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**INTERNATIONALIZATION OF FINANCE AND  
CHANGING VULNERABILITIES IN EMERGING  
AND DEVELOPING ECONOMIES**

Yılmaz Akyüz





## **RESEARCH PAPERS**

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**Yılmaz Akyüz\***

**SOUTH CENTRE**

**JANUARY 2015**

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## **ABSTRACT**

After a series of crises with severe economic and social consequences in the 1990s and early 2000s, emerging and developing economies (EDEs) have become even more closely integrated into what is widely recognized as an inherently unstable international financial system. Both policies in these countries and a highly accommodating global financial environment have played a role. Not only have their traditional cross-border linkages been deepened and external balance sheets expanded rapidly, but also foreign presence in their domestic credit, bond, equity and property markets has reached unprecedented levels. New channels have thus emerged for the transmission of financial shocks from global boom-bust cycles. Almost all EDEs are now vulnerable irrespective of their balance-of-payments, external debt, net foreign assets and international reserve positions although these play an important role in the way such shocks could impinge on them. Stability of domestic banking and asset markets is susceptible even in countries with strong external positions. Those heavily dependent on foreign capital are prone to liquidity and solvency crises as well as domestic financial turmoil. The new practices adopted in recent years including more flexible exchange rate regimes, accumulation of large stocks of international reserves or borrowing in local currency would not provide much of a buffer against severe external shocks such as those that may result from the normalization of monetary policy in the US. And the multilateral system is still lacking adequate mechanisms for an orderly and equitable resolution of external financial instability and crises in EDEs.





## TABLE OF CONTENTS

<b>I.</b>	<b>INTRODUCTION</b> .....	<b>1</b>
<b>II.</b>	<b>DEEPENING INTEGRATION</b> .....	<b>3</b>
	<i>II.1. Factors accelerating financial integration</i> .....	<i>3</i>
	<i>II.2. Expansion of external balance sheets</i> .....	<i>6</i>
	<i>II.3. Gross external assets</i> .....	<i>13</i>
	<i>II.4. Equity inflows and markets</i> .....	<i>15</i>
	<i>II.5. External debt</i> .....	<i>23</i>
	<i>II.6. Public commercial debt</i> .....	<i>34</i>
	<i>II.7. Private debt</i> .....	<i>45</i>
	<i>II.8. Foreign banks: Cross-border and local lending</i> .....	<i>51</i>
<b>III.</b>	<b>EXTERNAL VULNERABILITIES</b> .....	<b>56</b>
	<i>III.1. Credit and asset bubbles</i> .....	<i>56</i>
	<i>III.2. Exchange rate flexibility, capital flows and external vulnerability</i> .....	<i>58</i>
	<i>III.3. Reserve accumulation: How much self-insurance?</i> .....	<i>59</i>
	<i>III.4. Sovereign debt and financial stability</i> .....	<i>63</i>
	<i>III.5. Foreign banks and financial stability</i> .....	<i>67</i>
<b>IV.</b>	<b>CRISIS MANAGEMENT AND RESOLUTION</b> .....	<b>71</b>
	<i>IV.1. Sovereign debt workouts</i> .....	<i>72</i>
	<i>IV.2. Domestic sovereign debt</i> .....	<i>75</i>
	<i>IV.3. Banking crises and restructuring</i> .....	<i>79</i>
<b>V.</b>	<b>CONCLUSIONS</b> .....	<b>82</b>
	<b>REFERENCES</b> .....	<b>83</b>

## TABLES

Table 1: External Assets (A), Liabilities (L) and Net Foreign Assets (NFA) .....	11
Table 2: Current Account and Reserves .....	14
Table 3: Total Equity Liabilities (TEL) and Portfolio Equity Liabilities (PEL) .....	16
Table 4: Market Capitalization .....	21
Table 5: Non-resident Holdings in Stock Markets .....	22
Table 6: Gross External Debt.....	24
Table 7: Shares of Private and Public Sectors in International Commercial Debt .....	27
Table 8: Share of Local Currency Bonds and Notes in Total International Issues.....	28
Table 9: Outstanding Total Debt Issues in EDEs by Sectors.....	30
Table 10: Share of Local Currency in Total Bonds .....	32
Table 11: Share of Local Currency in Total Gross External Debt.....	34
Table 12: General Government Gross Debt .....	36
Table 13: Non-Resident Holdings of Local Currency Denominated Central Government Debt Securities.....	41
Table 14: Holders of General Government Debt.....	43
Table 15: Non-resident Holding of Government Debt Securities .....	44
Table 16: Private International Debt in EDEs .....	46
Table 17: Private International Debt.....	47
Table 18: International Emerging Market Corporate Bond Issuance .....	49
Table 19: Share of Foreign Banks - Regions .....	52
Table 20: Share of Foreign Banks in Selected EDEs .....	53
Table 21: Reserves and Foreign Claims: 2013 .....	61

## CHARTS

Chart 1: Capital Flows in EDEs.....	3
Chart 2: External Assets and Liabilities in EDEs .....	7
Chart 3: External Balance Sheets and Financial Openness in EDEs .....	8
Chart 4: External Assets and Liabilities by Regions .....	10
Chart 5: External Assets plus Liabilities in EDEs .....	12
Chart 6: Net Foreign Assets.....	13
Chart 7: Portfolio Equity Inflows and MSCI in EDEs .....	19
Chart 8: Market Capitalization and MSCI in EDEs.....	20
Chart 9a: International Securities and Bank Claims – all EDEs.....	25
Chart 9b: External Debt – all EDEs .....	25
Chart 10: Share of Domestic Currency Bonds & Notes in Total International Issues by EDEs .....	29
Chart 11: Structure of Total Debt Securities Outstanding in EDEs.....	31
Chart 12: Emerging Market Debt Outstanding in U.S. dollars and Local Currencies.....	33
Chart 13: General Government Gross Debt: Regions.....	35
Chart 14: Sovereign Bond Interest Rate Spreads in EDEs .....	37
Chart 15: Government Bond Yields in Emerging Markets .....	38
Chart 16: Non-resident Investor Participation in Domestic Markets for Government Bonds.....	40
Chart 17: Currency Composition of Central Government Debt in 2012 .....	42
Chart 18: Structure of Foreign Bank Claims in EDEs.....	54
Chart 19: Foreign Banks: Cross-Border and Local Claims in EDEs.....	55



## I. INTRODUCTION

After recurrent crises with severe economic and social consequences in the 1990s and early 2000s, emerging and developing economies (EDEs) have become even more closely integrated into what is now widely recognized as an inherently unstable international financial system.<sup>1</sup> The crisis that hit the US and Europe in 2008 did not slow this process despite initial fears that it could lead to a retreat from globalization (Altman, 2009). Widespread liberalization of international capital flows and greater openness to foreign financial institutions in EDEs, together with growing optimism about the growth prospects of several of them, have played an important role in attracting foreign investors and banks to these economies. This process was greatly helped by highly favourable global financial conditions before 2008 thanks to the very same credit and spending bubbles that culminated in a severe crisis in the US and Europe. It has been continuing unabated since then because of ultra-easy monetary policies pursued in these economies, notably in the US, in response to the crisis.

The surge in capital inflows that started in the early years of the new millennium and continued with full force after a temporary blip due to the Lehman collapse in 2008, holds the key to the growing internationalization of finance in EDEs. It has resulted in a significant increase in foreign presence in the equity, property, bond and credit markets of these countries, exerting a strong influence on their liquidity and valuation dynamics and heightening their susceptibility to international financial conditions. Gross assets and liabilities and external balance sheets have expanded rapidly almost everywhere. Even countries running large current account deficits have been able to add to their gross assets thanks to strong capital inflows. More importantly, the structure of external balance sheets has undergone important changes, particularly on the liabilities side, bringing new vulnerabilities:

- The share of direct and portfolio equity in external liabilities has been increasing. An important part of the increase in equity liabilities is due to capital gains by foreign holders. In many EDEs foreign presence in equity markets is greater than that in the US and Japan.
- While still remaining below the levels seen a decade ago as a per cent of GDP, external debt build-up has accelerated since the crisis in 2008. This is mainly due to borrowing by the private sector which now accounts for a higher proportion of external debt than the public sector in both international bank loans and security issues.
- A very large proportion of private external debt is in foreign currency. There is also a renewed tendency for dollarization in domestic loan markets.
- Bond issues have been growing faster than borrowing from international banks both in the public and private sectors, particularly since the crisis.
- International banks have been shifting from cross-border lending to local lending by establishing commercial presence in EDEs. Their market share in EDEs has reached 50 per cent compared to 20 per cent in OECD countries.

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<sup>1</sup> EDEs correspond to what the IMF calls “Emerging Market and Developing Economies”.

- Public debt as a percent of GDP now stands below the highs seen in the aftermath of recurrent crises in the 1990s and early 2000s, but in many countries it has started to rise since the crisis.
- As a result of a shift of governments from international to domestic bond markets and opening them to foreigners, the participation of non-residents in these markets has been growing.
- Much of sovereign external debt is now in local currency and under local jurisdiction.
- The proportion of local-currency sovereign debt held abroad is greater in many EDEs than in reserve-issuers such as the US, the UK and Japan. The sovereign debt of EDEs is held by fickle investors abroad rather than by foreign central banks as international reserves.

With deepened and changed pattern of financial integration, new channels have emerged in the transmission of financial shocks from global boom-bust cycles to EDEs. Vulnerabilities resulting from the internationalization of domestic equity, bond and property markets and increased foreign presence in the banking system have gained importance in addition to the traditional balance-of-payments vulnerability to interruptions to access to international capital markets and capital reversals. Almost all EDEs have now become susceptible to global financial cycles and shocks irrespective of their balance-of-payments, external debt, net foreign assets (NFA) and international reserves positions although these play an important role in the way such shocks could impinge on them. Stability of domestic banking and asset markets is exposed to global shocks even in countries with strong external payments and assets positions. Those heavily dependent on foreign capital have become even more vulnerable, exposed to risks of both external and domestic financial instability.

This paper analyses the salient features of the recent pace and pattern of integration of major EDEs into the global financial system and their changing vulnerabilities to external financial shocks. In discussing the pattern of integration and the associated vulnerabilities the paper focuses on the size and composition of gross external balance sheets, particularly gross liabilities.<sup>2</sup> The next section examines the factors driving closer integration of EDEs into the international financial system in the new millennium and the changes in the volume and composition of their gross external balance sheets. This is followed by a discussion of consequent financial vulnerabilities. The penultimate section examines the implications of these for the management and resolution of liquidity and solvency crises in EDEs, followed by conclusions.

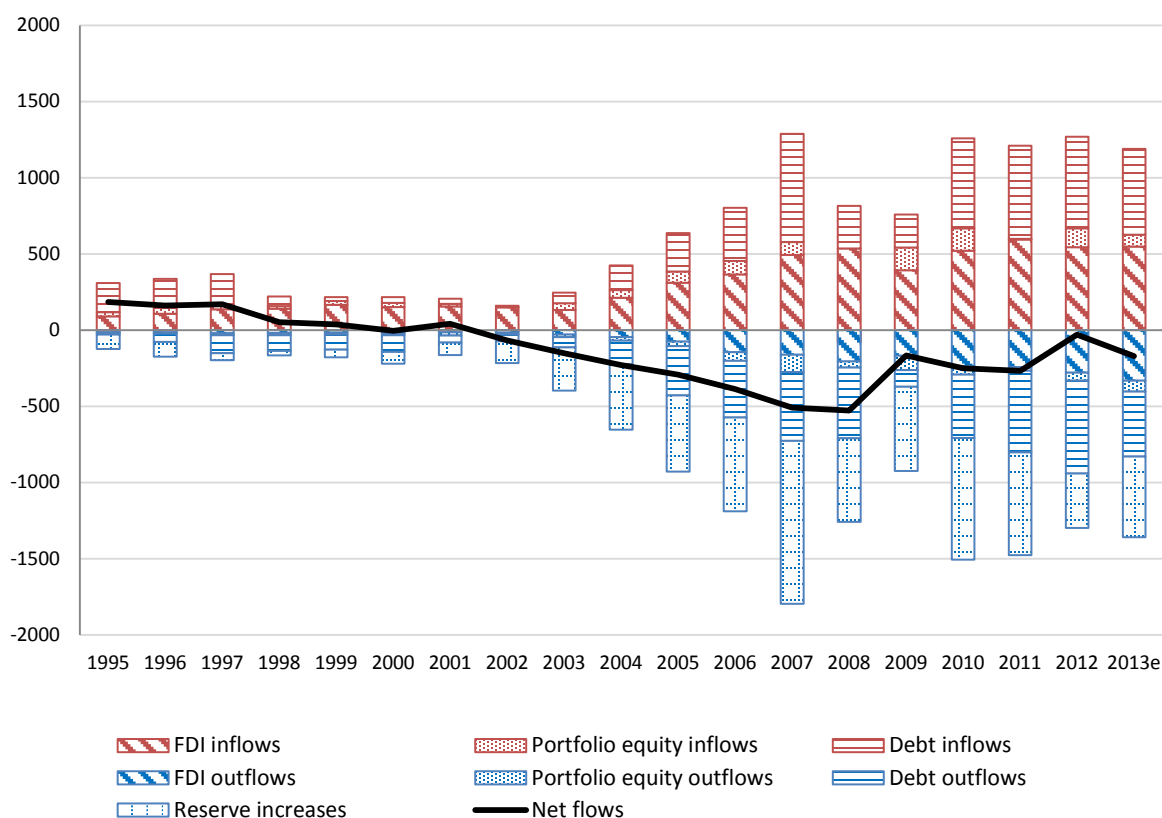
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<sup>2</sup> For the argument that gross external balance sheets and the leverage of the national balance sheets are more important in explaining potential vulnerabilities and the incidence and severity of financial crises than net foreign asset positions or current account deficits (its flow counterpart), see also Al-Saffar *et al.*, 2013.

