# The Evolution of Capital Flows to Emerging-Market Economies

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- Many emerging-market economies (EMEs) have significantly improved their macroeconomic fundamentals and undergone structural reforms since the 1997 Asian crisis.
- These developments have enhanced the composition of capital flows to EMEs, including an improved debt structure, a larger share of capital flows in the form of foreign direct investment, and greater access to international debt markets for corporations in EMEs.
- Despite these positive developments, increased financial linkages left many countries vulnerable to external disruptions in 2007–09.

lows of private capital to emerging-market economies (EMEs) fell off sharply as the global financial crisis deepened: total net private capital flows, which reached a record high of US\$1.2 trillion in 2007, fell to only US\$649 billion in 2008 and are estimated to have fallen to US\$435 billion in 2009.1 The downturn affected all developing regions, albeit to various degrees, with emerging Europe being the worst affected. Following a period of net outflows between October 2008 and March 2009, private capital flows to most EMEs resumed in the second and third guarters of 2009. While portfolio equity inflows have rebounded quickly, total private capital inflows are forecast to reach only US\$722 billion in 2010, about half of their 2007 levels. In some countries, however, rapid capital inflows have raised concerns regarding the impact of such flows on financial stability or on the exchange rate, and capital controls on inflows are being implemented or considered. Whether these controls are temporary or long-term in nature, and how effective they will be, remains to be seen.

This article has two objectives. First, it highlights that lessons learned from the Asian crisis have prompted EMEs to improve their macroeconomic fundamentals and to implement structural reforms-developments that have enhanced the composition of capital flows to these countries. In particular, EMEs have improved their fiscal positions. Some have adopted inflation targeting and allowed a more flexible exchange rate, while others have accumulated substantial foreign exchange reserves. Many EMEs have also avoided running large current account deficits. This has led to (i) greater investor confidence, (ii) an improved debt structure (seen in the shift from external to domestic debt markets and from short to longer maturities), (iii) a larger share of capital flows in the form of foreign direct investment (FDI), which tend to be more stable,

Institute of International Finance (IIF) figures for 2009, based on a sample of 30 key emerging-market economies.

and (iv) greater access to international debt markets for corporations in EMEs, both in terms of bank borrowing and new bond issuance.

These positive developments have been reinforced by structural changes in the global financial landscape. For example, financial innovation, such as growth in the market for credit default swaps (CDS) for developingcountry debt, has enabled greater risk distribution. Taken together, these developments led to an increase in capital flows that has brought significant economic and financial benefits (from increased trade and financial integration). The improvement in the composition of capital flows has also made some EMEs more resilient to external shocks.

Second, the article argues that the developments that have improved capital flows have also increased the likelihood of contagion when global economic conditions deteriorate. The growing share of countries with open capital accounts has widened the scope for rapid capital outflows in response to deteriorating economic conditions. Thus, even though most EMEs maintain better policies and have stronger institutions than they did at the onset of previous crises, many remain vulnerable to external disruptions. The vulnerability of EMEs to shocks varies considerably, however. Countries with large current account deficits that rely heavily on external financing seem to be particularly vulnerable, while EMEs holding large foreign exchange reserves or running current account surpluses are better positioned to withstand disruptions in capital inflows.

The severity of the recent financial crisis in emerging markets and the risks of further spillovers call for a continued strong and coordinated response from policy-makers at the global level. Currency-swap lines between major central banks and a broader range of support for EMEs by international institutions (such as the IMF's flexible credit line) are examples of policies that appear to have enhanced confidence and reduced the negative spillovers of the crisis to EMEs.<sup>2</sup> In addition, policy-makers need to implement policies that support capital flows, and ensure that capital controls, if implemented in response to a financial

crisis, are of a temporary nature.<sup>3</sup> While capital controls may be beneficial in the short run, such measures are inherently distortionary, and their long-run effects are likely to be detrimental to the broader economy. In fact, capital flows can be beneficial for EMEs and for the international financial system as a whole. Thus, policy-makers in emerging markets need to continue to strengthen their financial systems and policies to meet the ongoing challenges of the global economic environment.

## Background

## Capital flows since 2000

From 2002 to 2007, net capital flows to EMEs grew nearly fivefold to US\$1.2 trillion, a level higher than that prior to the East Asian and Russian crises (Chart 1).<sup>4</sup> Disaggregation of the data reveals that nearly all types of flows increased during this period. Net FDI flows remained resilient, rising steadily from 2003 through to the end of 2007. Flows of portfolio equity, on the other hand, tended to be more sensitive to shifting conditions in the global business cycle and to global risk tolerance. They were relatively strong in 2005–06, averaging about US\$52 billion per year.

