### **Chapter 1**

# Introduction and Summary

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In a global economy beset by concerns over a growth recession, financial volatility, and rising inflation, many countries in the Western Hemisphere have been among the few bright spots in recent years. Not that these countries were immune to the shocks that hit around the globe, especially the challenge posed by rampant food and energy price increases. Overall, however, economic growth has been resilient, balance sheets have remained strong, and financial institutions have been largely isolated from the turbulence that has affected their brethren in the industrialized world.

These developments fly in the face of traditional views of the "if the United States sneezes, Latin America catches a cold" type. However, they have not come as a surprise to those following the significant progress achieved by many countries in recent years, both in macroeconomic management and on the structural and institutional front. A decline in export commodity prices may yet test the resilience of these achievements-a fact not lost in recent debates of whether the glass of economic reforms in Latin America is half full or half emptybut there seems to be a strong consensus that economic and financial linkages between Latin America, the United States, and other important regions of the world economy have undergone profound change.1

The papers compiled in this book analyze these "linkages" from many different angles. They reflect the outcome of what began as a stock-taking exercise in the IMF's Western Hemisphere Department in late 2006. Given the mandate to strengthen the institution's work on cross-country and regional issues, a working group of about 15–20 economists set out to have a fresh look at some of the questions that researchers (and policymakers) in both North and South America have grappled with for decades, for example:

- How do changes in global economic conditions affect countries in the Western Hemisphere? Are countries different in their response to external shocks, and what could account for such differences?
- What role do factors such as external demand, global interest rates, risk appetite, remittance flows, or commodity prices play in the propagation of shocks?
- To what extent are countries still dependent on the United States as a growth locomotive and provider of capital? Have financial markets become more integrated, and what is the role of capital flows in transmitting financial volatility, or even crises?

The results are presented in three sections, focusing in turn on (1) business cycle linkages, (2) commodity price shocks and inflation, and (3) financial linkages. Literature surveys on each topic are presented separately at the end of the book. Many of the papers were discussed during the Western Hemisphere Department's 2007 Annual Research Seminar, the proceedings of which are available online.<sup>2</sup>

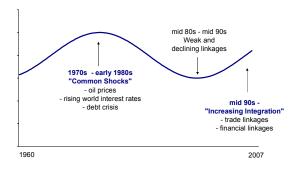
<sup>&</sup>lt;sup>1</sup> For a debate on the sustainability of Latin America's current fortunes, see IDB (2007) and Zettelmeyer (2007).

<sup>&</sup>lt;sup>2</sup> See www.imf.org/external/np/seminars/eng/2007/ whd/index.htm.

### **Business Cycle Linkages**

Survey work suggests that trade and financial integration have again strengthened Latin America's business cycle linkages with the outside world. This process began in the mid-1990s; however, the degree of business cycle synchronization is still considered to be below the peaks of the 1970s and early 1980s (see Figure 1.1). During this earlier period, linkages were strong because countries faced common shocks, including global oil supply disruptions and, subsequently, a rise in world interest rates and the emergence of the regional debt crisis. Today, different factors are at work. Although world commodity prices are on the rise once again, common shocks are now playing a less important role. Trade liberalization, increasing openness, and the globalization of capital markets, including for foreign direct investment, currently explain much of the region's rising sensitivity to external factors.

Figure 1.1



Another key finding has been that the exposure to external cyclical factors varies widely across the region. The relative importance of the United States as an export market has declined, but the overall increase in openness means that exports to the United States have risen relative to GDP in most countries since the early 1990s. U.S. linkages are strongest within NAFTA, followed by those between the United States and Central America. While rising, linkages between South America and the United States, and within South America itself, remain weaker. Instead, trade and investment linkages to other regions have been growing, particularly with Europe (e.g., Brazil, Chile) and Asia. World Bank studies have found that the emergence of China as a trading partner has so far had a small overall impact on Latin America, although it has triggered some shifts in production from low-wage to high-wage sectors.<sup>3</sup>