## II. DEEPENING INTEGRATION

### II.1. Factors accelerating financial integration

Chart 1: Capital Flows in EDEs  
(Billions of U.S. dollars)



Source: IIF (May 2014).

e: estimates.

A central factor in the acceleration of integration of EDEs into the international financial system is the surge in capital inflows that started in the early 2000s (Chart 1).<sup>3</sup> This was the third post-war boom in capital inflows to EDEs. The first boom had started in the late 1970s and ended in 1982 with a debt crisis in Latin America. The second boom came in the first half of the 1990s and took only a few years to culminate in recurrent crises, starting with

<sup>3</sup> Here capital flows are used for both inflows and outflows. *Capital inflows* refer to the net acquisition of domestic assets by *non-residents* where sale of assets are defined as negative inflows. *Capital outflows* refer to the net acquisition of foreign assets by *residents*, including foreign companies and individuals that have established residence in EDEs, and sales are defined as negative outflows. *Net capital flows* are the difference between capital inflows and capital outflows. Chart 1 is based on data from the Institute of International Finance (IIF) rather than the IMF since the IIF provides data on portfolio equity inflows for the entire period under consideration. These data cover the 30 largest countries which account for a very large proportion of total income and capital flows of EDEs.

Mexico in 1994-95 and followed by East Asia, Brazil, Russia, Turkey and Argentina. The third boom in capital inflows surpassed the first two not only in absolute terms but also in per cent of gross domestic product (GDP) (Akyüz, 2011).

Both push and pull factors played a role. From 2002 onwards, policies pursued in advanced economies (AEs) generated highly favourable external financial conditions for EDEs. Sharp cuts in interest rates in all major AEs and rapid liquidity and credit expansion that led to the subprime bubble in the US and property and consumption bubbles in several European countries also gave a major boost to capital inflows to EDEs. Although the collapse of Lehman Brothers in September 2008 resulted in a rapid deterioration in global financial conditions and sudden reversal of capital inflows to EDEs, these were short-lived thanks primarily to the policy response of the US. The resort to zero-bound policy rates and rapid expansion of liquidity, the so-called quantitative easing, generated a swift recovery of capital inflows to EDEs, resulting in a new surge in several regions (Akyüz, 2013). If the Lehman blip is excluded, the boom in capital inflows that started around 2002 is longer than previous post-war booms, lasting over a decade.

Because of higher interest rates and more vibrant asset markets, several EDEs became more attractive for international investors and lenders from the early years of the 2000s. Risk appetite shifted in favour of EDEs and equities of firms in several major EDEs emerged as a new asset class for portfolio diversification by international investors. BRIC (Brazil, Russia, India and China) were identified by international bankers as the “emerging markets” with the brightest economic prospects and came to be seen as highly profitable venues for investment and lending (O’Neill, 2001). Again, many economies in the European periphery enjoyed improvements in their credit ratings and falls in spreads thanks to their inclusion in the Economic and Monetary Union (EMU).

Significantly accelerated growth in EDEs after the early 2000s was an important reason for the growing interest of international investors. Many EDEs had been in disarray in the late 1990s and early 2000s, facing severe currency, liquidity and debt crises one after another, starting in 1994-95 with Mexico, followed by East Asia, Brazil, Russia, Turkey and Argentina. However, their recovery was rapid, greatly helped by a favourable global economic environment (Akyüz, 2012). While in the 1990s growth in the EDEs had been faster than that in AEs only by 1 percentage point, the difference shot up to almost 5 points from 2002 until the onset of the crisis. Again, the recovery in EDEs after 2009 was much faster than that in AEs. Thus, a virtuous circle emerged whereby rapid growth attracted more capital into EDEs and this in turn added to growth by stimulating private spending in investment in property and consumption, thereby attracting even more capital.

An equally important factor in the deepening of global financial integration of EDEs is capital account liberalization. In some cases this was undertaken as a result of obligations undertaken in the World Trade Organization (WTO) negotiations on trade in financial services. For many others, it resulted from commitments made in Free Trade Agreements (FTAs) and Bilateral Investment Treaties (BITs) with major AEs, particularly the US and the EU. Nevertheless, most countries, notably those with chronic current account deficits and savings gaps, chose to liberalize capital accounts unilaterally in the hope that this would help close their structural deficits and accelerate investment and growth.

Local bond markets were opened to foreign investors in order to deepen them and facilitate public borrowing. This was also expected to address the so-called original sin



problem – that is, the inability of EDEs to issue international debt in their own currencies (Eichengreen *et al.*, 2003) – and allow them to transfer the currency risk to creditors and minimize the impact of currency declines on debt burden and external sustainability. In East Asia the development of regional bond markets was seen as a solution to the problems of currency and maturity mismatches that had devastated the region during the 1997 crisis, culminating in the Asian Bond Market initiative in 2003 (Lim and Lim, 2012).

The past decade also saw a widespread liberalization of inflows of direct and portfolio equity investment. Many private financial and non-financial corporations in EDEs started looking for partners from AEs in order to facilitate their access to foreign markets and finance and this accounts for an important part of foreign acquisitions of equity in EDEs. On the other hand, following China's success in becoming an international hub for manufactured exports to AEs, hopes were increasingly pinned on participation in international production networks organized and controlled by transnational corporations (TNCs) from AEs for export-led industrialization. Even countries such as India, traditionally quite selective vis-à-vis direct and portfolio equity inflows, relaxed or removed overall limits or sectoral caps. The outcome has been a significant escalation of foreign presence and influence in real and financial sectors of EDEs.

Domestic markets have also been opened to foreign banks, notably but not only from AEs, often on grounds that this would improve the efficiency of the banking system, lower the intermediation margin and enhance the resilience of EDEs to external financial shocks. Some countries have encouraged joint ownership with local partners while others allowed fully-owned foreign subsidiaries or branches under the control of parent banks.

As a result of the liberalization of the capital account for residents, both financial and non-financial corporations have come to enjoy greater access to international financial markets flooded with cheap money, particularly since the onset of the crisis in AEs. In major EDEs, including deficit countries dependent on foreign capital such as Brazil, India, South Africa and Turkey, corporations have been allowed and even encouraged to invest and expand abroad and become global players. Limits on the acquisition of foreign securities and deposits by individuals and institutional investors were also raised or abolished. Until the recent weakening of capital inflows and current accounts, a main motive for outward liberalization was to relieve pressures of strong capital inflows on currencies and avoid costly interventions in foreign exchange markets (Akyüz, 2008).

Thus, finance in EDEs has become increasingly internationalized in two overlapping dimensions. First, through rapid expansion of international assets and liabilities as conventionally defined on the basis of residence – that is, the balance sheet positions of residents of EDEs vis-à-vis non-residents. Second, as a result of growing assets and liabilities defined on the basis of nationality – that is, the balance sheet positions of nationals of EDEs vis-à-vis foreigners including debt to foreign banks located in EDEs and the external debt of overseas subsidiaries of their corporations.

## **II.2.      *Expansion of external balance sheets***

The evolution of gross external assets and liabilities of EDEs has been shaped by their two principal determinants: current account balances and capital flows.<sup>4</sup> In most of the 1990s the current account of EDEs taken together was in deficit despite occasional small surpluses in East Asia and fuel exporters. As a result, capital inflows provided financing for both current account deficits and acquisition of (gross) assets abroad. However, growth of external balance sheets was slow because when capital inflows were strong, deficits were large, as in the first half of the decade, and when deficits came down, so did capital inflows, as in the second half.

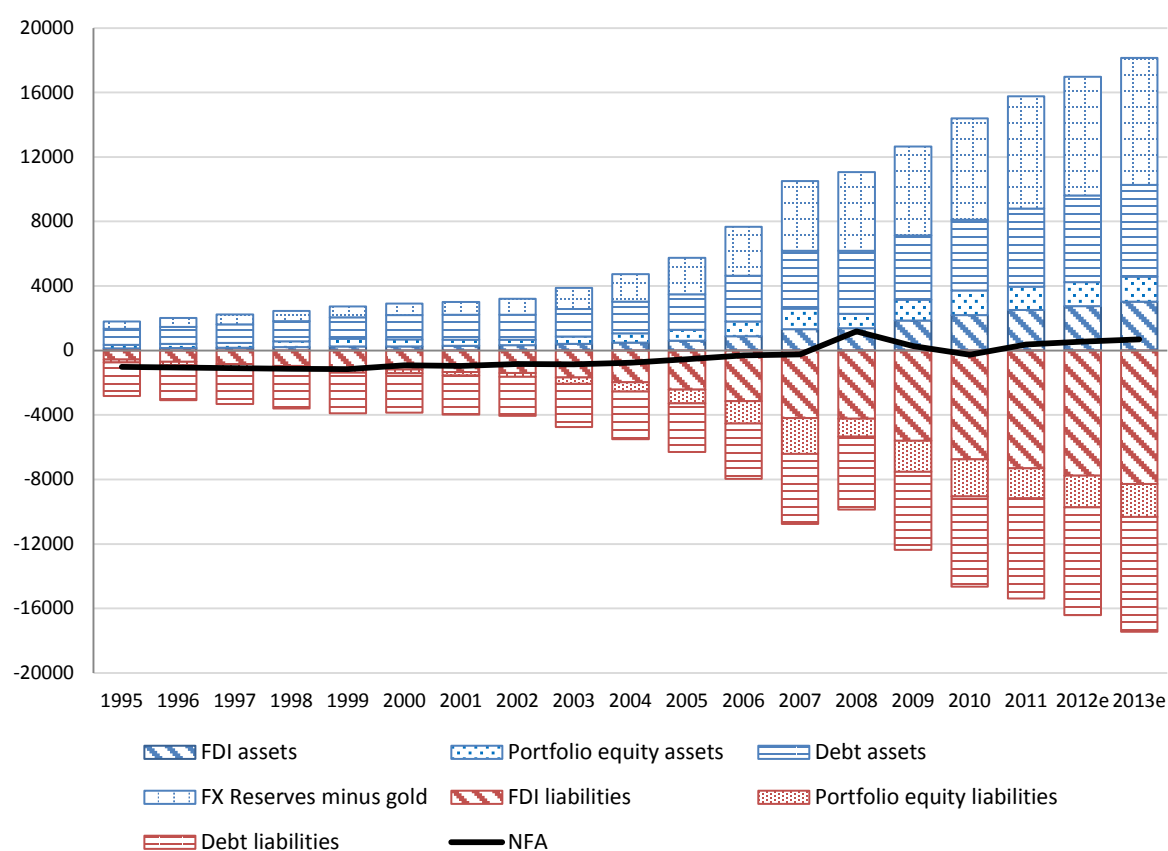
The picture changed in the new millennium when both current accounts and capital inflows improved significantly. For EDEs as a whole, the current account shifted to a surplus thanks to a strong export drive by China and smaller East Asian economies and large surpluses of fuel exporters. In Asia the cumulative current account surplus exceeded \$1 trillion during 2002-07 and over 85 per cent of this was due to China. Large inflows of capital and current account surpluses allowed several East Asian EDEs and many fuel exporters to build up sizeable external assets. In the rest of the developing world deficits declined and even small surpluses emerged thanks to a surge in commodity earnings. The combination of improved current account positions and the surge in capital inflows resulted in a significant expansion of their external balance sheets in the period before the crisis. After 2008, China's surplus fell sharply, but Asia and EDEs as a whole continued to run a current account surplus. While many major EDEs started to run large deficits, strong capital inflows still allowed them to acquire assets abroad and to expand their external balance sheets.

