

3. Emerging Europe and the Global Crisis: Lessons from the Boom and Bust

Two years after the collapse of Lehman Brothers, emerging Europe²² has begun its recovery from its deepest post-transition recession. While the recovery remains uneven and export-led (Chapter 2), the banking and currency crises that many initially feared have largely been avoided. This chapter addresses three questions: Why was emerging Europe so severely affected by the global crisis? Why were the banking and currency crises that many had feared avoided? What lessons for crisis prevention can be drawn from the boom-bust cycle?

How the Global Financial and Economic Crisis Affected Emerging Europe—A Narrative

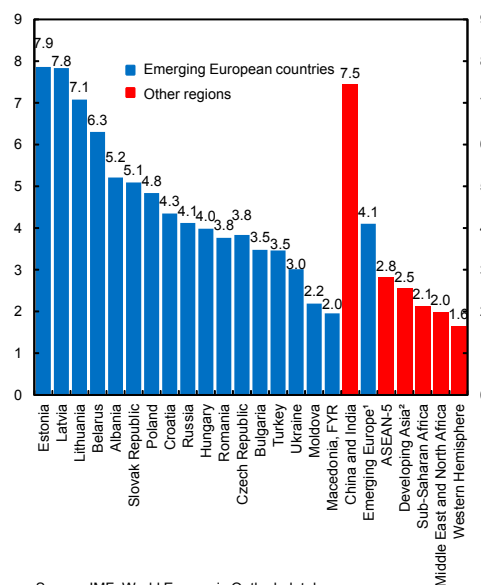
The Run-up to the Crisis

In the decade and a half prior to the global economic crisis, emerging Europe grew faster than almost all other emerging market regions. Per capita income in the region grew by 4 percent annually during 1995–2007—exceeded only by China and India (Figure 38). Growth was helped by the transition from a planned to a market economy. Institutions were modernized, often in the context of an EU accession process. Foreign direct investment poured in to benefit from highly skilled labor. Great strides were made toward trade and financial integration with western Europe. Economic growth was further stimulated by the anticipation of rapid future income growth, declining real interest rates, and increasingly buoyant global economic and financial conditions.

Note: The main authors of this chapter are Yuko Kinoshita, Johan Mathisen, and Jérôme Vandenbussche.

²² Two advanced countries (the Czech and Slovak Republics), which until 2009 were classified as emerging markets, have been included in this analysis as well, given the valuable lessons their experiences provide.

Figure 38. Emerging Europe and Selected Regions: Real Per Capita GDP Growth, 1995–2007 (Annual percentage change in PPP terms)



Source: IMF, World Economic Outlook database.
¹Includes Czech Republic and Slovak Republic.
²Excludes China and India.

Until 2003, growth was driven largely by exports. Exports grew rapidly, as trade became integrated with the West. By 2007, the euro area had become the main trading partner of most countries in the region (Tables 8 and 9).²³ Owing to their geographic proximity and relatively low labor costs, central and eastern Europe (CEE) countries became part of an integrated cross-border production chain, with western European manufacturers shifting the production of components and intermediate goods to the east. German automakers were particularly active in outsourcing to CEE countries.²⁴ During this decade capital inflows remained moderate and went largely to the tradable sector.

²³ Commodity exporters such as Russia and Ukraine trade with a broader set of countries. The Baltics trade mainly with Russia and their neighboring countries.

²⁴ Russia and Ukraine remained predominantly commodity exporters.

Table 8. Emerging Europe: Exports of Goods, 1995–2007
(Percent of GDP)

| | Levels | | | Changes | | |
|------------------------|--------|------|------|-----------|---------|-----------|
| | 1995 | 2003 | 2007 | 1995–2003 | 2003–07 | 1995–2007 |
| Moldova | 51 | 41 | 31 | -11 | -9 | -20 |
| Ukraine | 41 | 48 | 35 | 8 | -14 | -6 |
| Croatia | 21 | 18 | 21 | -3 | 3 | 1 |
| Romania | 23 | 30 | 24 | 7 | -6 | 1 |
| Albania | 7 | 8 | 10 | 0 | 2 | 2 |
| Lithuania | 42 | 38 | 44 | -3 | 5 | 2 |
| Russia | 25 | 31 | 27 | 6 | -3 | 2 |
| Estonia | 49 | 57 | 51 | 8 | -6 | 3 |
| Latvia | 26 | 26 | 29 | 0 | 3 | 3 |
| Turkey | 10 | 16 | 17 | 6 | 1 | 7 |
| Bulgaria | 40 | 37 | 47 | -3 | 10 | 7 |
| Macedonia, FYR | 27 | 30 | 36 | 3 | 6 | 9 |
| Belarus | 44 | 56 | 54 | 12 | -2 | 10 |
| Poland | 16 | 25 | 33 | 8 | 8 | 17 |
| Czech Republic | 39 | 53 | 70 | 14 | 17 | 32 |
| Slovak Republic | 44 | 61 | 78 | 17 | 17 | 34 |
| Hungary | 28 | 51 | 69 | 23 | 18 | 41 |
| Bosnia and Herzegovina | ... | 14 | 21 | ... | 7 | ... |
| Montenegro, Rep. of | ... | ... | 12 | ... | ... | ... |
| Serbia | ... | ... | 19 | ... | ... | ... |

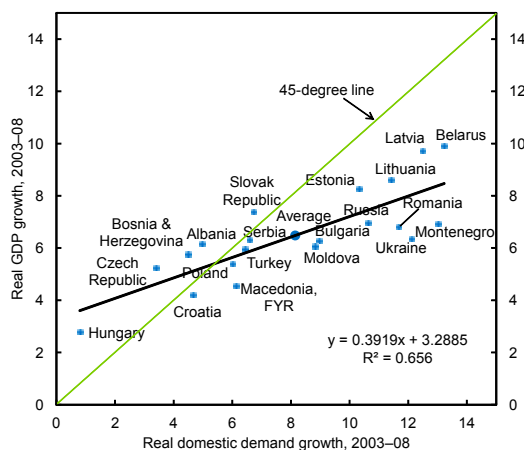
Sources: IMF, Direction of Trade Statistics database and World Economic Outlook database.

Table 9. Emerging Europe: Direction of Exports, 2007
(Percent of GDP)

| | Euro Area | EE and CIS | Other | Total |
|------------------------|-----------|------------|-------|-------|
| Albania | 8 | 1 | 1 | 10 |
| Montenegro, Rep. of | 8 | 3 | 0 | 12 |
| Turkey | 6 | 3 | 8 | 17 |
| Serbia | 9 | 8 | 2 | 19 |
| Bosnia and Herzegovina | 13 | 7 | 1 | 21 |
| Croatia | 11 | 7 | 4 | 21 |
| Romania | 13 | 7 | 4 | 24 |
| Russia | 11 | 8 | 9 | 27 |
| Latvia | 6 | 15 | 8 | 29 |
| Moldova | 15 | 13 | 3 | 31 |
| Poland | 18 | 9 | 6 | 33 |
| Ukraine | 6 | 18 | 11 | 35 |
| Macedonia, FYR | 22 | 10 | 3 | 37 |
| Lithuania | 11 | 22 | 11 | 44 |
| Bulgaria | 23 | 16 | 9 | 47 |
| Estonia | 16 | 17 | 19 | 51 |
| Belarus | 12 | 31 | 10 | 54 |
| Hungary | 40 | 20 | 9 | 69 |
| Czech Republic | 46 | 17 | 7 | 70 |
| Slovak Republic | 40 | 27 | 11 | 78 |

Sources: IMF, Direction of Trade Statistics database and World Economic Outlook database.

Figure 39. Emerging Europe: Domestic Demand Growth and GDP Growth, 2003–08¹
(Annual average percentage change)



Sources: IMF, *International Financial Statistics* and World Economic Outlook database.
¹As the boom in the Baltic states ended in 2007, data for the Baltics refer to 2002–07.

From 2003 onward, however, growth in the region was driven increasingly by a domestic demand boom (Figure 39). During 2003–08, domestic demand growth in the region averaged 8 percent annually—well above GDP growth (6½ percent per year). The boom was particularly pronounced in the Baltic and European CIS countries, together with Bulgaria, Montenegro, and Romania, where domestic demand grew by 9–13 percent. In other countries (including Albania, Bosnia, Croatia, Czech Republic, Macedonia, Poland, the Slovak Republic), domestic demand

growth was more moderate (4–6 percent per year). Domestic demand was weak only in Hungary, partly as the result of the substantial fiscal consolidation that took place in the precrisis years.

There was not only a boom in *private* sector demand; public expenditure grew rapidly as well. The boom in domestic demand and the increase in commodity prices (in commodity exporters such as Russia) led to a sharp increase in government revenues. Only part of this revenue surge was used to improve fiscal balances.²⁵ Over the five-year period, only Bulgaria, Croatia, the Czech Republic, Hungary, Montenegro, and Turkey improved their fiscal balance by 3 percentage points of GDP or more. Instead, buoyant revenues were used mainly to increase public expenditure.²⁶ Real expenditure growth exceeded real GDP growth in every country, except in Macedonia. By 2008, only Belarus, Bulgaria, Montenegro, and Russia ran fiscal surpluses.²⁷

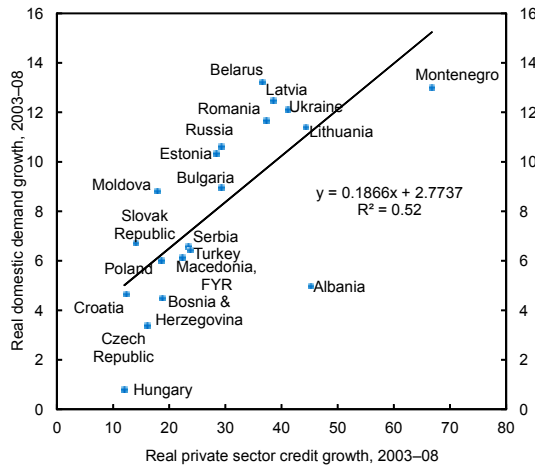
The demand boom was the result of a surge in bank credit and asset prices (Figures 40 and 41). Although

²⁵ See Rahman (2010).

²⁶ Rosenberg and Sierhej (2007) find that EU-related transfers also contributed to procyclical fiscal policy in the New Member States.

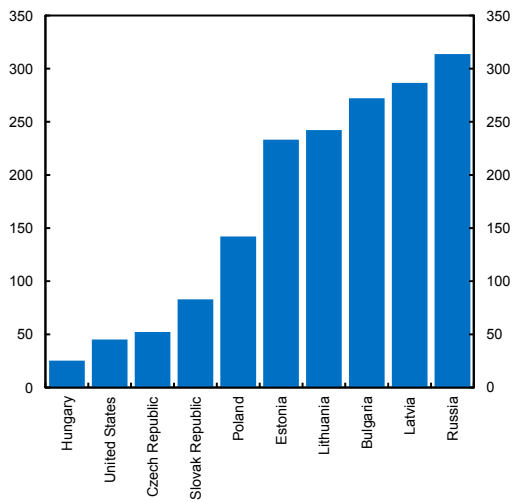
²⁷ Although Russia’s fiscal policy had been procyclical, the fiscal balance improved, primarily owing to rising oil prices.

Figure 40. Emerging Europe: Domestic Demand and Private Sector Credit Growth, 2003–08¹
(Annual average percentage change)



Sources: IMF, *International Financial Statistics* and World Economic Outlook database.
¹As the boom in the Baltic states ended in 2007, data for the Baltics refer to 2002–07.

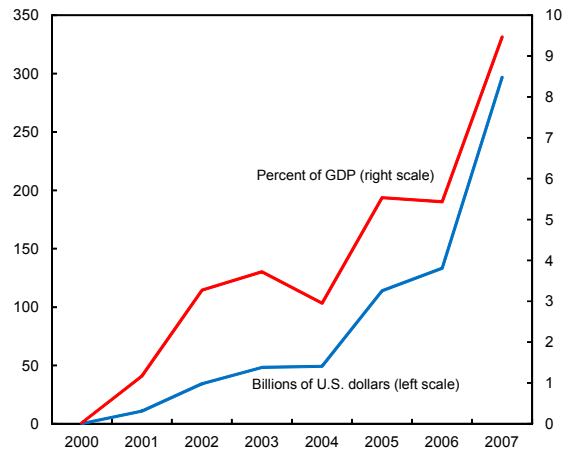
Figure 41. Emerging Europe: Change in Real Estate Prices, 2003–08¹
(Percentage change)



Sources: Haver Analytics; and country statistical offices.
¹As the boom in the Baltic states ended in 2007, data for the Baltics refer to 2002–07.

much of the credit increase reflected the development of an initially undersized financial sector, the speed of credit growth exceeded what could be justified by appropriate financial deepening and jeopardized macroeconomic stability (WIIW, 2010). Housing prices rose sharply (Figure 41), and even equity markets surged, with an average annual increase of some 40 percent.

Figure 42. Emerging Europe: Net Capital Flows, 2000–07

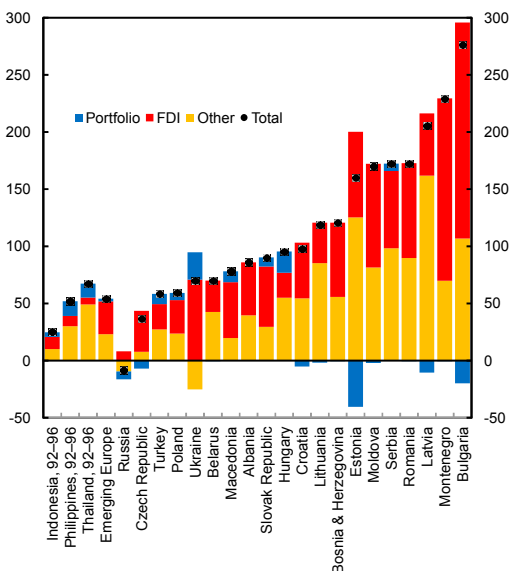


Source: IMF, *International Financial Statistics*.

The domestic demand boom was fueled and financed by unprecedented capital inflows (Figure 42). Emerging Europe as a whole has been the beneficiary of large capital inflows since the late 1990s. Initially, the region’s post-transition reforms, growth prospects, and integration with western Europe were the main factors that pulled foreign capital into the region. From 2003 onward, push factors—low interest rates in advanced countries and low global volatility—further boosted capital inflows, as did the expectation of euro adoption and the dismantling of barriers to capital flows in the context of EU accession (Rosenberg and Tirpak, 2008). Capital inflows became very large by historical standards and compared with other emerging market economies. The size and composition of the capital inflows varied significantly across countries, and some countries managed to avoid large capital inflows altogether (Figure 43). Capital inflows were particularly large in the Baltic countries and southeastern Europe (SEE), whereas the more mature economies of Poland and the Czech Republic with flexible exchange rates and small interest rate differentials to the euro received much more modest inflows.

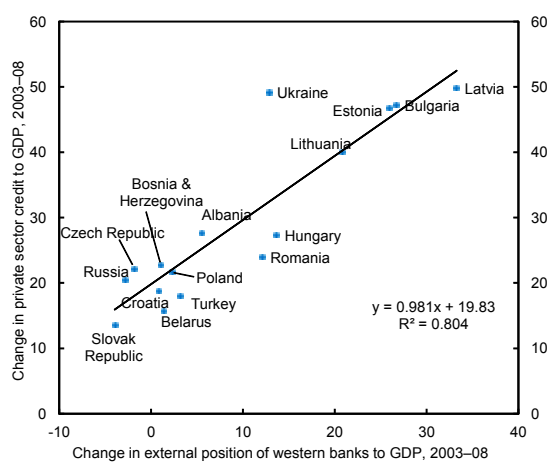
Capital flows from western European banks were particularly important in fueling the demand boom.