An empirical model presented by Par Österholm and Jeromin Zettelmeyer (Chapter 2) sheds light on the relative contribution of external shocks to output fluctuations in Latin America between 1994 and 2007. The authors estimate that external factors account for at least half of the medium-term variance of Latin American GDP growth. The overall impact of an export-weighted world growth shock on Latin America is estimated to be roughly one-for-one, and commodity prices and borrowing spreads (the Latin EMBI, or U.S. high-yield spread) are also found to play an important role. Standardized shocks to commodity prices and spreads—equivalent to about 5 percent and 75-100 basis points, respectively-each contribute to a change in the Latin American growth rate of at least <sup>1</sup>/<sub>2</sub> percentage point. This said, there is reason to believe that the resilience of Latin America to the U.S. financial shocks has increased relative to the sample period. The transmission mechanism for these shocks during the 1994-2007 typically involved Latin American borrowing spreads. Recently, however, the response of these spreads to financial shocks in the U.S. has been far more muted.

A particular focus of the work on business cycle linkages has been on two regions that were expected to have particularly strong linkages with the United States—the NAFTA countries and Central America. In Chapter 3, Andrew Swiston and Tam Bayoumi explore business cycle synchronization and economic growth spillovers in an environment of increasing trade integration within NAFTA. They found that linkages between Canada and the United States have been high and stable over time: about 75–80 percent of a U.S. growth shock are passed on to Canada. In contrast, linkages between Mexico and the United States have strengthened following the

<sup>&</sup>lt;sup>3</sup> See Lederman, Olarreaga, and Perry (2006).

implementation of NAFTA, in part because the external anchor appears to have lowered domestic instability, and now the Mexican growth response to a U.S. shock is even greater than one-for-one.

Shaun Roache analyzes the Central American angle (Chapter 4). The economies of this region are relatively open and geographically close to the United States, and cyclical fluctuations are being transmitted through several transmission channels, including trade, the financial sector, and migrant worker remittances. The paper indeed finds that the Central American business cycle is dominated by the United States. However, output growth does sometimes diverge, and the model suggests that region-specific shocks, including civil conflicts, terms of trade shocks, and poor policy responses rather than a unique regional business cycle—in the past have played an important role.

## **Commodity Price Shocks**

One of the most important economic developments in recent years has been the rise in global energy and commodity prices. Nkunde Mwase and Guy Meredith in Chapter 5 present a timely analysis of how higher world oil prices were passed through to retail prices in the Latin America and the Caribbean during 2003-07. For the region as a whole, they find that there has been low pass-through on average during this period, although there was significant variation across the region, with higher pass-through generally observed for the oil-importing countries.

Taking a broader perspective of inflation, Rita Babihuga and Ana Corbacho show that world commodity price shocks have had a clear impact on inflation across the region (Chapter 6). Their empirical analysis suggests that world commodity prices typically explain about 30 percent of the variation in headline inflation, with food price passthrough much higher than for energy. They estimate that the 30 percent increase in world food prices during 2006-07 has raised annual headline inflation rates by an average of 1 percentage point, equivalent to the increase in inflation in the whole region during 2007. In contrast, the 50 percent rise in world fuel prices over the same period would have raised inflation by 0.3 percentage points.

## **Financial Linkages**

Our literature surveys also have found ample evidence for the transmission of financial shocks from global markets to the region. Monetary policy "surprises" in the United States-which are most widely studied-have had an important impact on local equity markets and sovereign credit spreads. These effects were generally found to be stronger for countries with a pegged exchange rate than for countries with a flexible rate. The intensity of equity market spillovers also seemed to be positively linked to the degree of openness and liquidity of financial markets, and the degree of financial and real integration. While these spillovers have increased over time, the literature found that-outside a crisis period-their impact on the business cycle is usually superseded by other shocks.