From the beginning of the millennium until the crisis in 2008 the external balance sheet (that is, gross external assets plus liabilities) of EDEs taken together expanded by threefold (Chart 2). The momentum has continued unabated after the Lehman collapse except for a brief interruption. For the entire period of 2000-13 gross international assets and liabilities of EDEs grew by about 15 and 12.5 per cent per annum, respectively, and their gross balance sheets expanded by more than fivefold. About 84 per cent of gross external assets and 78 per cent of gross external liabilities outstanding at the end of 2013 had been accumulated after 2000.

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<sup>4</sup> In addition, both gross assets and liabilities and net foreign asset positions are subject to valuation effects due to changes in bond and equity prices and exchange rates when they are denominated in different currencies; see Lane and Milesi-Ferretti. 2014. This issue will be subsequently discussed in relation to the measurement of the degree of financial integration and the effect of equity price changes on external liabilities.

Chart 2: External Assets and Liabilities in EDEs  
(Billions of U.S. dollars)



**Source:** South Centre calculations and estimates based on Lane and Milesi-Ferretti (2007), IIF (2014) and IMF *WEO* (April 2014).

e: estimates.

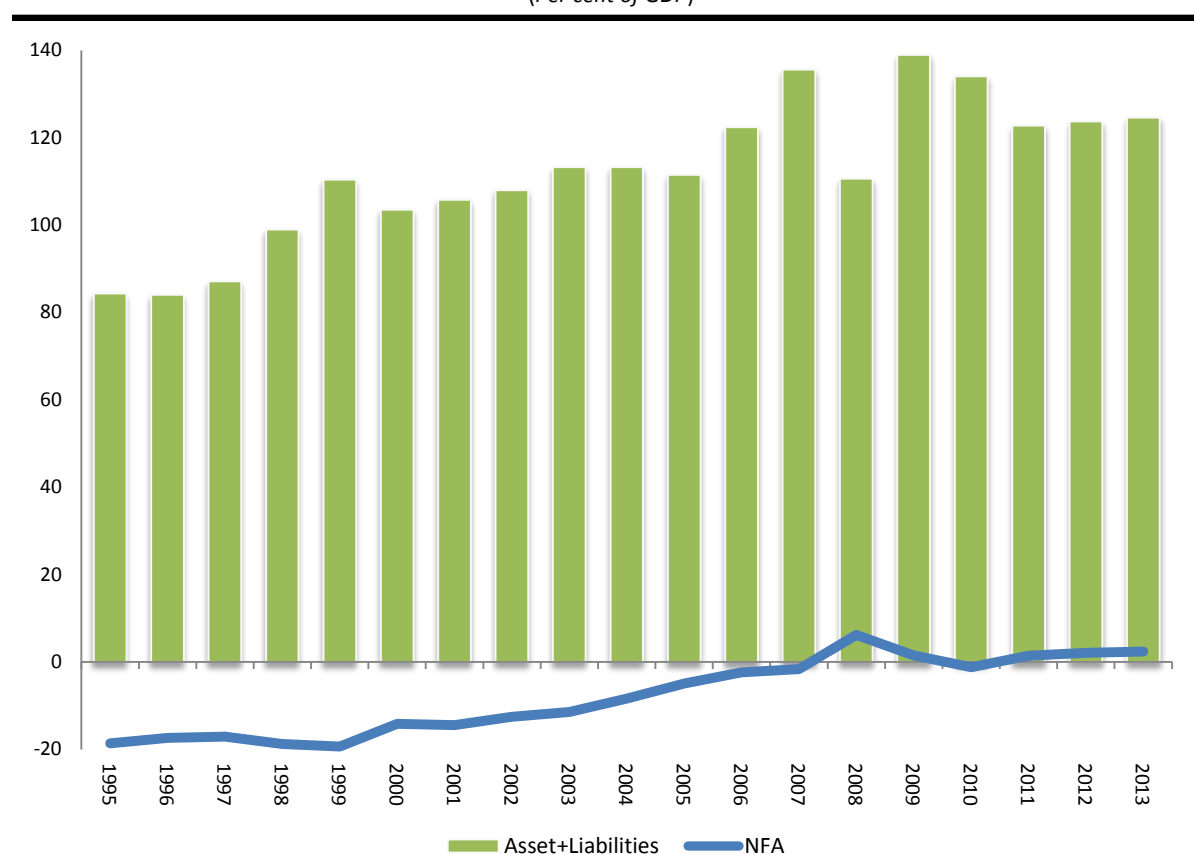
A conventional measure of the degree of financial integration is the ratio of external assets plus liabilities to GDP – the volume-based measure of international financial integration (Lane and Milesi-Ferretti, 2007). However, this measure is subject to distortions due to valuation changes; that is, changes in exchange rates and asset prices, notably bond and equity prices, relative to prices of goods and services that comprise GDP. When external assets and liabilities are denominated in foreign currencies, a real depreciation of the national currency would raise their value relative to GDP and vice-versa for appreciations. Similarly, an equity market boom would raise the value of existing foreign holdings relative to GDP even in the absence of an increase in the degree of foreign participation in the market. This effect is particularly important for portfolio equity liabilities which are estimated at market values while direct equity investment is typically reported at book values.

For these reasons it is sometimes argued that a more accurate normalization of foreign holdings (liabilities) should be the size of relevant markets – namely, debt and equity markets. In the same vein, for the foreign assets held, normalization should be based on total portfolio holdings by residents so as to assess the extent of international portfolio

diversification (Yeyati and Williams, 2011). Such measures will be explored in subsequent discussions on equity and debt markets and the banking system. Nevertheless, it is important to keep in mind that valuation effects cannot always be avoided by taking the size of relevant domestic markets rather than GDP to measure the relative importance of external liabilities as long as these liabilities are denominated in several currencies. This is certainly the case for debt where foreigners hold both hard-currency and local-currency claims. Such valuation effects should and can be accounted for by tracing the movement of the relative prices involved.

The ratio of sum total of gross external assets and liabilities to GDP is shown in Chart 3. It was around 84 per cent in the mid-1990s, rising in the second half of the decade but falling subsequently. The upward trend that started in the early 2000s with the boom in capital inflows and the growing current account surplus of EDEs was interrupted by the Lehman collapse in 2008. With the recovery in capital inflows the ratio rose sharply during 2009-10, but fell again as inflows slowed and the current account surplus contracted. At the end of 2013, it was about 125 per cent, well above the levels of the 1990s but below the peaks reached on the eve and the wake of the Lehman collapse.

Chart 3: External Balance Sheets and Financial Openness in EDEs  
(Per cent of GDP)



**Source:** South Centre calculations and estimates based on Lane and Milesi-Ferretti (2007) and IMF *WEO* (April 2014).

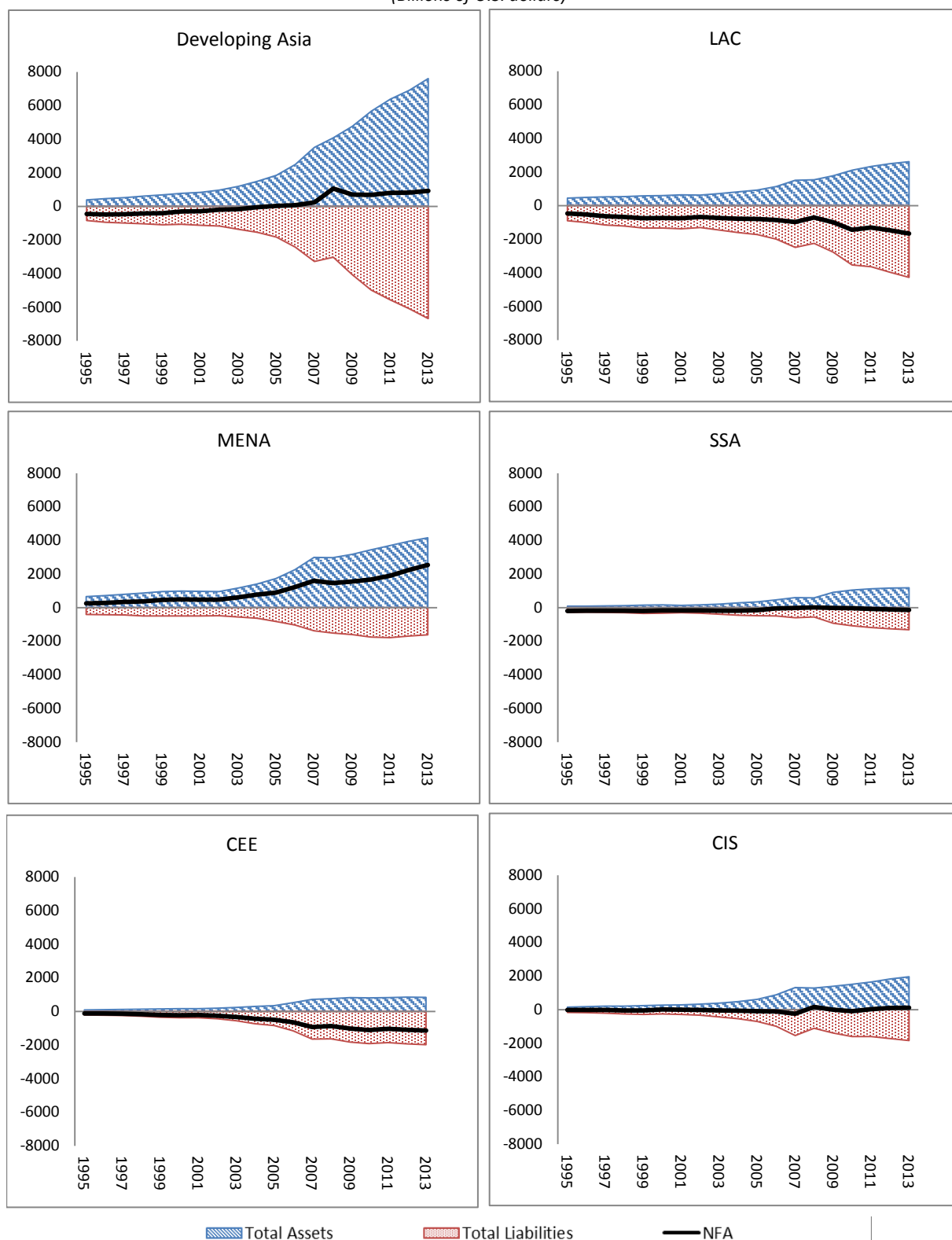
These changes in external balance sheets relative to GDP have no doubt been influenced by movements in exchange rates and asset prices. Since the early 2000s, exchange rates and equity prices of EDEs have generally moved in the same direction, implying that their valuation effects have worked in opposite directions (Akyüz, 2013). Until the Lehman collapse, currencies of EDEs mostly appreciated, creating a negative valuation effect on the ratio of external assets and liabilities to GDP while equity prices increased sharply, creating a positive valuation effect. The Lehman collapse triggered sharp declines in both currencies and equity prices, reversing their valuation effects. The strong recovery during 2009-10 was followed by a relative weakening of both currencies and equity prices.

At the end of 2013, the currencies of major EDEs against the dollar were higher by around 20 per cent compared to the levels of the early 2000s in real terms, implying a negative valuation effect. In the same period, the MSCI equity price index registered an increase of about 200 per cent, raising the value of foreign equity holdings and hence causing a positive valuation effect. However, the latter was small compared to the negative valuation effect of currency appreciations since external portfolio equity liabilities constituted less than 12 per cent of total liabilities in 2013. Therefore, the valuation effect during 2000-13 is likely to have reduced rather than increased the volume of external gross balance sheets of EDEs as a per cent of GDP, thereby resulting in an underestimation of the degree of integration on volume-based measure.

External assets and liabilities and capital flows of EDEs also grew faster than their international trade in goods and services during 2000-13. Until the onset of the crisis in 2008, both imports and exports of EDEs had grown rapidly thanks to growth of exports of manufactured consumer goods from East Asian EDEs to the US and Europe and the boom in commodity prices and trade. However, this came to an end in 2008 even though commodity prices recovered quickly due to China's stimulus package (Akyüz, 2013). For the entire period from 2000 to 2013, in value terms total trade (imports plus exports) of EDEs grew by some 11.5 per cent per annum while growth of their total stock of assets and liabilities in dollar terms was 13.6 per cent. The gap is even wider in terms of capital flows (inflows plus outflows) which grew on average by around 15 per cent per annum.

With assets growing faster than liabilities due to a strong export performance and current account position, the net foreign assets of EDEs as a whole moved from negative to positive territory after the 1990s. At the end of the 1990s, total external liabilities of EDEs had exceeded their total external assets by \$1.2 trillion or almost 20 per cent of their combined GDP. Subsequently their net asset position improved and became positive, reaching \$1.2 trillion or 6.2 per cent of their combined GDP in 2008. However, after the crisis, as the current account surplus of EDEs fell, their net foreign assets as a per cent of GDP started to decline, hovering around 2 per cent during the period 2011-2013 (Chart 3).

