IB 460 Course Pack

12

The Good and the Ugly: Emerging Asia and Emerging Europe

In this chapter we drill down more deeply into the experiences of two sets of emerging markets between which there is a sharp contrast in terms of resilience regarding the global financial crisis. Before the crisis, average per capita GDP growth was highest in two groups of emerging markets, Asian and European. As discussed, there is a stark contrast between the way in which these two groups of emerging markets experienced and responded to the crisis. In 2009 Asian emerging markets posted the highest average rate of growth, while European emerging markets had the lowest. These sharp contrasts led us to investigate the experiences and policy responses of these two groups of EMEs in more detail.

We adopt a case study approach by first examining in detail the evidence for the group of emerging Asian economies that was particularly resilient during the financial crisis in terms of both being less affected directly and bouncing back strongly to high growth. We then present a comparative case study of the emerging European countries that were hit hard and whose recovery has been much more restrained. To conduct this comparative analysis, we expand our basic data set to encompass the economies of emerging Europe. Our choice of variables to include in these case studies does draw to some extent upon the literature discussed in the previous chapter.

TAB L E 12 -1 . Growth Rate of Output, Emerging Asia, 2007-10

(in percent)

Country	*2007*	*2008*	*2009*	*2010 projection*[a]
China	13.0	9.6	8.6	9.9
Hong Kong	6.4	2.2	–2.8	5.5
India	9.6	5.1	7.7	7.9
Indonesia	6.3	6.0	4.5	5.6
Korea	5.1	2.3	0.2	5.9
Malaysia	6.5	4.7	–1.7	6.8
Pakistan	5.7	1.6	3.6	4.4
Philippines	7.1	3.7	1.1	6.2
Singapore	8.5	1.8	–1.3	8.4
Taiwan	6.0	0.7	–1.9	8.5
Thailand	4.9	2.5	–2.2	4.1
Unweighted median[b]				
All countries	6.4	2.5	0.2	6.2
All countries except China	6.4	2.4	–0.5	6.0
International comparison				
Germany	2.5	1.3	–4.9	1.2
Japan	2.3	–1.2	–5.3	3.0
United States	2.1	0.4	–2.4	3.3

a. Based on Economist Intelligence Unit forecasts.
b. Unweighted medians are the cross-sectional medians of the data in respective columns.

Asian Emerging Markets

Asian emerging markets, particularly China and India, have been among the most resilient during the crisis. In this section we explore the reasons for this resilience by examining the structure of the emerging and developing economies in the region, particularly the extent of their reliance on foreign trade and finance.'

Growth Composition and Trade Linkages

We begin with a review of the recent growth performance of the major Asian emerging markets, followed by a description of the evolution of the structure of GDP from a national accounts perspective. Table 12-1 shows that the

(unweighted) median growth rate of GDP in emerging Asia was above 6 percent in 2007 and, even at the height of the crisis in 2008-09, stayed positive. China and India were clearly outliers in terms of the high growth rates they were able to maintain even during these difficult years.

Table 12-2 shows the shares of the components of GDP for three years-2000, 2008, and 2009. The median share of private (household) consumption in GDP was 66 percent in 1995 (not shown in the table) but then started to decline in the latter half of the 1990s. This decline continued during the recent decade, with the median share falling by 6 percentage points from 2000 to 2008. Shares of government consumption and investment remained relatively stable between 2000 and 2008. The share of net exports rose from 3 percent in 2000 to 9 percent in 2008-09, suggesting an increase in the region's reliance on foreign demand.

Table 12-3 shows average GDP growth rates over the period 2000-09 for each country in the sample. The next five columns show the contributions of different components-total consumption (which is further broken down into private and government consumption), investment, and net exports-to overall GDP growth. Consumption is typically the largest component of GDP, so it is usually the case that consumption growth tends to track overall GDP growth. On average, total consumption growth (private and public) contributed about 3.2 percentage points to GDP growth, relative to median GDP growth of about 4.6 percent a year. In other words, consumption growth on average accounted for about twothirds of GDP growth among the eleven countries in the sample.2

The final column of table 12-3 shows that, on average, net exports accounted for only a modest fraction (0.7 percentage points) of overall GDP growth, but this conceals a wide disparity across individual countries. For four of the eleven economies in the sample, net exports contributed 1 percentage point or more a year to GDP growth. The average contribution of net exports to growth was negative in the case of India alone.

It is interesting to note that, despite the popular characterization of China as

relying on export-led growth, the direct contribution of net exports to GDP growth amounted to only 1.1 percentage point a year over the period 2000-09, which is about one-tenth of overall GDP growth. The data in this table certainly do not look like prima facie evidence of exportled growth among the Asian economies in general, or China in particular. Of course, this is based on a narrow accounting perspective of how exports matter for economic growth.

TABLE 12-2. Shares of Real GDP, Emerging Asia, 2000, 2008, 2009[a]
(in percent)

	2000				2008				2009			
	Consumption			Net	Consumption			Net	Consumption			Net
Country	Private	Government	Investment	exports	Private	Government	Investment	exports	Private	Government	Investment	exports
China	46.4	15 9	35 3	2 4	35.3	13.3	43.5	7 9	.			
Hong Kong	66 0	10 1	25.4	–1 5	59 6	8.0	20.2	12 2	61 7	8 4	20 0	8.2
India	64.2	12 9	25 9	–1 9	57.2	9 8	36 2	–4 3	59 5	11 5	34.9	–6 1
Indonesia	61.7	6 5	22 2	10 5	57 2	8.1	23.9	9 6	57 4	9 0	23.4	10 3
Korea	54.0	12 1	31 0	3.2	52 9	14 4	28 6	4 4	53 0	15.1	24 1	7.5
Malaysia	43.8	10 2	26.9	19 2	52 4	13.7	20 8	13.1	53 7	14 5	17 4	14.4
Pakistan	75.4	8 6	17 2	–1 2	68 6	13.2	19.4	–1 2	69 6	11 0	16 0	1 9
Philippines	77 3	8 2	24 6	–4 6	78 1	6 6	18 1	1 4	80 3	7 1	16 1	–2 6
Singapore	42.2	10.8	33 3	13 6	39 2	10 5	31.4	20.4	39 7	11 4	28 1	22 6
Taiwan	60 4	13 9	23 1	2 7	54 4	11 3	17 0	17 3	58 2	12 2	16 8	14 1
Thailand	54.0	9.2	20 7	14 9	51 8	8 9	23 4	15 4	52 7	10 0	20 5	18 4
Unweighted median[b]												
All countries	60.4	10 2	25.4	2 7	54 4	10.5	23.4	9 6	57 8	11 2	20.3	9 2
All countries except China	61 0	10 1	25.0	2 9	55 8	10.1	22.1	10 9	57 8	11 2	20.3	9.2
International comparison												
Germany	58.9	19.0	21.8	0.4	54 7	18.4	20 3	6 8	58.0	20 0	17 9	3.9
Japan	56 2	16 9	25.5	1 5	55 5	17 6	23 2	4 9				
United States	68 7	14.4	20.8	–3 9	71 0	14.5	17 5	–3.3	71 1	16 4	15 2	–2 7

Source CEIC, IMF, *World Economic Outlook*

= not available

a Shares may not add up to 100 percent due to statistical discrepancies

b Unweighted medians are the cross-sectional medians of the data in respective columns

TAB L E 12 - 3. Contributions to GDP Growth, Emerging Asia, 2000-09a

(in percent)

		Consumption				
Country	*GDP growth*[b]	*Total*	*Private*	*Government*	*Investment*	*Net exports*
China	10.2	4.1	2.8	1.3	5.0	1.1
Hong Kong	4.2	2.1	1.9	0.2	0.5	1.2
India	8.4	6.0	5.0	1.0	3.6	–1.4
Indonesia	5.1	3.2	2.6	0.7	1.5	0.5
Korea	4.4	2.8	2.2	0.6	0.7	0.8
Malaysia	4.3	4.2	3.1	1.0	–0.1	0.2
Pakistan	4.7	3.5	2.8	0.7	0.8	0.4
Philippines	4.6	3.9	3.7	0.2	0.4	0.5
Singapore	4.9	2.6	1.9	0.6	0.9	1.6
Taiwan	3.4	1.7	1.5	0.1	–0.4	2.3
Thailand	4.1	2.5	2.1	0.4	1.0	0.7
Unweighted median[c]						
All countries	4.6	3.2	2.6	0.6	0.8	0.7
All countries except China	4.5	3.0	2.4	0.6	0.7	0.6
International comparison						
Germany	0.8	0.5	0.3	0.2	–0.2	0.5
Japan	1.5	1.0	0.6	0.4	0.2	0.5
United States	1.9	2.0	1.7	0.3	–0.1	0.0

Source: CEIC; ADB, IMF, *World Economic Outlook*.

a. Contributions may not sum exactly to GDP growth because of rounding error or, in the case of some countries like the Philippines, because the statistical discrepancy is large. Investment includes private and public investment.

b. GDP growth rates (in percent) are annual averages. GDP growth contributions (in percentage points) are averages, except for China (2000–08) and Japan (2000–08).

c. Unweighted medians are the cross-sectional medians of the data in respective columns.

It is important to be careful about the use of the term export-led growth. Even if a country has very large exports relative to GDP, it could have a balanced trade account, which would mean that net exports were not contributing much to the bottom line in terms of GDP growth. The flip side of this argument is that exports have significant spillover effects on other parts of

the economy, so a rapid increase in gross exports could contribute to growth even if the accounting contribution based on net exports is small. Hence it is useful to look at trade relative to size of the economy, rather than just net exports, to gauge an economy's exposure to volatility in trade flows.

