, the most important policy influence on overall saving appears to have been changes in the level of public saving; however, a history of macroeconomic stability was also important in Thailand, and public sector reforms (of the tax, public enterprise, and pension systems) appear to have contributed to boosting saving in Chile.

Robust empirical links between *external financing* and growth cannot be easily identified, since economic policies influence both in complex ways. When imports had been severely compressed due to a balance of payments crisis, renewed access to external financing appears to have contributed to a rebound in growth (Ghana and India). Also, for those countries, such as Mexico, that experienced major debt-servicing difficulties, the debt crisis and its resolution had important indirect effects on investment and growth through their impact on confidence, interest rates, and the availability of credit to the private sector. More generally, the eight countries support the view that a timely availability of additional financing is likely to enhance growth prospects provided that supporting policies are in place: over the medium term, countries with favorable structural policies and improved public saving were the most successful in attracting capital inflows and channeling them toward increased investment.

Structural Reforms and Labor Markets

While it is a widely accepted notion that *structural reforms* enhance growth by improving the efficiency of resource allocation and expanding the productive capacity of the economy, rigorous empirical support for the links between reforms and productivity growth is difficult to establish. However, the experience of the eight countries suggests that those that began with relatively small structural distortions (Thailand) or made significant progress toward eliminating major distortions (Chile and Ghana) tended to experience the most rapid productivity gains, whereas those that made little progress with structural reform (Senegal) tended to have sluggish productivity growth. Although the country studies suggest that commonly identified "best practices" in structural reform in the trade and financial areas were not always associated with the strongest supply responses, they do support the view that in each country there are often strong complementarities between certain key reforms. The precise nature of these critical links varied from country to country, so there is no single blueprint on an appropriate sequencing of reforms.

With the exception of Thailand, all of the countries had considerable initial *labor market* rigidities (sometimes including extensive market segmentation or wage indexation or both) that impeded real wage flexibility. These features remained largely unchanged during the adjustment process; only Chile implemented significant reforms. Empirical evidence from the eight countries, albeit patchy, suggests that real wage flexibility was an important influence on the elasticity of employment with respect to output whereas failure to address backward-looking wage indexation was likely to exacerbate the negative effects on output and employment during disinflation episodes.

©International Monetary Fund. Not for Redistribution

Key Lessons for the Design of IMF-Supported Programs

The key lessons for program design that emerge from the country studies are summarized here and are discussed in more detail in Section X.

• *Delayed adjustment is costly.* Stabilization policies undertaken in the context of a macroeconomic crisis will generally have deeper contractionary effects than policies implemented in a more timely manner. Two lessons arise for IMF operations. First, as an economy emerges from such a crisis, there are limits to what adjustment policies can, and should be expected to, achieve for investment and growth in the short term. Second, the role of effective surveillance is central to improving growth prospects—through detecting imbalances at an early stage and encouraging timely policies to address them.

• *A forward-looking medium-term framework is essential.* The sustainability and consistency of policies are central to preventing an economy from being locked into a low-investment, low-growth equilibrium. In a number of cases, inconsistencies between different components of the adjustment effort (for example, between exchange rate, fiscal, and wage policies; or between the goals of fiscal consolidation and certain structural reforms) appear to have weakened the supply response and sometimes led to policy reversals. Furthermore, private saving and investment decisions are essentially forward-looking in nature and can be heavily influenced by expectational and confidence factors. Greater emphasis should therefore be placed on conducting program reviews and postprogram surveillance within a consistent, medium-term macroeconomic framework. When investment and saving deviate significantly from program targets, policies should be revamped in the context of this framework in order to increase the prospects for achieving the authorities' growth and external objectives.

• *The fiscal position is critical.* Fiscal adjustment should be strong enough both to minimize the adverse effects on private investment through the impact on interest rates and the availability of credit to the private sector, and to support real exchange rate adjustment to promote resource switching and thereby minimize the initial output contraction. To this end, program design should address as explicitly as possible: (1) the assumed links between credit availability, interest rates, and private investment; (2) the problems of weak bank portfolios; and (3) the sustainability of the fiscal position in a medium-term framework.

• *Increasing public saving is likely to be the most effective means of raising national saving in the short run.* Nevertheless, a partial offset in private saving typically should be expected. Program projections for private saving should take careful account of this offset as well as the empirical evidence on the determinants of saving in each country.

• *Structural reform: the need for an early start and a critical mass.* In each country case strong complementarities between the effects of certain structural reforms were apparent, suggesting that carefully combining mutually supportive reforms is likely to maximize the beneficial impact on growth. Program design should emphasize early technical preparation and implementation of these reforms. Moreover, insufficient emphasis on, or delays in, implementing sectoral-level measures can dampen the supply response to macro-level reforms. Both these factors underscore the importance of close coordination with the World Bank in identifying and monitoring the "core" reforms in each country.

• *Is there a blueprint for achieving a transition to faster growth?* The linkages between policies and growth are often indirect, and many factors other than policies may have an impact on growth. Nonetheless, Chile and Thailand—two countries with very different economic histories—both appear to have achieved a transition to a more rapid growth path and to have had a number of common elements in the policies they implemented: a set of macroeconomic policies that were internally consistent and sustainable and that provided adequate incentives for the tradable goods sector; structural reforms that were successful in establishing the private sector as the main engine of growth; relatively flexible labor markets; and policies that helped direct external capital inflows toward investment rather than consumption.

* * *

The study is organized as follows. Section II begins with a summary of long-term trends in growth and investment, then briefly describes the episodes of adjustment: the initial conditions and external environment in which adjustment was initiated and the subsequent growth response. The next seven sections examine in depth several policy issues of particular interest, supported by five technical appendices. Section III discusses the evidence from cross-country econometric work on factors influencing long-term growth. Section IV examines the role of macroeconomic policies. Factors explaining the path of private investment and saving are discussed in Sections V and VI, respectively, and Section VII explores the role of external financing; Section VIII examines structural reforms; and Section IX discusses labor markets. The final section sets out specific policy conclusions and lessons for the design of adjustment policies.

©International Monetary Fund. Not for Redistribution