Chart 4: External Assets and Liabilities by Regions  
(Billions of U.S. dollars)



Source: South Centre calculations and estimates based on Lane and Milesi-Ferretti (2007) and IMF WEO (April 2014).

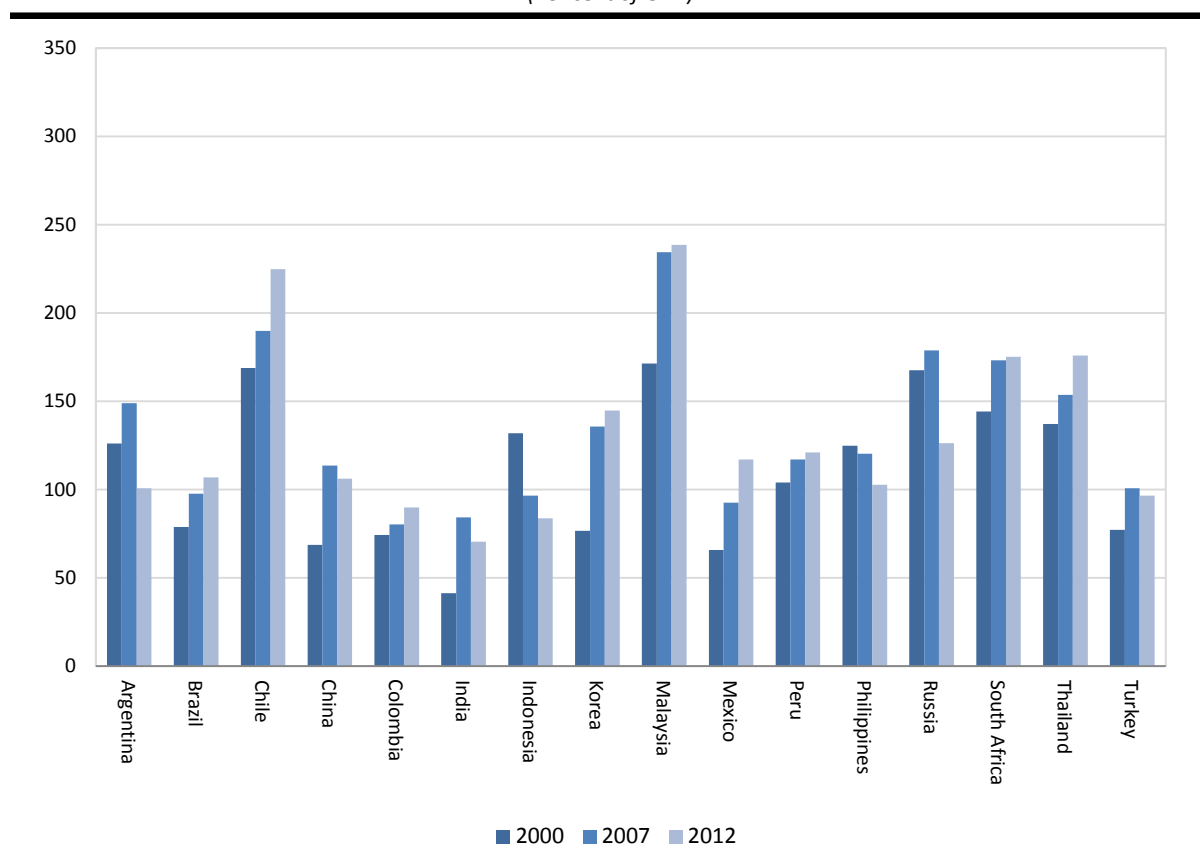
This aggregate picture naturally conceals significant diversity among various regions and countries (Chart 4). Given its sheer size, it is not surprising that a large proportion of international assets and liabilities of EDEs are concentrated in Asia, accounting for 40 per cent of the total, followed by Latin America and the Caribbean (LAC) and Middle East and North Africa (MENA) (Table 1). Asia also tops the list in terms of the pace of financial integration since the early 1990s, as measured by the growth of its external asset and liabilities. However, as a proportion of GDP, Asian external balance sheets are smaller than all other regions, including Sub-Saharan Africa (SSA), just over 100 per cent in 2013, up from 80 per cent in 2000. At the beginning of the millennium all regions except oil-rich MENA and the Commonwealth of Independent States (CIS), had negative NFA positions. Both MENA and the CIS increased their NFA subsequently thanks to strong energy prices while Asian EDEs shifted from negative to positive NFA positions. SSA still has a negative NFA position despite a significant improvement after the early 2000s. LAC continues to have a large negative NFA position whereas the crisis-stricken Central and Eastern Europe (CEE) has seen a significant deterioration throughout the 2000s.

Table 1: External Assets (A), Liabilities (L) and Net Foreign Assets (NFA)

	A+L (billions of U.S. dollars)		(A+L)/GDP		NFA/GDP	
	2000	2013	2000	2013	2000	2013
Asia	1836	14287	81	106	-13	7
LAC	1935	6880	90	119	-34	-29
MENA	1476	5768	168	170	56	75
SSA	490	2501	141	190	-51	-10
CEE	528	2820	89	147	-38	-60
CIS	524	3801	149	135	3	4

**Source:** South Centre calculations and estimates based on Lane and Milesi-Ferretti (2007) and IMF *WEO* database.

Chart 5: External Assets plus Liabilities in EDEs  
(Per cent of GDP)

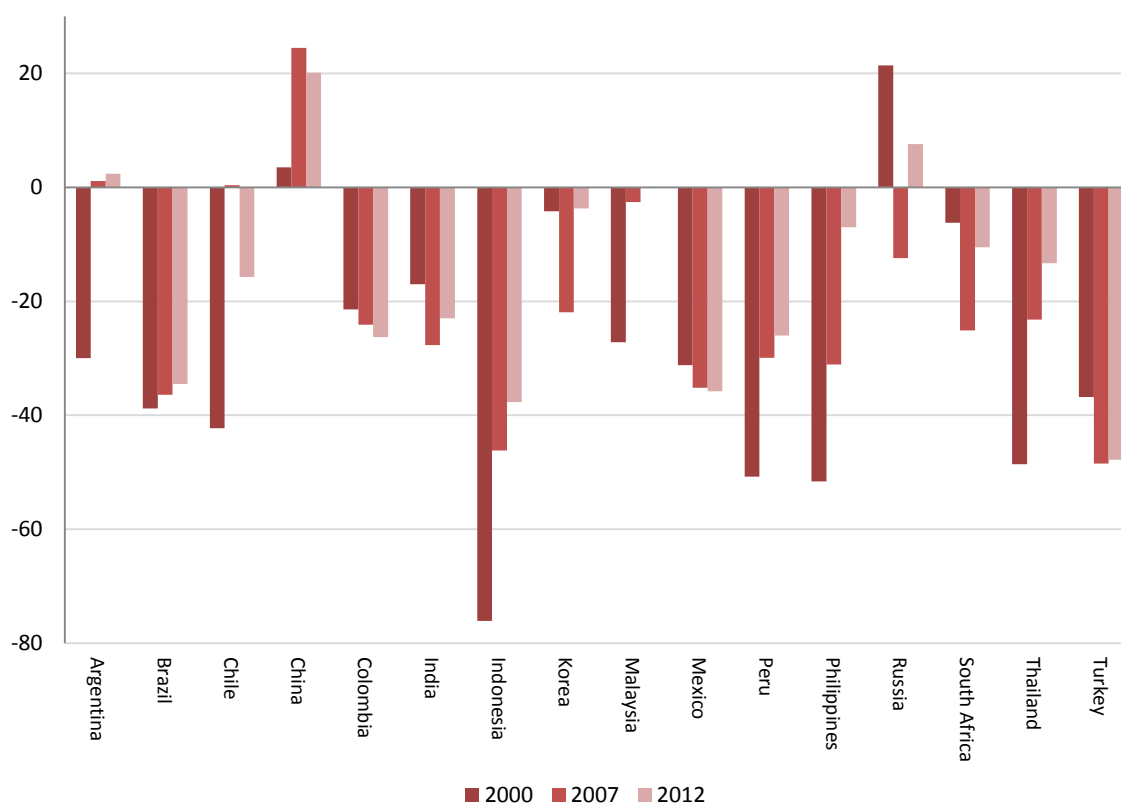


**Source:** South Centre calculations and estimates based on Lane and Milesi-Ferretti (2007) and IMF *BOP* database.

Chart 5 gives the total international balance sheet volumes and Chart 6 NFA positions as a per cent of GDP for individual countries. Almost all countries saw their balance sheets expand relative to GDP until the onset of the crisis. After 2007 the picture became more varied according to the combination of capital inflows and current account balances and growth rates. At the end of 2012 all EDEs except China and the Russian Federation had negative NFA positions, with Colombia, India, Mexico, South Africa and Turkey showing significant deteriorations compared to the beginning of the century.



Chart 6: Net Foreign Assets  
(Per cent of GDP)



Source: South Centre calculations and estimates based on Lane and Milesi-Ferretti (2007) and IMF BOP database.

### II.3. Gross external assets

There is considerable diversity in the growth of different components of gross external assets of EDEs over the past decade. At the beginning of the 2000s external debt assets accounted for more than half of total assets of EDEs; by 2013 their share fell to less than one-third. The share of direct equity (FDI) in total assets doubled to reach 17 per cent in 2013 thanks to the emergence of some firms in major EDEs such as Brazil, China, India, South Africa and Turkey as international investors, particularly in other EDEs. By contrast portfolio equity investment abroad grew slowly and its share in total assets fell from 15 per cent to some 8 per cent during the same period. A main factor is the increased attraction of local equity markets in EDEs compared to those in AEs, which offered higher capital gains not only because of a boom in local currency prices but also because of currency appreciations.

But even more striking is the unprecedented growth of international reserves. Excluding gold, which is not a claim on non-residents, their share in total assets increased from less than a quarter in 2000 to 43 per cent by 2013. The increase exceeded by a large margin the total cumulative current account surpluses of EDEs (Table 2). Of some \$7 trillion reserves accumulated after 2000, almost two-thirds are earned from current account surpluses

and one-third are borrowed – i.e., put aside from capital inflows.<sup>5</sup> Over 40 per cent of *total* reserves of EDEs in 2013 were borrowed reserves.<sup>6</sup> This was close to one-half of their total gross external debt in that year.

Table 2: Current Account and Reserves

*(Billions of U.S. dollars)*

	EDEs	Fuel Exporters	China	Other EDEs
<b>Reserves</b>				
2013	7774.9	1798.8	3839.5	2136.6
2000	801.1	192.0	168.3	440.8
Increase	6973.8	1606.8	3671.3	1695.8
<b>Current Account<sup>a</sup></b>				
2000-13	4477.1	4572.2	2322.3	-2417.4
<b>Borrowed Reserves<sup>b</sup></b>				
2000-13	2496.7	–	1349.0	1695.8

**Source:** IMF *IFS* and *WEO* databases.

a. Cumulative current account balance over 2000-13.

b. Reserves accumulated from capital inflows over 2000-13.

Of the two major surplus economies, fuel exporters used their current account surpluses partly to add to reserves and partly to use for other forms of investment abroad, often through Sovereign Wealth Funds. In other words, they reinvested abroad all capital inflows plus almost two-thirds of their current account surpluses. In China, about two-thirds of additional reserves came from current account surpluses and the rest from capital inflows. Thus, unlike fuel exporters, Chinese investment abroad, excluding reserves, has been less than foreign investment in China. For the rest of the countries, reserves accumulated between 2000 and 2013 were entirely borrowed, coming from capital inflows, as these countries ran, on average, current account deficits over that period. There are, however, some exceptions, notably smaller East Asian countries with sustained current account surpluses such as Malaysia.

Collectively EDEs have net liabilities in both debt (excluding reserves) and equities. This is also true for a large majority of them individually. There is a relatively large number of EDEs with positive net debt positions including reserves – that is, their debt assets plus reserves exceed their debt liabilities. But many of these countries have negative net external positions in equities. For instance it is estimated that, as of the mid-2000s, 31 of the 39 EDEs

<sup>5</sup> Borrowed in the sense that their counterpart is increased liabilities to non-residents in one form or another, including equity investment as well as debt, which all generate outward income transfers.

<sup>6</sup> Since before the 2000s the current account of EDEs as a whole was generally in deficit, a large proportion of reserves held at the beginning of the new millennium were borrowed reserves. Adding to this the reserves accumulated from capital inflows during 2000-13 would give around 40 per cent of total reserves in 2013 as borrowed reserves.

with positive net debt positions had negative net equity positions (Lane and Milesi-Ferretti, 2007). This means that reserves of these countries came from equity inflows whereas in others with net negative positions in both debt and equity, they came partly from debt inflows and partly from equity inflows.