TAB L E 12 - 4. Openness to Trade, Emerging Asia, 2000 and 2009

(in percent of GDP)

	2000			*2009*		
Country	*Total trade*[a]	*Exports*[b]	*Trade balance*	*Total trade*[a]	*Exports*[b]	*Trade balance*
China	39.6	20.8	2.0	51.4	28.0	4.6
Hong Kong	282.1	143.3	4.4	383.7	195.5	7.3
India	27.4	13.2	–0.9	46.3	20.4	–5.5
Indonesia	71.4	41.0	10.5	47.7	25.9	4.1
Korea	74.3	38.6	2.9	103.1	54.0	4.9
Malaysia	220.4	119.8	19.2	159.9	89.2	18.4
Pakistan	28.1	13.4	–1.2	34.7	13.6	–7.5
Philippines	108.9	55.4	1.9	64.6	30.0	–4.6
Singapore	377.7	195.6	13.6	407.8	214.2	20.7
Taiwan	105.3	53.8	2.2	122.3	65.6	8.9
Thailand	124.9	66.8	8.6	126.6	68.0	9.3
Unweighted median[c]						
All countries	105.3	53.8	2.9	103.1	54.0	4.9
All countries except China	107.1	54.6	3.7	112.7	59.8	6.1
International comparison						
Germany	66.4	33.5	0.5	80.3	42.5	4.8
Japan	21.2	11.3	1.5	26.1	13.3	0.4
United States	25.7	10.9	–3.8	24.4	10.9	–2.7

Source CEIC; Asian Development Bank's statistical database system.
a. Total trade refers to the sum of exports and imports of goods and services.
b. Exports include both goods and services.
c. Unweighted medians are the cross-sectional medians of the data in respective columns.

The first three columns of table 12-4 show, for 2000, the ratio of total trade

(imports plus exports of goods and nonfactor services), exports, and the trade balance (exports minus imports) to GDP. The next three columns show the same three ratios for 2009. The average ratio of exports to GDP was about 54 percent at the beginning of that decade, suggesting great dependence on exports. But the average ratio of the trade balance (or net exports), which is of relevance to the GDP bottom line, was only about 3 percent of GDP. Even though a number of economies in this group experienced dramatic increases in trade openness during the 2000s, the median openness ratio remained essentially unchanged from 2000 to 2009. By contrast, the median ratio of the average trade balance to GDP rose to 5 percent by 2009, up from 3 percent in 2000, suggesting a greater reliance on net exports for growth.

What is the right way to look at a country's dependence on exports? This is a subtle issue. The average trade openness ratio of over 100 percent implies that Asian economies are in general very open and vulnerable to volatility in international trade. On the other hand, for a country with a small net trade surplus, the direct contribution of external trade to GDP growth is correspondingly small. In the case of China, for instance, processing trade-which for China involves only a modest amount of value added, as it involves the use of imported inputs and intermediate goods-is estimated to account for nearly half of overall exports. From this perspective, the reliance of Asian economies on foreign markets is relatively limited. Again, this is a narrow perspective and does not take into account growth spillovers from exports, which could be significantly larger than indicated by net exports or by just the direct value added contribution from the exporting sector. The overall exposure of Asian economies to trade, based on ratios of exports to GDP and the consequent spillover effects, is higher. This is corroborated by the 2 percentage point increase in median net exports to GDP ratio over the period 2000-09.

Financial Linkages

Next we turn to an analysis of the dependence of the region on foreign finance. This is best captured by the current account, which represents the difference

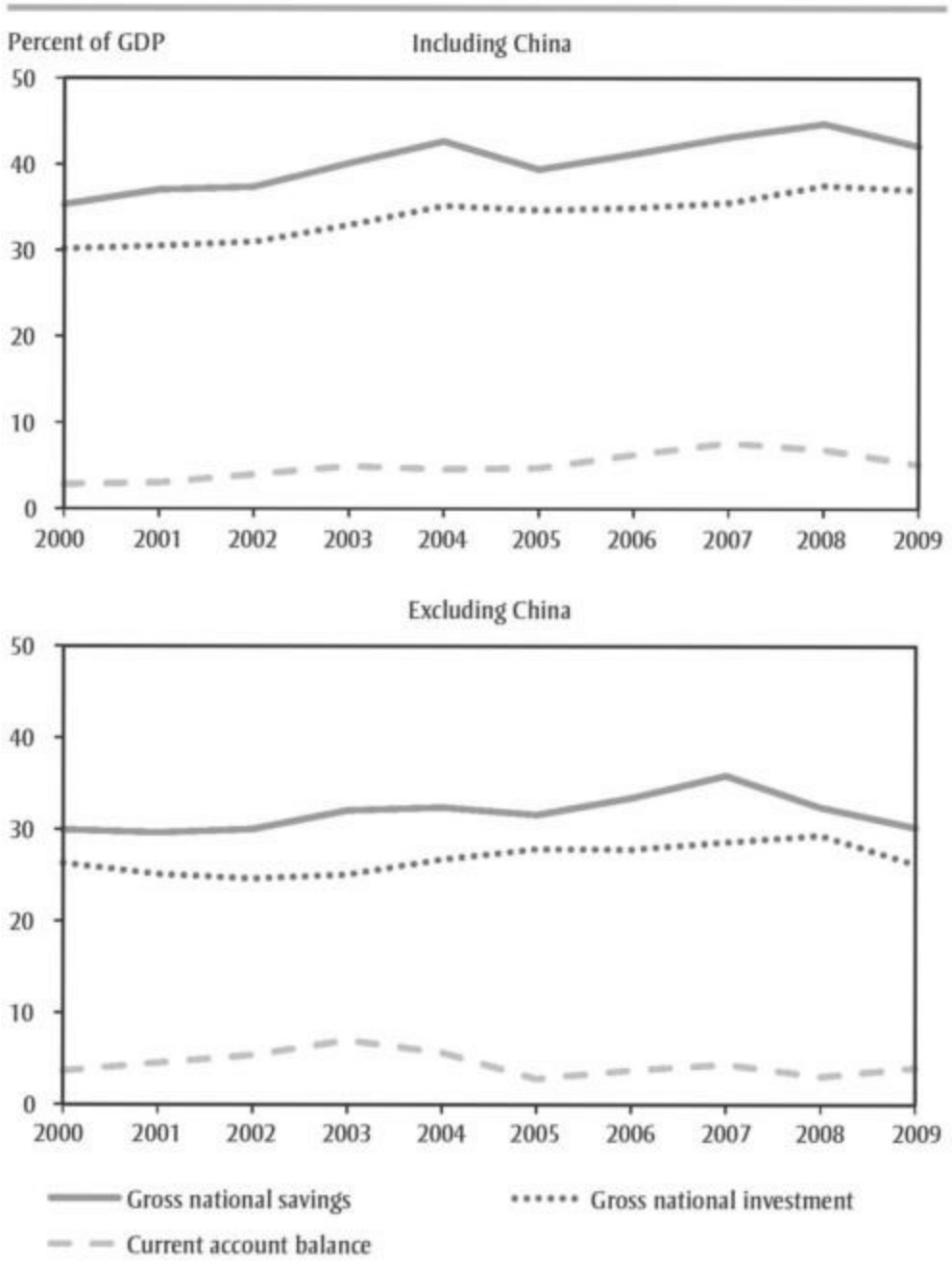
between national savings and national investment. More important, it provides a summary measure of all types of flows, private and official, along with unofficial flows (Prasad, Raj an, and Subramanian 2007). A current account surplus implies that a country is exporting capital, while a current account deficit implies that it is importing capital. While gross flows in both directions are important for understanding the importance of financial channels for cross-border transmission of shocks, current account deficits are useful for understanding vulnerability to crises, as they indicate the degree of dependence on foreign finance. Indeed, many of the Asian economies we examine here had net private capital inflows even as they were running current account surpluses and exporting capital through official channels (reserve accumulation). Net inflows of different types of capital have important implications. For instance, phenomena such as sudden stops of inflows can be particularly painful for countries with large current account deficits.

Figure 12-1 shows aggregate savings and investment balances for emerging Asia. The aggregate savings to GDP ratio is the sum of national savings across the countries in the sample divided by the sum of national GDP for those countries, with both variables expressed in a common currency, converted at market exchange rates from domestic currency. The aggregate investment and current account data are constructed in a similar manner.

The top panel of figure 12-1 shows that aggregate savings and investment rose in Asia after the early 2000s. The rate of increase in savings is higher than that of investment, leading to a rising current account balance, which was 6.7 percent of aggregate GDP in 2007 but then fell to 5 percent in 2009. The lower panel of figure 12-1, which excludes China, shows that that country is a big driver of these patterns in the data (its current account balance to GDP ratio was 9.8 percent in 2008 but fell to 5.8 percent in 2009). The aggregates for the remaining countries show savings and investment remaining stable after early 2000. The regional current account balance ratio to GDP also remained relatively flat, in the 3-5 percent range after early 2000.