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These flows began to fall in 2007, however, eventually turning into net outflows (US\$8 billion) for the year as a whole, and deteriorated further to an outflow of US\$92 billion in 2008. Net bank flows to EMEs grew steadily from 2003 to 2007, reaching a peak of about US\$366 billion in 2007. Again, these flows plunged in



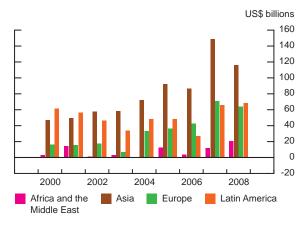
<sup>2</sup> In the past, IMF facilities have been associated with adverse signals. However, the flexible credit line (FCL) is designed for countries deemed to have very strong fundamentals, policies, and track records of policy implementation. Thus, an FCL does not necessarily send adverse signals to the market.

<sup>3</sup> The literature is divided on the benefits and costs of capital controls. Such controls may be beneficial in the short run (e.g., in response to a crisis) or in initial development stages (when countries have an underdeveloped financial system). However, in the long run, capital controls tend to become less effective and have detrimental effects on the economy. For an overview of the literature, see Kawai and Takagi (2008).

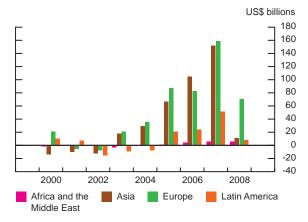
<sup>4</sup> Private net flows plus official net flows.

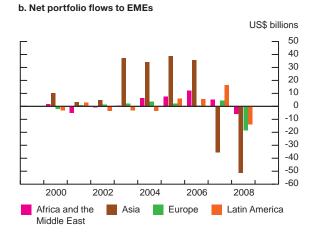
#### Chart 1: Capital flows to emerging markets

#### a. Net FDI flows to EMEs

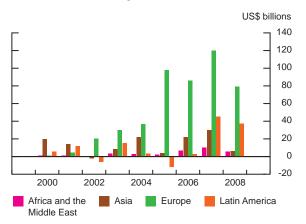


#### c. Net bank flows to EMEs





d. Other net debt financing



Note: Emerging Asia includes China, India, the Philippines, Thailand, Indonesia, Korea, and Malaysia. Emerging Europe includes Croatia, Romania, Turkey, Poland, Russia, the Czech Republic, Bulgaria, Hungary, and Slovakia. Africa and the Middle East includes South Africa, Egypt, and Morocco. Latin America includes Ecuador, Chile, Peru, Venezuela, Mexico, Brazil, Colombia, and Argentina.

Sources: Institute of International Finance and authors' calculations

2008 across all regions to a total of US\$95 billion.<sup>5,6</sup> The effects of these flows remain an ongoing concern for policy-makers in emerging markets.

- 5 Note that *net* capital flows may understate the level of capital flows in EMEs, because these flows denote *net inflows* (i.e., investment flows into EMEs minus withdrawn investments, dividends, etc.) minus *net outflows*, the latter including, for instance, growing outward investment from EMEs (private portfolio investors, sovereign wealth funds, etc.). In fact, in aggregate, capital is now flowing from EMEs to the low-saving developed economies, especially the United States.
- 6 This plunge was partly caused by global deleveraging, re-emerging home bias in investment, and a reduction in loans to EMEs by international banks trying to overcome severe liquidity shortages in their home markets.

#### The implications of capital flows

Although capital flows often benefit EMEs, very rapid inflows can be difficult to absorb.<sup>7</sup> In fact, one lesson from the 1997 Asian crisis is that capital flows can significantly influence macroeconomic outcomes: the crisis was preceded by appreciation pressures stemming from strong capital inflows and global liquidity, which, in turn, culminated in higher asset prices. The "sudden stops" (or reversals in capital

<sup>7</sup> There has been an intense debate in the literature about the long-run growth benefits of capital flows. Some argue that unfettered capital flows are a serious impediment to global financial stability (e.g., Rodrik and Subramanian 2009), while others argue that increased openness to capital flows has been essential for countries aiming to move from lower- to middle-income status (e.g., Mishkin 2008).

inflows) that followed were then associated with sharp currency depreciations, collapsing asset prices, and severe economic downturns.

