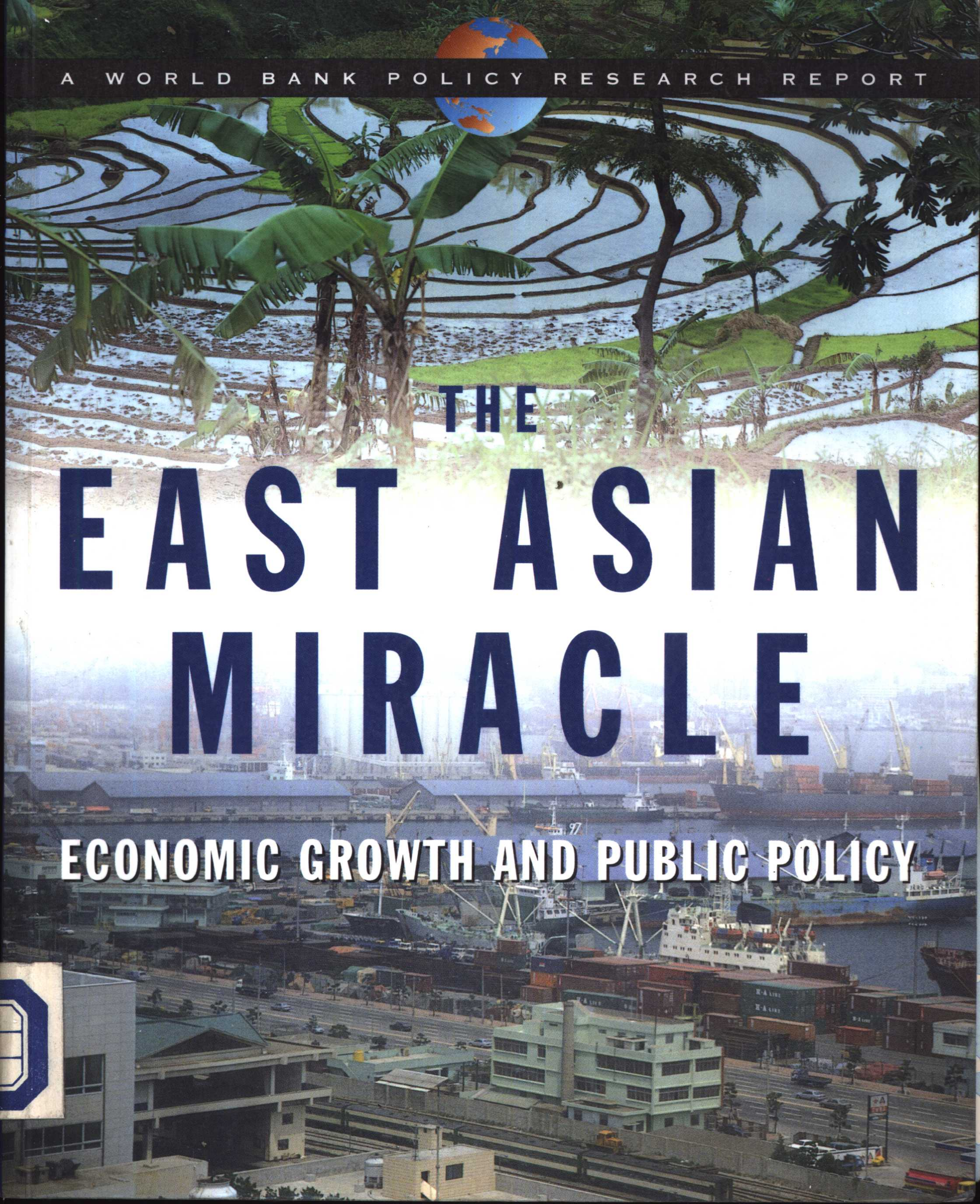
A WORLD BANK POLICY RESEARCH REPORT

THE EAST ASIAN MIRACLE

ECONOMIC GROWTH AND PUBLIC POLICY



The East Asian Miracle

Economic Growth and Public Policy

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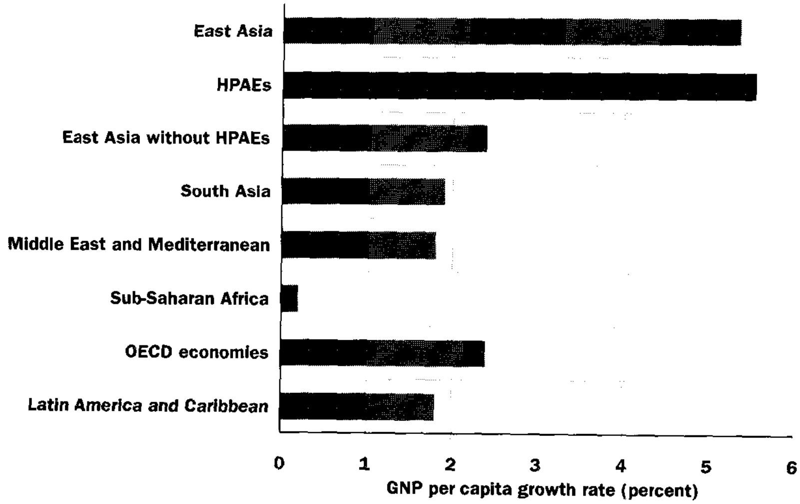
Overview: The Making of a Miracle

EAST ASIA HAS A REMARKABLE RECORD OF HIGH AND sustained economic growth. From 1965 to 1990 the twenty-three economies of East Asia grew faster than all other regions of the world (figure 1). Most of this achievement is attributable to seemingly miraculous growth in just eight economies: Japan; the "Four Tigers"—Hong Kong, the Republic of Korea, Singapore, and Taiwan, China; and the three newly industrializing economies (NIEs) of Southeast Asia, Indonesia, Malaysia, and Thailand. These eight high-performing Asian economies (HPAEs) are the subject of this study.*

Selecting any set of economies and attempting to understand the origins of their successful growth are necessarily arbitrary processes.[1] Botswana, Egypt, Gabon, and Lesotho in Sub-Saharan Africa have also been among the world's top growth performers in the past two decades, as have such diverse economies as Brazil, Cyprus, Greece, and Portugal (see figure 2). Why focus on eight economies in East Asia? In part the choice reflects popular interest; it has become common to see references to the "Asian Economic Miracle." In part it reflects recent attention by the academic and development policy communities to the relationship between public policies—which some authors have argued have a number of common threads in the eight economies, especially Japan, Korea,

*Recently China, particularly southern China, has recorded remarkably high growth rates using policies that in some ways resemble those of the HPAEs. This very significant development is beyond the scope of our study, mainly because China's ownership structure, methods of corporate and civil governance, and reliance on markets are so different from the those of the HPAEs, and in such rapid flux, that cross-economy comparison is problematic. We touch on China's recent development in chapters 1 and 3. The economic transition in China is the subject of current research by the Policy Research Department of the World Bank (see Bibliographic Note).