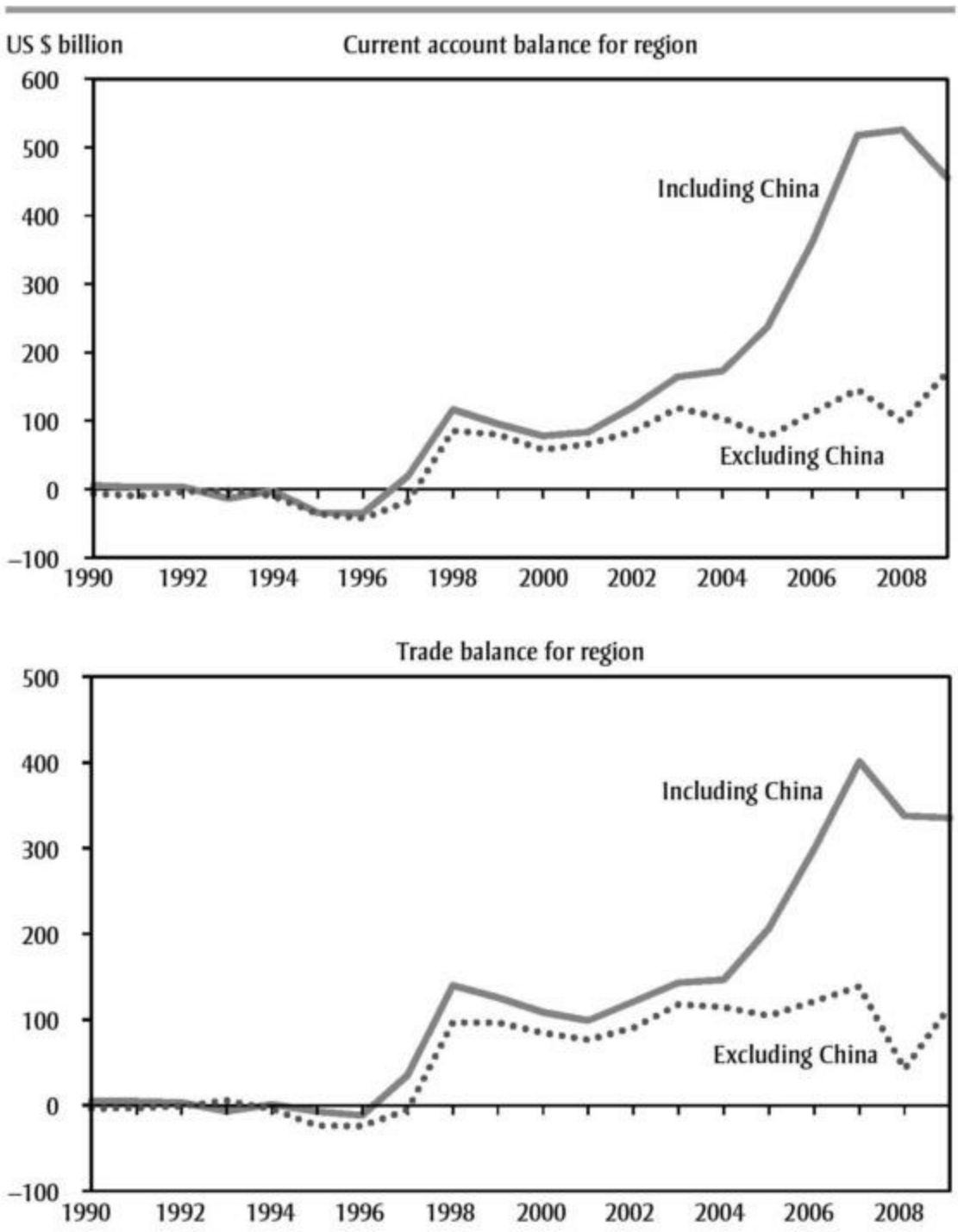
Figure 12-2 (top panel) shows the overall current account balance for emerging Asia. The numbers in this figure represent the excess of savings over investment for the region as a whole. The total excess savings of the region amounted to only about $100 billion in the early 2000s. Excluding China, this figure stayed roughly constant during the rest of the 2000s, through 2007-08. The big surge in the region's excess savings clearly came from China, as the aggregate current account balance including China jumped to $500 billion by 2008, driven by massive Chinese current account surpluses, which hit $440 billion in 2008. In 2009 the region's current account surplus fell modestly, mostly because of a $142 billion decline in China's current account surplus between 2008 and 2009; the joint current account surplus of the remaining Asian emerging markets in fact went up by about $80 billion between these two years. The lower panel of figure 12-2 shows that the trajectory of the regional current account balance largely tracks the regional trade balance, with China again playing an important role in driving the region's overall balance.

F I G U R E 12 -1 . Aggregate Saving-Investment Balance, Emerging Asia, 2000-091



Source: Raw data are from CEIC and EIU.
a. Figures are ratios of the relevant aggregate variables (summed up across all countries in the region) to the region's aggregate nominal GDP (in a common currency, at market exchange rates).

F I G U R E 12 - 2. Aggregate Current Account and Trade Balances, Emerging Asia, 1990-2009



Source: Raw data are from CEIC, EIU, and the IMF's WEO.

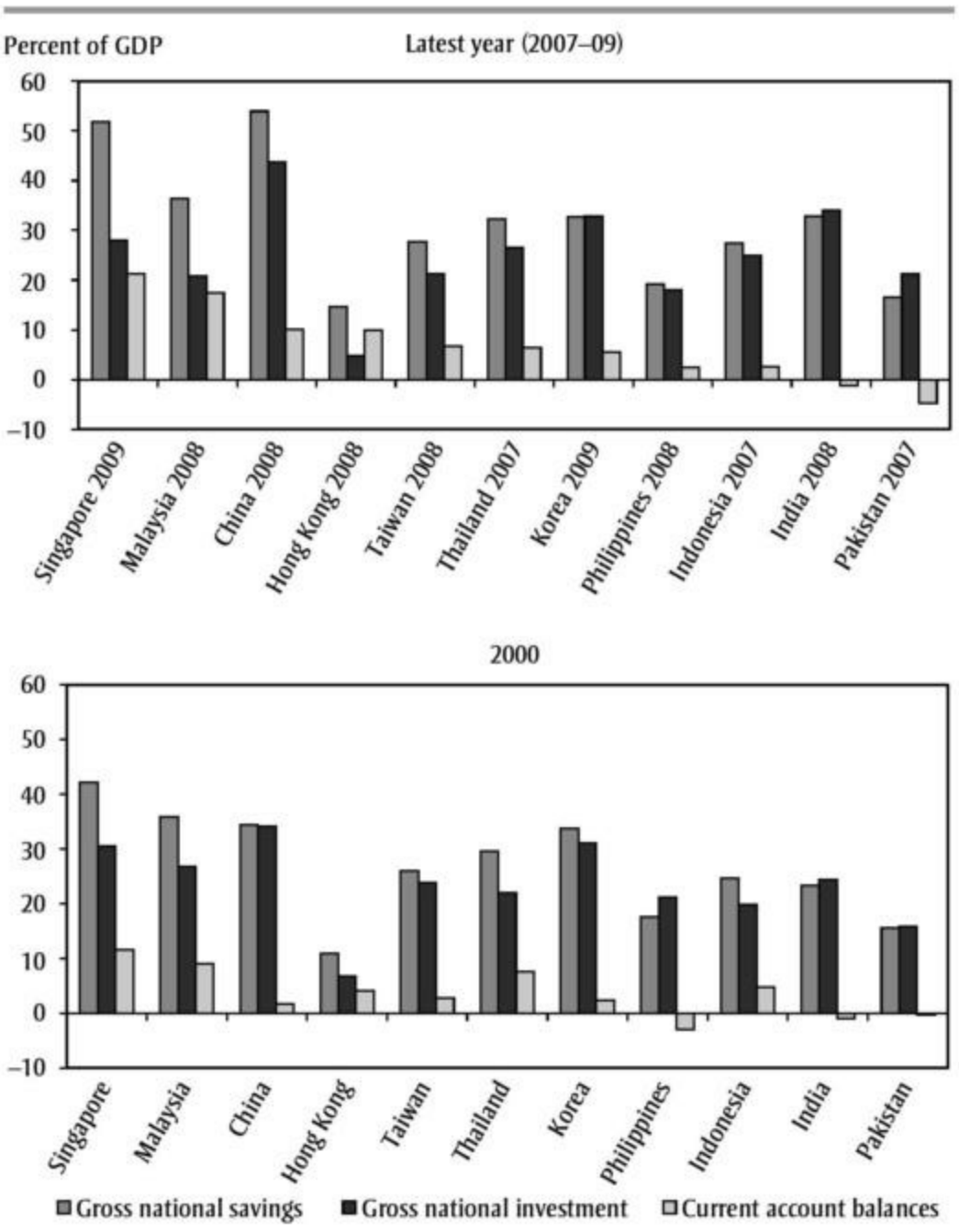
Figure 12-3 shows the savings-investment balances for individual countries in the sample, with national savings, national investment, and current account balances all expressed as ratios to national GDP. The countries are sorted by

decreasing order of the current account balance to GDP ratio. The top panel of the figure contains data for the latest year for which data are available for each country (2007, 2008, or 2009), and the lower panel shows the corresponding data for 2000. To facilitate comparison, the order of countries is the same in the lower panel as in the upper panel.

One feature that is immediately obvious is that national saving rates were quite high on average across all of these Asian economies. Even in this group, China was clearly in a league of its own among the relatively large economies, with a gross national saving rate in excess of 50 percent of GDP in 2008. For most countries in the sample, saving rates either increased or stayed roughly constant during this decade. China experienced the sharpest jump in the national savings rate, nearly 20 percentage points in an eight-year period.