The unprecedented reserve accumulation by EDEs in the past decade goes directly against the prognostications of mainstream theory that the need for international reserves should lessen as countries gained access to international financial markets and became more willing to respond to balance-of-payments shocks by exchange rate adjustments. However, capital account liberalization and increased access to international financial markets have produced exactly the opposite result. Private capital flows have no doubt allowed larger and more persistent current account deficits in EDEs beyond the levels that could be attained by relying on borrowing from the Bretton Woods Institutions (BWIs) or bilateral lenders. But this has also meant accumulation of large stocks of external liabilities. Because of pro-cyclical behaviour of international financial markets, EDEs have become highly vulnerable to sudden stops and reversals in capital flows and this has increased the need to keep reserves as self-insurance.

Empirical evidence indeed shows a strong correlation between capital account liberalization and reserve holdings and a growing tendency to absorb capital inflows into reserves rather than using them for current payments (Aizenman and Lee, 2005; Choi *et al.*, 2007). The widespread distrust among EDEs against the IMF because of pro-cyclical macroeconomic conditionalities and structural adjustments attached to lending at times of currency and balance-of-payments crises has no doubt reinforced this tendency towards self-insurance.

That EDEs as a whole have been running a current account surplus implies that, in aggregate, net capital flows (that is, net capital inflows minus net outflows, including reserve changes) run from poor to rich countries. However, this is not the case for market-intermediated or private capital flows. Official reserve accumulation by EDEs as a whole exceeds their total current account surplus and the difference comes from positive net private flows (net private inflows minus net private outflows). This is the case even for China which has been running twin surpluses on its current and (non-reserve) capital accounts and using a sizeable proportion of private capital inflows to add to reserves. In other words, market-intermediated net private capital inflows plus current account surpluses of EDEs are reinvested back by their central banks into international reserve assets issued by governments in major AEs and this is why in aggregate money is flowing from poor to rich countries.

#### ***II.4. Equity inflows and markets***

The liberalization of FDI regimes and portfolio equity inflows, together with the increased willingness of foreigners to invest in EDEs, resulted in a 7-fold increase in total equity liabilities of EDEs between 2000 and 2013, reaching almost 60 per cent of their total external liabilities in 2013, up from about 37 per cent at the beginning of the century. Growth in portfolio equity liabilities was faster, albeit more unstable. Equity liabilities also show a significant increase as a proportion of GDP over the same period (Table 3). The increase was due not only to rapid growth in direct and portfolio equity *inflows*, but also to the impact of

an upward trend in equity prices on the value of the existing *stock* of foreign holdings in the equity markets of EDEs. This upward trend was triggered by large and sustained foreign inflows from the early years of the century. Substantial foreign presence has become a permanent feature of these markets and led to structural changes regarding their liquidity and valuation dynamics and making them highly susceptible to changes in global financial conditions.

Table 3: Total Equity Liabilities (TEL) and Portfolio Equity Liabilities (PEL)  
(Per cent of GDP)

	1995		2000		2007		2012	
	TEL	PEL	TEL	PEL	TEL	PEL	TEL	PEL
EDEs	13.4	3.0	21.6	3.5	40.9	14.2	36.0	7.3
Argentina	15.3	4.5	25.1	1.3	28.6	2.6	20.7	0.7
Brazil	10.2	3.1	24.8	6.9	49.3	26.6	46.6	15.9
Chile	37.3	7.6	64.7	6.0	62.8	5.3	72.4	7.9
China	14.1	0.9	20.5	1.2	33.2	13.1	27.7	4.5
Colombia	8.4	0.6	11.6	0.4	30.3	3.5	30.8	4.3
India	5.0	2.9	7.9	3.6	38.5	29.4	22.1	10.8
Indonesia	11.8	2.8	14.4	3.6	37.8	19.0	33.6	12.4
Korea	6.2	4.4	13.7	7.3	42.1	30.5	36.9	25.1
Malaysia	56.4	25.5	50.9	14.9	74.3	35.2	59.7	21.9
Mexico	19.4	7.2	23.7	7.0	42.6	14.9	41.0	11.0
Peru	13.2	3.0	25.0	4.3	42.8	17.8	38.2	12.8
Philippines	16.5	7.2	16.0	3.9	31.4	17.7	20.4	9.1
Russia	6.1	0.2	16.7	4.3	61.5	23.8	31.4	8.8
South Africa	18.2	8.3	49.7	17.0	77.2	38.5	62.7	27.3
Thailand	25.8	14.6	32.0	6.6	62.2	23.1	60.1	19.0
Turkey	5.6	1.0	10.0	2.8	33.8	9.9	22.7	5.0

**Source:** South Centre calculations and estimates based on Lane and Milesi-Ferretti (2007), IIF (2014), IMF WEO (April 2014) and IMF BOP database.

**Note:** EDEs refer to IMF classifications of “emerging markets and developing economies”.

Equity inflows have been stronger and more stable than debt-creating inflows. During the boom in the 1990s, external debt of EDEs grew faster than equity inflows, but this was reversed after the Asian crisis when equity inflows kept up but international lending to EDEs fell sharply. Both recovered after 2002. The Lehman collapse in 2008 led to a much sharper decline in international lending to EDEs than in equity inflows. After the crisis debt-creating inflows shot up once again almost matching total equity inflows between 2010 and 2013.

Still, the increase in total equity liabilities of EDEs during 1995-2013 was 3.5 times the increase in their total gross external debt.

Of the two components of equity, portfolio inflows have been more pro-cyclical than direct equity. This, together with sharp swings in equity prices, has resulted in a significant instability in the composition of equity liabilities. The share of portfolio equity in total equity liabilities doubled between the early 2000s and 2007 to reach 35 per cent as portfolio inflows accelerated and equity prices increased sharply. The Lehman collapse had a much stronger impact on portfolio inflows than direct equity. Despite a rapid recovery after 2009, at the end of 2012 portfolio equity liabilities as per cent of GDP were below the peaks reached on the eve of the crisis in most countries in Table 3. But they were still well above the levels recorded at the beginning of the millennium and their share in total equity liabilities of EDEs was also higher by 5 percentage points.

In interpreting these numbers it should be noted that there are several problems in the way portfolio and direct equity investments are defined and recorded in international statistics. First, the division between FDI and portfolio equity is quite arbitrary. The acquisition of at least 10 per cent of voting stock in a new or existing firm is defined as FDI while ownership below 10 per cent is treated as portfolio equity. Ownership of 10 per cent or more is seen to imply the existence of a long-term, stable relationship between the investor and the enterprise and a significant degree of influence on management (IMF, 2009). However, there is no compelling reason why investment in 10 per cent ownership or more should be less fickle than investment in 9.9 per cent.

Second, in FDI statistics retained earnings are imputed as being payable to the owners to be reinvested as an increase in their equity. In balance-of-payments statistics they are first recorded as investment income payments in the current account and then as offsetting inflows of direct equity investment in the capital account. Thus, they are assumed to be used for lasting investment in the existing or new productive assets. However, it is generally not possible to identify if this is really the case. This problem of identification of the use of retained earnings is particularly important because they constitute a significant part of statistically measured FDI inflows. In 2011 they accounted for 30 per cent of global FDI flows. Their share in FDI earnings is particularly high in EDEs, almost 50 per cent in 2011, financing 39 per cent of inward investment in these economies. Furthermore, they are used to accumulate record levels of cash and other liquid assets, rather than reinvested in productive capacity (UNCTAD, 2013).

Finally, loans and advances from parent companies to affiliates are also treated as part of direct equity rather than debt. It is true that exceptions are made for loans between certain affiliated financial corporations, notably deposit taking corporations – international banks – on grounds that such debt is not so strongly connected to direct investment relationships. However, this may also be the case in non-financial sectors since in practice it is not possible to identify the nature and effects of lending and borrowing between parents and affiliated corporations. Statistics do not generally give the terms and conditions of intra-company loans and advances (UNCTAD, 2009). These are known to fluctuate much more than equity capital. They are highly susceptible to changes in short-term business conditions and their inclusion as equity capital can cause large swings in recorded FDI flows. For instance in 2012 high levels of repayment of intercompany loans to parent companies by Brazilian affiliates abroad pushed Brazilian FDI outflows to negative figures even though there was a net equity capital investment abroad of some \$7.5 billion by parent companies (UNCTAD, 2013). For

all these reasons, an important part of what is recorded in international statistics as direct equity investment may very well behave like portfolio flows.

International capital flows into equity markets of EDEs now play a central role in their price dynamics. The movement of prices in these markets depends on net inflows of equity capital, both domestic and foreign, relative to new issues through initial public offerings and by the companies already listed. Foreign direct investors do not generally issue equities in EDEs or list their companies in local stock markets. In fact evidence suggests that FDI tends to be positively correlated with the migration of capital raising, listing and trading to international financial centres, and FDI inflows to EDEs have almost no effect on stock market depth (market capitalization) in these economies (Claessens *et al.*, 2001; Doytch 2013a and 2013b).<sup>7</sup> By contrast, large and sustained inflows of portfolio equity can add considerably to demand for equities. This is also true for foreign acquisition of equities of existing firms classified under direct investment, but the way data on equity inflows are reported does not allow this to be identified.

A sudden price boom after a prolonged period of relatively sluggish markets could only happen as a result of large and sustained net inflows. These create liquidity and excess demand and raise prices which can in turn generate additional inflows as investors are attracted by prospects of capital gain. Price rises continue until excess demand is eliminated by new issues or an autonomous exit from the market. Historically, the rise of institutional investors is seen to have triggered such a boom. International capital flows into equity markets of EDEs in the new millennium appear to have been playing a similar role.<sup>8</sup>

During the second half of the 1990s until 2002, both portfolio equity inflows and prices fluctuated without any discernible upward trend (Chart 7).<sup>9</sup> They both shot up from 2003, rising constantly and reaching peaks on the eve of the crisis, by which time prices had increased by 2.5 times and portfolio equity inflows by 7.5 times in comparison with 2002. As net inflows became negative after the Lehman collapse in 2008, prices also took a dive, falling by almost 50 per cent. With the subsequent recovery in portfolio equity inflows, prices made a sharp upturn, almost matching pre-crisis levels. The drop in inflows in 2011 was also reflected in a downturn in prices, followed by recovery in both.

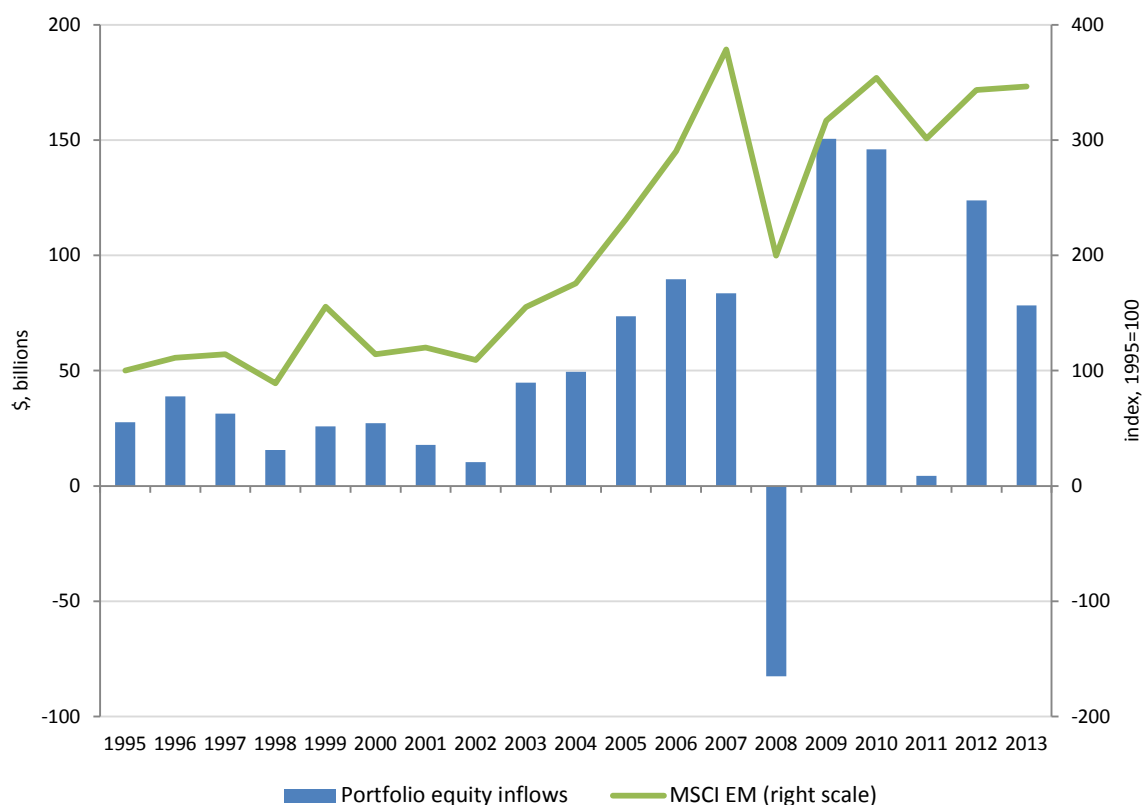
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<sup>7</sup> Indeed the number of companies from BRICS countries listed in the US and UK stock markets rose significantly before the onset of the crisis in AEs, from 180 to over 300 between 2005 and 2009; see Chandra (2010).