Figure 1 Average Growth of GNP per Capita, 1965–90



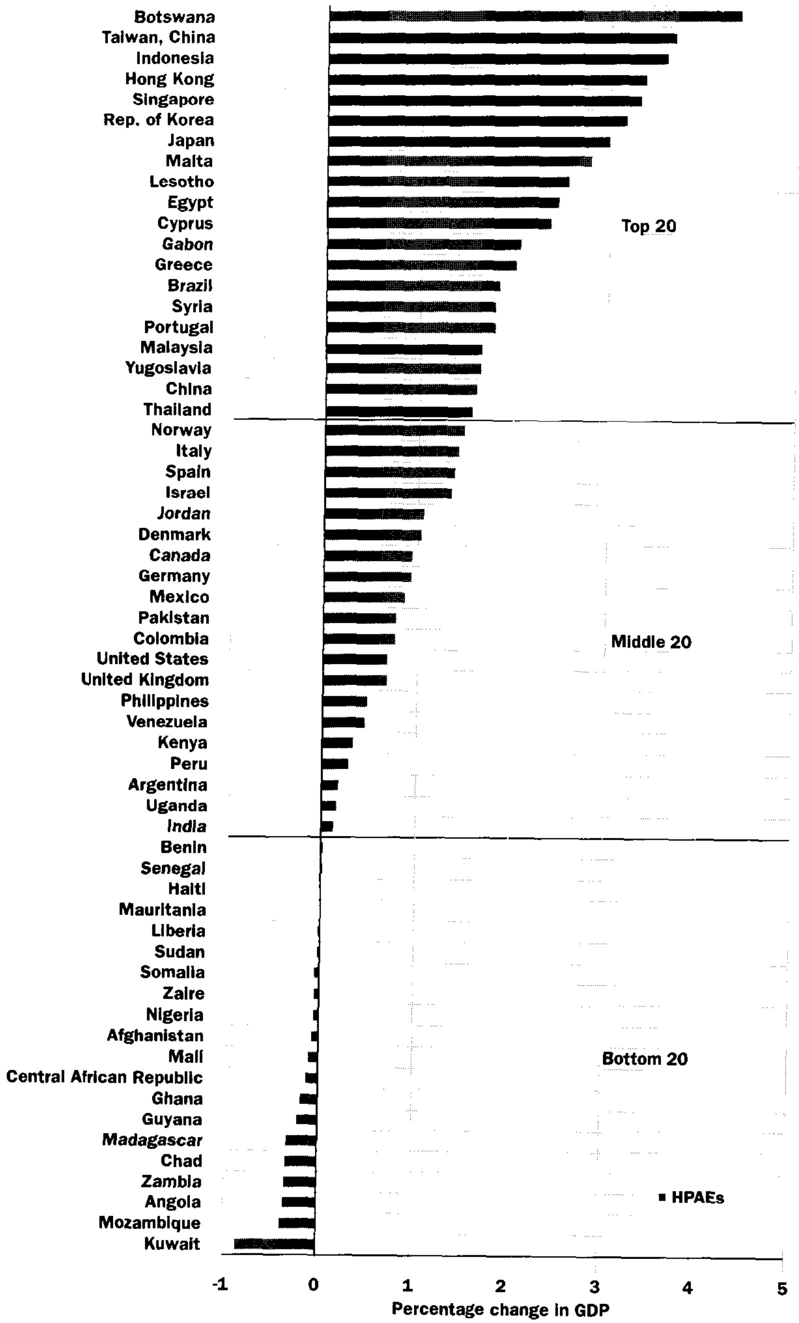
Source: World Bank (1992d).

Singapore, and Taiwan, China—and rapid growth. And in part it reflects the belief of those involved with this study that the eight economies do share some economic characteristics that set them apart from most other developing economies.

Since 1960, the HPAEs have grown more than twice as fast as the rest of East Asia, roughly three times as fast as Latin America and South Asia, and five times faster than Sub-Saharan Africa. They also significantly outperformed the industrial economies and the oil-rich Middle East–North Africa region. Between 1960 and 1985, real income per capita increased more than four times in Japan and the Four Tigers and more than doubled in the Southeast Asian NIEs (see figure 2). If growth were randomly distributed, there is roughly one chance in ten thousand that success would have been so regionally concentrated.