The situation of EMEs in the lead-up to the recent crisis bears both similarities and differences to the conditions prevailing prior to the 1997 Asian crisis. Apparent similarities include appreciation pressures, abundant global liquidity (up to mid-2007), and rapidly rising asset prices. There are, however, important differences, since many EMEs have learned the lessons from the Asian crisis and have become more resilient to financial disruptions.<sup>8</sup> First, governments improved fiscal policy and, in many cases, implemented strong monetary policy frameworks. Second, strong economic growth, along with improved standards of corporate governance, attracted a steady inflow of capital, supported by benign conditions in the global economy (until mid-2007). Third, many EMEs, such as China, Russia, India, Korea, and Brazil, have accumulated record levels of foreign exchange reserves, implying that they are less vulnerable to "sudden stops" than in the past. Fourth, FDI flows are now larger than portfolio investment flows (Chart 1-a and 1-b), reducing the likelihood of a rapid reversal in capital flows. And fifth, in recent years, capital inflows (the result of the strong policy frameworks mentioned above), have been associated with current account surpluses. While there are some notable exceptions, these developments suggest that most EMEs are far more resilient than before.

## How Have Capital Flows to Emerging Markets Changed?

Improvements in the underlying macroeconomic fundamentals of many EMEs over the past few years have contributed to significant changes in the structure and composition of capital flows. These include structural changes in emerging-market debt, the development of equity markets, and growth in external corporate debt.

# Structural changes in emerging-market debt

That debt markets in emerging economies are evolving can be clearly seen in the diversification beyond U.S.-dollar-denominated, high-yield, sovereign debt instruments. The three main structural changes are: growth of domestic debt markets, lengthening of debt

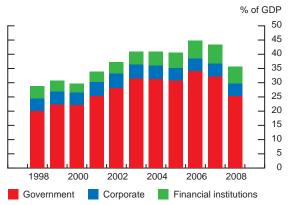
8 Perrault (2002) describes improvements in the composition of capital flows in the aftermath of the Asian crisis.

maturity, and financial innovation in the form of credit derivatives.

#### Growth of domestic debt markets

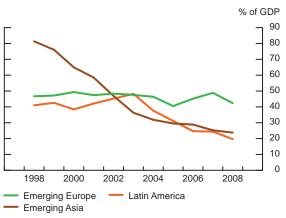
Until the late 1990s, markets for domestic fixed-income (public) securities were relatively underdeveloped in many countries in Latin America, Asia, emerging Europe, and Africa, with total outstanding domestic debt securities in EMEs at 20 per cent of GDP in the mid-1990s. Many EMEs have been shifting towards the issuance of local-currency debt, reflecting better fundamentals, greater foreign investor appetite, and a growing domestic institutional investor base. And until

## Chart 2: Outstanding domestic debt in emerging markets



Note: Figures are averages of outstanding domestic debt by sector. Countries include: Argentina, Brazil, Chile, China, Colombia, the Czech Republic, Hungary, India, Indonesia, Malaysia, Mexico, Pakistan, Peru, the Philippines, Poland, Russia, Slovakia, South Africa, South Korea, Thailand, Turkey and Venezuela.

Sources: *BIS Quarterly Review* December 2009; Institute of International Finance; International Monetary Fund, *International Financial Statistics* 



#### Chart 3: Total external debt of emerging markets

Note: Figures are the median total external debt (percentage of GDP) for selected emerging markets in each region. Source: Institute of International Finance 2007, benign global financial conditions allowed these countries to lock in longer-term funding and improve debt structures. Consequently, from 1998 to 2008, total outstanding domestic debt securities grew from 29 per cent of GDP to almost 36 per cent, driven mainly by the public sector **(Chart 2)**. During this period, total external debt (i.e., public and private) declined **(Chart 3)**.

In the past, there were doubts about the ability of emerging markets to borrow in international financial markets in their own currency-a phenomenon referred to as "original sin."9 However, over the past decade or so, many EMEs have overcome "original sin," through greater issuance of bonds denominated in their own currencies in international financial markets, as well as through the development of their domestic bond markets. With regard to the former, Brazil, Colombia, Mexico, Peru, and Uruguav have issued international bonds denominated in their currencies over the past five years, and both foreign and local investors have been active in these localcurrency markets, owing to the fact that many EMEs have been following better macroeconomic policies, thus giving investors greater confidence in their domestic-currency bonds.

> Local-currency bond markets in developing countries have become a major source of financing and were the fastest-growing segment of EME debt until 2007.