Figure 43. Emerging Europe: Cumulative Net Capital Inflows, 2003–08¹
(Percent of 2003 GDP)



Source: IMF, World Economic Outlook database.
¹As the boom in the Baltic states ended in 2007, data for the Baltics refer to 2002–07 in percent of 2002 GDP.

Figure 44. Emerging Europe: Change in External Position of Western Banks and Private Sector Credit, 2003–08¹

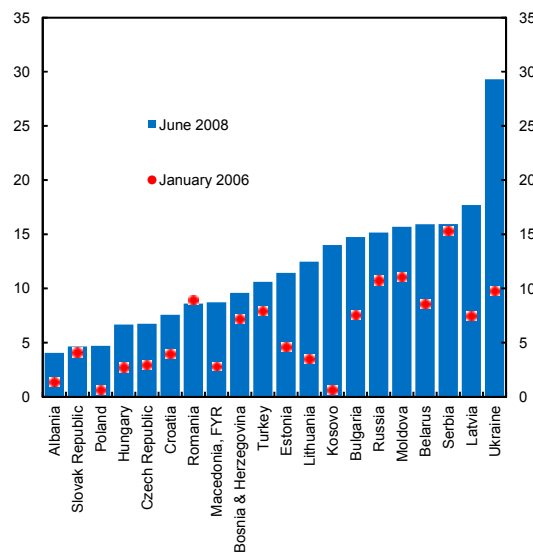


Sources: IMF, World Economic Outlook database and *International Financial Statistics*; and BIS locational banking statistics (Table 6A).
¹As the boom in the Baltic states ended in 2007, data for the Baltics refer to 2002–07.

Western European banks provided direct cross-border lending and financed much of the credit increase through deposits and capital injections to their local subsidiaries (Figure 44). With low margins in western Europe, western banks became increasingly interested in expanding in eastern Europe, and came to dominate much of the region’s banking systems as they acquired local banks that were privatized or put up for sale by their private owners.

The domestic demand boom contributed to rapid GDP growth but also led to a sharp increase of current account deficits, and an overheating of the economy. The current account deterioration was particularly pronounced in countries where domestic demand expanded by more than 8 percent per year—with the exception of Russia, where terms-of-trade improvements to a large extent offset the impact of rising domestic demand.²⁸ With rapid growth, inflation started to pick up (Figure 45), labor markets tightened, and wage costs accelerated. Overheating was particularly pronounced in the

Figure 45. Emerging Europe: Consumer Price Inflation, 2006 and 2008
(Annual percentage change)



Source: Haver Analytics.

Baltic countries, Bulgaria, Montenegro, and the CIS countries. The Czech Republic, Hungary, Poland, and the Slovak Republic managed to avoid much of the overheating—the Czech and Slovak Republics also saw a substantial reduction in their current account deficits.

While current account deficits were to a large extent financed by FDI inflows, these FDI inflows increasingly went to the nontradable sector (financial

²⁸ In some countries with less pronounced demand booms, such as Albania and Bosnia and Herzegovina, current account deficits were already high prior to 2003.

services, real estate, and construction).²⁹ As more resources were drawn to the nontradable sector, growth became unbalanced. By 2007, the share of nontradable FDI was significantly higher in SEE and the Baltics than in CEE (Figure 46). The shift to the nontradable sector was not a problem in all countries: in CEE, where the share of manufacturing in FDI is high, the shift was largely avoided.

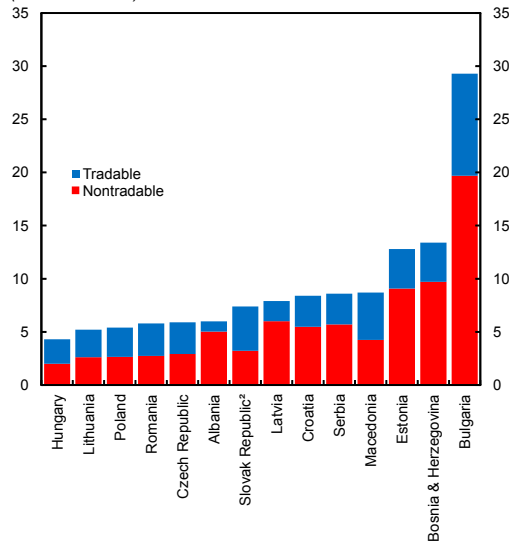
By 2007, the growth pattern of many countries seemed unsustainable and vulnerable to a sudden decline in capital inflows. Growth had become reliant on domestic demand, supported by a continued rapid expansion of credit, large capital inflows, and continued asset price appreciation (Figure 47). As demand depended so much on credit growth that was financed from abroad, any slowdown or reversal of foreign financing was bound to hit the economy hard. Moreover, since the majority of loans were foreign currency denominated in much of the region, an exchange rate depreciation resulting from a slowdown of capital flows would have had powerful adverse balance sheet effects and could have undermined financial stability (Figure 48). Large external debt that had built up over years of substantial current account deficits meant that a decline of roll-over rates would have put debtors in a tight spot. Because much of the external debt was owed by banks, financial stability was potentially also at risk from this perspective.

Not all countries were equally affected by these imbalances and vulnerabilities, and some countries managed to avoid them altogether. These differences were in part the result of different policy reactions and institutions.

- *Monetary and exchange rate policy:* Countries with fixed exchange rate regimes and deep financial integration with western Europe had few instruments to stop the credit boom. Moreover, inflation in the wake of the credit boom drove real interest rates lower, further fueling the

²⁹ Kinoshita (forthcoming).

Figure 46. Emerging Europe: Foreign Direct Investment Flow in Tradable and Nontradable Sectors, 2007¹
(Percent of GDP)

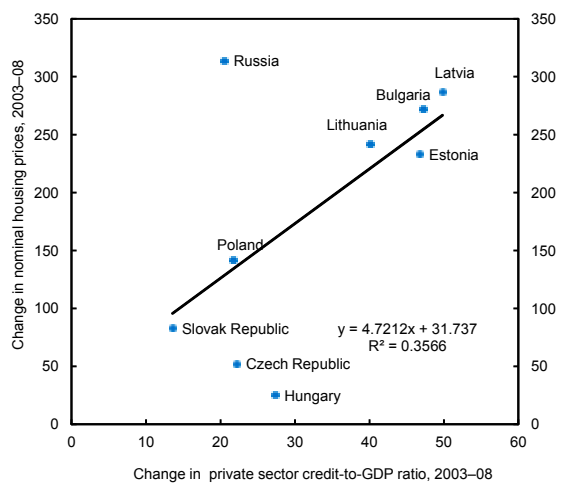


Sources: IMF, World Economic Outlook database; and WIIV Database on Foreign Direct Investment.

¹The tradable sectors consist of manufacturing, agriculture, mining, retail, hotels, and restaurants, while the nontradable sectors are construction, electricity, transport, communication, real estate and financial intermediation.

*Data refer to 2006.

Figure 47. Emerging Europe: Private Sector Credit and Housing Prices, 2003–08¹



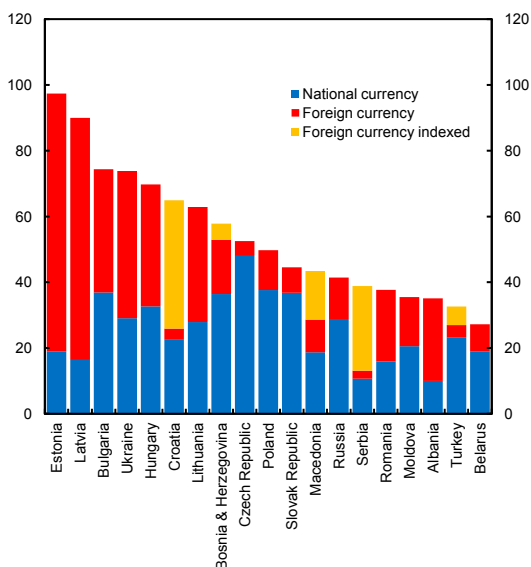
Sources: IMF, *International Financial Statistics*; and country statistical offices.

¹As the boom in the Baltic states ended in 2007, data for the Baltics refer to 2002–07.

demand boom. Countries with floating exchange rate regimes were able to tighten monetary conditions by letting the nominal exchange rate appreciate.

- *Fiscal policy:* Fiscal policy was procyclical during the boom in most of emerging Europe, with the

Figure 48. Emerging Europe: Total Private Sector Credit by Currency, 2008
(Stock in percent of GDP)



Sources: National authorities; and IMF, *International Financial Statistics*.

notable exception of Hungary, which began tackling long-standing fiscal weaknesses from 2007. During the boom years, public finances were mostly improving, reflecting a strong revenue performance (Table 10). This was particularly pronounced in countries that relied heavily on domestic absorption.³⁰ By 2008, countries with the most rapid public expenditure growth were showing the most pronounced signs of overheating. In these countries, fiscal policy was procyclical in the sense that it further exacerbated private sector demand pressures.

- *Financial sector policy:* Many countries had taken prudential and supervisory measures in the form of tightening the existing regulations to stem credit growth but they had limited effects.³¹ In Bulgaria, Croatia, and Serbia, administrative measures had been taken through direct credit controls or marginal reserve requirements on foreign borrowing. However, such efforts to slow down credit often diverted inflows into less supervised channels. For example, Bulgaria

³⁰ Rahman (2010).

³¹ See Chapter 2 of the May 2010 *Regional Economic Outlook: Europe* (IMF, 2010g) on managing capital flows.

introduced bank-by-bank credit ceilings in 2005–06, which seemingly reined in credit growth but also accelerated direct cross-border borrowing by firms. Also in Croatia corporate entities turned to direct borrowing from parent banks abroad instead of channeling loans through the domestic banking system where restrictions were high.

Despite these large variations in vulnerabilities, markets failed to differentiate between countries. Indeed, as vulnerabilities increased, risk premiums declined, and some of the countries with the highest vulnerabilities continued to enjoy investment grade status (IMF, 2010g).

The First Stage of the Global Crisis

Between the start of the global crisis in August 2007 and September 2008, GDP growth in emerging Europe remained generally strong. Despite the market turmoil in the United States and uncertainty in the global economy, capital continued to flow into emerging Europe and CDS and bond spreads in the region rose only moderately. Most equity markets lost steam from late summer 2007, but apparently without repercussions for real activities. Indeed, as inflation was rising rapidly, in part driven by booming food and fuel prices, controlling inflation became the main policy challenge. The focus of policymakers in the region remained to engineer a soft landing of their economies rather than preparing for an impending crisis.

The Baltic countries were the first to experience a slowdown, albeit initially for reasons unrelated to the global turmoil.³² Swedish banks had started to slow credit growth in the summer of 2007, as they became increasingly concerned about their exposure to the region.

Hungary experienced a short episode of financial stress in March 2008. It embarked on a fiscal consolidation program starting in mid-2006 to tackle long-standing twin deficits. The fiscal deficit and the

³² See Purfield and Rosenberg (2010) for a discussion of recent crises in the Baltics.

Table 10. Emerging Europe: General Government Overall Balance¹
(Percent of GDP)

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|----------------------------------|-------|------|------|------|------|------|------|-------|
| Albania ² | -4.6 | -5.0 | -3.5 | -3.3 | -3.6 | -5.1 | -7.4 | -4.1 |
| Belarus ² | -1.0 | 0.0 | -0.7 | 1.4 | 0.4 | 1.3 | -0.7 | -3.4 |
| Bosnia and Herzegovina | -1.7 | -0.5 | 0.6 | 1.1 | -0.3 | -3.6 | -5.7 | -4.5 |
| Bulgaria ² | 0.0 | 1.7 | 2.4 | 3.5 | 3.5 | 3.0 | -0.9 | -4.9 |
| Croatia ² | -4.8 | -3.4 | -2.8 | -2.6 | -2.4 | -1.3 | -4.1 | -5.3 |
| Estonia | 2.2 | 1.6 | 1.6 | 3.2 | 2.9 | -2.3 | -2.1 | -1.1 |
| Hungary ³ | -7.2 | -6.4 | -7.9 | -9.4 | -5.0 | -3.7 | -4.1 | -4.2 |
| Kosovo ² | 1.6 | -4.9 | -3.1 | 2.5 | 4.9 | -0.2 | -0.8 | -3.4 |
| Latvia ^{2,4} | -1.7 | -1.2 | -1.3 | -0.5 | 0.6 | -7.5 | -7.8 | -11.9 |
| Lithuania | -1.3 | -1.5 | -0.5 | -0.4 | -1.0 | -3.3 | -8.9 | -7.7 |
| Macedonia, FYR | -0.1 | 0.4 | 0.2 | -0.5 | 0.6 | -0.9 | -2.6 | -2.5 |
| Moldova ² | 0.7 | 0.7 | 1.5 | 0.0 | -0.2 | -1.0 | -6.4 | -5.4 |
| Montenegro ² | -2.9 | -1.8 | -1.1 | 2.6 | 6.3 | 1.5 | -4.4 | -7.1 |
| Poland | -6.2 | -5.4 | -4.1 | -3.6 | -1.9 | -3.7 | -7.1 | -7.4 |
| Romania | -2.2 | -3.4 | -0.7 | -1.4 | -3.1 | -4.8 | -7.4 | -6.8 |
| Russia ² | 1.4 | 4.9 | 8.2 | 8.3 | 6.8 | 4.3 | -6.2 | -4.8 |
| Serbia, Republic of ² | -2.9 | 0.0 | 0.8 | -1.6 | -1.9 | -2.6 | -4.1 | -4.8 |
| Turkey ^{2,5} | -10.4 | -4.4 | -0.6 | -0.6 | -2.1 | -2.9 | -6.2 | -4.0 |
| Ukraine ² | -0.9 | -4.4 | -2.3 | -1.4 | -2.0 | -3.2 | -6.2 | -5.5 |
| Emerging Europe ⁶ | -2.7 | -0.3 | 2.2 | 2.4 | 1.8 | 0.2 | -6.0 | -5.2 |
| Memorandum | | | | | | | | |
| Czech Republic | -6.6 | -2.9 | -3.6 | -2.6 | -0.7 | -2.7 | -5.9 | -5.4 |
| Slovak Republic | -2.8 | -2.4 | -2.8 | -3.4 | -1.9 | -2.3 | -6.8 | -8.0 |
| Slovenia ² | -1.4 | -1.4 | -1.1 | -0.8 | 0.2 | -0.3 | -6.1 | -5.8 |

Source: IMF, World Economic Outlook database.

¹As in the WEO, general government overall balances reflect staff's projections of a plausible baseline, and as such contain a mixture of unchanged policies and program effort.

²Reported on a cash basis.

³For Hungary, the general government overall balance projections include staff projections of the macro framework and of the impact of existing legislated measures, as well as fiscal policy plans as announced by end-August 2010. To meet the recently announced commitments of the government to balances of 3.8 percent of GDP in 2010 and 3 percent of GDP in 2011, the authorities will need to approve additional measures.

⁴In Latvia, the widening of the 2010 headline deficit reflects one-off bank restructuring costs of about 3.5 percent of GDP.