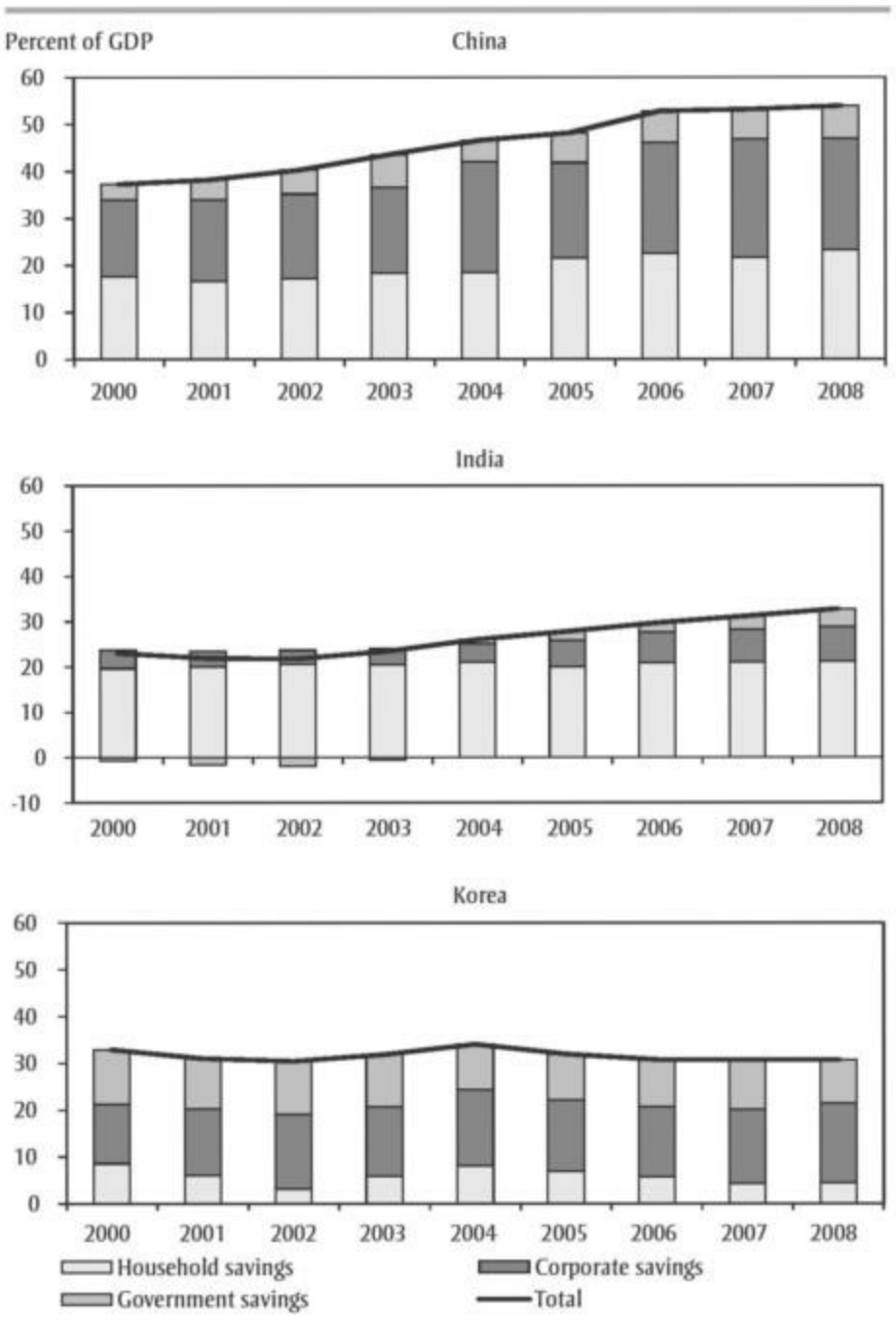
High domestic saving rates seem to be a key component of the story about why Asian economies do not seem to be greatly reliant on foreign finance. To understand these patterns better, we also look at the components of national savings: savings by households, by firms, and by the government.' Figure 12-4 presents data on the composition of savings in the three largest economies in non-Japan Asia-China, India, and Koreaover the period 2000-08. These three economies account for about threequarters of GDP in non-Japan Asia. In China, the share of corporate saving increased markedly in recent years, accounting for almost half of national savings in 2007 and a slightly lower share in 2008. Interestingly, in India, household savings remained the dominant source of national savings, amounting to about 20 percent of GDP since the early 2000s. Corporate savings have become increasingly important in India over the last few years. In Korea household savings as a ratio to GDP fell quite sharply after the late 1990s, driving down overall national savings slightly. A striking development is that, by 2006-07, corporate savings became the dominant source of savings in the region, accounting for nearly half of aggregate savings.

F I G U R E 12 - 3. Savings-Investment Balances, Emerging Asia, 2000 and Latest Year of Available Data,



a. Countries sorted by decreasing order of latest current account balances.

F I G U R E 12 - 4. Composition of National Saving, China, India, Korea, 2000-08a



Source: Raw data are from CEIC and ADB.
a. Data for 2008 are preliminary and subject to revision.

Macroeconomic Policies

Table 12-5 presents data on a few key macroeconomic variables just before and during the crisis. The median general government budget deficit to GDP ratio in emerging Asia was essentially zero in 2007, with only four countries

(India, Indonesia, Malaysia, and Pakistan) registering deficits higher than 1 percent of GDP. The median ratio of gross public debt to GDP in 2007 was around 35 percent, well below the 60 percent that is considered the threshold for a risky level of public debt (Reinhart and Rogoff 2009b). Thus fiscal policy was not severely constrained when the crisis hit. Monetary policy was also relatively under control, with median average annual credit growth to the private sector of about 7 percent in 2005-08, with only two countries (India and Indonesia) registering average credit growth of more than 20 percent during that period.

As a consequence of these relatively prudent macroeconomic policies before the crisis, countries in the region were able to use fiscal policy aggressively to counter the crisis, with the median government budget deficit rising by almost 3.5 percentage points between 2008 and 2009. This also helped buffer the decline in the growth of credit to the private sector. One notable exception to the pattern of declining credit growth is that of China, where credit growth exploded to 34 percent in 2009, from 14 percent in the previous year. In Hong Kong, Malaysia, and the Philippines there was a modest increase in credit growth in 2009.

Notwithstanding the relatively favorable macroeconomic positions of the economies in emerging Asia, it is surprising that the collapse in global trade did not have a more devastating effect. In addition to the fall in demand from advanced economies, the sharp fall in the availability of trade credit hampered trade in many export-dependent EMEs. On this score, the resilience of financial systems in Asia proved to be a factor that contributed to the resilience of exports, fueled by rising trade within the region. Freund (2009) and Chor and Manova (2010) find that countries that did not experience major financial market difficulties had much better export performance during the crisis.4 Mora and Powers (2009) note that liquidity provided by multilateral development banks, export credit agencies, and national governments also mitigated the decline in trade credit and supported trade flows.

TABLE 12-5. Budget Balances, Debt, and Credit Growth, Emerging Asia, 2007–09
(in percent)

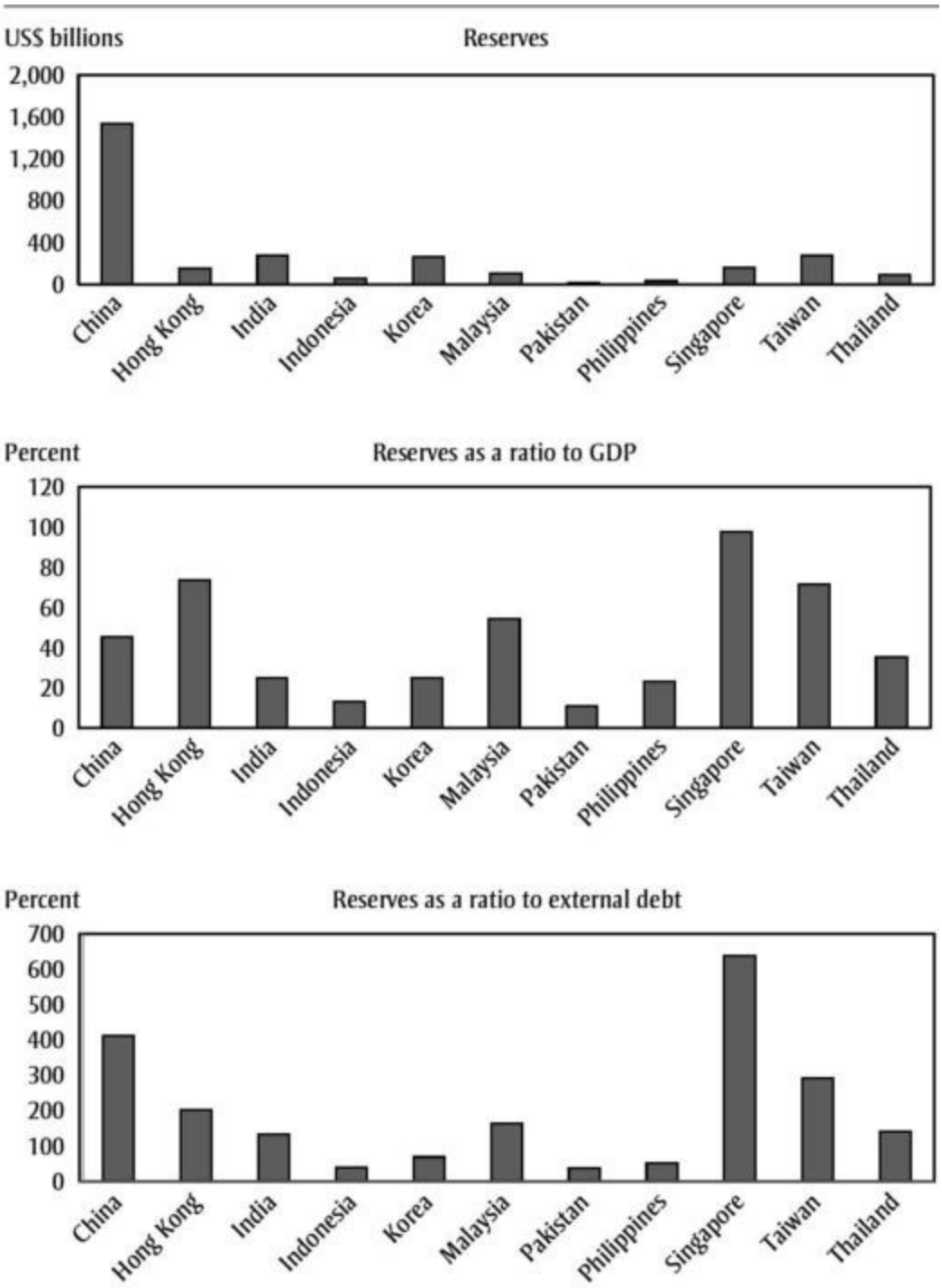
	Budget balance (% GDP)[a]			*Public debt (% GDP)*[b]			*Annual credit growth*[c]	
Country	*2007*	*2008*	*2009*	*2007*	*2008*	*2009*	*2005–08 average*	*2009*
China	0.9	–0.1	–2.0	20.2	17.7	20.2	14.1	34.2
Hong Kong	7.7	0.1	–3.4	1.3	1.2	1.0	2.3	7.7
India	–4.4	–7.9	–10.4	80.5	80.2	84.7	20.8	12.6
Indonesia	–1.2	0.0	–2.6	35.1	33.2	31.5	21.7	7.2
Korea	3.5	1.2	–2.8	29.6	29.1	34.9	12.6	7.5
Malaysia	–2.8	–4.4	–4.8	30.0	30.7	39.5	6.4	7.7
Pakistan	–4.0	–7.3	–4.9	54.6	58.4	55.9	17.0	12.9
Philippines	–0.7	–0.1	–2.4	47.8	48.7	51.0	3.1	3.6
Singapore	11.1	6.3	2.5	86.0	87.5	93.5	6.9	2.0
Taiwan	–0.2	–0.8	–4.3	34.1	36.8	41.8	4.6	2.3
Thailand	–0.9	0.1	–4.1	37.6	38.0	49.1	4.1	0.4
Unweighted median[d]								
All countries	–0.7	–0.1	–3.4	35.1	36.8	41.8	6.9	7.5
All countries except China	–0.8	–0.1	–3.7	36.3	37.4	45.5	6.7	7.4
International comparison								
Germany	–0.5	–0.1	–4.2	63.4	67.1	78.7	0.7	0.9
Japan	–2.5	–5.8	–10.5	187.7	196.6	218.6	–5.9	0.7
United States	–2.8	–5.9	–12.5	61.9	70.4	84.8	7.7	–2.1

Source: EIU; IMF, *World Economic Outlook*, International Financial Statistics database.
a. Budget balance is general government balance.
b. Public debt is general government gross debt.
c. Credit growth is growth in credit to the private sector.
d. Unweighted medians are the cross-sectional medians of the data in respective columns.