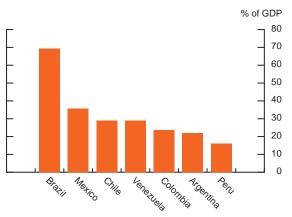
Local-currency bond markets in developing countries have become a major source of financing and were the fastest-growing segment of EME debt until 2007 **(Chart 4)**. These markets are concentrated in eight countries: Brazil, China, India, the Republic of Korea, Malaysia, Mexico, Turkey, and South Africa. Until recently, they were largely closed to foreign investors. However, gradual and steady liberalization of capital accounts in several countries has led to increased foreign participation.<sup>10</sup> Foreign investment in localcurrency bond markets has been further facilitated by

9 The term "original sin" was coined by Eichengreen and Hausman (1999) and refers to a country's inability to borrow abroad for long terms in its own currency. If the country accumulates net debt, it will consequently have an aggregate currency mismatch on its balance sheet.

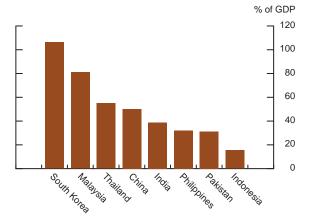
10 Benign global financial conditions and the search for yield also enabled EMEs to issue more debt in local currency.

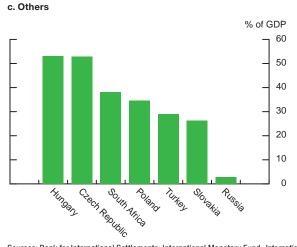
# Chart 4: Outstanding domestic-currency debt in emerging markets, 2008

a. Latin America









Sources: Bank for International Settlements; International Monetary Fund, International Financial Statistics

the introduction of local-currency bond indexes, such as JP Morgan's Government Bond Index-Emerging Markets (GBI-EM), launched in 2005.<sup>11</sup>

#### Lengthening maturity structures

Until the 1990s, short-term debt constituted a large share of EMEs' total outstanding debt, partly because of the high risk premium charged by international capital markets on long-term debt. Improved fundamentals, including lower inflation, more responsible fiscal policies, and current account surpluses, have reduced the risk of a crisis and, combined with global investors' search for yield, have enabled EMEs to lengthen the maturity structure of their debt. Consequently, the share of short-term external debt in total international debt securities has declined over the past decade. This is true for both sovereign and private debt issues. Latin America has seen an impressive decrease in short-term debt from more than 20 per cent in 2000 to less than 9 per cent by the end of 2007. However, flows of short-term debt (primarily bank loans and trade credit) increased in 2007 by US\$35 billion and were concentrated in Latin America and the Caribbean.<sup>12</sup> Europe and Central Asia still accounted for almost half of the total flows (World Bank 2008).

In addition, emerging markets have moved away from floating-rate debt towards fixed-rate debt: In 1994, over half of the total outstanding issuance of emergingmarket debt securities was floating rate in nature. In 2007, only 2 per cent of the total outstanding issuance of emerging-market debt was floating rate in nature (Business Wire 2008). At the same time, the share of inflation-indexed bonds in EME issuance is declining (Medeiros 2006).

The implication of this development for the resilience of capital flows to EMEs is clear. Studies on debt crises conclude that a shorter and more concentrated debt structure increases the likelihood of a debt crisis.<sup>13</sup> In addition, short-term or floating-rate debt may increase a country's exposure to sharp increases in interest rates, which may have additional consequences, since governments may need to increase taxes in order to service the debt (see Barro 1997). Longer maturities, on the other hand, imply smaller quantities of debt to be rolled over in every period.

11 Other such indexes include JPMorgan Chase's Emerging Local Markets Index (ELMI) and the Lehman Global Aggregate Index.

12 Some of the flows to this region reflect activities in offshore financial centres for which only limited information is available.

13 For example, Alesina, Prati, and Tabellini (1990) and Cole and Kehoe (1996).

Thus, long-term debt is more sustainable (less vulnerable to rollover risk), making the transition to a longer debt structure beneficial for EMEs.

#### Financial innovation: credit derivatives

Credit derivatives have become increasingly important instruments for investors in emerging markets in recent years. In particular, credit default swaps (CDSs), securities that insure against the event of default on an underlying bond, are gaining importance and are estimated to account for a large share of the face value of the international debt securities of emerging markets. CDSs are being used in securities markets in Bulgaria, the Republic of Korea, Mexico, Peru, the Philippines, and the Russian Federation.

