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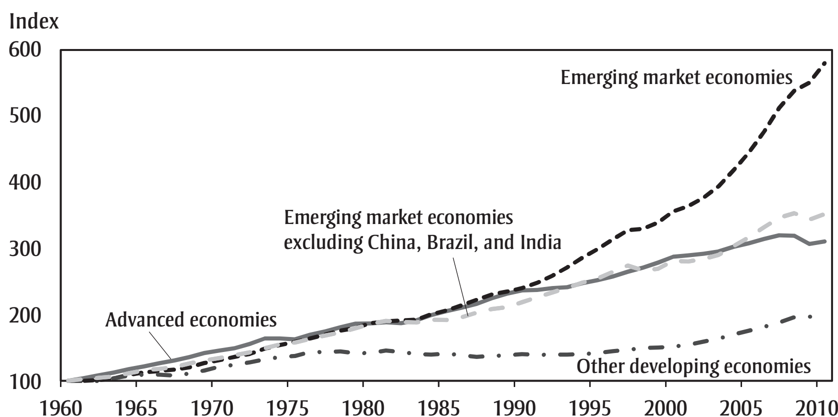
Changes in the World Economic Order: A Roadmap

Over the last two decades, emerging market economies (EMEs) have become a dominant presence in the world economy. They now account for a substantial share of world output and, with their rapid growth rates, have become a major driver of global growth during the past decade. Trade and financial linkages between advanced economies and EMEs have also become much stronger, speeding up the process of global integration.

The spectacular growth performance of EMEs in recent decades has attracted the most attention.[1] As a group the EMEs have experienced far greater cumulative growth since 1960 than other developing countries and the advanced economies (figure 1-1). Excluding Brazil, China, and India—three of the most prominent large, dynamic economies—from the list of emerging markets makes the performance of this group look less spectacular, although it is still much better than that of the group of other developing countries. Other economic indicators provide a broader snapshot of the rising prominence of emerging markets in the world economic order (figure 1-2). While their shares of the world population and world

1. In this book, we use a conventional definition of *emerging markets*. We fully recognize that membership in the group of EMEs is largely the consequence of these countries' growth performance and their opening up to trade and financial integration. We use this term as a descriptive label and do not ascribe any causation to it.

FIGURE 1-1. Evolution of GDP, by Group, 1960–2010[a]



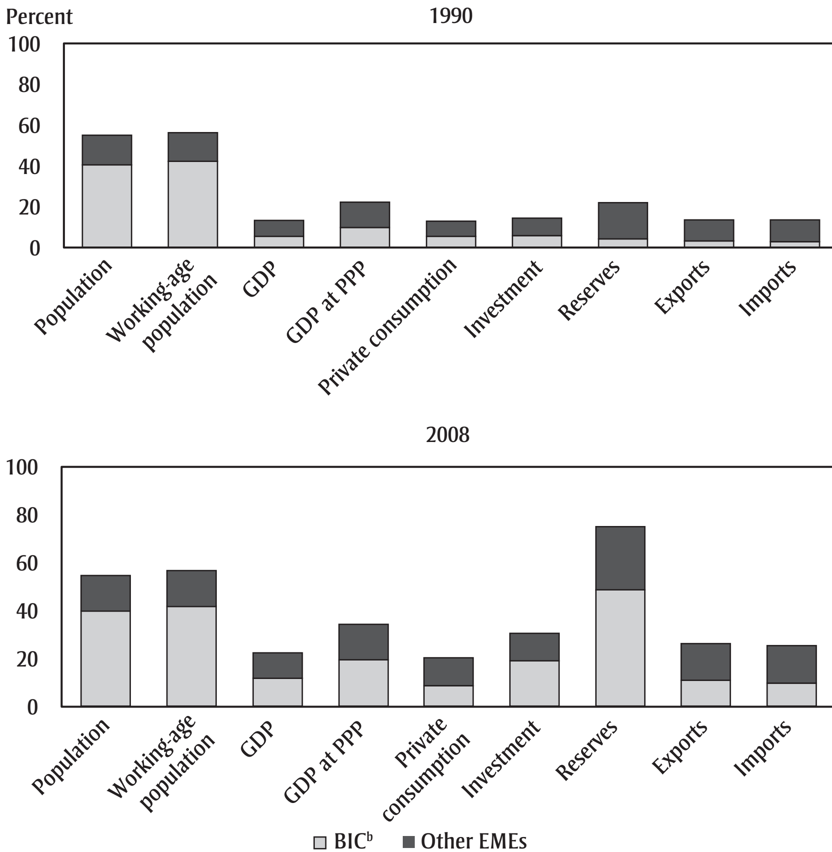
a. Indexes are set to 100 in the base period.

labor force remained relatively stable from 1990 to 2008, the EMEs have now become more important on virtually every other economic dimension. The emerging markets' shares of world GDP, private consumption, investment, and trade nearly doubled in the space of less than two decades. The share of world foreign exchange reserves held by emerging markets jumped from about 20 percent in 1990 to nearly 75 percent in 2008.