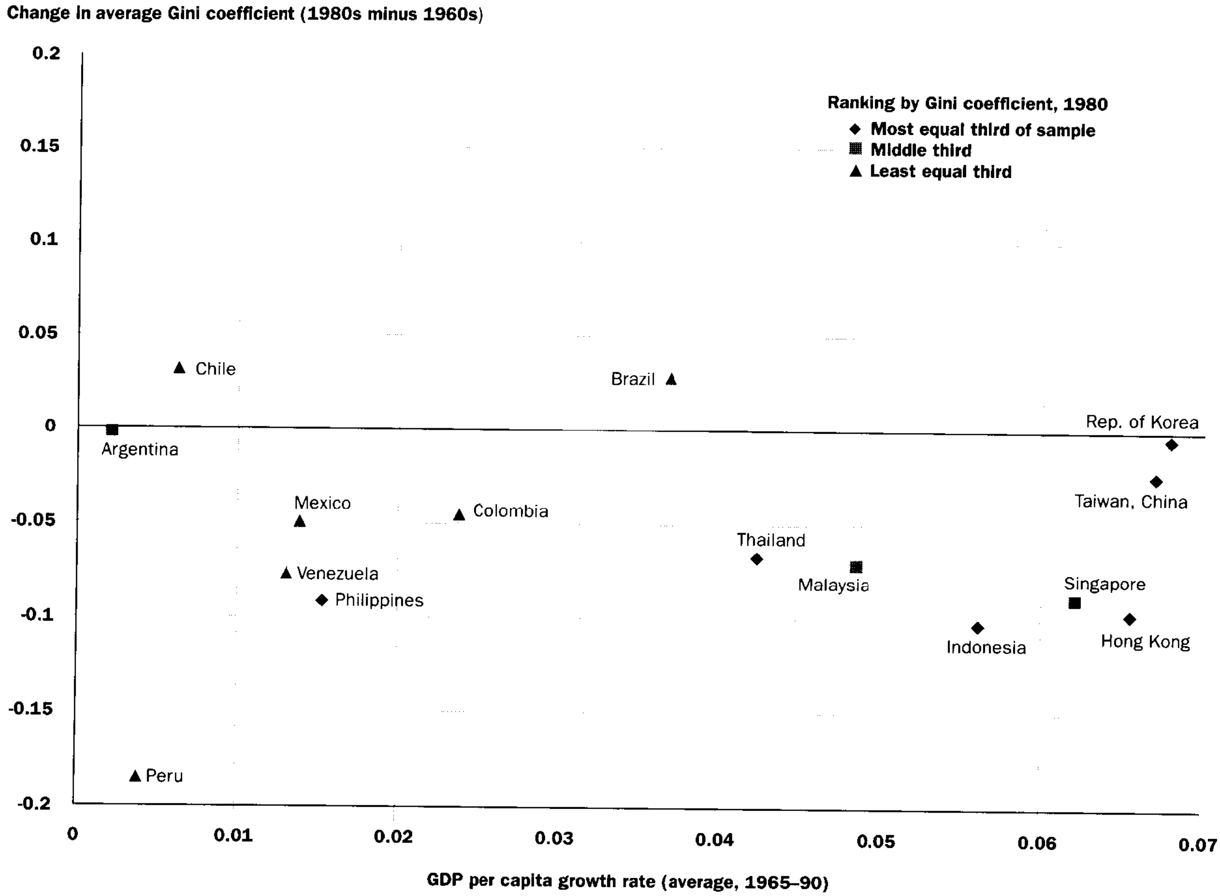
The HPAEs have also been unusually successful at sharing the fruits of growth. Figure 3 shows the relationship between the growth of gross domestic product (GPD) per capita between 1965 and 1990 and changes in the Gini coefficient, a statistical measure of the inequality of income distribution. The HPAEs enjoyed much higher per capita income growth at the same time that income distribution improved by as much or more than in other developing economies, with the exceptions of Korea and Taiwan, China, which began with highly equal income distributions. The HPAEs are the only economies that have high growth *and* declining

Figure 2 Change in GDP per Capita, 1960–85



Source: Summers and Heston (1988).

Figure 3 Change in Inequity and the GDP per Capita Growth Rate



Note: Figure 3 plots the relationship between average per capita income growth and changes in the decade average of the Gini coefficient from the 1960s to the 1980s; a negative number indicates that income became less concentrated. The decade average is used because data are available for different years in different economies; the decade average for the 1960s begins with data from 1965.
Source: World Bank data.

inequality. Moreover, the fastest growing East Asian economies, Japan and the Four Tigers, are the most equal.

As a result of rapid, shared growth, human welfare has improved dramatically. Life expectancy in the developing HPAEs increased from 56 years in 1960 to 71 years in 1990. (In other low- and middle-income economies, life expectancy also rose considerably, from 36 and 49 to 62 and 66 years, respectively.) In the HPAEs, the proportion of people living in absolute poverty, lacking such basic necessities as clean water, food, and shelter, dropped—for example, from 58 percent in 1960 to 17 percent in 1990 in Indonesia, and from 37 percent to less than 5 percent in Malaysia during the same period. Absolute poverty also declined in other developing economies, but much less steeply, from 54 to 43 percent in India and from 50 to 21 percent in Brazil from 1960 to 1990. A host of other social and economic indicators, from education to appliance ownership, have also improved rapidly in the HPAEs and now are at levels that sometimes surpass those in industrial economies.