This raises an interesting issue: even though many Asian emerging markets were net exporters of financial capital before the crisis (they were running current account surpluses), they were simultaneously experiencing significant gross inflows of private capitals While these flows were not large relative to GDP, they still had the potential to be disruptive if they were reversed. Indeed, between 2007 and 2008 two economies in the region-Korea and Malaysia-experienced sharp inflow reversals, while a few others also experienced a contraction of inflows. Interestingly, Asian emerging markets seem to have weathered these circumstances quite well, partly because of lessons learned from the last major crisis in the region.

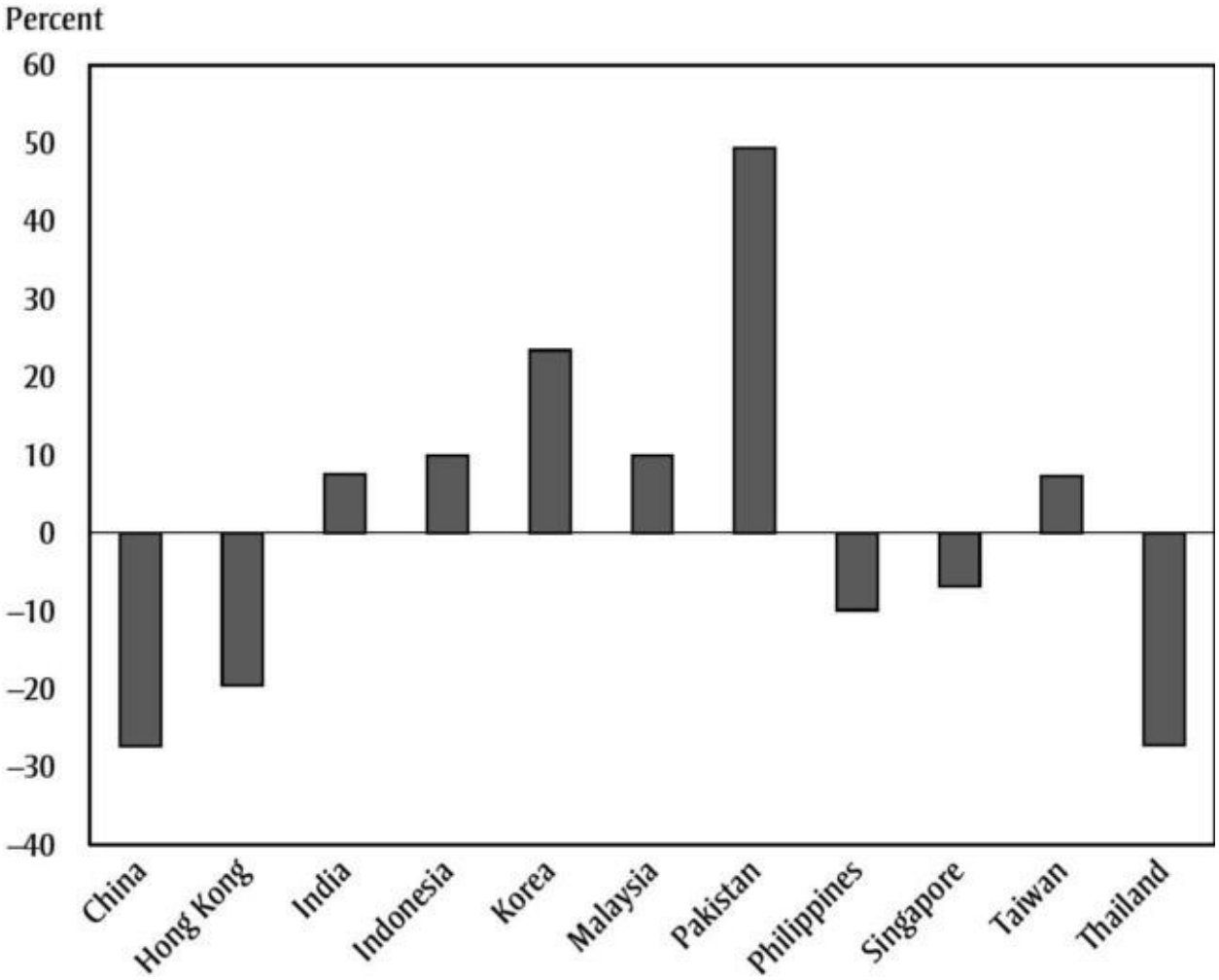
Following the devastating Asian financial crisis of 1997-98, Asian emerging markets attempted to build up international reserves as a form of self-insurance against capital account crises. Foreign exchange reserves provide protection against sudden stops and reversals of capital flows. The policy of reserve accumulation led to a massive pool of reserves held by Asian governments, with China leading the pack. In 2007, before the crisis hit, China had already amassed nearly $1.6 trillion in reserves. Many other major Asian emerging markets had also accumulated vast amounts of reserves relative to their GDP and their outstanding external debt (figure 12-5). A few of these countries did experience reserve losses during 2008 as they attempted to buffer their economies against capital inflow reversals, but these were modest relative to the overall stocks of reserves. Even Korea and Malaysia, which experienced the sharpest capital flow reversals, lost only 20 percent and 10 percent of their reserves, respectively, during 2008. In fact many Asian emerging markets continued to accumulate reserves during the crisis (figure 12-6). In short, reserve accumulation before the crisis implies that the region effectively inoculated itself against the potentially devastating effects of sudden stops and reversals in capital inflows.

F I G U R E 1 2 - 5. Reserves in Emerging Asia before the Crisis, 2007



Source: International reserves data from EIU Country Data; GDP data from WEO.

FIGURE 1 2 - 6 . Reserve Losses during the Crisis, 2007-08a



Source: IFS except for Taiwan, where data come from the Central Bank of Taiwan.
a. A negative number indicates reserve accumulation during this period.

The bottom line of this descriptive analysis is that emerging Asia may have been relatively insulated from the effects of the financial crisis because

-The overall dependence of the region on exports to the rest of the world was limited.

-Relatively insulated financial markets, especially limited dependence on foreign bank financing, narrowed the channels for financial contagion and also kept trade finance from collapsing.

-High and rising saving rates more than kept pace with rising investment rates, leading to current account surpluses and growing stocks of foreign exchange reserves, thereby insulating the region as a whole from the effects of a sudden stop in capital flows from advanced economies.

-Prudent macroeconomic policies practiced by a number of these countries created a lot more policy space for them to respond aggressively to the spillover effects of the crisis.

Emerging Markets of Eastern Europe

We now examine a parallel set of stylized facts for the economies of emerging Europe.' We begin with a review of recent growth performance and a description of the evolution of the structure of GDP from a national accounts perspective.

Composition of Growth

Table 12-6 shows real GDP growth rates for these countries in 2007-09 as well as growth forecasts for 2010. These economies were posting high growth rates across the board in 2007, with a median growth rate of nearly 7 percent in that year. The global recession began to take its toll in 2008, with median growth dropping to 3.5 percent and with two of the Baltic countries-Estonia and Latvia-recording negative growth rates in 2008. The year 2009 was difficult, with median growth plunging to minus 6.5 percent and all but one economy (Poland) registering significantly negative growth rates. The prognosis was for a slight recovery in output in 2010, with an average growth rate of 0.6 percent among countries in this group and with growth turning positive for ten of the fifteen countries. Clearly, this group as a whole was highly vulnerable to the global crisis, although there are significant differences in outcomes even within this group. To understand these growth patterns better, we turn to a more detailed exploration of the composition of growth and some policy indicators for these economies.

T A B L E 12 - 6. Growth Rate of Output, Emerging Europe, 2007-10

(in percent)

Country	*2007*	*2008*	*2009*	*2010 projection*[a]
Belarus	8.6	10.0	–1.2	1.8
Bulgaria	6.2	6.0	–6.5	–2.5
Croatia	5.5	2.4	–5.2	0.4
Czech Republic	6.1	2.7	–4.3	1.3
Estonia	7.2	–3.6	–14.0	–2.6
Hungary	1.2	0.6	–6.7	–0.9
Latvia	10.0	–4.6	–18.0	–4.0
Lithuania	8.9	3.0	–18.5	–4.0
Poland	6.8	4.9	1.0	2.2
Romania	6.2	7.1	–8.5	0.5
Russia	8.1	5.6	–7.5	1.5
Serbia	6.9	5.4	–4.0	1.5
Slovakia	10.4	6.4	–4.7	3.7
Slovenia	6.8	3.5	–4.7	0.6
Ukraine	7.9	2.1	–14.0	2.7
Unweighted median[b]	6.9	3.5	–6.5	0.6

a. Based on IMF, *World Economic Outlook*.
b. Unweighted medians are the cross-sectional medians of the data in respective columns.