⁵Fiscal projections assume the authorities adhere to the 2010 and 2011 targets set in their September 2009 medium-term program.

⁶Includes Albania, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Estonia, Hungary, Kosovo, Latvia, Lithuania, Macedonia, Moldova, Republic of Montenegro, Poland, Romania, Russia, Republic of Serbia, Turkey, and Ukraine. Average weighted by GDP valued at purchasing power parity (PPP).

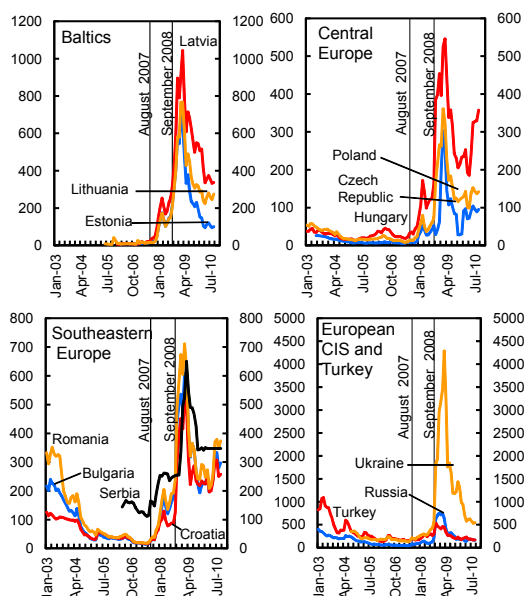
current account deficit narrowed in 2007, and real GDP growth slowed from 4 percent in 2006 to 1¼ percent in 2007. However, Hungary's debt stock vulnerabilities were unsettlingly high. Government bond markets were briefly thrown into turmoil in the spring of 2008 when a government auction ran into trouble. The exchange rate depreciated by 5 percent, and CDS rates shot up to almost 200 basis points and remained elevated.

The Collapse of Lehman Brothers and Its Aftermath

The global crisis spilled over to emerging Europe in September 2008, after Lehman Brothers filed for bankruptcy, through financial and trade channels. In a matter of weeks, global financial markets froze and international trade collapsed.

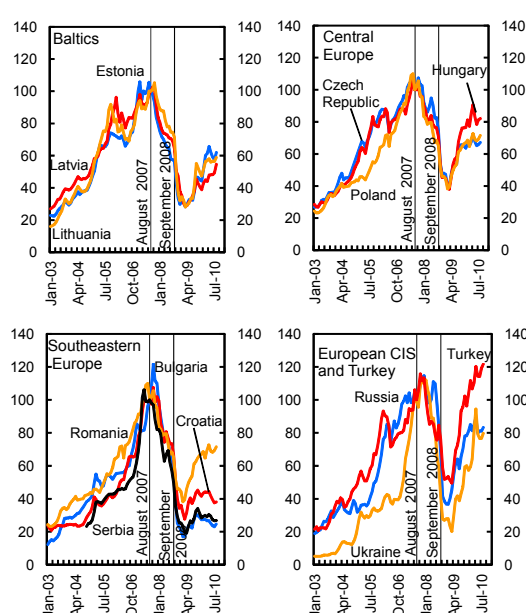
Risk aversion rose sharply, and equity markets plunged. Sovereign CDS spreads jumped by several hundred basis points in a matter of days in the Baltic countries, Hungary, Romania, Russia, Turkey, and Ukraine (Figure 49). The size of this increase was not indiscriminate but amplified pre-Lehman cross-country differences. CDS and the Emerging Markets Bond Index (EMBI) spreads remained very high through the end of the first quarter of 2009 and then started a slow, gradual decline (Figure 50). Equity markets, which had corrected since the summer of 2007 (or the fall of 2007 in the case of Russia and Turkey), suddenly plunged as both domestic and international investors retreated and only bottomed out in February or March 2009 after falling by more than 60 percent (and up to 85 percent in Bulgaria) (Figure 51).

Figure 49. Emerging Europe: CDS Spreads
(Basis points)



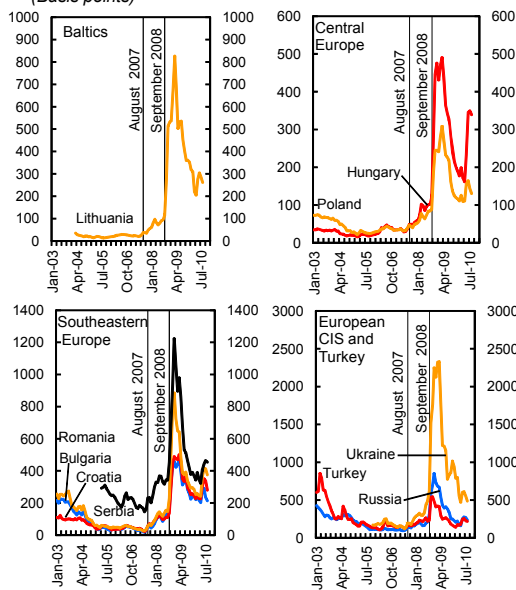
Sources: Bloomberg; and Datastream.

Figure 51. Emerging Europe: Stock Market Indices
(Index Aug. 2007 = 100)



Source: Bloomberg.

Figure 50. Emerging Europe: EMBI Spreads
(Basis points)



Source: Bloomberg.

Table 11. Emerging Europe: Gross International Sovereign Bond Issuance, 2008:Q1–2010:Q1
(Millions of U.S. dollars)

| | 2008 | | | | 2009 | | | | 2010 | Total |
|-----------------|-------------|--------------|-------------|------------|-------------|-------------|-------------|-------------|--------------|--------------|
| | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | |
| Macedonia | 0 | 0 | 0 | 0 | 0 | 244 | 0 | 0 | 0 | 244 |
| Latvia | 608 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 608 |
| Croatia | 0 | 0 | 0 | 0 | 1050 | 0 | 1500 | 0 | 0 | 2550 |
| Romania | 0 | 1163 | 0 | 0 | 0 | 0 | 0 | 0 | 1429 | 2592 |
| Slovak Republic | 0 | 0 | 0 | 0 | 2648 | 0 | 0 | 0 | 0 | 2648 |
| Lithuania | 0 | 0 | 0 | 105 | 188 | 700 | 0 | 1500 | 2000 | 4493 |
| Czech Republic | 0 | 3106 | 0 | 0 | 0 | 1986 | 438 | 492 | 0 | 6022 |
| Hungary | 0 | 2668 | 0 | 0 | 0 | 0 | 1397 | 0 | 2000 | 6066 |
| Turkey | 2000 | 500 | 1500 | 0 | 1000 | 1500 | 1250 | 0 | 3000 | 10750 |
| Poland | 474 | 3311 | 0 | 0 | 1292 | 1003 | 4208 | 1828 | 6444 | 18560 |
| TOTAL | 3081 | 10748 | 1500 | 105 | 2480 | 9132 | 7293 | 5320 | 14873 | 54532 |

Source: Dealogic.

Some governments faced financing problems. Countries with relatively more developed financial markets (Czech Republic, Hungary, Poland, Russia, and Turkey) witnessed a reversal of international portfolio flows, which in the case of Hungary translated into a drying up of the domestic bond market and looming financing problems for the government as early as October 2008. In addition,

issuance of international sovereign bonds, which had already shown signs of weakness during the third quarter, came to a near-freeze during the fourth quarter when the total issuance volume for the region was only US\$105 million (Table 11). This reflected both supply and demand factors because governments in the region, such as Poland's, opted to stay away from the euro market hoping that the increase in spreads would only be temporary, and turned instead to the domestic market.

Banks experienced funding pressures. Many advanced-country banks, which were confronted with liquidity and capital shortages, sharply curtailed new lending or even deleveraged at the group level.

In a change of strategy, they advised their subsidiaries and branches in emerging Europe that new credit would henceforth need to be financed solely from an increase in local deposits.³³ This effect was compounded by the freezing of the international syndicated loans market (Table 12), as well as a halt in the growth of direct cross-border loans. As a reflection of these developments, the external positions of banks reporting to the Bank for International Settlements vis-à-vis countries in the region stagnated or started to decline (particularly in Estonia, Latvia, and Ukraine; see Table 13).

Banks' funding pressures were further exacerbated by deposit withdrawals in October and November of 2008, in particular, in Montenegro, Russia, and Ukraine (Table 14). Foreign parent banks responded by providing liquidity support when and where necessary, but deposit rates started to creep up from that moment on. Nevertheless, a banking crisis could not be avoided in Latvia and Ukraine, where depositor confidence faltered and large domestic banks had to be taken over and recapitalized by the government (Box 7).

Net capital inflows dropped, sometimes very sharply (Figures 52 and 53). However, they

Table 12. Emerging Europe: Volume of International Syndicated Loans Issuance to Banks in 2008¹
(Millions of U.S. dollars)

| | 2008:Q1 | 2008:Q2 | 2008:Q3 | 2008:Q4 |
|------------------------|-------------|-------------|-------------|-------------|
| Albania | 0 | 0 | 0 | 14 |
| Belarus | 43 | 123 | 162 | 15 |
| Bosnia and Herzegovina | 0 | 47 | 0 | 0 |
| Bulgaria | 22 | 430 | 299 | 43 |
| Croatia | 0 | 0 | 155 | 0 |
| Czech Republic | 0 | 0 | 0 | 0 |
| Estonia | 0 | 78 | 32 | 0 |
| Hungary | 279 | 0 | 0 | 0 |
| Latvia | 508 | 23 | 297 | 0 |
| Lithuania | 0 | 31 | 0 | 0 |
| Macedonia, FYR | 0 | 0 | 0 | 0 |
| Moldova | 31 | 0 | 0 | 26 |
| Montenegro | 0 | 0 | 0 | 0 |
| Poland | 78 | 16 | 244 | 0 |
| Romania | 51 | 16 | 0 | 316 |
| Russia | 1118 | 4239 | 2363 | 1877 |
| Serbia | 0 | 0 | 0 | 0 |
| Slovak Republic | 0 | 0 | 0 | 0 |
| Turkey | 0 | 1033 | 4947 | 1585 |
| Ukraine | 349 | 592 | 809 | 200 |
| TOTAL | 2479 | 6628 | 9309 | 4075 |

Source: Dealogic.

¹Data include loans from the EBRD, EIB, and IFC, and exclude loans from parent banks.

remained positive in most countries, with the notable exception of Russia where large net capital outflows occurred. The highly indebted Russian corporate sector took advantage of the inflexible exchange rate framework to hedge its foreign currency exposure while Russian banks built up their net foreign assets. Foreign investors meanwhile reversed their carry trades when rapidly declining oil prices pointed to a likely exchange rate depreciation for the ruble.

Table 13. External Positions of Western Banks vis-à-vis Emerging Europe
(Percent of 2009 GDP, adjusted for exchange rate changes)

| | Stocks | | | Flows | | Change in flows |
|------------------------|----------|----------|----------|-----------------|-----------------|-----------------|
| | 2007: Q3 | 2008: Q3 | 2009: Q3 | 2007:Q3–2008:Q3 | 2008:Q3–2009:Q3 | |
| Latvia | 71 | 89 | 80 | 18 | -10 | -28 |
| Bulgaria | 28 | 52 | 50 | 24 | -2 | -26 |
| Ukraine | 22 | 34 | 25 | 12 | -9 | -21 |
| Hungary | 58 | 75 | 72 | 17 | -3 | -20 |
| Lithuania | 43 | 60 | 58 | 17 | -2 | -19 |
| Estonia | 91 | 101 | 93 | 10 | -8 | -18 |
| Romania | 32 | 44 | 39 | 13 | -5 | -18 |
| Montenegro | 15 | 36 | 40 | 20 | 4 | -16 |
| Czech Republic | 22 | 28 | 24 | 6 | -4 | -10 |
| Poland | 22 | 29 | 28 | 8 | -1 | -9 |
| Turkey | 20 | 25 | 21 | 5 | -4 | -9 |
| Russia | 15 | 17 | 12 | 3 | -5 | -8 |
| Moldova | 7 | 12 | 11 | 5 | -1 | -6 |
| Serbia | 21 | 28 | 28 | 6 | 1 | -6 |
| Bosnia and Herzegovina | 23 | 28 | 29 | 5 | 2 | -3 |
| Croatia | 65 | 70 | 72 | 5 | 2 | -3 |
| Belarus | 5 | 6 | 5 | 1 | -1 | -2 |
| Macedonia, FYR | 4 | 7 | 7 | 2 | 0 | -2 |
| Albania | 4 | 6 | 10 | 1 | 5 | 4 |

Sources: BIS, *Locational Statistics*; IMF, World Economic Outlook database.

³³ Parent banks continued to support their subsidiaries, and when liquidity pressure emerged they temporarily increased their exposure.

Table 14. Emerging Europe: Private Sector Domestic Currency Deposits, Oct 2008–Mar 2009¹
(Index Sep 2008 =100)

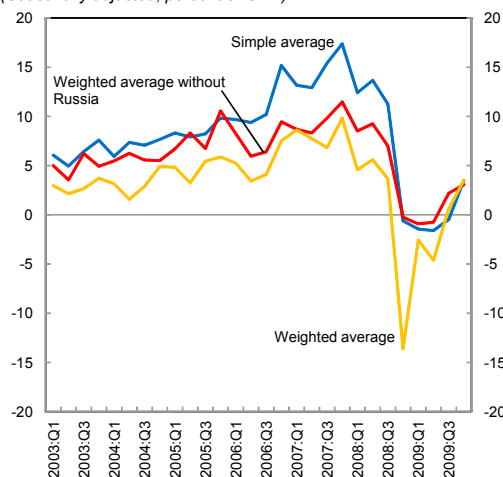
| | Oct 2008 | Nov 2008 | Dec 2008 | Mar 2009 |
|-------------------------|----------|----------|----------|----------|
| Montenegro ² | 92 | 86 | 83 | 69 |
| Ukraine | 91 | 86 | 85 | 74 |
| Russia | 96 | 86 | 82 | 76 |
| Moldova | 97 | 96 | 98 | 77 |
| Belarus | 99 | 96 | 99 | 77 |
| Macedonia, FYR | 99 | 92 | 94 | 81 |
| Latvia | 99 | 93 | 93 | 82 |
| Croatia | 96 | 96 | 100 | 87 |
| Lithuania | 94 | 92 | 96 | 89 |
| Serbia | 99 | 98 | 100 | 91 |
| Bosnia and Herzegovina | 92 | 90 | 95 | 91 |
| Albania | 97 | 96 | 98 | 93 |
| Estonia | 98 | 96 | 99 | 95 |
| Bulgaria | 96 | 95 | 104 | 100 |
| Romania | 96 | 96 | 102 | 101 |
| Czech Republic | 99 | 101 | 104 | 103 |
| Slovak Republic | 101 | 104 | 116 | 107 |
| Turkey | 105 | 106 | 109 | 111 |
| Hungary | 104 | 107 | 112 | 111 |
| Poland | 101 | 103 | 108 | 112 |

Sources: IMF, *International Financial Statistics*; Haver Analytics; and IMF staff calculations.

¹Deposits of households and nonfinancial corporations.

²Deposits in all currencies.