What caused East Asia's success? In large measure the HPAEs achieved high growth by getting the basics right. Private domestic investment and rapidly growing human capital were the principal engines of growth. High levels of domestic financial savings sustained the HPAEs' high investment levels. Agriculture, while declining in relative importance, experienced rapid growth and productivity improvement. Population growth rates declined more rapidly in the HPAEs than in other parts of the developing world. And some of these economies also got a head start because they had a better-educated labor force and a more effective system of public administration. In this sense there is little that is "miraculous" about the HPAEs' superior record of growth; it is largely due to superior accumulation of physical and human capital.

Fundamentally sound development policy was a major ingredient in achieving rapid growth. Macroeconomic management was unusually good and macroeconomic performance unusually stable, providing the essential framework for private investment. Policies to increase the integrity of the banking system, and to make it more accessible to nontraditional savers, raised the levels of financial savings. Education policies that focused on primary and secondary schools generated rapid increases in labor force skills. Agricultural policies stressed productivity and did not tax the rural economy excessively. All the HPAEs kept price distortions within reasonable bounds and were open to foreign ideas and technology.

But these fundamental policies do not tell the entire story. In most of these economies, in one form or another, the government intervened—systematically and through multiple channels—to foster development, and in some cases the development of specific industries. Policy interventions took many forms: targeting and subsidizing credit to selected industries, keeping deposit rates low and maintaining ceilings on borrowing rates to increase profits and retained earnings, protecting domestic import substitutes, subsidizing declining industries, establishing and financially supporting government banks, making public investments in applied research, establishing firm- and industry-specific export targets, developing export marketing institutions, and sharing information widely between public and private sectors. Some industries were promoted, while others were not.

At least some of these interventions violate the dictum of establishing for the private sector a level playing field, a neutral incentives regime. Yet these strategies of selective promotion were closely associated with high rates of private investment and, in the fastest-growing economies, high rates of productivity growth. Were some selective interventions, in fact, good for growth?

In addressing this question, we face a central methodological problem. Since we chose the HPAEs for their unusually rapid growth, we know already that their interventions did not significantly inhibit growth. But it is very difficult to establish statistical links between growth and a specific intervention and even more difficult to establish causality. Because we cannot know what would have happened in the absence of a specific policy, it is difficult to test whether interventions increased growth rates. Other economies attempted similar interventions without success, and on average they used them more pervasively than in the HPAEs. Because the HPAEs differed from less successful economies both in their closer adherence to policy fundamentals and in the manner in which they implemented interventions, it is virtually impossible to measure the relative impact of fundamentals and interventions on HPAE growth. Thus, in attempting to distinguish interventions that contributed to growth from those that were either growth-neutral or harmful to growth, we cannot offer a rigorous counterfactual scenario. Instead, we have had to be content with what Keynes called an "essay in persuasion," based on analytical and empirical judgments.

Our judgment is that in a few economies, mainly in Northeast Asia, in some instances, government interventions resulted in higher and more equal growth than otherwise would have occurred. However, the prerequisites for success were so rigorous that policymakers seeking to follow similar paths in other developing economies have often met with failure. What were these prerequisites? First, governments in Northeast Asia developed institutional mechanisms which allowed them to establish clear performance criteria for selective interventions and to monitor performance. Intervention has taken place in an unusually disciplined and performance-based manner (Amsden 1989). Second, the costs of interventions, both explicit and implicit, did not become excessive. When fiscal costs threatened the macroeconomic stability of Korea and

Malaysia during their heavy and chemical industries drives, governments pulled back. In Japan the Ministry of Finance acted as a check on the ability of the Ministry of International Trade and Industry to carry out subsidy policies, and in Indonesia and Thailand balanced budget laws and legislative procedures constrained the scope for subsidies. Indeed, when selective interventions have threatened macroeconomic stability, HPAE governments have consistently come down on the side of prudent macroeconomic management. Price distortions arising from selective interventions were also less extreme than in many developing economies.