Table 12-7 shows the shares of different components of GDP for three years-2000, 2007, and 2009. The median share of private (household) consumption in emerging European economies' GDP was relatively stable, in the range of 60-65 percent. One interesting contrast relative to Asian EMEs is that the median share of net exports in GDP for emerging Europe was -7 percent in 2007, reflecting the high trade deficits in the region before the crisis. Figure 12-7, which shows saving-investment balances in 2000, 2007, and 2009, indicates that these trade deficits were accompanied by large current account deficits. All of these countries except for Russia had current account deficits in 2007, the year before the crisis hit. A number of authors point out that the effects of the global financial crisis fell particularly severely on emerging European economies with current account deficits, as the availability of both

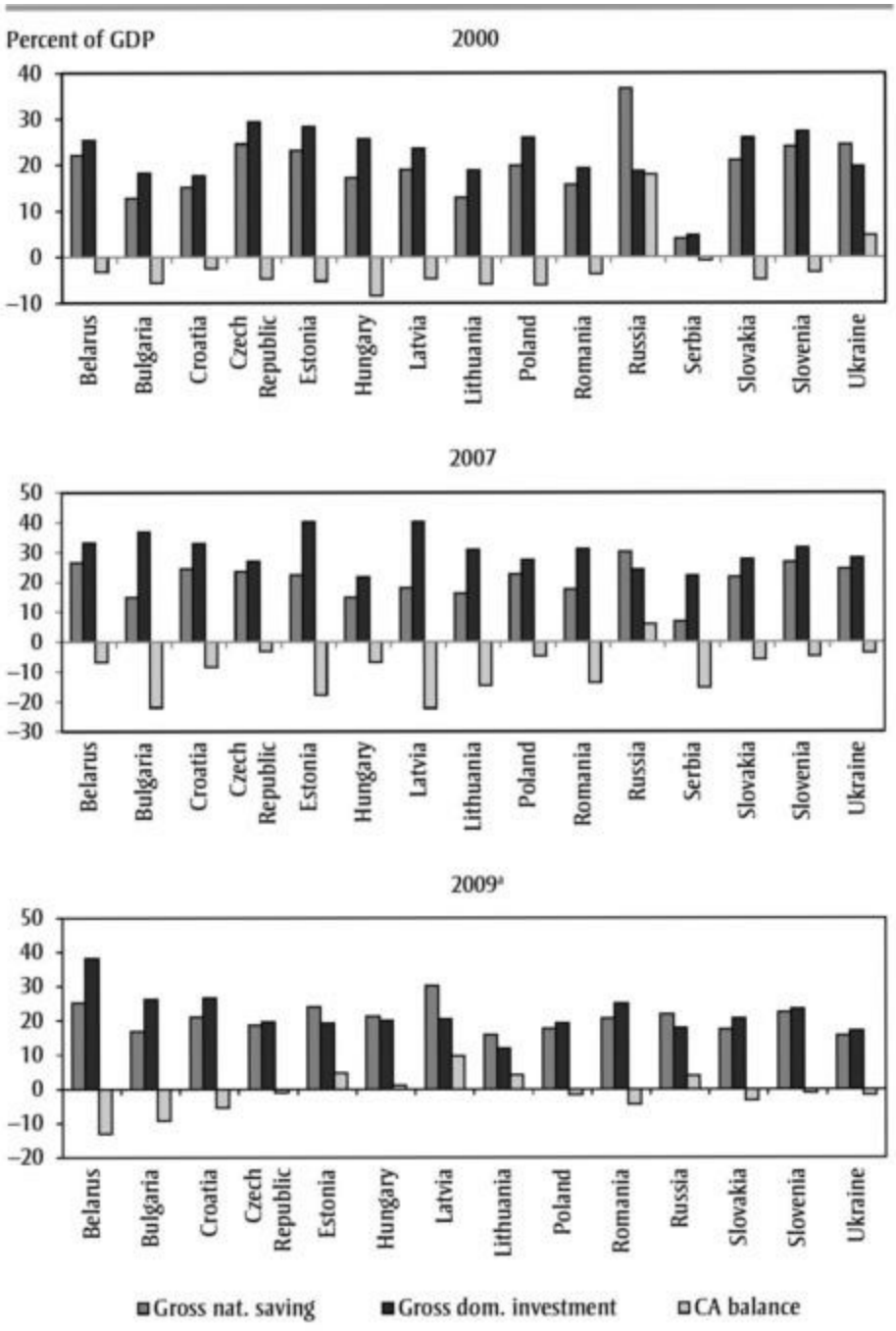
global liquidity and private _link_ capital flows shrank sharply during the crisis (Belka 2009; IMF 2009h; and Griffith-Jones and Ocampo 2009).'

TABLE 12-7. Shares of Real GDP, Emerging Europe, 2000, 2007, 2009[a]
(in percent)

	2000				2007				2009			
	Consumption			Net	Consumption			Net	Consumption			Net
Country	Private	Government	Investment	exports	Private	Government	Investment	exports	Private	Government	Investment	exports
Belarus	58 6	19 5	25 4	–3.5	57 6	13.8	35 8	–7.3	71 0	10.4	50 7	–32.0
Bulgaria	69 2	17.9	18.3	–5 4	72 2	15.0	39 4	–27 0	70 5	14 1	29 7	–14 3
Croatia	61 7	22 9	18.7	–3.2	63.6	18 0	29 7	–11 7	60 9	19 1	28 7	–8.5
Czech Republic	51.8	21 1	29.3	–3.0	49 0	18.5	30.8	0.8	51 5	19.8	25.2	1 9
Estonia	55.5	19 8	28.4	–3.6	61 0	13 3	43 7	–25.9	57 3	16 6	23.1	–0 1
Hungary	63.9	10 3	27.5	–3.7	66 6	8.9	23 1	3 5	65 5	9 5	20.7	11 6
Latvia	62 5	20.8	23.7	–7.0	72 4	13.9	38 0	–24.2	66 4	16 3	20.8	–2 2
Lithuania	64 6	22 8	18.9	–6 3	71 1	17.1	29 8	–19.2	69 9	20 8	13 6	–5 3
Poland	61.7	16.2	27.3	–4 0	59 5	16 1	28 8	–1 1	60 2	16.4	24 6	1 2
Romania	77 0	6 3	20.0	–4 6	89.2	5.7	33.0	–31 4	88 3	6 0	26 6	–20.9
Russia	47.0	20 0	19.1	14 5	59.8	14.6	27 6	–3 6	62.5	15.7	20.5	3 1
Serbia	76 6	19 8	8.3	–4 7	85.2	17 6	22 4	–25 2	86 5	16 5	17 2	–20 3
Slovakia	56 3	20.2	25.9	–2 5	52 9	16 6	28 7	3 1	55 0	17.7	23 8	3 8
Slovenia	57 4	18 8	27 3	–3.5	53.3	17 0	27.2	–2 9	56 2	19.5	25.2	–0.7
Ukraine	44 9	26 1	16 4	17.2	59.6	17 9	28 2	–5 7	66 3	19 8	13.2	0 2
Unweighted median[b]	61 7	19 8	23.7	–3.6	61 0	16 1	29 7	–7 3	65 5	16 5	23.8	–0 7

Source EIU country data, World Bank, *World Development Indicators*
a Shares may not add up to exactly 100% due to statistical discrepancies
b Unweighted medians are the cross-sectional medians of the data in respective columns

F I G U R E 12 - 7. Savings-Investment Balances, Emerging Europe, 2000, 2007, 2009



Source: EIU country data and World Bank's WDI database.
a. Data for Serbia not available.

T A B L E 12 - 8. Contributions to GDP Growth, Emerging Europe,

2000-091

(in percent)

		Consumption				
Country	*GDP growth*[b]	*Total*	*Private*	*Government*	*Investment*[c]	*Net exports*
Belarus	7.3	5.0	5.0	0.0	4.9	–3.2
Bulgaria	4.5	3.8	3.6	0.2	2.2	–1.3
Croatia	3.2	2.0	1.8	0.2	1.9	–0.6
Czech Republic	3.3	2.2	1.6	0.6	0.4	0.7
Estonia	4.1	2.8	2.4	0.4	0.4	0.5
Hungary	2.2	1.7	1.6	0.1	–0.2	1.3
Latvia	4.1	3.3	3.0	0.3	0.6	0.5
Lithuania	4.7	4.4	3.6	0.8	0.1	0.2
Poland	3.9	3.0	2.3	0.7	0.6	0.4
Romania	4.6	5.2	4.8	0.4	1.7	–1.8
Russia	4.8	4.4	4.0	0.4	1.0	–0.2
Serbia	3.9	5.1	4.7	0.4	1.5	–1.6
Slovakia	4.9	3.3	2.7	0.7	0.9	0.6
Slovenia	2.9	2.1	1.5	0.7	0.6	0.3
Ukraine	4.3	6.7	6.6	0.1	0.3	–1.9
Unweighted median[d]	4.1	3.3	3.0	0.4	0.6	0.2

Source: CEIC; Economist Intelligence Unit country data; IMF's International Financial Statistics database.
a. Contributions may not sum exactly to GDP growth due to rounding errors or statistical discrepancies.
b. GDP growth rates are annual averages.
c. Investment includes private and public investment.
d. Unweighted medians are the cross-sectional medians of the data in respective columns.

Table 12-8 shows average GDP growth rates over the period 2000-09 for each country in this group. The next five columns show the contributions of different components-total consumption (which is further broken down into private and government consumption), investment, and net exports-to overall GDP growth. On average, total consumption growth (private and public) contributed about 3.3 percentage points to GDP growth, relative to median GDP growth in the sample of about 4.1 percent a year. In other words, consumption growth on average accounted for about three-quarters of GDP

growth among the fifteen countries in the sample. Excluding 2009 and focusing on just 2000-08 (not shown in the table), consumption growth accounted for 4.8 percentage points relative to median average annual GDP growth of 6.2 percent, a similar fraction. This average is not very different from the average for the Asian EMEs.

The major difference relative to that group, however, is that the average contribution of investment in emerging Europe was much higher and net exports made a significant negative contribution to growth during 2000-08, unlike in Asia, where net exports made a positive contribution. For nine of the fifteen economies in the sample, net exports pulled down GDP growth (in a pure accounting sense) by 1 percentage point or more a year. Net exports did not contribute above 1 percentage point a year to growth in any of these economies. Including the year 2009 in the calculations (as in table 12-8) alters this picture considerably, with net exports accounting for a small positive contribution to growth for a majority of countries in emerging Europe, largely due to a collapse in investment and imports of both investment and consumer goods as a result of the financing crunch.

Trade and Financial Openness

When we consider a different measure of the importance of exports to these economies-the ratio of exports to GDP-the picture is in fact quite similar to that of Asia, with the median value of that ratio in 2007 at about 54 percent (although this declined compared to its value in 2000; see table 12-9). In fact in terms of overall trade openness ratios (the sum of exports and imports as a ratio to GDP), emerging Europe was on average even more open to trade before the crisis than emerging Asia. The combination of high export to GDP ratios, along with large trade and current account deficits, appears to have made these economies more vulnerable to contraction in external demand and global trade during the worst of the crisis.