These changes in the world economic order have prompted questions about the relevance of the conventional wisdom that when the U.S. economy sneezes the rest of the world catches a cold. The conventional wisdom came into question because emerging market growth continued to be strong despite relatively tepid growth in the advanced economies over the period 2003–07. A fierce debate got under way in 2006–07 about whether global business cycles were converging or whether cycles in emerging markets had started to diverge from fluctuations in advanced-country business cycles.[2] Indeed, the notion was gaining ground that EMEs had become the main engines of global growth and that advanced countries had themselves become more dependent on demand from the fast-growing emerging markets.

2. For a discussion of these debates, see Kose (2008), Kose, Otrok, and Prasad (2008a), and IMF (2007, 2008b).

FIGURE 1-2. Emerging Market Economies, Shares in the Global Economy, 1990 and 2008[a]



a. In percent of world totals.
b. Brazil, India, China

The divergence argument is of course directly linked to the issue of the resilience of EMEs, as it implies that those economies have become less vulnerable to external shocks emanating from the advanced economies. A notable development over the last decade is that trade and financial linkages *among* EMEs have risen rapidly, with trade and financial flows among this group of countries accounting for a rising fraction of their respective overall cross-border flows. This has further enhanced the perception that EMEs have become less dependent on advanced economies

and that business cycles among EMEs have become more correlated and simultaneously less closely linked to advanced-country cycles.

The global financial crisis has changed the direction of this debate and cast a shadow over the ability of the EMEs to insulate themselves from shocks in advanced countries. In particular, the problems in the financial systems of advanced countries rapidly spread to a number of EMEs during the last quarter of 2008 and the first half of 2009, disrupted their asset markets, and stunted their short-term growth prospects. As the global financial crisis has vividly shown, financial markets around the world are now closely tied together, and shocks in one part of the global financial system can and often do have large and immediate effects on other parts. Moreover, the crisis has been a bitter reminder that, for all their benefits, deeper trade and financial linkages can serve as a mechanism for magnifying shocks and intensifying their effects on the real side of a nation's economy.

As a significant fraction of EMEs followed the advanced countries into recession, the crisis called into question the notion of greater resilience of EMEs to advanced-country shocks. This was not altogether a surprising outcome, as past episodes of business cycles suggest that deep and highly synchronized recessions in advanced countries tend to have large spillovers to the EMEs. Remarkably, however, the majority of EMEs bounced back briskly from the global recession since mid-2009 and as a group have weathered the crisis much better than the advanced economies. There is of course significant variation in the degree of resilience displayed by different groups of emerging markets. For instance, the Asian emerging markets, especially China and India, have done far better than the economies of emerging Europe. Nevertheless, the core fundamentals of the EMEs suggest that most of these countries have the potential to generate sustained high growth over the long term, so the shift in the locus of global growth from the advanced economies to the EMEs is likely to persist.

These developments call for a deeper analysis of the implications of shifts in the global economic structure. Does economic theory provide clear guidance about how rising integration within and between groups of countries should affect business cycle synchronicity? In fact different theoretical models highlight two opposing effects of rising trade integration. Rising trade interdependence ought to increase cross-border demand

spillovers and increase business cycle synchronization, as measured by correlation of growth rates of output (gross domestic product), across countries. On the other hand, if rising trade linkages lead to greater specialization of production, then fluctuations in output could become less correlated as countries become more exposed to industry-specific shocks. There are similar contrasting effects of financial integration on output correlations; it magnifies potential shock spillovers, but this might be offset by greater industrial specialization if countries can use financial markets to smooth consumption relative to the resulting country-specific income risk. In short, the overall net effect of rising within- and between-group trade and financial integration is hard to pin down in a theoretical model.

A country's level of development also plays a role in determining the nature of the transmission mechanism. Trade and financial integration could help low-income developing economies to diversify their production base as integration gives them access to foreign finance for investment projects as well as access to larger foreign markets. It is only at higher per capita income levels that the specialization effect dominates the diversification effect of greater integration.

We discuss these mechanisms and the associated literature in more detail later in the book, but the main implication is that the net effects of trade and financial integration on within- and between-group correlations of business cycles can only be resolved empirically. Another implication is that the level of development may have a bearing on how integration affects a country's business cycle synchronicity with the rest of the world, suggesting the need for a breakdown of country groups not by region but by level of development.

Against this background of ambiguous predictions from theory, the objective of this book is to provide a systematic empirical analysis of the changes in the nature of cyclical linkages between the advanced economies and the EMEs in order to analyze the resilience of the latter group to global economic and financial developments.[3] We focus on four specific questions: First, how have the trade and financial linkages between the

3. Although a number of recent books (James 2009; Reinhart and Rogoff 2009b; Ferguson 2009) analyze the implications of the global financial crisis from different angles and through the lens of history, there is no comprehensive analysis of the experience of the EMEs during the crisis.

advanced countries and EMEs evolved in recent decades? Second, what are the implications of the dramatic changes in international linkages for the dynamics of cyclical spillovers between the advanced countries and EMEs? Third, how (and through which channels of transmission) has the latest global financial crisis impacted the short-term macroeconomic stability and long-term growth prospects of the EMEs? Finally, what are the policy implications of these changes for emerging markets and advanced countries?