This strong growth in CDS contracts reflects increased international investor demand for exposure to emerging markets. In the face of declining net issuance of emerging-market external debt, investors have met their targets for emerging-market exposure by selling protection on sovereign issues. CDS contracts have important implications for the pricing and supply of debt capital to developing countries, because they offer investors another way of assuming exposure to emerging-market risk and enhance the markets' ability to gauge credit risk. The massive growth in the CDS market could, indeed, enable better risk distribution and provide for more complete markets, but tracking who is assuming what risks may become very difficult. There is also the risk that some investors will take large positions without fully understanding them, and thus a shock may cause market turbulence.

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## **Equity Markets**

Strong economic growth in EMEs over the past few years has been accompanied by the rapid appreciation of local equity markets. From 2004 to May 2008, the MSCI emerging-markets index rose nearly 170 per cent **(Chart 5)**, despite the financial market turbu-

Chart 5: MSCI emerging-market indexes by region 1 January 2004=100



Note: Emerging Europe includes the Czech Republic, Hungary, Poland, Russia, and Turkey. Latin America includes Argentina, Brazil, Chile, Colombia, Mexico, and Peru. Emerging Asia includes China, India, Indonesia, Korea, Malaysia, Pakistan, the Philippines, Taiwan, and Thailand.

lence.<sup>14</sup> Foreign investors have increasingly taken part in this stock market boom, resulting in a record level of inflows of portfolio equity in 2006 of \$US53 billion, followed by a sharp decline in equity portfolio flows during the financial crisis (Chart 1-b).<sup>15</sup> The greater supply of foreign portfolio equity has had several benefits for corporations in EMEs. It has lowered the cost of capital and allowed financially constrained firms to expand. Moreover, growing foreign participation in EME stock markets has greatly increased the liquidity of local stock markets, which has contributed to the strengthening of EME financial systems. Research suggests that the increased liquidity of equity markets is highly correlated with future economic growth.<sup>16</sup>

Equity markets in EMEs have undergone a series of reforms since the early 1990s, which have increased the interest of foreign investors. Reforms have boosted competitive conditions in these markets and have improved investor confidence as EMEs have put in

14 The MSCI EM index is a float-adjusted market capitalization index that measures the performance of equity markets in EMEs. It consists of indexes in 26 emerging economies: Argentina, Brazil, Chile, China, Colombia, the Czech Republic, Egypt, Hungary, India, Indonesia, Israel, Jordan, Korea, Malaysia, Mexico, Morocco, Pakistan, Peru, the Philippines, Poland, Russia, South Africa, Taiwan, Thailand, Turkey, and Venezuela.

15 Note that data for net flows of portfolio equity underestimate these flows into EMEs. The former denote net inflows (which denote investment flows into EMEs minus withdrawn investments, dividends, etc.) minus net outflows (i.e., the purchase of a foreign stock by an EME private portfolio investor or sovereign wealth fund is a negative inflow). Sizable outward investments by portfolio equity investors in Korea and, in 2007–08, in China weakened net inflows.

16 For example, see Levine and Zervos (1998) and Rajan and Zingales (1998).

place better regulatory frameworks and reduced transactions costs and information asymmetry. In addition, corporations in EMEs are increasingly accessing international equity markets, driven by growing demand from investors and by the increasing participation of these companies in international business transactions. One factor allowing them to access foreign capital in equity markets is improved corporate governance. Well-governed companies are able to raise such financing at significantly lower cost than poorly governed companies because of the additional risk premium that investors demand from the latter.<sup>17</sup> In addition, countries that put in place laws and supporting institutions to protect the rights of minority shareholders have increasingly attracted foreign investors.18

There is considerable heterogeneity in the composition of portfolio flows across EMEs, and these patterns can be explained by their respective policies regarding the capital account. For example, the liberal approach of countries in emerging Asia to portfolio flows relative to that of the 1990s, combined with promising growth prospects, made them the primary destination of portfolio capital flows, which reached a peak of US\$35 billion in 2006, or 66 per cent of total portfolio flows to EMEs.<sup>19</sup> China, in particular, attracted a large portion of these flows. Growing demand from institutional investors, such as hedge funds, supported equity issues. In India, on the other hand, early relaxation of restrictions on equity inflows has shifted the composition towards portfolio investments, which accounted for one-third of capital flows in 2007. In contrast, portfolio equity flows to emerging Europe represent only a small fraction of capital flows, of which Russia and Turkey attracted the majority. Relatively weak portfolio flows to eastern Europe may be attributed to poor corporate governance: the risk that profits may be diverted either by insiders or through political intervention.