Not surprisingly, there is evidence of anomalous shock propagation during crises, suggesting that financial relationships change fundamentally during such times. Volatility in capital flows, including sudden stops, has been particularly high in Latin America. Possible reasons include small tradable sectors in Latin America (e.g., compared to Asia), as well as low scores on indices of corporate and macroeconomic transparency, both of which tend to be associated with a higher crisis probability. However, to the extent that fundamentals in Latin American countries have improved, the region may have reduced its vulnerability to shocks.<sup>4</sup>

One of the fundamental changes that may have supported greater resilience has been the development of domestic financial markets that

<sup>&</sup>lt;sup>4</sup> This finding has been confirmed by a simulation exercise (not reported in this book) that found the increase in the Latin America risk premium to be somewhat lower than predicted by a sovereign spreads model. Although probably still within the margin of error of such models, this suggests that the market had little reason to question the still-strong fundamentals of countries in the region.

have attracted a larger amount of foreign investment to Latin America. Ravi Balakrishnan and Fernando Goncalves analyze the impact of financial flows from the United States to regional economies (Chapter 7). Using a comprehensive dataset, they find external factors, such as global risk aversion and U.S. interest rates, still tend to be more important than domestic fundamentals in driving capital flows from the United States to Latin America. However, the link from capital flows to domestic financial conditions is quite weak and superseded by other factors, including global measures of risk aversion. This suggests that financial shocks are largely transmitted through prices rather than flows.

Roberto Benelli and Srideep Ganguly study day-today spillovers of shocks from U.S. financial markets to regional stock, bond, and currency markets, with a particular focus on periods of higher global market volatility (Chapter 8). They find that the sensitivity of Latin American financial markets to U.S. shocks is higher during periods of global market turbulence. For example, the amount of volatility in regional stock markets explained by U.S. factors during turbulent times is, on average, double that for periods of relative tranquility. One key result is that currency markets in Latin America have exhibited a decrease in linkages with the United States, which could be explained by the rising degree of exchange rate flexibility in the region.

Finally, the book returns to the relation between Canada and the United States-possibly the two countries with the closest economic and financial relationship in the Western Hemisphere. In Chapter 9, Vladimir Klyuev considers three transmission channels to assess the impact of tighter U.S. financial conditions on Canada: (i) trade, (ii) the cost of capital for firms in Canadian markets, and (iii) the amount of capital raised by Canadian firms in U.S. markets. The analysis shows that U.S. financial conditions are important for Canada-a 1 percentage point increase in the U.S. short-term interest rate leads to a decline in real Canadian GDP growth of up to 11/4 percentage points. The main impact comes through the financial channel, first and foremost through the cost for Canadian firms to rely on funding through U.S. markets, and secondly through the lingering effects emerging of tighter conditions in Canadian financial markets.

#### Conclusions

For most emerging market and developing countries in the Western Hemisphere, the integration with the global economy and financial markets has continued to deepen since the mid-1990s. Besides studying the linkages that increasingly tie these countries to the rest of the world, the papers presented in this volume also provide clues as to whether the benefits of globalization will come with the cost of increased vulnerability to external shocks. For much of the region, however, the answer is "probably not."

There is relatively strong evidence that financial linkages have been the most important transmission mechanism for external shocks. In the past, external shocks were amplified through capital markets movements that reacted to rigid economic policies. Such movements have been quite rapid, as underlined by the finding that prices—rather than capital flows which typically reverse with some lag provide the key transmission mechanism.

As economic policies have become more flexible supported by higher credibility of central banks and sounder fiscal policies—this amplification effect appears to have weakened. Most strikingly, while food and energy price shocks have been quickly passed through to domestic inflation, stresses in developed credit markets and the rise in global commodity prices in 2007 and 2008 have not led to an uptick in regional economic and financial volatility comparable to that experienced in past cycles.

Yet, it is also important to remember that many countries have benefited from positive terms of trade shocks and, hence, the new paradigm of stability remains to be tested by a sustained decline in the price of export commodities. In general, however, the result of the papers confirm the importance of good economic policies—flexible exchange rates, low inflation, and a responsible fiscal stance tend to produce better outcomes and lower degrees of vulnerability.

In summary, a combination of stronger external linkages and more flexible policies suggest that the region may receive the benefits of globalization without necessarily increasing its vulnerability to external shocks. As the English proverb goes, the region may be able to have its cake and eat it, too.

# References

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