In the newly industrializing economies of Southeast Asia, government interventions played a much less prominent and frequently less constructive role in economic success, while adherence to policy fundamentals remained important. These economies' capacity to administer and implement specific interventions may have been less than in Northeast Asia. Their rapid growth, moreover, has occurred in a very different international economic environment from the one that Japan, Korea, and Taiwan, China, encountered during their most rapid growth. Thus the problem is not only to try to understand which specific policies may have contributed to growth, but also to understand the institutional and economic circumstances that made them viable. Indeed, the experience of the Southeast Asian economies, whose initial conditions parallel those of many developing economies today, may prove to have more relevance outside the region than that of Northeast Asia.

The book is organized as follows: chapter 1 describes the distinguishing characteristics of the East Asian economic miracle, rapid growth with equity, and uses economic models to attempt to account for this growth. Chapter 2 reviews policy explanations for East Asia's economic success and introduces the framework that we will use throughout to explore the relationship between public policy and economic growth. Chapter 3 discusses pragmatism and flexibility in the formulation of policies that led to two important characteristics of the HPAEs' economic performance: macroeconomic stability and rapid growth of manufactured exports. Chapter 4 discusses the role of institutions. Chapter 5 looks at the role of public policy in the HPAEs' unusually rapid accumulation of physical and human capital, while chapter 6 analyzes the means used to achieve efficient allocation of resources and productivity growth. Chapter 7, in conclusion, assesses the success of East Asian polices and their applicability in a changing world economy. The remainder of this overview parallels the organization of the book, highlighting the central arguments and conclusions.

The Essence of the Miracle: Rapid Growth with Equity

THE EIGHT HPAEs ARE HIGHLY DIVERSE IN NATURAL RESOURCES, population, culture, and economic policy. What shared characteristics cause them to be grouped together and set apart from other developing economies? First, as we noted above, they had rapid, sustained growth between 1960 and 1990. This in itself is unusual among developing economies; others have grown quickly for periods but not for decades at such high rates. The HPAEs are unique in that they combine this rapid, sustained growth with highly equal income distributions. They also all have been characterized by rapid demographic transitions, strong and dynamic agricultural sectors, and unusually rapid export growth (see chapter 1).

The HPAEs also differ from other developing economies in three factors that economists have traditionally associated with economic growth. High rates of investment, exceeding 20 percent of GDP on average between 1960 and 1990, including in particular unusually high rates of private investment, combined with high and rising endowments of human capital due to universal primary and secondary education, tell a large part of the growth story. These factors account for roughly two-thirds of the growth in the HPAEs. The remainder is attributable to improved productivity. Such high levels of productivity growth are quite unusual. In fact, productivity growth in the HPAEs exceeds that of most other developing and industrial economies. This superior productivity performance comes from the combination of unusual success at allocating capital to high-yielding investments and at catching up technologically to the industrial economies.

Public Policies and Growth

What was the role of public policy in helping the HPAEs to rapidly accumulate human and physical capital and to allocate those resources to high-yielding investments? Did policies assist in promoting rapid productivity growth? There are several explanations for East Asia's success. Geography and culture were clearly important; however, they do not entirely account for the high-performing economies' success, as the presence of unsuccessful economies in the same region attests. Among the variety of policy explanations, two broad views have emerged (see chapter 2).

Adherents of the *neoclassical view* stress the HPAEs' success in getting the basics right. They argue that the successful Asian economies have been better than others at providing a stable macroeconomic environment and a reliable legal framework to promote domestic and international competition. They also stress that the orientation of the HPAEs toward international trade and the absence of price controls and other distortionary policies have led to low relative price distortions. Investments in people, education, and health are legitimate roles for government in the neoclassical framework, and its adherents stress the importance of human capital in the HPAEs' success.

Adherents of the *revisionist view* have successfully shown that East Asia does not wholly conform to the neoclassical model. Industrial policy and interventions in financial markets are not easily reconciled within the neoclassical framework. Some policies in some economies are much more in accord with models of state-led development. Moreover, while the neoclassical model would explain growth with a standard set of relatively constant policies, the policy mixes used by East Asian economies were diverse and flexible. Revisionists argue that East Asian governments "led the market" in critical ways. In contrast to the neoclassical view, which acknowledges relatively few cases of market failure, revisionists contend that markets consistently fail to guide investment to industries that would generate the highest growth for the overall economy. In East Asia, the revisionists argue, governments remedied this by deliberately "getting the prices wrong"—altering the incentive structure—to boost industries that would not otherwise have thrived (Amsden 1989).