<sup>8</sup> Toporowski (2002) calls this process “capital market inflation” and links it historically to the creation of funded pension schemes. Bonizzi (2013) uses the same approach to explain price dynamics in the equity markets of Brazil and the Republic of Korea in recent years by a historical jump in the presence of foreigners.

<sup>9</sup> Chart 7 on the link between portfolio equity inflows and prices uses IIF data on inflows valued at entry prices rather than changes in portfolio liabilities based on the data from Lane and Milesi-Ferretti (2007) since the latter include the impact of valuation changes which the inflows contribute to.

Chart 7: Portfolio Equity Inflows and MSCI in EDEs

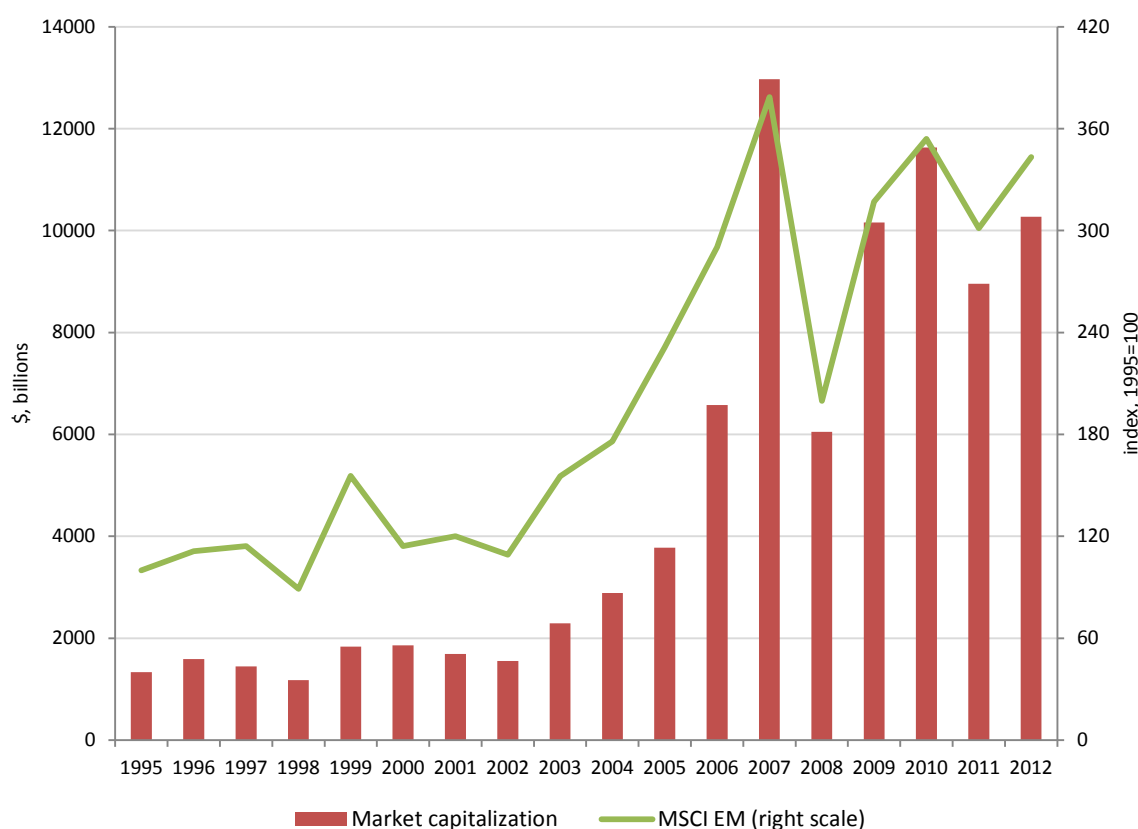


**Source:** MSCI and IIF (2014).

**Note:** MSCI index in local currency.

In the entire period from the beginning of the boom until 2013, cumulative portfolio equity inflows amounted to \$760 billion for the sample of countries in Chart 7, resulting in a significant increase in foreign presence in their equity markets, despite the instability caused by a series of adverse external shocks including the Lehman collapse, the Eurozone (EZ) crisis and tapering by the Fed. During the same period the increase in external portfolio equity liabilities of the countries in Table 3 was in the order of \$1.8 trillion. Although a direct comparison is not possible because of differences in coverage between these two sets of data, it can still be concluded that an important part of increased external portfolio equity liabilities of EDEs since the early 2000s is due to price increases and represents a significant capital gain for foreign holders.

Chart 8: Market Capitalization and MSCI in EDEs



**Source:** World Bank *WDI* and MSCI.

**Note:** MSCI index in local currency.

Market capitalization has also moved closely with equity prices, starting to rise rapidly after 2002, reaching a peak on the eve of the crisis and recovering after the Lehman collapse (Chart 8). It has also increased as per cent of GDP, thereby resulting in a significant degree of financial deepening. Except a few countries such as Chile, Malaysia and South Africa, market capitalization as a per cent of GDP was low in the 1990s in comparison with AEs (Table 4). By 2007 it was considerably higher in almost every country. In that year, in half of the EDEs in Table 4, its ratio to GDP was close to or higher than the levels in AEs. Subsequently, notably after 2010, the capitalization ratio fell almost everywhere with the weakening of prices, but in 2012 it was still much higher than the levels seen in the 1990s and early 2000s.



Table 4: Market Capitalization  
(Per cent of GDP)

	1995	2000	2007	2012
EDEs	32.2	35.6	110.8	48.2
Argentina	14.6	58.4	33.2	7.2
Brazil	19.2	35.1	100.3	54.6
China	5.8	48.5	178.2	44.9
Chile	103.5	76.1	123.0	116.1
Colombia	19.3	9.6	49.1	70.9
India	34.7	31.1	146.9	68.0
Indonesia	32.9	16.3	49.0	45.2
Korea	35.2	32.2	107.1	104.5
Malaysia	250.7	124.7	168.3	156.2
Mexico	26.1	18.1	38.1	44.6
Peru	22.0	19.8	98.6	47.5
Philippines	79.5	32.0	69.1	105.6
Russia	4.0	15.0	115.6	43.4
South Africa	185.6	154.2	291.3	159.3
Thailand	84.2	24.0	79.4	104.7
Turkey	12.3	26.1	44.3	39.1
<i>Memo: Advanced Economies</i>	<i>64.7</i>	<i>112.0</i>	<i>118.9</i>	<i>86.7</i>

**Source:** World Bank *WDI*.

**Note:** EDEs refer to Low and Middle Income Countries as defined by the World Bank.

Country-specific evidence on stock market inflows, share issuance and foreign purchases of equity from Brazil and the Republic of Korea also shows a similar process of “capital market inflation” (Bonizzi, 2013). In both countries equity prices were relatively stable and stock market capitalization kept pace with new issues until 2002 when prices and capitalization started to rise rapidly because of the surge in foreign inflows. Between 1995 and 2010, valuation changes accounted for 78 per cent of the increase in market capitalization in Brazil and 85 per cent in the Republic of Korea. Price hikes were responsible for a large proportion of the increase in portfolio liabilities in both countries, bringing significant capital gains to foreign holders.

In this process of “capital market inflation”, the evolution of market capitalization depends on equity prices and additions to the supply of equities through new issuance while

the value of foreign holdings depends on prices and new inflows from abroad. Once the process gets under way as a result of a sudden and sustained jump in the entry of foreign capital, changes in the share of foreign holdings in the market depend on the balance between new inflows from both home and abroad, new stock issuance and the extent of price increases.

Table 5: Non-resident Holdings in Stock Markets  
(Per cent of market capitalisation)

	2001	2007	2012
Argentina	1.4	5.7	8.2
Brazil	18.2	21.2	23.4
Chile	6.1	5.4	8.0
China	2.5	6.6	13.5
Colombia	2.3	2.1	4.3
India	12.1	18.1	19.8
Indonesia	15.6	19.0	19.9
Korea	23.6	23.8	25.3
Malaysia	10.5	20.8	17.0
Mexico	32.2	29.9	22.1
Peru	9.4	3.1	6.7
Philippines	8.3	18.5	10.8
Russia	14.4	12.4	16.7
South Africa	9.3	10.2	19.7
Thailand	27.8	29.0	27.0
Turkey	9.4	17.0	20.2

**Source:** World Bank *WDI* and IMF *Coordinated Portfolio Investment Survey (CPIS)*.

There are no comprehensive and consistent data on the share of foreign holdings in equity markets of EDEs. Table 5 is based on external equity liabilities compiled from the IMF's Coordinated Portfolio Investment Surveys (CPIS). As noted by Lane and Milesi-Ferretti (2007: 8), "the equity liabilities of a country derived from the *CPIS* provide a lower bound on that country's stock of liabilities" largely because of underreporting. Still the figures in the table show that in a very large majority of countries (13 out of 16), the share of non-residents in equity markets increased between the early 2000s and 2012. According to another estimate, on the eve of the crisis in 2008, the share of foreign holdings in total equity reached or exceeded 25 per cent in Brazil, Mexico, the Republic of Korea, the Russian Federation and Turkey (Psalida and Sun, 2009: Figure 7). In Asia, the average foreign share during 2003-07 was close to 20 per cent; in Indonesia, the Republic of Korea and Thailand it was higher (ADB 2011). Bonizzi (2013) estimates that in Brazil foreign stock holdings fell

from a peak of more than 40 per cent of the market in 2006 to less than 30 per cent in 2010, but recovered subsequently to reach almost the pre-crisis peak in 2012 while in the Republic of Korea they hovered between 30 per cent and 40 per cent of the market during the same period. In Turkey too, the share of foreign portfolios has shown significant swings since the beginning of the crisis, but it has generally remained well above the levels reported in the IMF's CPIS (Elmas, 2010; Sayın, 2014).

It is notable that in many of the so-called "emerging markets", the share of foreign portfolio holdings is above the levels in some "mature" markets, such as the US where it is around 14 per cent and Japan where it is 27 per cent.<sup>10</sup> In Table 5, in 10 EDEs in 2012 it was higher than the share of foreigners in the US market, even allowing for the underreporting mentioned above. In 2009, in 6 Asian EDEs, total foreign holdings of equity as per cent of total market capitalization was equal to or greater than foreign shares in Japan (ADB 2011).

## **II.5. External debt<sup>11</sup>**

As a result of the significantly faster growth in equity liabilities, the share of debt in total external liabilities of EDEs fell from more than 60 per cent at the beginning of the 2000s to some 40 per cent in 2013. It also declined as a share of GDP, particularly before the onset of the crisis (Table 6). Although external borrowing by EDEs grew rapidly from the early years of the 2000s until 2008, these economies also enjoyed unprecedented growth. Furthermore, in several EDEs, currency appreciations supported by the surge in capital inflows pulled down the external debt ratio. After the crisis, external debt started to rise faster than GDP in several EDEs due to growing current account deficits and increased private sector borrowing abroad. Currencies also weakened and growth started to falter after 2011 and both these factors contributed to the rise in the external debt ratio (Akyüz, 2013). In two-thirds of the countries in Table 6, it was higher in 2012 than the levels seen on the eve of the crisis.

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<sup>10</sup> See FRBNY (2013) for the US and Seguchi (2012) for Japan.

<sup>11</sup> In this paper external debt is used, unless stated otherwise, as debt to non-residents, the definition officially adopted by institutions compiling data on debt. It does not include debt to foreigners resident in the debtor country. It consists of debt not only in foreign currency but also local currency and includes debt issued both at home and abroad. However, as noted by Dell'Erba *et al.* (2013), in practice developing countries are often unable to identify the ultimate holders of their bonds and report figures on external and domestic debt by using information on the place of issuance and governing law. For various definitions, see also Roubini and Setser (2004).