Figure 52. Emerging Europe: Net Capital Flows to Emerging Europe, 2003–09¹
(Seasonally adjusted, percent of GDP)

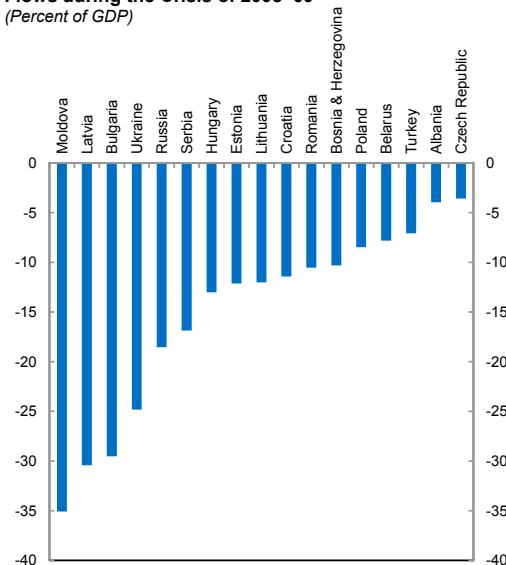


Source: IMF, *International Financial Statistics*.

¹Net capital flows are measured as the financial account balance, excluding reserve assets and IMF and EU balance of payment support, plus errors and omissions. Quarterly data are seasonally adjusted.

Exchange rates generally came under pressure (Figure 54). In countries such as the Czech Republic, Hungary, Poland, Romania, Russia, Serbia, and Ukraine, exchange rates fell sharply even while (some) central banks attempted to slow the pace of the depreciation. Most countries with a fixed exchange rate regime lost significant amounts of reserves. The evolution of an exchange rate pressure index based on monthly changes in nominal

Figure 53. Emerging Europe: Reduction of Net Capital Flows during the Crisis of 2008–09¹
(Percent of GDP)



Sources: IMF, *International Financial Statistics* and World Economic Outlook database.

¹Net capital flows are measured as the financial account balance, excluding reserve assets and IMF and EU balance of payment support, plus errors and omissions. Change shown is the maximum reduction of capital flows as a percent of GDP during 2008–09. Quarterly data are seasonally adjusted.

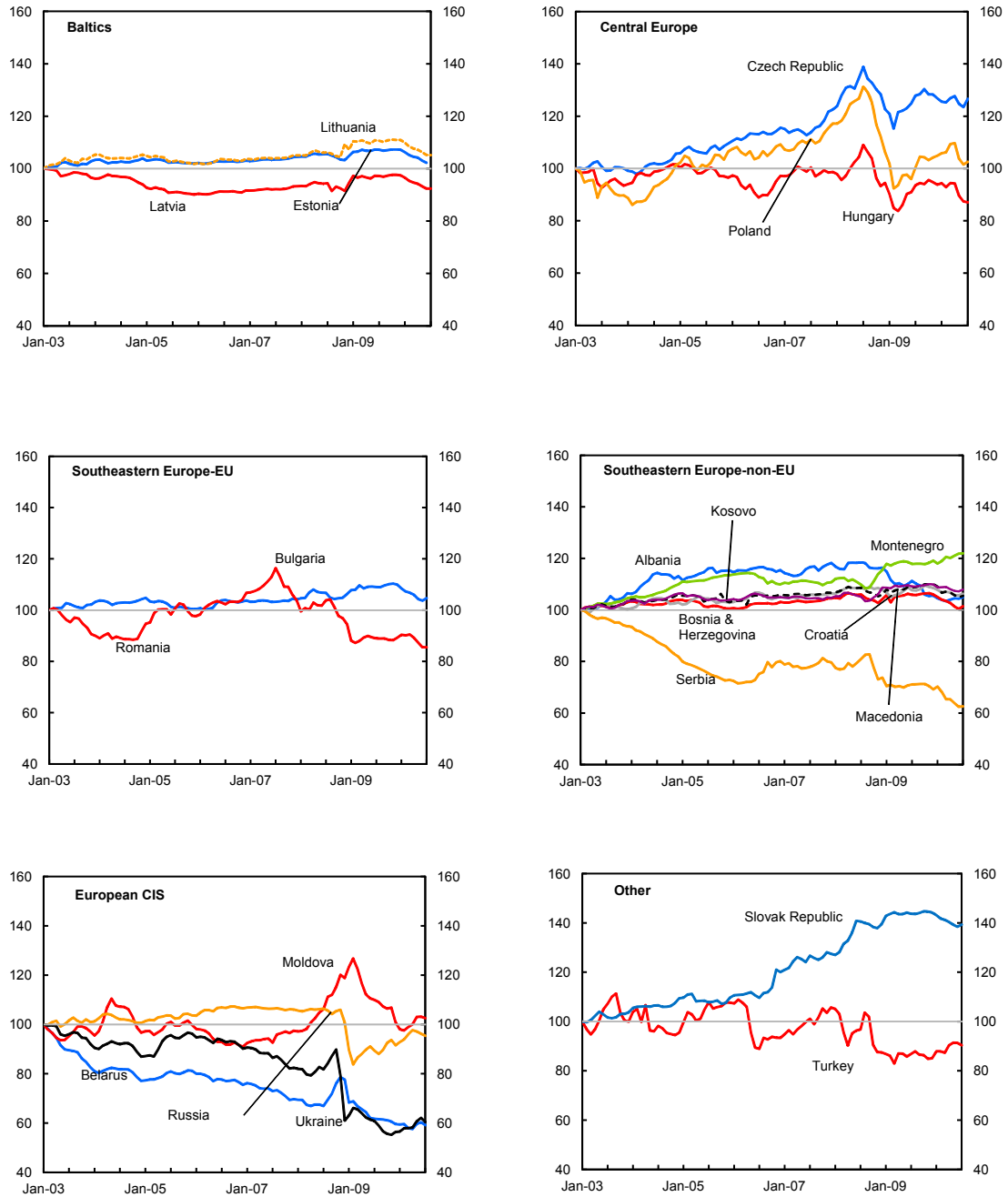
exchange rates and in international reserves suggests that pressures were broad-based in October 2008 (Table 15). By the end of November pressures were greatest in Latvia and Ukraine, perhaps owing to the brewing banking crises in these countries. Early pressures in October on the Hungarian forint were relieved thanks to the prompt corrective actions of the government in the context of an IMF-supported program (see the next section), while Russia first engineered a controlled and very gradual depreciation of the ruble during the last quarter of 2008, before letting the exchange rate go in the first quarter of 2009. But in the end, only Ukraine suffered from both an exchange rate and banking crisis.

The Impact on the Real Economy

The collapse in global trade soon led to a very sharp drop in exports. For large commodity exporters such as Russia (oil) and Ukraine (steel), the decline in export volumes was compounded by the sharp correction of commodity prices.

At the same time, domestic demand was affected by a sharp slowdown in credit growth and the

Figure 54. Emerging Europe: Nominal Effective Exchange Rates
(Index August 2008 = 100)



Source: IMF, Information Notice System.

Box 7. Banking Problems in Emerging Europe during 2008–09

In looking for instances of systemic banking crises in emerging Europe, we follow Laeven and Valencia's (2010) definition. They define a banking crisis as a situation in which at least three types of significant public interventions were necessary to stabilize a banking system (see table). According to this methodology, only two countries in emerging Europe, Latvia and Ukraine, had a systemic banking crisis during 2008–09. Two other countries, Hungary and Russia, had some symptoms of a systemic banking crisis but they were of a lesser magnitude.

Banking Crises in Emerging Europe during 2008–09

| Country | Extensive liquidity support | Significant restructuring costs | Significant asset purchases | Significant guarantees on liabilities | Significant nationalizations |
|-------------------------|-----------------------------|---------------------------------|-----------------------------|---------------------------------------|------------------------------|
| Systemic crises | | | | | |
| Latvia | √ | | | √ | √ |
| Ukraine | √ | √ | | | √ |
| Borderline cases | | | | | |
| Hungary | √ | | | √ | |
| Russia | √ | | | √ | |

Source: Laeven and Valencia (2010).

Note: Systemic banking crises are defined as cases where at least three of the listed interventions took place, whereas borderline cases almost met the definition of systemic crisis.

Latvia—Latvia's banking sector was particularly vulnerable to a sudden stop in capital flows because of its high loan-to-deposit ratio and the overheating of the domestic economy long before the Lehman Brothers bankruptcy. From end-August to end-November 2008, systemwide banking deposits fell by 10 percent. Parex Bank, the largest domestic bank and second largest bank overall, faced the greatest problems, losing one-fourth of its deposits. On November 10, the Latvian authorities passed a Parex-specific package of measures consisting of a state guarantee covering certain existing and new loans, a one-year government deposit to support the bank's immediate liquidity needs, and subordinated loans to strengthen its capital base. Initial responses to Parex Bank's growing illiquidity failed to stem the deposit run. On December 1, the authorities also imposed a partial freeze limiting withdrawal amounts from large noncommercial private deposits, then on December 5, they completed the takeover of 85 percent of the shares. On December 23, the European Commission approved a Latvian support scheme providing guarantees to eligible banks to ensure their access to financing.

An agreement was reached in March 2009 to reschedule Parex's syndicated loans. The bank was then recapitalized in May 2009 by converting government deposits into equity and subordinated debt. Deposit outflows then stabilized. The European Bank for Reconstruction and Development (EBRD) provided loans and acquired a 25 percent stake in September 2009. In October 2009, deposit withdrawal restrictions were partially lifted and the government made another injection into the bank in exchange for nonvoting shares. On August 1, 2010, Parex was split into a good bank (Citadele) and a bad bank. There have not been any disruptions to date. The government also provided two capital injections into state-owned Mortgage and Land Bank in 2009.

Ukraine—Large banking sector risks were built up during the boom years as a result of the exceptionally rapid credit growth that brought the loan-to-deposit ratio to 140 percent. Major strains started showing in the banking system in the fall of 2008. After the sixth largest bank (Prominvest Bank) was put under receivership, a widespread deposit outflow began. The authorities responded by imposing limits on early withdrawal of time deposits, which slowed the outflow, but confidence remained very fragile.

Note: The main author of this box is Jérôme Vandenbussche.

Persistent concerns led to the outflow of over 20 percent of deposits between October 2008 and March 2009, which accelerated the capital flight and devaluation pressures, with severe repercussions on the FX-denominated loan books. In response, the National Bank of Ukraine (NBU) extended large-scale liquidity support to the banking system. A forward-looking diagnostic study of a number of large banks was performed during the fourth quarter of 2008 and revealed large capital deficiencies. Following completion of the study, shareholders of all the foreign-owned banks injected the necessary capital as did those of most of the domestically owned banks. However, for five of the domestically owned banks the shareholders were unable or unwilling to bring in additional capital and the banks (Ukrprombank, Nadra Bank, Ukrgasbank, Rodovid Bank, and Kyiv Bank) were put under administration. For three of them a resolution strategy was implemented, including recapitalization by the government and appointment of a new management team. Ukrprombank is currently being liquidated, while the resolution of Nadra Bank is still pending.

Aggregate deposits stabilized in the spring of 2009, allowing the authorities to lift the ban on the early withdrawal of time deposits. A second diagnostic study for the smaller banks was completed in the spring of 2009. The shareholders of 27 banks undertook to provide additional capital by December 2009. As of the first quarter of 2010, the NBU was in the process of finalizing resolution strategies for those banks that were unable to raise the necessary capital.

Hungary—Hungary's largest bank, OTP, is listed on the Budapest Stock Exchange, has a dispersed ownership structure and a significant presence throughout emerging Europe through local subsidiaries. During the boom years, OTP had relied more and more on international borrowing at arm's length. When the crisis hit the region, OTP thus was at risk of loss of both investor and depositor confidence. To support confidence, the government issued on October 22, 2008, a political commitment for a blanket guarantee on all bank deposits.

As part of the IMF-supported program, the authorities then created in November 2008 a Capital Base Enhancement Fund, making available new capital to credit institutions in exchange for preferential shares. The scheme was open to all credit institutions of systemic importance on the market. It was extended twice and is now scheduled to expire on December 31, 2010. As of August 2010, only one credit institution, the mortgage lender FHB, had taken advantage of the recapitalization scheme.

In addition, in March 2009, Hungary enacted a liquidity scheme aimed at providing foreign currency loans to Hungarian financial institutions to enable them to maintain lending to the real economy in spite of the severe domestic and international liquidity shortage. Three Hungarian banks without a foreign parent (OTP, FHB, and MFB, the state-owned development bank) benefited from the scheme.

Russia—The sudden change in exchange rate expectations triggered by the collapse in oil prices in September 2008 led Russian banks and firms to seek to hedge their foreign currency exposures, exacerbating pressure on the ruble. The banking system was put under additional pressure by deposit outflows and some bank failures early on. Several small banks (Kit Finance, Svyaz Bank, Globex Bank, and Sobinbank) had to be rescued by state-owned banks or companies between mid-September and mid-October 2008.

On October 20, the government announced that it would widen the remit of the Deposit Insurance Agency (DIA) by injecting budgetary funds and that these funds would be used to bail out medium-sized banks. Soon after, on October 29, VEFK Bank was put under temporary administration. In April 2009, it received an equity injection and a subordinated loan from the DIA.

The authorities' efforts to stabilize the banking system during the fourth quarter of 2008 were aimed at providing significant liquidity while keeping the exchange rate stable to offset the abrupt loss of foreign financing. Starting in October 2008, the government auctioned excess budgetary funds to banks, while the Central Bank of Russia (CBR) provided an ever-widening array of liquidity facilities, including uncollateralized loans. The CBR also

...continued

Box 7. (concluded)

offered guarantees for interbank lending to qualifying banks, covering losses in the event that the license of a counterparty was withdrawn. In March 2009, another bank recapitalization scheme was announced which entailed an exchange of preferred shares for government bonds. With an improvement in overall bank liquidity, however, demand for this facility was relatively subdued, and it has been effectively shelved.

By and large, the Russian authorities' efforts proved successful in stabilizing their financial system. By late June 2009, with renewed inflows, local liquidity conditions and interbank lending had improved, while the stock of uncollateralized loans provided by the CBR at the height of the crisis was being rapidly repaid ahead of schedule.

Table 15. Emerging Europe: Exchange Rate Pressure Index, September 2008–May 2009

| Country | Sep.08 | Oct.08 | Nov.08 | Dec.08 | Jan.09 | Feb.09 | Mar.09 | Total |
|------------------------|--------|--------|--------|--------|--------|--------|--------|-------|
| Russia | 2.9 | 3.2 | 2.6 | 5.5 | 7.8 | 5.5 | -0.8 | 26.8 |
| Poland | 4.4 | 6.7 | 2.6 | 3.3 | 3.4 | 2.2 | 0.1 | 22.6 |
| Ukraine | -0.3 | 2.1 | 5.0 | 9.4 | 1.7 | 0.2 | 1.0 | 19.1 |
| Serbia | 1.4 | 6.9 | 4.7 | 0.3 | 5.6 | 0.4 | -0.4 | 19.0 |
| Romania | 2.8 | 4.5 | 1.6 | 0.2 | 6.0 | 1.2 | -0.5 | 15.8 |
| Croatia | 2.2 | 6.4 | 1.9 | -0.7 | 5.9 | 2.3 | -2.3 | 15.6 |
| Albania | 2.7 | 5.0 | -1.4 | -1.7 | 5.0 | 3.4 | 1.6 | 14.7 |
| Bulgaria | 2.0 | 6.0 | 2.0 | -0.1 | 4.2 | 1.2 | -1.7 | 13.8 |
| Moldova | 0.2 | 1.8 | -0.2 | 1.7 | 2.1 | 0.8 | 5.0 | 11.5 |
| Lithuania | 2.9 | 3.9 | 4.8 | -3.9 | 2.5 | 2.5 | -1.6 | 11.2 |
| Czech Republic | 2.3 | 3.8 | 1.8 | -0.3 | 4.0 | 1.5 | -3.0 | 9.9 |
| Latvia | 0.0 | 5.6 | 6.0 | -4.6 | 1.7 | -0.2 | 1.3 | 9.7 |
| Bosnia and Herzegovina | 2.1 | 5.5 | 2.0 | -3.5 | 2.8 | 1.6 | -1.9 | 8.6 |
| Macedonia, FYR | 1.4 | 3.2 | 2.7 | -1.5 | 1.6 | 1.5 | -0.3 | 8.5 |
| Estonia | 3.4 | 1.5 | 3.4 | -2.0 | 2.5 | 1.7 | -1.9 | 8.5 |
| Hungary | 2.0 | 5.3 | -2.3 | -2.7 | 3.7 | 2.6 | -2.1 | 6.5 |
| Turkey | 0.1 | 2.7 | 0.9 | 0.7 | 1.0 | -0.2 | 0.8 | 5.9 |
| Belarus | -0.2 | -1.5 | 0.0 | 3.2 | 6.5 | -0.7 | -1.4 | 5.9 |

Sources: IMF, *International Financial Statistics*; and IMF staff calculations.