#### External corporate debt

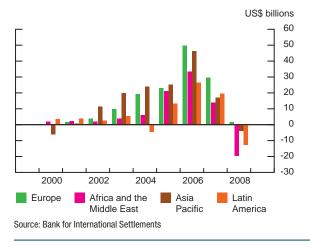
In the years leading up to the global financial crisis, corporations and financial institutions in EMEs borrowed in international debt markets on an unprecedented scale. This was reflected in the surge

<sup>17</sup> See OECD (2004) for a review of the evidence in OECD countries. See also Fremond and Capaul (2002).

<sup>18</sup> Henry and Lorentzen (2003) find that countries that have instituted such provisions tend to have larger, more efficient, and more stable stock markets than those without them.

**<sup>19</sup>** Note that capital flows to emerging Asia fell sharply in 2007–08 (see Chart 1).

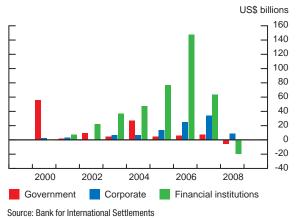
Chart 6: EME corporate and financial issuers of international debt



in the net issuance of international bonds (Chart 6),<sup>20</sup> and in increased borrowing from external banks (Chart 1-c). The opening of the global corporate bond market to a growing number of private (and public)

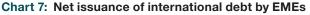
The opening of the global corporate bond market to a growing number of private (and public) companies from EMEs is an important structural change for financing in emerging markets.

companies from EMEs is an important structural change for financing in emerging markets. Access to international capital markets allows companies in EMEs to diversify their source of funds, borrow at longer maturities, gain international visibility, and reduce the cost of capital. The use of more sophisticated financing instruments also encourages better risk management. Accessing foreign capital markets also allows firms to reduce their dependence on local capital markets while exposing them to higher standards of accounting, reporting, disclosure, and corporate governance (Coffee 1999, 2002; Stulz 1999;



Reese and Weisbach 2002). The recent participation of corporations from EMEs in international capital markets may also help boost the access of smaller corporate players. First-time borrowers can face high costs, because lenders must expend considerable resources in obtaining information. Once these initial expenses are absorbed, the marginal cost of making subsequent loans is lower, reducing financing costs for all borrowers. A sound macroeconomic environment, ongoing financial liberalization, and improved corporate governance have contributed to this enhanced access of EME corporations to external financing.

Bond issuance by corporations in EMEs (including financial institutions) grew from 34 per cent of total issuance in 1995 to 92 per cent in 2007, greatly exceeding the issuance of sovereign bonds (Chart 7). Broadly speaking, the decline in sovereign bond issuance can be attributed to sound macroeconomic policies: fiscal authorities have tightened spending. resulting in lower ratios of public sector debt to GDP and substantial principal repayments on sovereign bonds. Moreover, most EMEs have repaid large amounts of external sovereign debt and have shifted public sector borrowing to the domestic bond market. The increased engagement of EME corporations in international capital markets has, in turn, been driven by two structural forces: (i) growing demand from investors seeking higher vields and investment diversification and (ii) privatizations in the corporate sector and companies' increasing participation in international business transactions. Improved domestic macroeconomic policies and liberalization of capital controls by several EME governments have also enhanced the ability of corporations to access international financing.



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**<sup>20</sup>** Note that net issuance of bonds is calculated as inflows minus outflows, such as repayments. Data on gross issuance in the international market show that bond issuance rose by 23 per cent (from US\$124 billion to US\$154 billion) in 2007 (for a 30-country sample).

The growing importance to EME firms of cross-border borrowing in capital markets since the early 2000s has raised a new set of policy challenges for developing countries and for the global economy, including concerns about corporate foreign debt. After the Asian crisis, most EMEs developed more open capital accounts, improved their local capital markets, and significantly reduced their external public debt. Such reforms tended to shift the locus of currency and credit risk associated with external borrowing from the sovereign to the corporate sector, with important implications for the conduct of policy. Indeed, overreliance on international sources of capital may have some drawbacks. For example, as corporations in EMEs have grown and expanded their international operations, they have increased their exposure to interest rate and currency risks. This greater foreign exposure has heightened the vulnerability of these firms to a drying up of foreign financing, such as occurred in the recent financial crisis.

## The Impact of the 2007–09 Crisis: Lessons Learned

The recent changes in the nature of capital markets and flows made some EMEs more resilient to the financial crisis. At the same time, rapidly growing trade and the financial integration of EMEs into the global economy over the past decade left some EMEs more vulnerable to contagion in the face of deteriorating global economic conditions. Countries that had adopted sound macroeconomic and financial policies appear to have fared better: they were more resilient and began to recover sooner.