Table 6: Gross External Debt

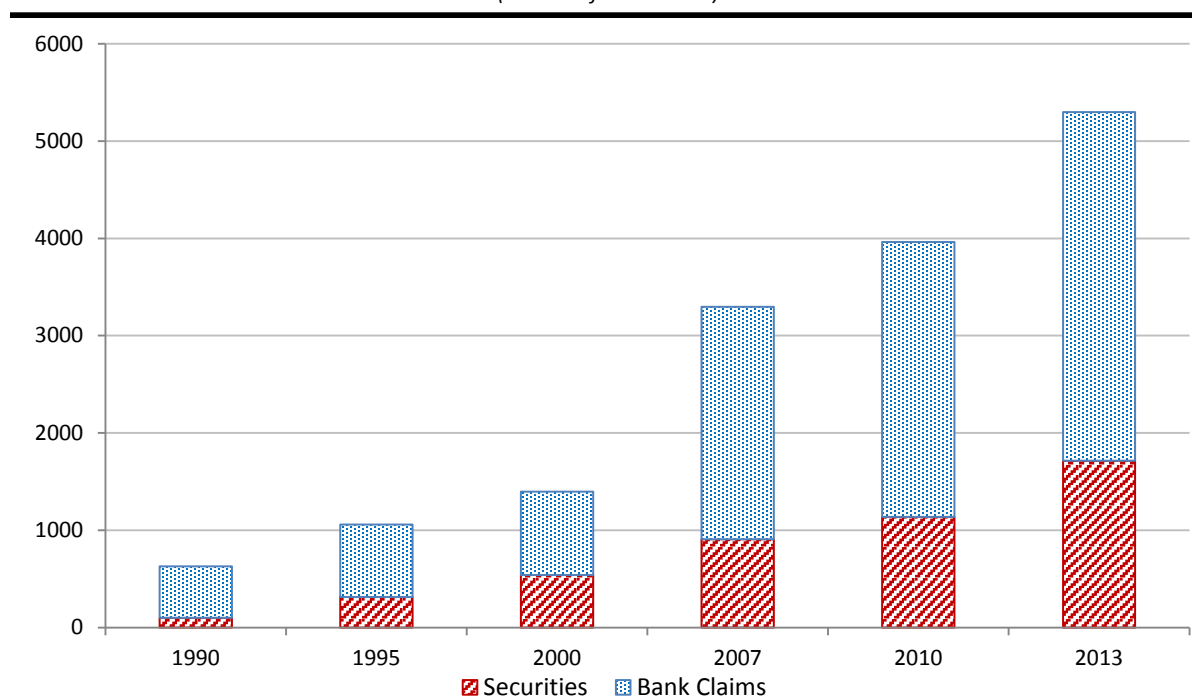
	1995	2000	2007	2012/13
EDEs ( <i>billions of U.S. dollars</i> )	2087.2	2433.1	4333.3	7129.3
EDEs ( <i>per cent of GDP</i> )	38.1	37.2	27.6	24.9
Argentina	33.8	52.9	18.9	7.3
Brazil	27.4	34.0	21.2	29.0
Chile	29.0	40.9	29.2	37.0
China	13.4	12.2	10.8	14.4
Colombia	26.8	35.9	25.4	29.2
India	25.8	21.3	19.1	21.4
Indonesia	93.8	89.6	44.9	34.4
Korea	24.4	26.7	43.3	33.0
Malaysia	49.7	48.5	44.2	56.7
Mexico	31.7	24.8	19.8	27.2
Peru	66.7	52.4	29.4	32.9
Philippines	53.8	72.1	46.2	39.8
Russia	43.2	56.4	58.8	50.8
South Africa	28.4	25.5	20.6	27.9
Thailand	67.8	60.3	28.7	34.2
Turkey	23.5	47.0	47.0	52.6

**Source:** South Centre calculations and estimates based on Lane and Milesi-Ferretti (2007) and IMF *BOP* database.

**Note:** 2013 for EDEs and 2012 for individual countries.

A very large proportion of external debt of EDEs is commercial debt, with the share of official debt remaining under 20 per cent of the total in recent years. International debt securities and bank loans constitute its two principal components. During the first post-war boom in capital inflows in the late 1970s and early 1980s, much of the external debt accumulated was in syndicated bank loans, largely to private borrowers. During the Latin American debt crisis an important part of this debt ended up with the public sector and was subsequently replaced by Brady bonds. Similarly in the second boom in the 1990s a very large proportion of the debt incurred in Asia was in bank loans to private borrowers, and after the 1997 crisis much of this also ended up in public hands.

Chart 9a: International Securities and Bank Claims – all EDEs  
(Billions of U.S. dollars)

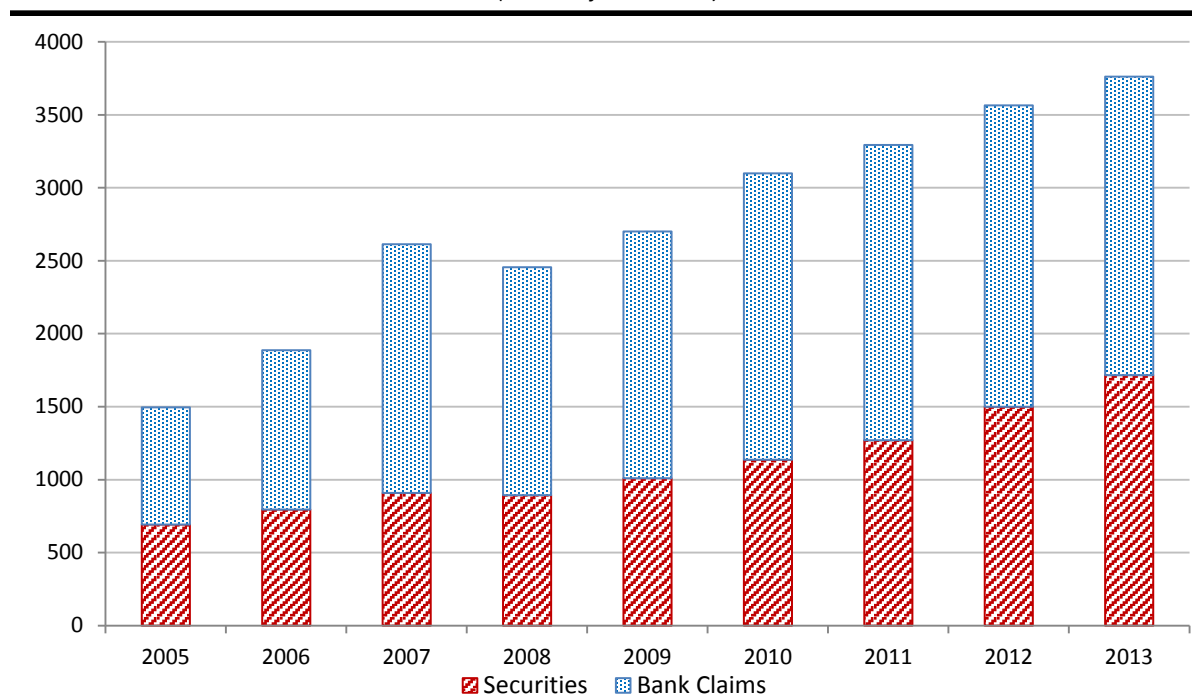


**Source:** BIS International Financial Statistics database.

**Note:** Includes all EDEs reported by the BIS.

Bank claims data are on immediate borrower basis; include cross-border claims and local claims in foreign currencies.

Chart 9b: External Debt – all EDEs  
(Billions of U.S. dollars)



**Source:** BIS International Financial Statistics database.

**Note:** Includes all EDEs reported by the BIS.

Bank claims data are on ultimate risk basis; include cross-border claims only.

International bank claims on EDEs as defined by the BIS, including cross-border claims and local claims in foreign currencies barely increased in the late 1990s after recurrent crises while bond issues kept up (Chart 9a). The strong recovery of international bank lending during the subprime expansion was followed by a cut back after the Lehman collapse and the EZ crisis (Van Rijkeghem and di Mauro, 2013; Avdjiev *et al.*, 2012; He and McCauley, 2013). With sustained liquidity expansion and historically low interest rates in AEs, cross-border lending and total international bank claims both recovered, but lagged behind security issues which picked up vigorously after the crisis (Charts 9a and 9b).<sup>12</sup> Between 2008 and 2013, the outstanding external debt of EDEs in securities almost doubled while international bank claims increased by around 50 per cent and cross-border claims even less.

There are also large shifts in the relative shares of the public and private sectors in the external commercial debt of EDEs. After falling in the second half of the 1990s, the share of the private sector in outstanding external debt securities started to rise in the new millennium, overtaking public sector issues. The private sector's share in international bank claims was already very large in the mid-1990s and it has increased further in the new millennium (Table 7). The private sector now accounts for the bulk of external commercial debt of EDEs both in international bank loans and securities.<sup>13</sup>

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<sup>12</sup> Chart 9a uses international bank claims on EDEs including local claims in foreign currencies whereas Chart 9b uses cross-border lending, available only from 2005. Data in Chart 9b thus correspond to the conventional definition of external debt based on residency.

<sup>13</sup> Table 7 does not give sectoral shares in *external* debt as conventionally defined since international bank loans include local claims of international banks in foreign currencies as well as cross-border lending. To differentiate, it is called *international* commercial debt. During 2005-2013, the share of local lending in foreign currencies in total international bank claims on EDEs varied between 10 and 16 per cent, somewhat higher after the crisis than before. This means that 80-90 per cent of international banks claims on EDEs in foreign exchange are cross border claims. Accordingly, figures in table 7 closely track the changes in public and private sectors' shares in external commercial debt of EDEs as conventionally defined.

Table 7: Shares of Private and Public Sectors in International Commercial Debt  
(Per cent)

	1995		2000		2007		2013*	
	Private	Public	Private	Public	Private	Public	Private	Public
EDEs	68.6	31.4	64.5	35.5	75.1	24.9	76.8	23.2
Argentina	44.5	55.5	43.3	56.7	32.3	67.7	28.8	71.2
Brazil	47.5	52.5	53.9	46.1	62.4	37.6	71.7	28.3
Chile	80.4	19.6	93.5	6.5	88.7	11.3	91.3	8.7
China	79.8	20.2	83.4	16.6	90.7	9.3	94.5	5.5
Colombia	63.8	36.2	49.3	50.7	38.1	61.9	59.5	40.5
India	79.4	20.6	80.7	19.3	95.8	4.2	96.6	3.4
Indonesia	85.5	14.5	80.6	19.4	65.1	34.9	68.1	31.9
Korea	93.7	6.3	90.3	9.7	85.1	14.9	87.8	12.2
Malaysia	82.5	17.5	82.2	17.8	80.2	19.8	81.3	18.7
Mexico	45.9	54.1	50.2	49.8	62.0	38.0	69.4	30.6
Peru	85.1	14.9	71.4	28.6	57.1	42.9	68.5	31.5
Philippines	53.4	46.6	62.9	37.1	45.8	54.2	54.2	45.8
Russia	93.2	6.8	45.5	54.5	85.2	14.8	78.8	21.2
South Africa	80.5	19.5	71.2	28.8	71.6	28.4	72.3	27.7
Thailand	94.8	5.2	89.4	10.6	89.7	10.3	87.4	12.6
Turkey	46.3	53.7	51.5	48.5	60.3	39.7	66.2	33.8
<b>Memo (all EDEs): Share in</b>								
<b>Debt securities</b>	40.6	59.4	35.6	64.4	48.3	51.7	57.2	42.8
<b>International bank claims</b>	80.4	19.6	82.7	17.3	85.3	14.7	86.0	14.0

**Source:** BIS *International Financial Statistics* database.

**Note:** Numbers include international debt securities and international bank claims as defined by the BIS.

\* Q3 numbers.

The currency composition of *total* external debt of EDEs has shifted towards local currencies for three main reasons. Firstly, there has been a sharp increase in the share of local-currency bonds and notes in international issues by both governments and corporations (Table 8; see also Tovar, 2005; Gruić and Wooldridge, 2012; Hale *et al.*, 2014). In 2000 such debt was around 2 per cent of total international securities issued by EDEs; at the end of 2013 it reached almost 17 per cent (Chart 10). In China, South Africa, Thailand and Turkey, the share of local-currency bonds and notes in total international issues reached or exceeded one-third in 2013.