Along with high levels of trade openness, many of these economies are also characterized by large cross-border financial flows. These economies

experienced a significant increase in gross inflows (as ratios to GDP) from 2000 to 2007, followed by a drop in 2009. There is a crucial difference between the central European countries of Bulgaria and Hungary and the Baltic countries of Estonia, Latvia, and Lithuania. For the former group, inflows of foreign direct investment (FDI) constituted the bulk of gross capital inflows in 2007, while in the latter group bank loans dominated these inflows. Consequently, the financial crisis hit the Baltics the hardest: bank financing dried up sharply as foreign banks based in the advanced economies pulled back capital to shore up their liquidity positions during the crisis.

TABLE 12-9. Openness to Trade, Emerging Europe, 2000, 2007, 2009
(in percent of GDP)

	2000			2007			2009		
Country	*Total trade*[a]	*Exports*[b]	*Trade balance*	*Total trade*[a]	*Exports*[b]	*Trade balance*	*Total trade*[a]	*Exports*[b]	*Trade balance*
Belarus	151.0	73.3	–4.3	129.7	61.7	–6.3	112.6	50.6	–11.3
Bulgaria	116.1	55.4	–5.3	147.6	63.0	–21.6	108.2	50.1	–8.0
Croatia	86.5	41.0	–4.5	103.2	47.5	–8.3	73.9	35.1	–3.8
Czech Republic	129.3	63.2	–3.0	155.5	80.1	4.8	137.0	71.4	5.8
Estonia	171.5	84.2	–3.2	156 6	72 4	–11.7	134.3	70.1	5 9
Hungary	150.4	73.3	–3.8	159.0	80 1	1.2	154.5	80.8	7 0
Latvia	89.9	41.2	–7.5	103 4	41 5	–20.5	83.8	41.8	–0 2
Lithuania	95.7	44.7	–6.3	121.8	54 2	–13.4	102.1	50.7	–0 6
Poland	60.4	27.0	–6.4	84 9	41 0	–2.9	76.3	38.2	0 1
Romania	70.1	32.4	–5.2	73.9	29.9	–14.1	65.0	29.6	–5 8
Russia	67.6	44.1	20.6	52.3	30.4	8.6	48.7	28.1	7.5
Serbia	23.8	8.8	–6.2	80.1	28.7	–22.8	67.7	26.4	–14.8
Slovakia	199.4	98.1	–3.2	193.0	96.2	–0.5	139.8	69.9	–0.1
Slovenia	129.3	62.6	–4.0	140.5	69.3	–1.9	116.2	58.7	1.1
Ukraine	119.9	62.4	5.0	95.4	44.8	–5.7	99.1	48.7	–1.8
Unweighted median[c]	116.1	55.4	–4.3	121.8	54.2	–6.3	102.1	50.1	–0.2

Source: EIU country data.
a. Total trade refers to the sum of exports and imports of goods and services.
b. Exports include both goods and services.
c. Unweighted medians are the cross-sectional medians of the data in respective columns.

What are the macroeconomic implications of surges in capital flows, such as the one emerging European countries experienced before the crisis? Using 109 episodes of large net private capital inflows to fifty-two countries over the 1987-2007 period, Cardarelli, Elekdag, and Kose (2010) study this question. Their findings are consistent with the events in many emerging European economies. In particular, they report that episodes of large capital inflows are often associated with real exchange rate appreciations and deteriorating current account balances. More important, such episodes tend to be accompanied by a pickup in GDP growth, but afterward growth often drops significantly.'

Stock data on gross foreign assets and liabilities confirm the dependence of central European countries on FDI and the dependence of the Baltic countries on bank loans. For some economies in the region, even the high reliance on inward FDI proved to be a source of vulnerability, however, because a large amount of this investment was concentrated on sectors like autos, which were hit by structural changes as a consequence of the crisis (Filippov and Kalman 2009).

What was the role of foreign banks in exacerbating the crisis in emerging Europe? A number of studies attempt to address this question. For example, Canales-Kriljenko, Coulibaly, and Kamil (2010) study how foreign bank lending unfolded differently in Latin America than in emerging Europe. In particular, they investigate why foreign bank lending continued to grow in Latin America during the crisis but showed lower and, later, negative growth in emerging Europe. They conclude that global banks from advanced European economies were instrumental in fueling a credit boom in emerging Europe by transferring large amounts of funds to their local subsidiaries, which then lent them out domestically. Latin America had less intensive credit growth, a smaller presence of foreign banks, and lower reliance on external funding from parent banks in developed economies. In Latin America, 60 percent of foreign bank lending was denominated in local currency. In emerging Europe, by

contrast, 60 percent of foreign bank lending was denominated in foreign currency. This made the latter group more vulnerable to exchange rate shocks. These factors may help explain why Latin America was more resilient during global deleveraging and foreign-bank lending withdrawals than during episodes of global financial turbulence that caused crises in these economies.

In a related study, Berglof and others (2009) test whether foreign bank ownership may have generated an element of stability by curbing outflows of bank lending. They conclude that economic integration with international banking groups and political and institutional integration with Western Europe made emerging Europe more resilient. They argue that foreign bank ownership mitigated output declines, at least in 2008. They also find that, while the overall effect of financial integration on output declines during the crisis is mixed, external debt does have a major explanatory role. However, since their analysis does not fully incorporate the sharp falls in output that took place in 2009, their conclusions should be interpreted with caution.

Cetorelli and Goldberg (2010) find that global banks played a significant role in the transmission of the crisis to EMEs. They find that supply of loans to EMEs was affected through three channels: a contraction in direct cross-border lending by foreign banks, a contraction in local lending by foreign banks' affiliates, and a contraction in lending by domestic banks as a result of the decline in cross-border interbank lending. Countries with greater dependence on foreign bank lending, especially in cases where those foreign banks were domiciled in countries whose financial systems were hit harder by the crisis, took a bigger hit.

There is a vigorous ongoing debate about whether greater integration into Europe through stronger trade and financial linkages has made the economies of emerging Europe more resilient or whether it has increased their vulnerability to shocks emanating from the advanced economies in the region. Allard (2009), Belka (2009), and Cihak and Fonteyne (2009) note that, while EU accession had many benefits for the concerned economies of emerging

Europe during less turbulent times, it made them more vulnerable to shocks emanating from advanced economies in the EU and created more channels for the spread of contagion effects. Cihak and Mitra (2009) argue that EU integration may in fact have provided a cushioning effect by giving these countries more access to financial support from the IMF and the EU.

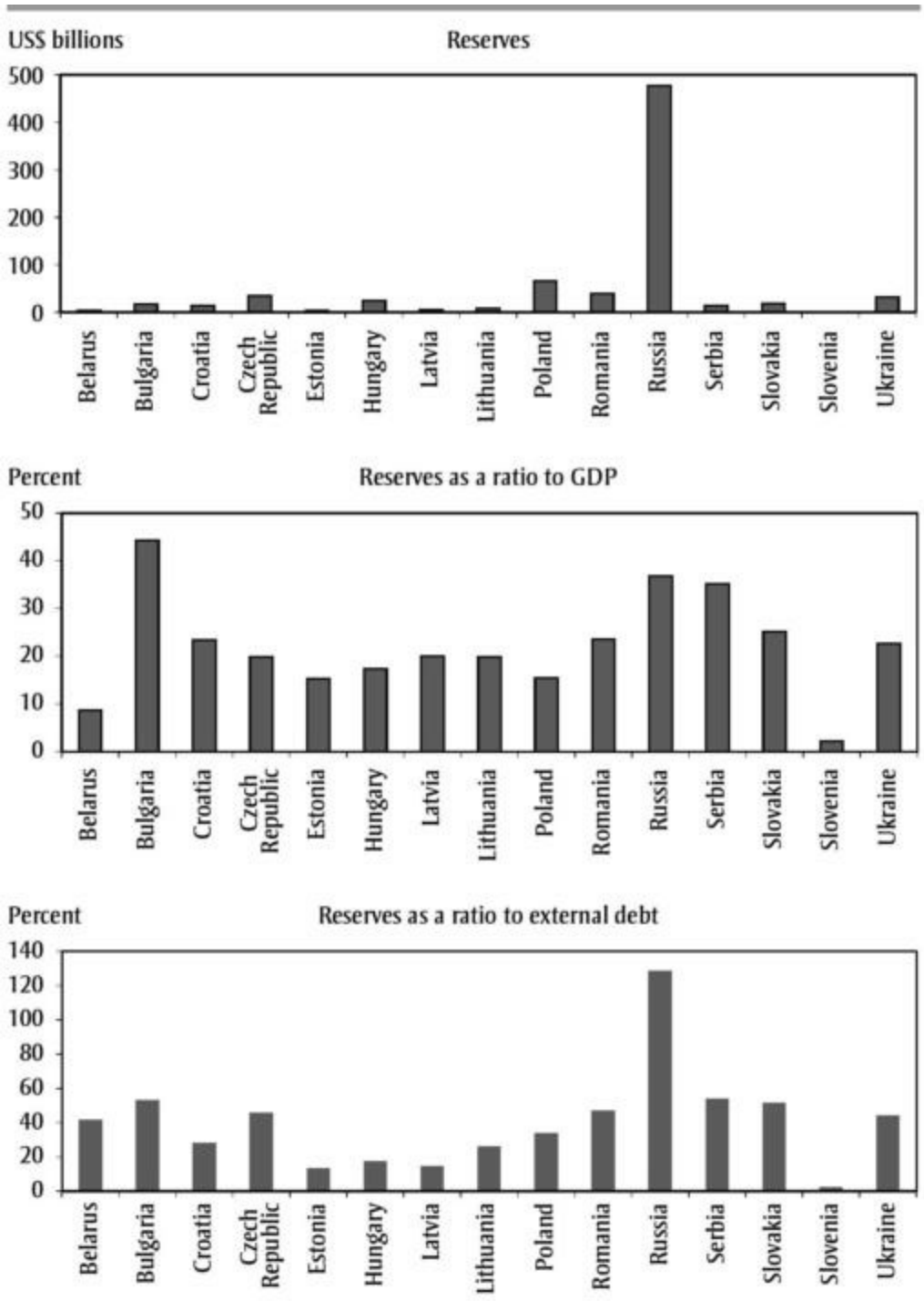
Macroeconomic Policies

As discussed earlier, international reserves in principle provide a degree of protection against sudden stops and reversals of capital flows. So it is interesting to examine the amount of self-insurance through reserve buildups that the emerging European economies had before the crisis, in absolute terms as well as relative to economic size and the amount of external debt obligations. Figure 12-8 shows that Russia had by far the largest stock of foreign exchange reserves, and this holds true, though to a lesser extent, even when those reserves are measured relative to its GDP or to its external debt. By the latter criterion, all other economies had reserves just around or below 50 percent of their external debt, suggesting some degree of vulnerability to volatility of capital inflows. Interestingly, when the crisis hit, there was a general loss of reserves over the period from December 2007 to December 2008, but four countriesBulgaria, the Czech Republic, Estonia, and Hungary-continued to accumulate rather than lose reserves during this period (figure 12-9). Hungary of course benefited in this respect from adopting an IMF-EU lending program, which allowed it to protect its stock of reserves.