The revisionist school has provided valuable insights into the history, role, and extent of East Asian interventions, demonstrating convincingly the scope of government actions to promote industrial development in Japan, Korea, Singapore, and Taiwan, China. But, in general its proponents have not claimed to establish that interventions per se accelerated growth. Moreover, as we shall show, some important government interventions in East Asia, such as Korea's promotion of chemicals and heavy industries, have had little apparent impact on industrial structure.

In other instances, such as Singapore's effort to squeeze out labor-intensive industries by boosting wages, policies have clearly backfired. Thus neither view fully accounts for East Asia's phenomenal growth.

The Market-Friendly View. In describing the policies associated with rapid growth, *World Development Report 1991* (World Bank 1991b) expands on the neoclassical view, clarifying systematically how rapid growth in developing countries has been associated with effective but carefully limited government activism. In the "market-friendly" strategy it articulates, the appropriate role of government is to ensure adequate investments in people, provide a competitive climate for private enterprise, keep the economy open to international trade, and maintain a stable macroeconomy. Beyond these roles, the report argues, governments are likely to do more harm than good, unless interventions are market friendly. On the basis of an exhaustive review of the experience of developing economies during the last thirty years, it concludes that attempts to guide resource allocation with nonmarket mechanisms have generally failed to improve economic performance.

The market-friendly approach captures important aspects of East Asia's success. These economies are stable macroeconomically, have high shares of international trade in GDP, invest heavily in people, and have strong competition among firms. But these characteristics are the outcome of many different policy instruments. And the instruments chosen, particularly in the northeastern HPAEs, Japan, Korea, and Taiwan, China, sometimes included extensive government intervention in markets to guide private-sector resource allocation. The success of these northeastern economies, moreover, stands up well to the less interventionist paths taken by Hong Kong, Malaysia, and more recently Indonesia and Thailand.

A Functional Approach to Understanding Growth. To explore these varying paths to economic success, we have developed a framework that seeks to link rapid growth to the attainment of three functions. In this view, each of the HPAEs maintained macroeconomic stability *and* accomplished three functions of growth: accumulation, efficient allocation, and rapid technological catch-up. They did this with combinations of policies, ranging from market oriented to state led, that varied both across economies and over time.

We classify policies into two broad groups: fundamentals and selective interventions. Among the most important fundamental policies are those that encourage macroeconomic stability, high investments in human capital, stable and secure financial systems, limited price distortions, and openness to foreign technology. Selective interventions include mild financial repression (keeping interest rates positive but low), directed credit, selective industrial promotion, and trade policies that push nontraditional exports. We try to understand how government policies, both fundamental and interventionist, may have contributed to faster accumulation, more efficient allocation, and higher productivity growth.

We maintain as a guiding principle that for interventions that attempt to guide resource allocation to succeed, they must address failures in the working of markets. Otherwise, markets would perform the allocation function more efficiently. We identify a class of economic problems, coordination failures, which can lead markets to fail, especially in early stages of development. We then interpret some of the interventionist policies in East Asia as responses to these coordination problems—responses that emphasized cooperative behavior among private firms and clear performance-based standards of success.

Competitive discipline is crucial to efficient investment. Most economies employ only market-based competition. We argue that some HPAEs have gone a step further by creating contests that combine competition with the benefits of cooperation among firms and between government and the private sector. Such contests range from very simple nonmarket allocation rules, such as access to rationed credit for exporters, to very complex coordination of private investment in the government-business deliberation councils of Japan and Korea. The key feature of each contest, however, is that the government distributes rewards—often access to credit or foreign exchange—on the basis of performance, which the government and competing firms monitor. To succeed, selective interventions must be disciplined by competition via either markets or contests.