Note: The index is the sum of the deviation of monthly changes in the nominal exchange rate vis-à-vis the Special Drawing Right (SDR) from its mean and the deviation of the monthly change in international reserves in SDRs from their mean. Both changes are normalized by their standard deviation. A higher index indicates more pressure.

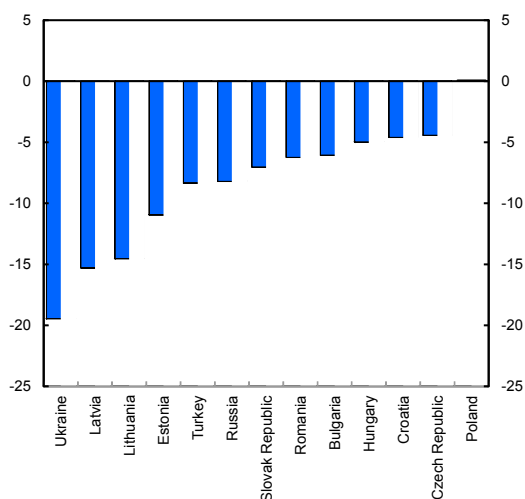
bursting of the real estate bubbles. The domestic demand decline was particularly pronounced in the Baltics and Ukraine, driven by a sharp fall in both consumption and investment. In the Czech Republic and Poland, which had been less affected by the credit-fueled domestic demand boom in the region, consumption remained stable or even marginally increased, thereby cushioning the overall domestic demand fall.

As a result, output in most countries declined very sharply (Figure 55). Seasonally adjusted GDP in Latvia, Lithuania, and Ukraine contracted by

16 percent, 15 percent, and 19 percent, respectively, between September 2008 and March 2009. A few countries escaped severe recession—Belarus, Macedonia, and Poland were only mildly affected by the downturn, while Albania continued to grow. The output decline in emerging Europe as a whole was larger than in other EMC regions, mainly because capital inflows corrected from a higher level in emerging Europe than elsewhere.³⁴

³⁴ Emerging market countries were primarily affected through financial channels (Blanchard, Das, and Faruqee, 2010).

Figure 55. Emerging Europe: Real GDP Growth, 2008:Q3–2009:Q1
(Seasonally adjusted, in percent)



Sources: Eurostat; and Haver Analytics.

Policy Reactions

To contain the crisis, governments took a host of policy measures. Emergency measures were taken to support confidence in the banking sector. Rapid adjustments in monetary and fiscal policies were also implemented. In several cases, external funding was secured through IMF-supported programs and/or swaps and other arrangements with western European central banks. The policy mix depended on country-specific pressure points and constraints on policies.

Stabilizing the financial sector was key

As in the United States and western Europe, stabilizing the financial sectors was a priority. The financial sectors in emerging Europe benefited from measures taken by home country authorities in western Europe as well as both conventional and unconventional policy measures taken by the ECB and the Riksbank. Domestic policy measures also helped maintain the confidence of depositors and debt holders. These measures included loosening of reserve requirements, introduction of new domestic and foreign liquidity provision operations, debt guarantee schemes, as well as (almost universally)

increases in deposit insurance coverage. Many supervisors strongly recommended a zero-dividend policy and sometimes requested preemptive recapitalizations based on stress tests (as in Romania and Ukraine). The authorities also intervened directly in selected individual distressed institutions to provide them with fresh liquidity or capital (as in Latvia, Montenegro, Russia, and Ukraine). Foreign currency liquidity support was sometimes made possible thanks to swap arrangements with western European countries' central banks, such as Estonia's arrangement with the Swedish Riksbank, Latvia's arrangement with Sweden and Denmark's central banks, and Hungary's and Poland's arrangements with the Swiss National Bank. The ECB entered into repo agreements with the Hungarian National Bank in October 2008 and with the National Bank of Poland in November 2008.³⁵

Monetary and fiscal policy reactions differed: some countries had to give priority to financial market stabilization, while others could provide stimulus

Adjustments in official policy interest rates depended on the strength of downward exchange rate pressures. Where fast exchange rate depreciations or devaluations would have threatened private sector balance sheets because of direct or indirect foreign exchange risk, policy rates were temporarily increased (as in Croatia, Hungary, Russia, Serbia, and Ukraine) or put on hold (as in Latvia and Romania) in spite of the severity of the shock to the real economy. In other countries, policymakers were able to decrease policy rates (Czech Republic, Poland, and Turkey). Monetary and exchange rate policy frameworks were maintained, with the exception of Belarus, Russia, and Ukraine.³⁶

³⁵ See Allen and Moessner (2010).

³⁶ Russia devalued by about 20 percent and substantially widened the band for the ruble vis-à-vis the currency basket; following a 32 percent devaluation, Ukraine's de facto exchange rate regime was reclassified to "managed floating" from a

(continued)

The immediate fiscal policy response depended on precrisis fiscal buffers, the exchange rate regime, and the position in the political cycle. Countries with an already fragile fiscal situation, such as Hungary, accelerated fiscal adjustment measures. For the Baltic countries, maintaining the credibility of their pegged exchange regimes required large-scale consolidation measures despite low public debt, and even fiscal reserves in the case of Estonia. By contrast, others were able to let automatic stabilizers work or even allow discretionary fiscal relaxation. Poland chose to only partially offset the effects of previously planned tax cuts in 2008 and 2009. Russia and Turkey adopted fiscal stimulus packages. Bulgaria drew on its fiscal buffers and postponed most of the adjustment until the summer of 2009 when a new government took office. The Czech government put in place expansionary anticrisis measures in 2009, but quickly reversed course with the 2010 budget.

International official financing provided relief

Several countries secured IMF-supported programs. Large, front-loaded financial assistance packages from the IMF, in close cooperation with the EU and other multilateral institutions, provided external funding and smoothed the required policy adjustments in several countries. The design of the underlying economic programs in each country reflected its circumstances—the amount of fiscal space available and the nature of the exchange rate regime—and the preferences of its authorities (Box 8).³⁷

pegged exchange rate regime; and Belarus devalued its currency by about 20 percent and repegged to a euro-dollar-Russian ruble basket (instead of the dollar) in early January 2009.

³⁷ Compared with previous crisis programs supported by the IMF, these programs differed in a number of key features: (i) financing was generally larger and more front-loaded, allowing countries to maintain supportive macroeconomic policies whenever possible; (ii) program conditionality was considerably streamlined, focusing more on measures addressing the vulnerabilities that magnified the impact of the shock; and (iii) top priority was given to financial sector stabilization, including guarantee schemes backed by IMF

(continued)

Why Was a Meltdown Avoided?

Although the crisis was deep, the large-scale regional banking and currency crisis that some had feared was avoided. In October 2008, market observers and analysts started worrying that western European parent banks would soon start to shrink their emerging European subsidiaries' balance sheets or even walk away from their subsidiaries' commitments, putting severe pressure on exchange rates and/or international reserves.³⁸ Investment banks and rating agencies worried that banking sector losses in emerging Europe would be so large that the soundness of several parent banks would be jeopardized.³⁹ Despite these worries, there were no banking panics, and, unlike in many advanced economies, governments did not have to step in to save entire banking systems. Except for Ukraine, western European parent banks maintained their presence in emerging Europe despite a decline in profitability of their operations in the region. There was no collapse of any fixed exchange rate regimes either—which is what had often happened in earlier crises in emerging economies. It was widely believed that if Latvia had broken its hard peg, contagion would have spread to other countries with a currency board. But in the end, Latvia managed to maintain its peg, although it suffered the largest recession in the region in doing so.

Domestic Policy Actions Played a

Role . . .

Much of the relative calm was due to decisive domestic policy implementation (see above). Concerns had been voiced in early 2009 that some of the new democracies in emerging Europe would not be able to withstand a sharp economic downturn, harsh adjustment measures, and dashed

resources, initiatives to enhance bank supervision, and emergency liquidity support.

³⁸ See, for example, Economic Intelligence Unit (April 2009), Citigroup (2008), and Deutsche Bank (2008).

³⁹ See, for example, Merrill Lynch (2008), Morgan Stanley (2008), Barclays Capital (2009), and Fitch Ratings (2009).

Box 8. IMF-Supported Programs

Several countries turned out to be particularly vulnerable from the beginning of the crisis and entered into an IMF-supported program in the fourth quarter of 2008.¹

- Hungary's foreign exchange and government securities markets were particularly affected because of the country's underlying stock vulnerabilities (public and external debt) and the high level of development and integration of these markets with the rest of the EU. In addition, the developed Hungarian FX swap market quickly froze. Hungary entered into an IMF program in November 2008.
- Substantial problems in Ukraine's large steel sector (due to sharply lower external demand), growing concerns about the ability of its banks and firms to roll over existing international credit lines, and troubles at its sixth largest bank weakened confidence in the country's banking system and currency. Ukraine entered into an IMF program in November 2008. In July 2010, a new Stand-By Arrangement (SBA) was approved, with a cancellation of the old program.
- In Latvia, the availability of external finance fell very sharply, owing to global developments and downgrades to Latvia's sovereign credit rating. The country's largest domestic bank and second largest bank (Parex Bank) suffered a significant outflow of deposits after September 2008, compelling the Latvian authorities to partially nationalize the institution and provide liquidity support. Other domestic banks and firms found it increasingly difficult to roll over their international liabilities. Latvia entered into an IMF program in December 2008.
- Similar to other countries in the region, Serbia had an overheated economy. Its exchange rate came under pressure, households withdrew some of their deposits, and external financing became more difficult. The Serbian authorities decided to enter into a precautionary program with the IMF in January 2009.
- Prices for Belarus's commodity exports fell, and demand for its products dropped off. Lingering effects of past booming domestic demand and the rapid appreciation of the U.S. dollar, to which it pegged its currency, put further pressure on the country's trade balance. At the same time, Belarus faced much less accessible and more expensive credit markets. It first used its currency reserves as a temporary response, then started negotiating an IMF program in late October 2008. The program was officially approved in January 2009. One of the prior actions was a one-off devaluation by 20 percent of the Belarusian ruble.

As economic conditions had worsened sharply, several other countries sought assistance from the IMF in the second quarter of 2009:

- Serbia augmented the size of its program in May 2009.
- In Romania, capital inflows had slowed sharply and international reserves had begun to decline. The Romanian authorities felt that the effects of the global crisis had not been especially pronounced in Romania compared with elsewhere in the region, but that the vulnerability to a sudden drop in capital flows was higher due to the weak fiscal position and high current account deficit. They entered into an IMF program in May 2009.

...continued

Note: The main author of this box is Jérôme Vandenbussche.

¹ As discussed in the main text, many of these programs were also supported by other international institutions such as the European Union. See also Table 16.

Box 8. (concluded)

- Notwithstanding its favorable fundamentals and the authorities' strong policy response, Poland's economy was being severely affected by the global financial crisis through both the export and financial sector channels. Poland had maintained access to international capital markets but with foreign direct investment (FDI) coverage of the current account deficit declining rapidly and continued portfolio outflows, the zloty had come under significant pressure and depreciated by about 35 percent against the euro in the fourth quarter of 2008. Poland received a Flexible Credit Line from the IMF in May 2009.
- In Bosnia, the rapidly deteriorating external and financial environment created substantial external and budget financing needs, thus necessitating a rapid adjustment. Agreement on an IMF program was reached in May 2009 (the program was officially approved in July).
- In Moldova, falling demand in trading partners led to a severe downturn in exports and remittances. Domestic demand collapsed, causing GDP contraction and deflationary pressures. External and budget financing shortfalls due to a decline in capital inflows and structural fiscal deterioration necessitated a large adjustment. Arrangements under the Extended Credit Facility and the Extended Fund Facility were approved in January 2010.
- Kosovo's economic performance has been hampered severely by infrastructure bottlenecks, and rapid expenditure has undermined fiscal sustainability. The IMF program for Kosovo was approved in July 2010 to help restore fiscal sustainability and safeguard financial stability.

A summary of key program features for each country is provided in the table below.