The book is organized as follows. In chapter 2 we provide an extensive survey of the empirical and theoretical literature on the cyclical implications of rising global trade and financial linkages for the transmission and synchronicity of business cycles, with specific attention to the vulnerability and resilience of EMEs to developments in advanced countries. It turns out that there are few conclusive theoretical implications about how greater global integration should affect business cycle correlations, leaving this to be resolved empirically.

In chapter 3 we present the details of our database, which covers the main advanced economies and emerging markets along with a large group of other developing economies. The latter group includes low-income countries that are typically less integrated into the world economy. In chapter 4 we study the changes in global growth dynamics and focus on the evolution of the size distribution of different groups of countries and the dynamics of sectoral output over time. This allows us to characterize the rising importance of EMEs in the world economy and also to examine how the internal structures of these economies have shifted over time.

Building on this analysis, in chapters 5 and 6 we examine changes in global trade and financial linkages in recent decades. We document how EMEs have become major players in global trade and finance due to rapid economic growth fueled by the dramatic changes in their sectoral structures and the extent of their integration into the global economy. We also provide an analysis of changes in the composition and direction of trade and financial flows of emerging markets, both among themselves and with other groups of economies.

In chapter 7 we study the impact of the rapid increase in global linkages on the volatility of business cycles. Given that volatility is a key ana-

lytical component for a study of the resilience of EMEs, this chapter presents a baseline for evaluating the impact of globalization on business cycle fluctuations. We analyze the evolving nature of the dynamics of volatility of output, consumption, and investment across groups of countries and over time.

In chapter 8 we examine the degree of business cycle comovement among and between advanced economies and EMEs. We also consider the changes in the extent of comovement during the global financial crisis using the latest available data. We separately examine the comovement of real and financial variables using aggregate as well as sectoral data in order to provide a more complete picture of cross-country comovement. One striking result is that comovement of fluctuations in financial markets has considerably outpaced those in real variables such as GDP.

In chapter 9 we undertake a formal statistical analysis of the degree of comovement to examine whether economic fluctuations among and between the two groups of countries have changed over time. Our empirical analysis is based on state-of-the-art econometric models that allow us to flexibly capture the dynamic transmission and propagation of different types of shocks across countries. Interestingly, we find that business cycle comovement has become stronger within the groups of EMEs and advanced economies but slightly weaker between these two groups. This novel result provides some backing for the notion that EMEs are decoupling from the advanced economies, although our evidence is suggestive rather than conclusive.

In addition to the aggregate analysis, we also study the nature of business cycle spillovers among emerging markets in specific regions such as Asia and Latin America. The increasingly prominent role of Asian economies, especially China and India, is particularly relevant to the debates about the decoupling and resilience of EMEs, which have focused on the ability of this region to insulate itself from a slowdown in advanced economies during the global financial crisis. Contrasting the spillover effects in different regions allows us to explore the mechanisms by which countries may be more or less insulated from global shocks, even if they have similar levels of integration with the global economy.

In chapter 10 we characterize business cycle dynamics around recessions in EMEs. One of our objectives is to study the resilience of these

countries during the global financial crisis. Since a number of emerging market countries experienced recessions because of the crisis, a natural first step is to review the main characteristics of these episodes. We also provide a brief analysis of the behavior of key real and financial aggregates in emerging markets around these periods, contrasting these patterns with those for advanced economies. In addition, we examine the implications of recessions accompanied by financial crises. That analysis provides a baseline for evaluating the performance of key EMEs during this crisis.

In chapter 11, we investigate in more detail the impact of the global financial crisis on EMEs. Considering the unique nature of the crisis, we first provide a metric to examine the cost of the crisis and compare this cost with that of previous episodes. We then provide a bird's-eye view of how the EMEs in different regions were affected by the crisis. In chapter 12 we undertake detailed case studies of two groups of EMEs—those in Asia and those in Europe—that displayed strikingly different degrees of resilience to the global financial crisis. China and India, in particular, weathered the crisis with just a small stutter in their growth rates, while EMEs in Eastern Europe suffered deep recessions during 2008–09 and are experiencing weak and uncertain recoveries. These regional case studies set the stage for a discussion in chapter 13 of the factors underlying the resilience of emerging markets as a group and also the differences in the degree of resilience of different groups of EMEs.

We conclude the book in chapter 14 with a summary of our findings and a discussion of their implications for the design of macroeconomic policies for emerging markets, advanced countries, and the global economy. Our analysis points to a number of interesting avenues for future research, which we also summarize in the concluding chapter.