Table 12-10 indicates that the median government budget deficit in emerging Europe was about 1 percent in 2007, and the median ratio of public debt to GDP was 18 percent. Thus fiscal policy was not severely constrained when the crisis hit.' By contrast, rapid credit growth seems to have been a bigger source of domestic vulnerability, averaging 29 percent a year in these economies during the period 2005-08 (in domestic currency terms). The absence of foreign financing drove average credit growth down to 6 percent in these economies in 2009, with four of them (Estonia, Hungary, Latvia, and Lithuania) experiencing negative credit growth in that year. Indeed in some of these

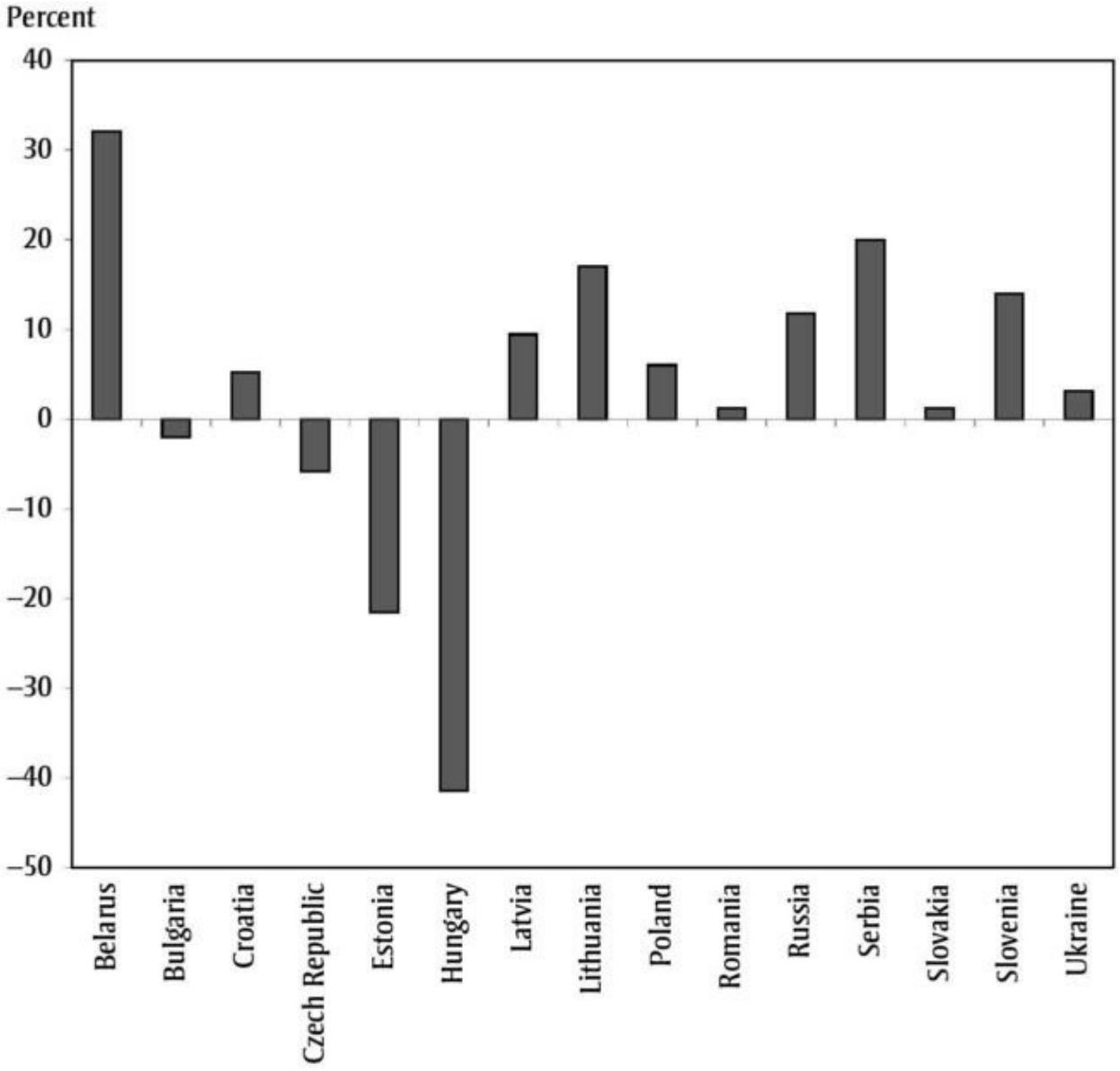
countries the contraction in credit was even more severe than indicated by these numbers, as a large share of loans was denominated in foreign currencies; currency depreciation during the crisis meant that the domestic currency payment obligations on those loans rose during 2009 even as new credit dried up.

F I G U R E 12 - 8. Reserves in Emerging Europe before the Crisis, 2007



Source: International reserves data from E I U Country Data, Bank of Slovenia, and GDP data from IMF's WEO.

F I G U R E 12 - 9. Reserve Losses during the Crisis, Emerging Europe, 2007-081



Source: CEIC and IMF's IFS.
a. A negative number indicates reserve accumulation during this period.

T A B L E 12 -1 0. Budget Balances, Debt, and Credit Growth, Emerging Europe, 2007-09

(in percent)

Country	Budget balance (% GDP)[a]			Public debt (% GDP)[b]	Annual credit growth[c]	
	2007	2008	2009	2007	2005–08 average	2009
Belarus	0.5	1.4	–0.7	11.5	40.5	8.0
Bulgaria	3.5	3.0	–0.8	18.2	35.0	11.1
Croatia	–2.6	–1.8	–3.2	49.7	15.9	2.0
Czech Republic	–1.7	–1.3	–5.9	26.2	14.4	5.8
Estonia	2.6	–2.8	–1.7	3.8	28.6	–6.7
Hungary	–5.0	–3.8	–4.0	66.7	15.7	–3.0
Latvia	–0.3	–4.1	–9.1	9.0	38.9	–9.5
Lithuania	–1.0	–3.3	–8.9	16.9	39.9	–10.5
Poland	–1.9	–3.7	–7.1	42.5	22.4	8.2
Romania	–2.3	–4.8	–7.4	17.5	49.8	7.4
Russia	6.0	4.9	–6.2	5.3	27.0	18.0
Serbia	–1.9	–2.2	–4.3	34.3	33.8	13.0
Slovakia	–1.9	–2.3	–6.8	29.5	14.1	15.5
Slovenia	0.3	–0.3	–5.6	22.9	24.5	0.8
Ukraine	–1.1	–1.5	–6.5	11.6	64.4	3.9
Unweighted median[d]	–1.1	–2.2	–5.9	18.2	28.6	5.8

Source: EIU country data; EBRD, *Transition Report 2009*, and World Bank, *World Development Indicators*.
a. Budget balance is general government balance.
b. Public debt is general government gross debt.
c. Credit growth is growth in credit to the private sector.
d. Unweighted medians are the cross-sectional medians of the data in respective columns.

Relating these numbers to the growth outcomes for 2009 and the projections for 2010 (table 12-6), it appears that countries that were able to maintain better credit growth in 2009 have better outcomes and prospects. By contrast countries with very high credit growth before the crisis and weak credit growth during the crisis appear to have been hit hardest.10 This list includes Baltic countries such as Estonia, Latvia, and Lithuania as well as countries like Hungary and Slovenia. Public debt before the crisis was at manageable levels in most of emerging Europe before the crisis, leaving space for some fiscal stimulus. The two economies with large public debt relative to GDP-Croatia

and Hungary-were clearly a lot more constrained in terms of being able to use fiscal stimulus.

Poland and Lithuania provide an interesting contrast." Poland had credit growth of about 22 percent during 2005-08, well below the sample average of 29 percent, and experienced a drop to 8 percent in 2009, a smaller percentage drop than most other countries. Lithuania, by contrast, experienced a drop in credit growth from 40 percent a year during 2005-08 to minus 11 percent during 2009. Poland had a higher level of debt before the crisis (42.5 percent of GDP, relative to 17 percent of GDP for Lithuania). But a raft of expenditure measures put in place before the crisis hit and difficulties in financing its debt meant that Lithuania was unable to undertake any additional fiscal stimulus in response to the crisis. By contrast, Poland was able to undertake a concerted fiscal stimulus program when the crisis hit. The net effect was that Poland had positive growth in 2009 and was expected to record stronger growth in 2010, while Lithuania took a massive hit in growth in both years.

The main message from this descriptive analysis is that emerging Europe may have been particularly vulnerable to the aftershocks of the crisis for the following reasons:

-A high dependence on external finance, as reflected in large current account deficits

-Significant exposure to foreign banks, which had many benefits but which served as a transmission channel for the crisis

-Rapid credit expansion in the years before the crisis, which proved to be difficult to sustain once foreign bank financing dried up.

The case studies we present in this chapter set the stage for a compilation of a set of reasons as to why certain emerging markets were not greatly affected by the global financial crisis, why emerging markets as a group weathered the crisis relatively well, and what the implications might be for the notion of

divergence of business cycles in emerging markets from advanced country cycles.