IMF Support for Countries Affected by the Global Crisis (As of September 10, 2010)

| Country | IMF Loan Size, Approval Date | Key Objectives and Policy Actions | Additional Information ¹ |
|---------|--|--|---|
| Hungary | \$15.7 billion, November 2008 | <p>Address the main pressure points in public finances and the banking sector:</p> <ul style="list-style-type: none"> • Substantial fiscal adjustment to provide confidence that the government's financing need can be met in the short and medium term. • Up-front bank capital enhancement to ensure that banks are sufficiently strong to weather the imminent economic downturn, both in Hungary and in the region. • Large external financing assistance to minimize the risk of a run on Hungary's debt and currency markets. | <p>In addition to financial assistance from the IMF, the program is supported by \$8.4 billion from the European Union and \$1.3 billion from the World Bank.</p> <p>On completion of the third review in September 2009, the arrangement was extended for 6 months, with a rephrasing of the undisbursed amount.</p> <p>The fifth review of the program was completed in March 2010. The authorities have announced their intention not to draw additional resources. www.imf.org/external/country/HUN/index.htm</p> |
| Ukraine | \$16.9 billion, November 2008 \$15.2 billion, July 2010 | <ul style="list-style-type: none"> • Help the economy adjust to the new economic environment by allowing the exchange rate to float, aim to achieve a balanced budget in 2009, phase in energy tariff increases, and pursue an incomes policy that protects the population while slowing price increases. • Restore confidence and financial stability (recapitalizing viable banks and dealing promptly with banks with difficulties). • Protect vulnerable groups in society (an increase in targeted social spending to shield vulnerable groups). • Restore confidence and fiscal sustainability by reducing the general government deficit to 2.5 percent of GDP by 2012 and setting public debt firmly on a downward path below 35 percent by 2015. • Initiate reforms to modernize the gas sector and phase out Naftogaz's deficit, including through gas tariff increases and a price mechanism that depoliticizes price setting of public utilities. • Restore and safeguard banks' soundness through completion of recapitalization plans by end-2010 and strengthened supervision. • Develop a more robust monetary policy framework focused on domestic price stability with greater exchange rate flexibility under a more independent National Bank of Ukraine. | <p>November 2008 SBA was canceled and replaced by a new SBA with the new government in July 2010. Under the November 2008 SBA, \$10.5 billion was disbursed. www.imf.org/external/country/UKR/index.htm</p> |
| Latvia | \$2.4 billion, December 2008 | <ul style="list-style-type: none"> • Take immediate measures to stem the loss of bank deposits and international reserves. • Take steps to restore confidence in the banking system in the medium term and to support private debt restructuring. • Adopt fiscal measures to limit the substantial widening in the budget deficit and prepare for early fulfillment of the Maastricht criteria in view of euro adoption. • Implement income policies and structural reforms that will rebuild competitiveness under the fixed exchange rate regime. | <p>In addition to financial assistance from the IMF, the program is supported by €3.1 billion from the European Union, €1.8 billion from the Scandinavian Countries (Denmark, Finland Norway, and Sweden.), €0.2 billion from Poland, €0.1 billion from the Czech Republic, €0.1 billion from Estonia, €0.4 billion from the World Bank, and \$0.1 billion from the European Bank for Reconstruction and Development .</p> <p>The third review of the program was completed in July 2010. The arrangement was extended by 9 months, until December 2011. www.imf.org/external/country/LVA/index.htm</p> |
| Belarus | \$2.5 billion, January 2009; augmented to \$3.5 billion in June 2009 | <ul style="list-style-type: none"> • Facilitate an orderly adjustment to external shocks and address pressing vulnerabilities. • Adopt a new exchange rate regime to improve external competitiveness—a steep devaluation of the rubel against the dollar of 20 percent and a simultaneous switch to a currency basket with a trading band of ±5 percent. • Support policies to strengthen the monetary framework, balance the budget, and impose strict public sector wage restraint. | <p>The fourth and final review was completed in March 2010. www.imf.org/external/country/BLR/index.htm</p> |

| Country | IMF Loan Size, Approval Date | Key Objectives and Policy Actions | Additional Information ¹ |
|------------------------|---|--|---|
| Serbia | \$0.5 billion, January 2009; augmented to \$4.0 billion in May 2009 | <ul style="list-style-type: none"> • Tighten the fiscal stance in 2009–10: limit the 2009 general government deficit to 1¼ percent of GDP and adopt further fiscal consolidation in 2010. The tightening involves strict income policies for containing public sector wage and pension growth and a streamlining of non-priority recurrent spending, which helps create fiscal space to expand infrastructure investment. • Strengthen the inflation-targeting framework while maintaining a managed floating exchange rate regime. | <p>Since the program was designed, Serbia's external and financial environment has deteriorated substantially. In response, the authorities have (1) raised fiscal deficit targets for 2009–10 while taking additional fiscal measures, (2) received commitments from main foreign parent banks that they would roll over their commitments to Serbia and keep their subsidiaries capitalized, and (3) requested additional financial support from international financial institutions and the EU. The fifth review was completed in September 2010.</p> <p>www.imf.org/external/country/SRB/index.htm</p> |
| Romania | \$17.1 billion, May 2009 | <ul style="list-style-type: none"> • Cushion the effects of the sharp drop in private capital inflows while implementing policy measures to address the external and fiscal imbalances and to strengthen the financial sector: • Strengthen fiscal policy to reduce the government's financing needs and improve long-term fiscal sustainability. • Maintain adequate capitalization of banks and liquidity in domestic financial markets. • Bring inflation within the central bank's target. | <p>IMF support is coordinated with the EU and the World Bank. The fifth review was completed in September 2010.</p> <p>www.imf.org/external/country/ROU/index.htm</p> |
| Poland | \$20.6 billion Flexible Credit Line, May 2009 | The Flexible Credit Line (FCL) is an instrument established for IMF member countries with very strong fundamentals, policies, and track records of implementation. Access to the FCL is not conditional on further performance criteria. | <p>The arrangement for Poland, which has been kept precautionary, has helped stabilize financial conditions there, leaving room for accommodative macroeconomic policies and improving access to market financing.</p> <p>www.imf.org/external/country/POL/index.htm</p> |
| Bosnia and Herzegovina | \$1.6 billion, July 2009 | Safeguarding the currency board arrangement by a determined implementation of fiscal, income, and financial sector policies. | <p>The staff-level agreement for the second and third reviews was reached in September 2010.</p> <p>www.imf.org/external/country/BIH/index.htm</p> |
| Moldova | \$0.6 billion Extended Credit Facility and Extended Fund Facility, January 2010 | <ul style="list-style-type: none"> • Reverse the structural fiscal deterioration that occurred in 2008–09 while safeguarding funds for public investment and priority social spending. • Keep inflation under control while rebuilding foreign reserves to cushion the economy from external shocks. • Ensure financial stability by enabling early detection of problems and strengthening the framework for bank rehabilitation and resolution. • Raise the economy's potential through structural reforms. <p>To promote poverty reduction, the program sets a floor on priority social spending. Moreover, social assistance spending will be increased by 36 percent in 2010 relative to 2009 to support vulnerable households.</p> | <p>The first review was completed in July 2010.</p> <p>www.imf.org/external/country/mda/index.htm</p> |
| Kosovo | \$139.6 million, July 2010 | <p>Achieving fiscal stabilization, while accommodating large infrastructure investments, and safeguarding financial sector stability:</p> <ul style="list-style-type: none"> • Limit the overall budget deficits in 2010 to 3.4 percent of GDP by raising select excise taxes and by restraining current primary spending in 2010 to 18.7 percent of GDP and holding it broadly constant thereafter. • Bolster the government's bank balances held with the Central Bank of Kosovo (CBK) to provide scope for emergency liquidity assistance (ELA), and provide the CBK with a mandate for ELA, and further strengthen the banking system. • Improve the financial position of the energy sector to limit its costs to the budget. | <p>Kosovo became the 186th member of the IMF on June 29, 2009. The first review is scheduled in December 2010.</p> <p>www.imf.org/external/country/uvk/index.htm</p> |

¹ More detailed information available at indicated Web sites.

hopes of convergence. In reality, political institutions proved much stronger than feared, thanks in part to EU membership or prospects of EU accession. The resilience was remarkable, especially in the fixed exchange rate countries.

. . . As Did International Support

Large-scale and timely international financial support was also crucial in supporting market confidence and avoiding sharp currency depreciations (Table 16). The global financial crisis in emerging Europe reshaped the role played by international financial institutions (IFIs) in crisis prevention and resolution. The IMF—for EU members jointly with the EU—acted quickly to extend large front-loaded loans to the affected countries. This was made possible partly by reforms to the IMF’s lending framework undertaken at the onset of the global financial crisis.⁴⁰ Early involvement of the IMF before the collapse of currencies reduced tail risks and helped bring down borrowing costs for emerging markets that had spiked following the bankruptcy of Lehman Brothers. The EU enhanced access to its structural funds as part of the European Economic Recovery Plan of December 2009, concluded parallel programs with EU member countries, which substantially increased overall financing, and extended its support to nonmember countries with fiscal support and broad support for banks and small and medium-sized enterprises. The World Bank, the European Bank for Reconstruction and Development (EBRD), and the European Investment Bank (EIB) also stepped up their support to the affected countries in bank restructuring. In some cases, bilateral financial support was provided by other European countries.⁴¹

⁴⁰ The IMF increased its resources for loans from about \$250 billion to \$750 billion, following the April 2009 G-20 summit in London. The IMF also conducted a major overhaul of its lending framework by offering higher loan amounts and further tailoring loan terms to countries’ circumstances.

⁴¹ The Nordic countries, the Czech Republic, Estonia, and Poland provided financial support to Latvia.

Table 16. Financing Packages for Emerging European Countries Under IMF-Supported Programs¹

(As of August 2010, billions of U.S. dollars)

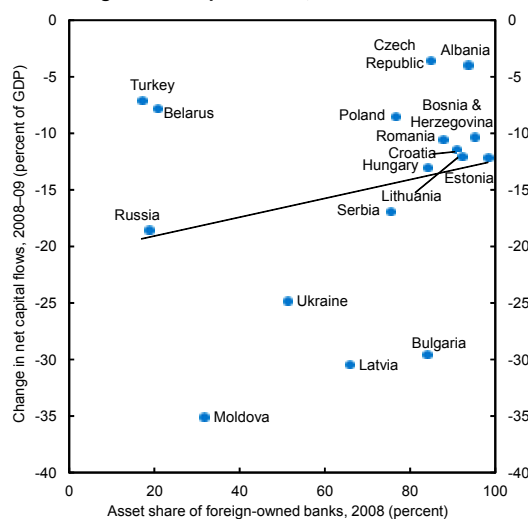
| | IMF | EU | WB | Other | Total |
|------------------------|-------------|-------------|------------|------------|--------------|
| Kosovo | 0.1 | 0.1 | 0.1 | 0.0 | 0.3 |
| Moldova | 0.6 | 0.3 | 0.3 | 0.1 | 1.3 |
| Bosnia and Herzegovina | 1.6 | 0.1 | 0.2 | 0.1 | 2.0 |
| Serbia, Republic of | 4.0 | 0.2 | 0.4 | 0.0 | 4.6 |
| Belarus | 3.5 | 0.3 | 0.2 | 1.0 | 5.0 |
| Latvia | 2.4 | 4.4 | 0.6 | 3.3 | 10.6 |
| Hungary | 15.7 | 8.4 | 1.3 | 0.0 | 25.4 |
| Romania | 17.1 | 6.6 | 1.3 | 1.3 | 26.3 |
| Ukraine ² | 25.7 | 1.3 | 3.4 | 2.1 | 32.5 |
| TOTAL | 70.7 | 21.7 | 7.7 | 7.8 | 107.9 |

Source: IMF staff calculations.

¹Figures indicate programmed amount, unless indicated.

²For Ukraine, IMF column includes the sum of two Stand-By Arrangement (SBA) programs (i.e., the amount actually disbursed under the November 2008 SBA plus the amount committed under the July 2010 SBA).

Figure 56. Emerging Europe: Foreign Bank Ownership and Change in Net Capital Flows, 2008–09



Sources: EBRD; IMF, *International Financial Statistics*; and IMF staff calculations.

The Western European Banks’ Presence Contributed to Financial Stability during the Crisis

Although western European banks played a major role in providing the capital flows to emerging Europe, they also helped stabilize the region during the crisis (Figure 56).⁴² Outflows were more contained in countries with higher penetration of foreign banks, and some countries even experienced

⁴² The EBRD’s 2009 Transition Report also argued that there is little evidence that financial integration per se caused the credit boom.

inflows. Contrary to the skeptics' early concerns, all foreign banks remained in the region, which had a stabilizing effect.⁴³

Although western banks generally stopped providing new financing to their subsidiaries, they broadly maintained their exposure and provided fresh equity when necessary or required by local supervisors, as in Romania and Ukraine.⁴⁴ Early in the crisis it became clear that all large foreign banking institutions operating in the region would benefit from explicit and implicit guarantees from their home country governments and would not be allowed to fail. This strong backing by western sovereigns certainly supported depositor confidence across the region and was instrumental in preventing panics.

The continuation of bank exposure was helped by the informal forum called the European Bank Coordination Initiative (EBCI, also known as the “Vienna Initiative”), through which foreign parent banks pledged to maintain exposure to countries with an IMF program during the crisis (Box 9). It was recognized that under the prevailing circumstances, western banks faced a coordination problem: while they had an interest in staying in the region, they would be better off exiting first lest competitors decide to leave before they do. Agreements in the context of the EBCI helped resolve the collective action dilemma and proved to be instrumental in restoring confidence among banks operating in the region.

Banking Sectors Had Considerable Buffers

Many banking sectors in the region had sizable buffers before the crisis. As shown in Table 7 (see page 37), capital adequacy ratios were generally well above 10 at end-2007 and end-2008, and profitability remained positive in 2009, except in the Baltics, Montenegro, and Ukraine. The absence of

⁴³ See also EBRD (2009).

⁴⁴ OTP (Hungary) also supported its subsidiaries during the crisis by extending capital transfers.

exchange rate crises, which protected borrowers' balance sheets and gave banks time to renegotiate the terms of some loans (for example, by extending their maturity) so as to avoid default, goes a long way to explain the relatively moderate deterioration of credit quality in most countries in spite of large GDP declines.⁴⁵

Countercyclical Policy in Western Europe Helped

Western Europe's countercyclical monetary and fiscal policies also cushioned the impact of the shocks. Rapid cuts in policy interest rates and abundant liquidity provision to western European banks by the ECB and the Riksbank limited the increase in emerging European banks' funding costs in foreign currency despite the increase in CDS spreads across the region. They also lowered the debt service burden of floating-rate mortgages denominated in foreign currency. Moreover, with interest rates in the West hitting rock bottom, even moderate interest rate levels in emerging Europe helped support currencies. As a result, except for Latvia and Ukraine, the increase in average deposit rates remained moderate throughout the crisis (Figure 57). In addition, very accommodative fiscal policy in western Europe produced positive spillovers to emerging Europe as it put a brake on the decline in exports, especially for those countries with a well-developed automobile sector that indirectly benefited from various cash-for-clunkers schemes in the West.

Imbalances Were of a Self-Correcting Nature

In many countries, imbalances were of a self-correcting nature—a drop in capital inflows led to a

⁴⁵ Stress tests prepared by market analysts in 2008:Q4 or 2009:Q1 often assumed that nonperforming loans would quickly reach 25 percent in all countries, leading to strong recapitalization needs. In fact, NPL ratios at end-2009 were generally well below that level, except for Ukraine (though the higher levels in part reflect a broader definition of NPLs).

Box 9. European Bank Coordination Initiative (“Vienna Initiative”)

In late 2008 the global financial crisis spread to eastern Europe. Western banks with subsidiaries in central and eastern Europe (CEE) and southeastern Europe (SEE) countries faced an exceptional degree of uncertainty, and a serious coordination problem. Given countries’ large share of foreign private debt, any bank recognized that if other banks left, only an early exit would ensure availability of funds to repatriate the investment. In the absence of a coordination mechanism, uncertainty could therefore have led to wholesale retreat of foreign banks, notwithstanding their declared interest in staying.

Being concerned about the possible fallout from uncoordinated withdrawal of foreign banks from CEE/SEE countries, the IMF, the European Bank for Reconstruction and Development (EBRD), and the European Union (EU) established as early as in January 2009 an informal forum called the European Bank Coordination Initiative (EBCI, also known as the Vienna Initiative). The purpose of the group was to foster a dialogue between all key stakeholders, including foreign banks, home and host supervisors, and relevant governments, and thereby reduce the likelihood of uncoordinated outcomes.

The EBCI became a truly effective and operational tool in the context of IMF- and IMF/EU-supported programs in CEE and SEE countries. Given that CEE and SEE’s balance of payments problems were the result largely of private sector debt—generally capital inflows from parent to subsidiary banks—the international lenders sought assurances that the private sector would share the adjustment burden. The EBCI provided the necessary framework for such private sector involvement (PSI). In country-specific meetings for a range of program countries (Bosnia and Herzegovina, Hungary, Latvia, Romania, and Serbia), foreign banks active in the country publicly declared support for economic adjustment by maintaining exposure at predefined levels and, in most countries, recapitalizing their subsidiaries on the basis of stress tests.¹ “Quid pro quo” macroeconomic programs increased international reserves and served as policy commitments by the authorities to ensure a predictable operating environment. Banks’ commitments were made for limited time periods and renewed—generally at the time of formal reviews of the lending programs.