## Overall, EMEs withstood the recent financial turmoil better than in previous crises.

Overall, EMEs withstood the recent financial turmoil better than in previous crises. In fact, capital flows remained robust until the collapse of Lehman Brothers in September 2008. This is likely the result of stronger policy frameworks. Indeed, the growing popularity of inflation targeting, increased flexibility of exchange rates, greater ability to issue debt in domestic currency, and generally improved fiscal positions have led to justified perceptions that EMEs have significantly improved their economic fundamentals over the past decade. The high level of foreign exchange reserves held by many EMEs has also helped to maintain confidence, albeit at the cost of inflexibility in the real exchange rate (for some) and the buildup of global imbalances over the medium term. Research also suggests that attempts to reduce the vulnerability of individual countries in more normal times, such as smaller current account and fiscal deficits, can lower the level of financial stress in EMEs and may limit the implications for the real economy (IMF 2009). Once financial stress recedes in the advanced economies, lower current account and fiscal deficits can help to re-establish financial stability and inflows of foreign capital.

With respect to the composition of capital flows, countries that had attracted larger shares of FDI flows generally fared better in the crisis. FDI flows held up fairly well, and despite some weakness in early 2009, no "fire sale" of FDI has occurred, such as took place in emerging Asia in the late 1990s.<sup>21</sup> Recent research also shows that a large pre-crisis exposure to inflows of FDI capital was associated with a less-severe credit crunch during the recent crisis (Tong and Wei 2009).<sup>22</sup> As in previous crises, the reversal in flows during the 2007–09 crisis came in two main categories: net flows of portfolio equity and net bank lending. Countries that depended mainly on these flows were less well positioned to deal with the drying up of liquidity in the financial crisis. Portfolio equity flows were affected as early as 2007, as investors scrambled out of illiquid EME equity markets. Net bank lending to EMEs fell sharply in 2008, partly because of global deleveraging, a re-emerging home bias, and the reduction of loans to EMEs by international banks in order to overcome severe liquidity shortages in their home markets. Bond markets, on the other hand, while also having been severely hit, appear to be recovering guickly. Moreover, countries with more developed local bond markets have been somewhat more resilient, but not immune, to capital outflows.

## **Regional differences**

EME regions can be grouped by their performance in the financial crisis, based on their progress in improving fundamentals and their reliance on the different components of capital flows. For instance, in Latin America, almost six years of improving current account positions, marked gains in terms of trade,

<sup>21</sup> FDI flows almost inevitably weaken during downturns in the business cycle, since a portion is accounted for by reinvested earnings, which weaken during periods of recession, when the overall appetite to invest falls.

<sup>22</sup> Note that the total volume of pre-crisis capital inflows does not appear to be systematically related to the severity of the credit crunch.

declines in public external debt relative to output, growing international reserves, and financial sector reforms have strengthened the ability of many countries to weather external shocks. In addition, many countries with flexible exchange rates absorbed part of the shock through significant exchange rate depreciation. The banking crisis also had the least severe impact in Latin America, because of a reduction in banking flows over the past 10 years. In fact, the rebound in capital inflows to some countries in Latin America has raised concerns: Brazil, for instance, has imposed controls on inflows.

Emerging Asia also appears to be better positioned than in previous crises, although the region has experienced a collapse in global banking and equity flows.<sup>23</sup> Liabilities to banks in advanced economies declined somewhat in emerging Asia following the 1997–98 crisis, making the region less vulnerable to external banking crises. However, portfolio liabilities have increased markedly in emerging Asia, which led to a rapid withdrawal of portfolio equity in 2007 and 2008. Nevertheless, equity flows rebounded quickly in mid-2009, with equity markets rising strongly. This too has raised concerns that asset prices may deviate from fundamentals if inflows expand too rapidly. High levels of official reserves have also helped cushion the shock, and government budget surpluses have allowed policy-makers to implement important fiscal stimulus packages. Declining inflation has allowed monetary authorities in many countries to cut key policy interest rates. Moreover, sound banking systems in most countries have allowed the effective implementation of measures to help sustain domestic liquidity and the availability of credit. Liquidity in local currency has remained broadly adequate, and interbank rates have declined or remained stable.