Economic contests, like all others, require competent and impartial referees—that is, strong institutions. Thus, a high-quality civil service that has the capacity to monitor performance and is insulated from political interference is essential to contest-based competition. Of course, a high-quality civil service also augments a government's ability to design and implement non-contest-based policies.

Our framework is an effort to order and interpret information. We are not suggesting that HPAE governments set out to achieve the functions of growth. Rather, they used multiple, shifting policy instruments in pursuit of more straightforward economic objectives such as macroeconomic stability, rapid export growth, and high savings. Pragmatic flexibility in the pursuit of such objectives—the capacity and willingness to change policies—is as much a hallmark of the HPAEs as any single policy instrument. This is well illustrated by the great variety of ways in which the HPAEs achieved two important objectives: macroeconomic stability and rapid export growth (see chapter 3).

Achieving Macroeconomic Stability and Export Growth

More than most developing economies, the HPAEs were characterized by responsible macroeconomic management. In particular, they generally limited fiscal deficits to levels that could be prudently financed without increasing inflationary pressures and responded quickly when fiscal pressures were perceived to building up. During the past thirty years, annual inflation averaged approximately 9 percent in these economies, compared with 18 percent in other low- and middle-income economies. Because inflation was both moderate and predictable, real interest rates were far more stable than in other low- and middle-income economies. Macroeconomic stability encouraged long-term planning and private investment and, through its impact on real interest rates and the real value of financial assets, helped to increase financial savings. The HPAEs also adjusted their macroeconomic policies to terms of trade shocks more quickly and effectively than other low- and middle-income economies. As a result, they have enjoyed more robust recoveries of private investment.

Many of the policies that fostered macroeconomic stability also contributed to rapid export growth. Fiscal discipline and high public savings allowed Japan and Taiwan, China, to undertake extended periods of exchange rate protection. Adjustments to exchange rates in other HPAEs—validated by policies that reduced expenditures—kept them competitive, despite differential inflation with trading partners.

In addition to macroeconomic policies, the HPAEs used a variety of approaches to promoting exports. All (except Hong Kong) began with a period of import substitution, and a strong bias against exports. But each moved to establish a pro-export regime more quickly than other developing economies. First Japan, in the 1950s and early 1960s, and then the Four Tigers, in the late 1960s, shifted trade policies to encourage manufactured exports. In Japan, Korea, and Taiwan, China, governments established a pro-export incentive structure that coexisted with moderate but highly variable protection of the domestic market. A wide variety of instruments was used, including export credit, duty-free imports for exporters and their suppliers, export targets, and tax incentives. In the Southeast Asian NIEs the export push came later, in the early 1980s, and the instruments were different. Reductions in import protection were more generalized and were accompanied by export credit and supporting institutions. In these economies export development has relied less on highly selective interventions and more on broadly based market incentives and direct foreign investment.

Building the Institutional Basis for Growth

Some economists and political scientists have argued that the East Asian miracle is due to the high quality and authoritarian nature of the region's institutions. They describe East Asian political regimes as "developmental states" in which powerful technocratic bureaucracies, shielded from political pressure, devise and implement well-honed interventions. We believe developmental state models overlook the central role of government–private sector cooperation. While leaders of the HPAEs have tended to be either authoritarian or paternalistic, they have also been willing to grant a voice and genuine authority to a technocratic elite and key leaders of the private sector. Unlike authoritarian leaders in many other economies, leaders in the HPAEs realized that economic development was impossible without cooperation (see chapter 4).

The Principle of Shared Growth. To establish their legitimacy and win the support of the society at large, East Asian leaders established the principle of shared growth, promising that as the economy expanded all groups would benefit. But sharing growth raised complex coordination problems. First, leaders had to convince economic elites to support pro-growth policies. Then they had to persuade the elites to share the benefits of growth with the middle class and the poor. Finally, to win the cooperation of the middle class and the poor, the leaders had to show them that they would indeed benefit from future growth.

Explicit mechanisms were used to demonstrate the intent that all would have a share of future wealth. Korea and Taiwan, China, carried out comprehensive land reform programs; Indonesia used rice and fertilizer price policies to raise rural incomes; Malaysia introduced explicit wealth-sharing programs to improve the lot of ethnic Malays relative to