The EBCI has been a successful vehicle for public–private sector coordination and helped avert a systemic financial crisis in the region. Follow-up meetings conducted on a regular basis found that commitments made in the country meetings were broadly honored and that both banks and the public sector felt that the dialogue had supported a more predictable economic environment and helped economic stabilization and recovery in individual countries. With the acute phase of the crisis now resolved, the role of the EBCI is increasingly shifting toward forward-looking policies for the region. Among a range of topics, key concerns include setting an appropriate prudential environment supporting renewed but balanced credit growth in the region and developing adequate policies to reduce risks from the very high level of foreign currency borrowing.

The Vienna Initiative/European Bank Coordination Initiative (VI/EBCI) countries

| | Date ¹ | Place | No. of participating foreign banks | Market share of foreign banks ² | Nationality of banks |
|---------|-------------------|-----------|------------------------------------|--|-----------------------------------|
| Romania | March 2009 | Vienna | 9 | 88 percent | Austria, France, Greece, Italy |
| Serbia | March 2009 | Vienna | 10 | 75 percent | Austria, France, Greece, Italy |
| Hungary | May 2009 | Brussels | 6 | 70 percent | Austria, Belgium, Germany, Italy |
| BiH | June 2009 | Vienna | 6 | 95 percent | Austria, Germany, Italy, Slovenia |
| Latvia | September 2009 | Stockholm | 4 | 56 percent | Sweden, Denmark, Finland |

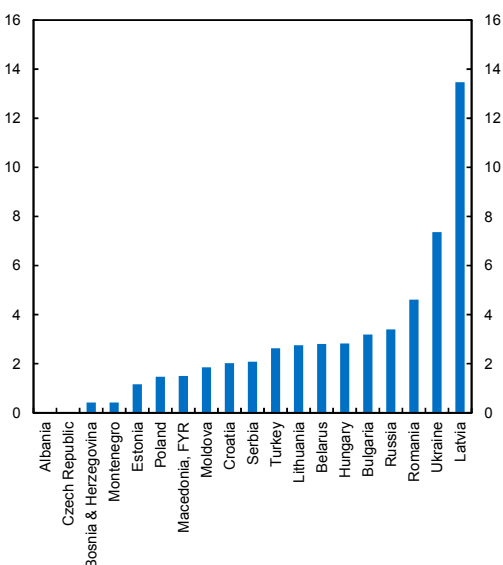
¹The date of the first-phase meetings.

²In percent of banks’ assets.

Note: The main author of this box is Yuko Kinoshita.

¹ For example, see Joint IMF, EC Press Release on the EBCI meeting for Romania: <http://www.imf.org/external/np/sec/pr/2009/pr09178.htm>.

Figure 57. Emerging Europe: Change in Deposit Rate from August 2008 to Peak
(Percentage points; peak during August 2008–December 2009)



Sources: IMF, *International Financial Statistics*; National Bank of Poland website; National Bank of Serbia website; and IMF staff calculations.

reduction of current account deficits rather than a depletion of reserves. During the boom years, capital inflows had boosted domestic demand and contributed to widening current account deficits. When the capital inflows declined, domestic demand and current account deficits adjusted, and reserve declines remained fairly moderate, even in countries with fixed exchange rates. Thus, the Baltics and Bulgaria did not experience a currency crisis, although their current account adjustment exceeded that of the Asian crisis countries (Figure 58). The SEE countries also experienced a sharp adjustment of their current account deficits, although not as severe as in the Baltics and Bulgaria. The exceptions were Moldova, Russia, and Ukraine, which experienced large capital outflows, and used a significant amount of their reserves to defend their exchange rates before they were allowed to depreciate.

Lessons for Crisis Prevention

Although the crisis in emerging Europe was triggered by *external* factors (the recession in western Europe and the sudden stop in capital inflows), *domestic* imbalances and vulnerabilities played a key role. Indeed, it is striking how large the differences

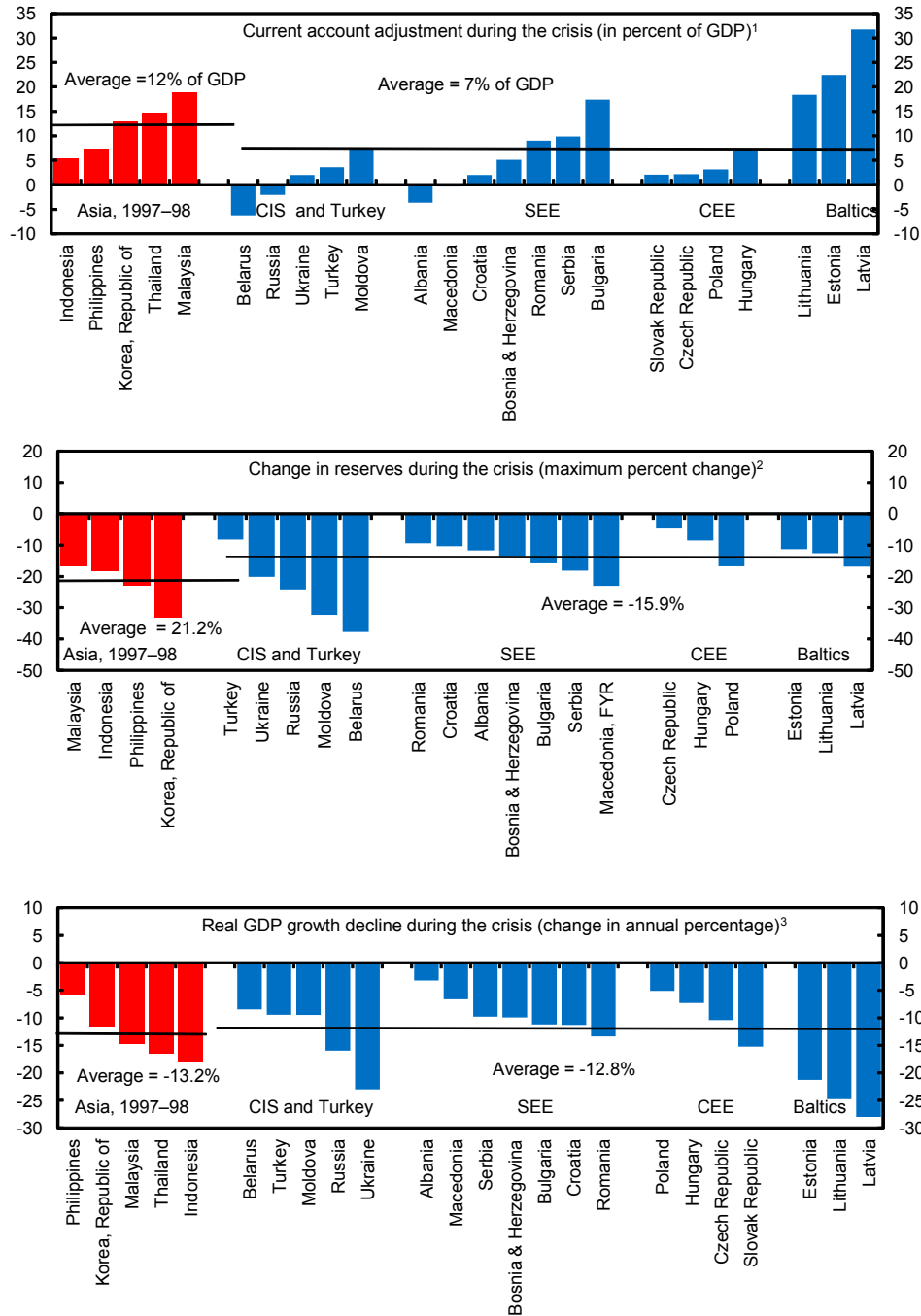
have been in the extent to which countries have been affected by the crisis: the Baltic states and Ukraine saw very large declines in GDP (IMF, 2010i), whereas others such as Albania, Belarus, and Poland had (if at all) short and shallow recessions. Countries that have largely managed to avoid the capital inflows-driven credit and domestic demand booms have had a much less severe recession (Box 10).

Thus, one of the main lessons of the crisis is that GDP growth that is driven by credit booms, rapid domestic demand growth, and large capital inflows into the nontradable sector is ultimately not sustainable. Bakker and Gulde (2010a and 2010b) and EBRD (2009) find that the size of the precrisis credit boom explains the depth of recessions better than any other variable.⁴⁶ Countries with very rapid credit growth not only experienced higher output *volatility* with strong growth followed by deep recessions but over a longer time period they do not seem to have experienced higher *average* growth, as the higher output losses during the recession offset the higher growth during the boom years (Figure 59).

How can countries avoid capital inflows-driven credit and domestic demand booms? What is the difference between countries that largely managed to avoid the buildup of imbalances and those that did not? One of the main lessons is that prudential measures to control credit growth would likely be more successful if they relied on better cooperation between home and host supervisors. This is particularly relevant for fixed exchange rate countries, as credit booms can be difficult to stop with conventional monetary policy instruments in these circumstances. Other policy instruments, such as fiscal policies, would have to play a more active role. During boom years, rapid revenue growth should be used to build up fiscal buffers rather than

⁴⁶ Other variables that help explain the depth of recessions are short-term external debt and trading partner growth (Blanchard, Das, and Faruqee, 2010). IMF (2010e) identifies external vulnerabilities more generally, trading partner growth and foreign bank claims, along with credit growth.

Figure 58. Emerging Europe and Asia: Adjustment during the Crisis, 2007–09



Source: IMF, World Economic Outlook database.

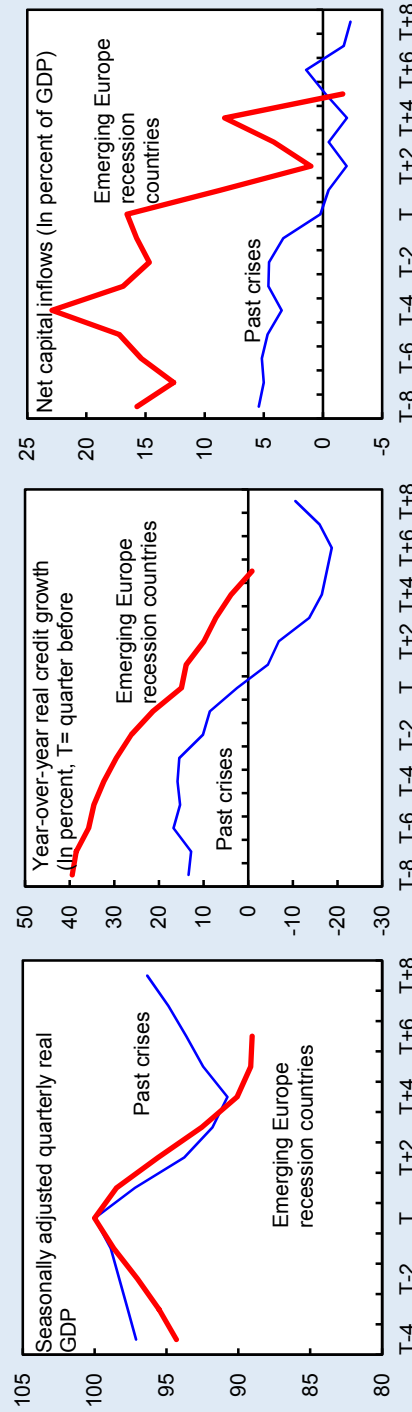
¹Current account adjustment is the change in current account balance to GDP between 2007 and 2009 for emerging Europe, and between 1997 and 1998 for Asia.

²Maximum percent change between 2007 and 2009 for emerging Europe, and in 1997 for Asia.

³Real GDP decline is the change in real GDP growth between 2007 and 2009 for emerging Europe, and between 1997 and 1998 for Asia, except Thailand (1996 and 1998).

Box 10. Emerging Europe Crisis Compared with Previous Emerging Market Crises¹

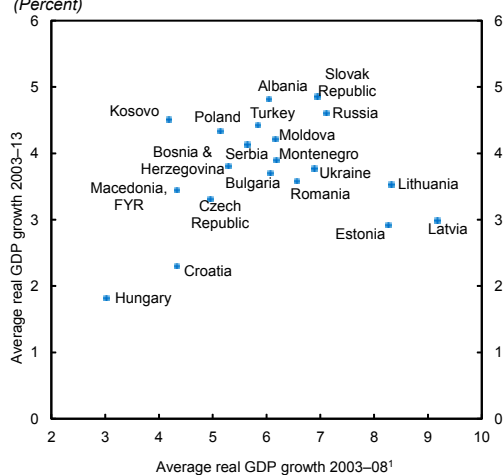
| | Precrisis | Crisis | Recovery |
|----------------------|---|---|---|
| Real activity | Emerging Europe experienced significantly stronger precrisis GDP growth than past crises countries. | The recession in emerging Europe was much deeper than past crises. Although economic activity has contracted at the same rate, the duration has been longer. The recessions in both Latvia and Ukraine have been deeper than Uruguay's recession—the deepest recent recession before this crisis. | In previous crises, the recovery was "V-shaped" and output losses were fully recovered after 10 quarters. It seems likely that the bottom of this crisis will be flatter than in previous crises, and the recovery is projected to be longer. |
| Credit growth | Credit growth in emerging Europe was much higher than prior to previous crises. | Given the strong precrisis credit growth, year-over-year real credit growth in emerging Europe turned negative only after five quarters. In contrast, year-over-year credit growth in past crises quickly turned negative, but bottomed out after 6 quarters at a 20 percent fall in credit. | In previous crises, the overall credit recovery took 10 quarters, although several countries experienced an extended period of contraction of credit. |
| Capital flows | Capital inflows were much higher in emerging Europe than in previous crises. The inflows increased sharply just before this crisis, while inflows had fallen steadily ahead of previous crises. | The collapse in capital inflows to emerging Europe has been spectacular. However, net inflows to emerging Europe remained positive until the recession bottomed out. Part of the reason for this is that FDI inflows held up relatively well. | In previous crises, the capital outflows typically lasted several quarters and remained below precrisis levels. |



Note: The main author of this box is Johan Mathiesen.

¹ Past capital account crisis cases include (first quarter in recession in parenthesis): Argentina (2001:Q2), Brazil (1998:Q3), Colombia (1998:Q3), Indonesia (1997:Q4), Ecuador (1998:Q4), South Korea (1998:Q2), Malaysia (1998:Q1), Mexico (1995:Q1), Philippines (1998:Q1), Russia (1998:Q1), Thailand (1997:Q3), Turkey (2001:Q1), and Uruguay (2001:Q2). Emerging Europe recession countries include Bulgaria (2008:Q4), Croatia (2008:Q2), Estonia (2008:Q1), Hungary (2008:Q2), Latvia (2008:Q1), Lithuania (2008:Q3), Romania (2008:Q3), Russia (2008:Q3), Serbia (2008:Q2), Turkey (2008:Q2), and Ukraine (2008:Q3).

Figure 59. Emerging Europe: Average Real GDP Growth (Percent)



Sources: IMF, World Economic Outlook database; and IMF staff calculations.
¹As the boom in the Baltic states ended in 2007, data for the Baltics refer to 2002–07.

facilitating a surge in expenditure, and at times large surpluses may be appropriate.

Prudential Measures Require Better Home-Host Cooperation

A key lesson from the crisis is that controlling credit growth through prudential measures is challenging. Indeed, the effectiveness of the flurry of domestic prudential measures to stem overall credit growth has been mixed (IMF, 2010g, and Enoch and Ötker-Robe, 2007).