On the other hand, the buoyant economic growth in central and eastern Europe over the past decade was fuelled by a strong expansion of credit that relied largely on external financing and led to rising levels of external debt, as was the case in the 1997 Asian crisis. Current account deficits widened on the back of booming private consumption and have been running in the double digits in the Baltic States, Romania, Bulgaria, Bosnia, and Serbia.<sup>24</sup> Bank liabilities to advanced economies have grown rapidly in emerging Europe and are now over 50 per cent of GDP, which is about three times the level in other emerging-market regions, making the region more vulnerable to external bank crises (World Bank 2009). Large currency mismatches in banks' portfolios, short maturities, and the rapid expansion of bank credit to the private sector have made repaying or rolling over loans especially problematic. In addition, countries with fixed exchange rate regimes only slowly adjust to large external imbalances, because the entire burden of adjustment is borne by domestic mechanisms, particularly fiscal policy. In many important ways, therefore, eastern European countries headed into the crisis with weaker macroeconomic fundamentals than countries in emerging Asia or Latin America. The impact of the crisis has thus been more dramatic and will likely be longer lasting than in other regions.

## **Overall assessment**

Taken together, the sound policies adopted before the crisis have allowed many EMEs to better weather and respond to the financial turbulence. Nevertheless, improved fundamentals have not prevented the transmission of financial stress from advanced economies to EMEs. The growing levels of trade and the financial integration of EMEs into the global economy over the 2002-07 period left many countries vulnerable to fallout from the crisis, despite the improvements in the composition and nature of capital flows. Trade linkages have become increasingly important over the past 20 years, with exports to advanced economies up from less than 10 per cent of emerging economies' GDP to nearly 20 per cent (IMF 2009). Crisis transmission via both trade and financial linkages has been compounded by second-round effects through spillovers from affected emerging economies back to advanced economies and through spillovers within the group of emerging economies. All in all, net private debt and equity flows are projected to decline from a record high of 7 per cent of GDP in 2007 to just over 2 per cent in 2009, exceeding the peak-to-trough drop during the Latin American debt crisis in the early 1980s (3.3 percentage points) and in the combined East Asian and Russian crises of the late 1990s (2.4 percentage points) (World Bank 2009).

## **Conclusion and Policy Discussion**

Despite the turnaround in capital flows in late 2009, these flows have not yet returned to pre-crisis levels. Only a few emerging-market sovereigns were able to issue international bonds in 2009. Bank lending to EMEs fell considerably through the first quarter of 2009 and remained weak throughout the year. There

<sup>23</sup> Markets in East Asia and the Pacific are more liquid than those in other developing regions and have been a dominant destination for equity investors.

<sup>24</sup> This happened even though all these countries, with the exception of Romania, ran tight enough fiscal positions that they would have met the Maastricht criteria in 2008.

is also increasing evidence of a drop in FDI inflows to EMEs. According to World Bank estimates, net private debt and equity flows to EMEs are projected to decline from a high of 7 per cent of GDP in 2007 to a mere 2.6 per cent in 2010.

The past decade has been characterized by ongoing financial liberalization in many EMEs which, in turn, has resulted in the growing integration of these countries into the global economy. In theory, financial and capital account liberalization should lead to a better allocation of savings, more efficient investment, and thus higher long-run economic growth. The increasing integration of EMEs in the global economy has, indeed, brought substantial economic and financial benefits, but it has also magnified the potential impact of any deterioration in global economic conditions. Thus, even though most EMEs now follow better macroeconomic policies than they did at the onset of previous crises, more are now vulnerable to external disruptions. In particular, the recent global crisis has highlighted that financial and capital account liberalization can result in poor economic outcomes unless accompanied by appropriate regulation and supervision. Moreover, sequencing is an important element to consider in the context of capital account liberalization: simply, certain institutional arrangements need to be in place first, including supervisory and regulatory capacity, appropriate legal standards and other institutional features that can help maintain financial stability in the presence of capital inflows (Kawai and Takagi 2008; McKinnon 1993). Indeed, the crisis has sparked widespread interest in tighter regulation of financial

institutions, financial markets, and financial transactions (Barroso 2009). Additional regulation should be implemented in a nuanced and targeted manner, however, since excessive regulation may not always be the appropriate response (Schembri, Santor, and Epstein 2009).

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The recent crisis has also prompted a number of EMEs to impose controls on capital outflows. Some countries may also react by increasing their holdings of official reserves and maintaining undervalued exchange rates. There is also the risk that some countries may use capital controls beyond emergency needs which, in turn, might restrict their ability to attract capital in the future. Thus, while imposing capital controls may have some benefits in the short run, the long-run effects are likely to be detrimental, since such policies could potentially exacerbate macroeconomic imbalances. Indeed, capital flows are an integral part of a stable and efficient market-based international financial system, and policy-makers need to enact policies that would support such flows.

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