Externally funded credit growth has proven particularly hard to control. Many western banks in emerging Europe operate their foreign affiliates as if they are branches,⁴⁷ with risk management centralized at the group level and local supervisors relying on parent bank's home supervisors to monitor the changes in the risk profile of their foreign affiliates. Foreign-owned banks can often evade regulatory measures, including by switching from domestic to cross-border lending, or by switching lending from banks to nonbanks, such as leasing institutions (owned by foreign-owned banks). They are also less likely to be influenced by domestic monetary policy measures, such as raising of

⁴⁷ Legally, most of the foreign affiliates were subsidiaries.

domestic interest rates. Often, these banks are systemically important in the host country, although a small part of the overall bank group.

Better cooperation between home and host supervisors would likely make prudential measures to control credit growth more successful. Such cooperation should include adequate mechanisms for effective communication, information sharing, and joint analysis of common concern, and the formulation of effective responses (Fonteyne and Mathisen, forthcoming). The recent advances in integrating national frameworks within the EU will help address the challenge of containing buildup of financial risks, particularly challenging in countries with an extensive foreign bank presence.⁴⁸

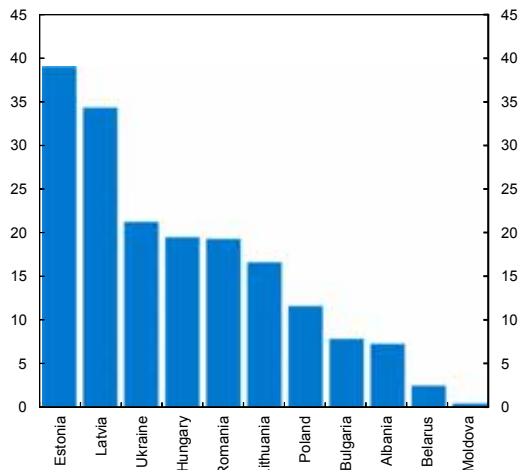
One prudential measure that could have usefully been used more is the discouragement of foreign currency loans. Some countries were partially able to discourage foreign currency lending in the run-up to the crisis. For example, Belarus, Moldova, and Turkey effectively restricted household borrowing in foreign currencies through long-standing prudential regulations, while Poland relied on guidelines to stem such practices. A more widespread effective discouragement of foreign currency loans would have slowed credit growth in many countries, as much of the credit boom was financed by foreign banks, which were not allowed to take an open currency position. It would also have prevented the buildup of large currency mismatches in the private sector, which posed a severe risk during the crisis (see Figure 60 and Box 11).⁴⁹

⁴⁸ The recent financial reforms and how they related to New Member States are described in Box 7 in IMF, 2010g.

⁴⁹ Measures to contain foreign exchange risks can be imposed directly on banks or indirectly on the borrower (Enoch and Ötker-Robe, 2007). Turkey's ban on foreign currency loans to households and the European Commission's proposed lowering of loan-to-value ratios are examples of direct measures. Such measures could also include tightening or introducing sectoral limits on banks' net open foreign currency position or imposing a limit on banks' gross foreign exposure (EBRD, *Transition Report*, 2009, p. 74). Examples of indirect measures include Hungary and Poland's requirements for banks to disclose the risks of foreign currency borrowing to potential clients. They can also take the form of consumer protection, for example, by

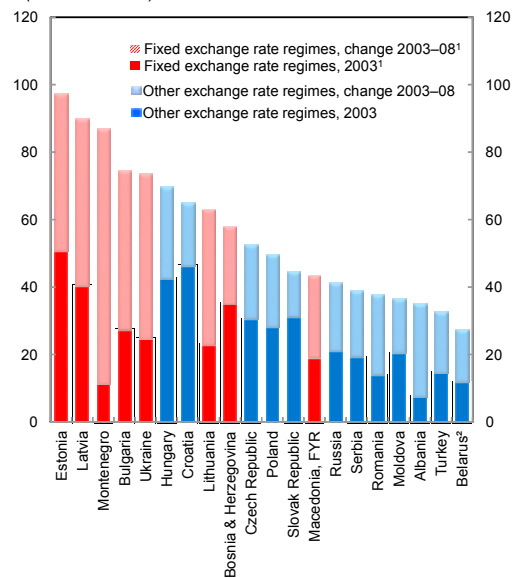
(continued)

Figure 60. Emerging Europe: Foreign Currency Loans to Households, 2008
(Percent of GDP)



Source: IMF, *International Financial Statistics*.

Figure 61. Emerging Europe: Private Sector Credit, 2003 and 2008
(Percent of GDP)



Sources: IMF, *International Financial Statistics* and *AREAER*; and IMF staff calculations.

¹Fixed exchange rate countries are classified in *AREAER* as exchange arrangements with no separate legal tender, currency board arrangements, or other conventional fixed peg arrangements.

²During 2003–08, Belarus was reclassified from an exchange rate within a crawling band to a conventional fixed peg arrangement.

Fixed Exchange Rates Make Credit Booms Harder to Stop

It is striking that the strongest credit growth during the boom years took place in countries with fixed exchange rate regimes (Figure 61). While the Baltics, Bulgaria, Montenegro, and Ukraine all had annual credit growth at about 10 percent of GDP or more, many of the countries in the region with more flexible exchange rate regimes largely managed to avoid a credit boom. The countries with floating exchange rates during this period (Albania, Poland, and Turkey) had the lowest outstanding credit-to-GDP ratio at the end of 2008, as well as the lowest precrisis credit growth.

This difference exists in part because countries with fixed exchange rates have a limited set of monetary policy tools to restrain credit booms once they set in, as discussed above. Countries with flexible exchange rates, on the other hand, can dampen booms by letting the nominal exchange rate appreciate. Such an appreciation helps prevent overheating of the economy and further lowers inflation by reducing import prices, which keeps real interest rates higher. It is noticeable that many of the countries that avoided a credit boom (Czech Republic, Poland, and Slovak Republic) saw a substantial appreciation of their nominal exchange rates during the boom years.

Yet, there were also some countries with fixed exchange rate regimes that did not experience massive credit booms (Bosnia and Macedonia). Indeed, in non-EU SEE there seems little difference between countries with fixed exchange rates and those with more flexible exchange rates. Capital inflows in these countries were much lower, partly because of the memory and legacy of various conflicts in the region, and partly because they were not (yet) in the EU. This suggests that, in the absence of large capital inflows, fixed exchange rates do not necessarily pose a problem. More generally, the recent IMF study on exchange rate regimes that looks at all countries in the world has concluded that

limiting household borrowing in foreign currency relative to income or assets. As long any such measures (direct or indirect) are not residency-based, they would be possible also within the EU.

Box 11. Foreign Currency Mortgages, Maturity Mismatches, and Foreign Currency Shortages: The Cases of Hungary and Poland

Foreign currency (FX) mortgage loans, mainly in Swiss francs, became very popular in Hungary and Poland in the years before the crisis. These loans were attractive for borrowers because they carried lower interest rates than domestic currency loans; they were profitable for banks because of extra revenues related to foreign exchange rate operations and high commissions. Of course, FX mortgage loans were only cheaper if the exchange rate remained stable, or appreciated—an expectation that was widely held at the time.

Swap markets played an important role in the funding of these loans. While subsidiaries of western European banks could obtain the foreign currency resources for these loans from their parent banks, domestic banks financed these loans in part through swapping domestic currency deposits into foreign currency resources. During tranquil times, these swap markets worked well, as sufficient liquidity was provided by foreign banks. Western banks originated FX swap contracts and closed their own open position in the Hungarian forint or Polish zloty through Treasury bond repo operations.

During the financial crisis, this funding mechanism broke down. As the cost of foreign currency funding from western parent banks went up, banks increasingly tried to obtain foreign currency through swapping domestic currency. Yet just when *demand* for FX swaps increased, *supply* of FX swaps was reduced, as the counterparties in FX swap transactions attempted to reduce their exposure to central and eastern European economies. Medium-term FX swaps became practically unavailable, while short-term swaps—the instrument of last resort—became very costly for domestic banks. Moreover, with the forint and the zloty depreciating, rolling over swaps required a growing amount of domestic currency resources. This process caused severe liquidity strains in some domestic banks, which triggered a “deposit war” in the Hungarian and Polish banking sectors, which fueled a general rise in deposit interest rates in late 2008 and 2009.

Rapidly evaporating FX liquidity on the interbank market forced the National Bank of Poland to provide short-term (7 days) FX swaps. In Hungary, the central bank also introduced short-term FX swaps as a stop-gap measure, and began offering longer-term FX swaps (3 and 6 months) in March 2009. Both facilities are still in operation, although conditions in the FX swap market have normalized.

The Hungarian and Polish experiences exemplify the risk for banking sector stability created by the expansion of mortgages denominated in foreign currency and financed by domestic currency deposits combined with swap transactions. To help contain this risk, prudential regulation should be enhanced to strengthen the management of on-balance-sheet FX liquidity mismatches.

Note: The main authors of this box are Andrzej Raczko and Johannes Wiegand.

economies with pegged regimes generally fared neither better nor worse than those with floats during the global financial crisis (IMF, 2010h, Box 1.1).

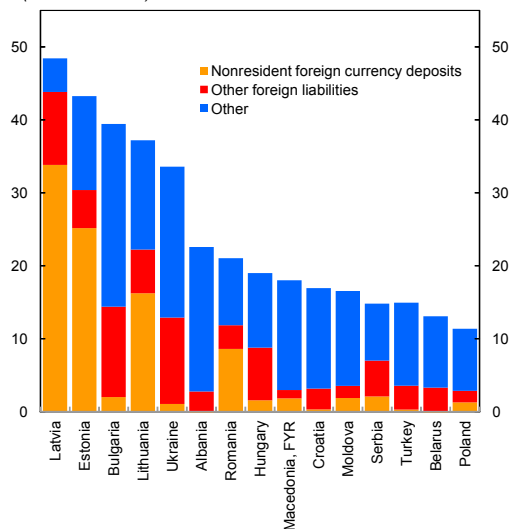
Fixed exchange rates do not necessarily result in credit booms, but they do make it hard to prevent credit booms in the presence of large capital inflows. Some countries with fixed exchange rates attracted particularly large capital inflows because they had just entered or were about to enter the EU, and

were seen as plausible candidates to enter the EMU. This further lowered the perceived exchange rate risk, increased overall expected growth and investment returns, and thereby contributed to excessive foreign-financed credit growth (Figure 62).

Larger Fiscal Surpluses during Boom Times?

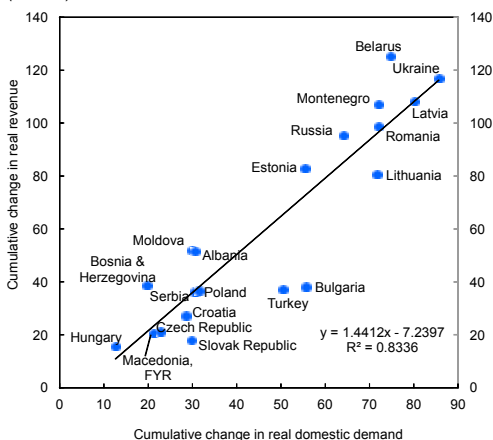
The limits of prudential policies and the role of exchange rate regimes underscore the need for a

Figure 62. Emerging Europe: Contribution to Change in Credit-to-GDP Ratio, 2003–07
(Percent of GDP)



Sources: IMF, *International Financial Statistics*; and IMF staff calculations.

Figure 63. Emerging Europe: Cumulative Change in Real Domestic Demand and Real Fiscal Revenue, 2003–08¹
(Percent)



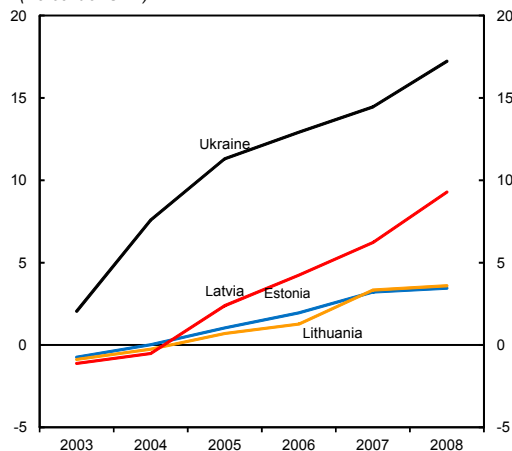
Sources: IMF, *World Economic Outlook* database and *Government Finance Statistics*; and IMF staff calculations.

¹As the boom in the Baltic states ended in 2007, data for the Baltics refer to 2002–07.

decisive fiscal response to capital inflows. In particular, fiscal policy can look very good during boom years—when domestic demand booms feed fiscal revenues. This often creates the illusion of fiscal space, at a time when fiscal policy may need to play a much stronger countercyclical role, especially in countries with fixed exchange rates.

The rate of precrisis public expenditure growth in many countries now appears to have been imprudent. The large increases further fueled overheating; it also set the stage for large deficits when part of the revenue surge turned out to be

Figure 64. Selected Countries: Cumulative Fiscal Savings Assuming a Cap of 10 Percent Real Increase in Public Expenditures
(Percent of GDP)



Sources: IMF, *International Financial Statistics* and *World Economic Outlook* database; and Haver Analytics.

temporary (Figure 63). Indeed, countries that better managed their fiscal positions fared better during the crisis. These countries had generally higher foreign reserves as well as larger fiscal buffers. Many of the other countries had to seek external assistance because of fiscal financing problems once the crisis erupted.

Fiscal policy could play a much more active role—saving money when revenues are growing instead of increasing spending and boosting public wages. This may mean that during boom times small fiscal surpluses are not sufficient—that large surpluses are needed. This might prove a daunting task, and would require a strong political will to adhere to the overall objective of medium- and long-term fiscal sustainability (Figure 64). Policymakers may prefer to spend in boom times, but the payoff from saving is that a large fiscal buffer will reduce the more politically damaging need to cut expenditure sharply during a recession—as several countries had to do during this crisis.

Conclusion

The crisis in emerging Europe provides important lessons in crisis prevention. Although the crisis was triggered by external factors (the recession in western Europe and the sudden stop in capital

inflows), domestic imbalances and vulnerabilities played a key role. Indeed, countries that managed to avoid the capital inflows-driven credit and domestic demand booms have had much less severe recessions, and are now in much better shape as a consequence.

If crises of the type we have just witnessed in emerging Europe are to be prevented in the future, these lessons from the past must be learned. Most importantly, prudential policies will need to be strengthened, including through improved international cooperation and greater attention by home supervisors to activities of their banks in emerging Europe. Macroeconomic policies, in particular fiscal policies, will have to play a more active role to counter capital inflows-driven credit and domestic demand booms.

Finally, policies aimed at slowing credit booms should have long-term benefits in promoting more balanced and sustainable growth. Countries that experienced the most severe credit boom also saw

the largest output volatility and the most pronounced output reversals. It now appears that average GDP growth over the cycle in this group was no higher and in some cases lower than in countries with more restrained credit increases. In addition, growth among the countries with the highest credit growth was often very imbalanced, resulting in an insufficient expansion of their economic supply potential. Finally, countries with the most rapid credit growth have also ended up with the highest external debt and the largest fiscal deficits.

Above all, it will be important—when the next boom comes—to be wary of stories that “this time is different.” Such narratives often have some plausibility and attractiveness during booms, especially when they become prolonged and warnings from skeptics increasingly fall by the wayside. But a careful analysis of the drivers of growth, asset price developments, and competitiveness should always be used as a reality check.