Table 8: Share of Local Currency Bonds and Notes in Total International Issues

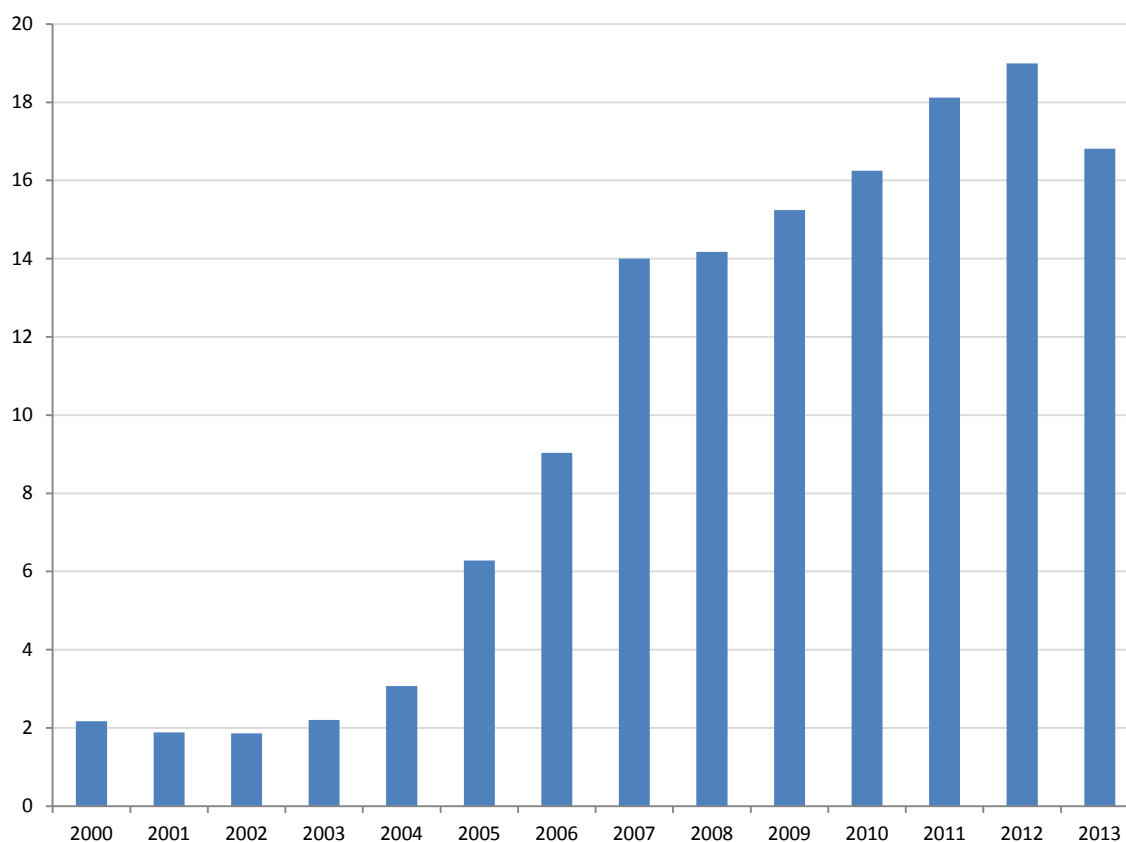
	<i>(Per cent)</i>		
	2000	2007	2013
EDEs	2.2	14.0	16.8
Argentina	2.6	1.5	0.4
Brazil	0.0	18.4	16.9
Chile	4.5	4.5	6.5
China	0.0	12.7	32.3
Colombia	0.0	19.5	19.9
India	0.1	1.4	3.3
Indonesia	0.1	7.2	15.8
Korea	0.2	0.6	0.3
Malaysia	0.0	5.3	9.2
Mexico	0.3	20.7	18.8
Philippines	0.8	1.0	8.8
Russia	1.3	7.2	12.3
South Africa	70.1	73.8	51.5
Thailand	6.4	21.1	32.0
Turkey	0.0	33.1	33.7

**Source:** BIS *International Financial Statistics* database.

**Note:** EDEs include 15 countries covered in this table.



Chart 10: Share of Domestic Currency Bonds & Notes in Total International Issues by EDEs  
(Per cent)



**Source:** BIS *International Financial Statistics* database.

**Notes:** EDEs include all the countries in Table 8.

Second, domestic securities issued in foreign currencies or linked to the exchange rate have become much less important. In the 1990s when inflation was high, inflation-indexed or forex-linked local debt securities were quite widespread in EDEs, like Mexican tesobonos in the mid-1990s. However, forex-linked bonds and notes have almost disappeared with a widespread shift to flexible exchange rates. They have also lost their attractiveness because of currency appreciations in several EDEs.<sup>14</sup>

Third, as taken up in greater detail in the subsequent section, many governments in EDEs have shifted from international debt in foreign currency to domestic debt in local currency and opened domestic debt markets to foreigners, benefiting from increased willingness of international lenders to assume the currency risk and come under local jurisdiction in return for higher yields and large capital gains. This, together with growing private sector issues in local markets, has led to a rapid expansion of domestic debt securities relative to international debt securities (Table 9 and Chart 11) and raised the share of local-

<sup>14</sup> But several EDEs still continue to have relatively large amounts of inflation-linked bonds and notes, including Argentina, Brazil, Mexico, South Africa and Turkey – see, BIS Debt Securities Statistics Table 16C.

currency in *total* bonds issued by EDEs (Table 10).<sup>15</sup> It has also resulted in a large increase in the locally-issued debt held by non-residents. According to the World Bank (2013), at the end of 2012 the share of non-resident holdings in \$9.1 trillion local debt market of EDEs reached an unprecedented 26.6 per cent and this proportion exceeded 40 per cent in some economies.

Table 9: Outstanding Total Debt Issues in EDEs by Sectors

*(Billions of U.S. dollars)*

	1995	2000	2007	2013
Domestic (All issuers)	317.4	702.6	5528.4	10580.2
General Government	247.5	520.4	2954.2	5452.5
Financial Corporations	37.0	115.4	1990.6	3247.8
Non-Financial Corporations	32.0	66.8	583.6	1878.6
International (All issuers)	271.3	464.3	698.2	1298.9
General Government	146.5	284.3	304.2	393.2
Financial Corporations	69.4	97.0	226.3	555.7
Non-Financial Corporations	55.0	114.2	171.3	362.4

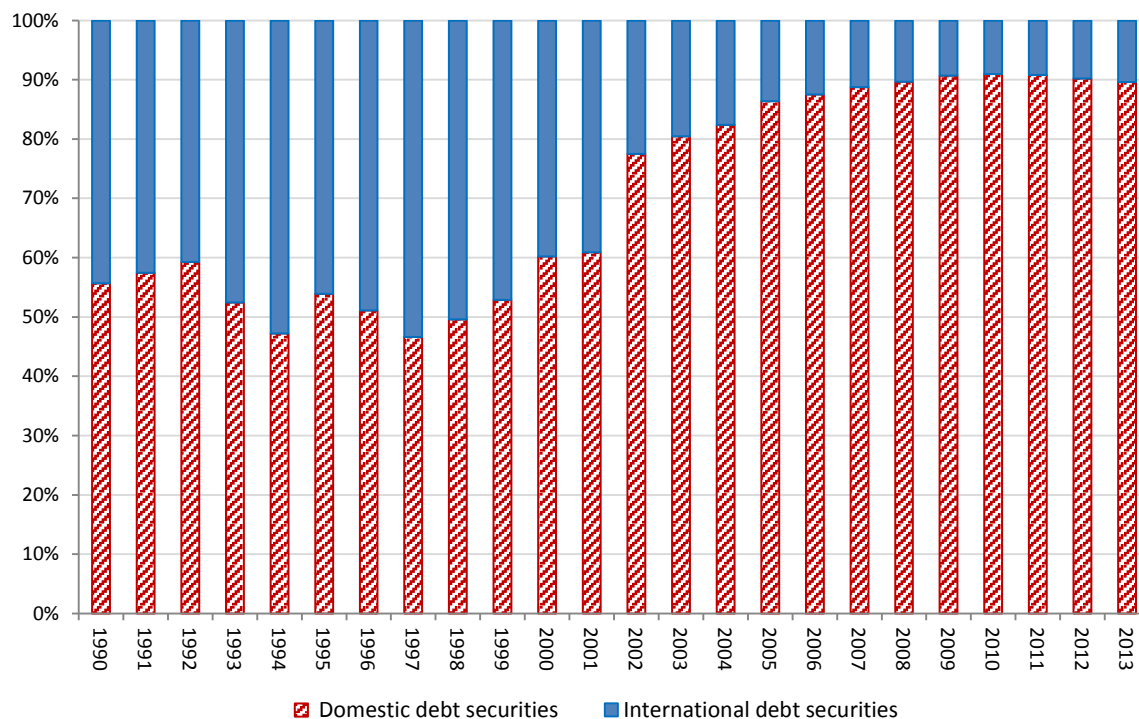
**Source:** BIS *International Financial Statistics* database.

**Notes:** 2013: Q3 numbers.

EDEs include 16 countries covered in this paper.

<sup>15</sup> The BIS now defines international debt securities as those issued by non-residents in all markets while domestic debt securities are those issued by residents in their local markets— see Gruić and Wooldridge (2012). Here, the external debt of EDEs in securities is defined as issues by their residents in markets abroad in all currencies, foreign and local, plus domestic issues in all currencies held by non-residents. Some residents of EDEs (e.g., local banks) may also hold securities issued in foreign markets by other residents of the same country (e.g., bonds of their own governments). In principle these should be deducted from external debt defined as claims of non-residents over residents, but available data do not always allow identifying this.

Chart 11: Structure of Total Debt Securities Outstanding in EDEs  
(Per cent of the total)



Source: BIS International Financial Statistics database.

Notes: Includes 20 countries reported by the BIS.

2013: Q2 numbers.

Table 10: Share of Local Currency in Total Bonds  
(Per cent)

	2001	2008	2013
EDEs	70	85	82
Argentina	29	49	...
Brazil	59	79	...
Chile	77	75	80
China	95	99	...
Colombia	31	37	76
India	97	92	89
Indonesia	96	80	...
Korea	91	88	88
Malaysia	77	86	85
Mexico	59	81	79
Peru	60	67	...
Philippines	48	53	67
South Africa	87	84	88
Thailand	81	95	95
Turkey	78	81	79

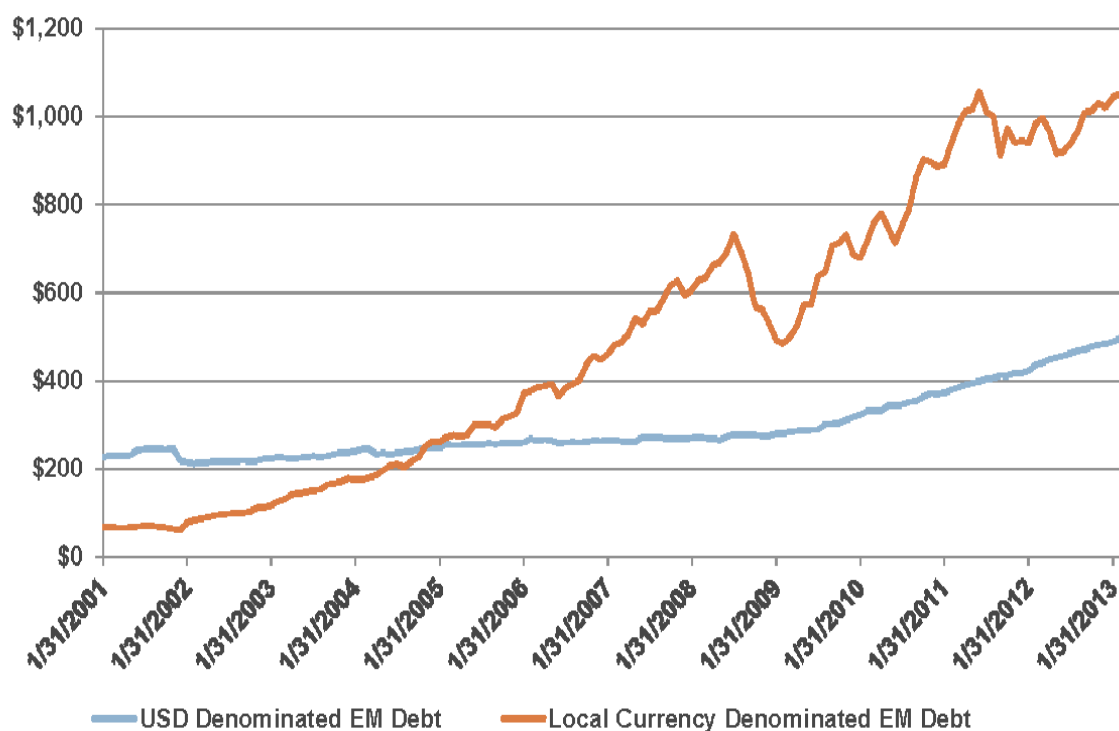
**Source:** Burger *et al.* (2010) and BIS *International Financial Statistics* database.

**Notes:** For 2001 and 2008 EDEs refer to IMF classifications of “emerging markets and developing economies”; for 2013, they include 11 countries for which data are available.  
Bonds with original maturity over one year.

For all these reasons the share of local currency in *total* external debt issued by EDEs has increased rapidly since the beginning of the century. According to figures on outstanding debt of emerging economies provided by J.P. Morgan, dollar issues were far greater than local-currency issues at the beginning of the 2000s (Chart 12).<sup>16</sup> The latter started growing vigorously and steadily, overtaking the dollar issues in mid-2000s. The Lehman collapse had a much stronger impact on local-currency issues than dollar-denominated issues, but after the dip in 2008-09 local-currency issues recovered, albeit showing considerable instability compared to pre-crisis years. In 2013, at over \$1 trillion, the local-currency debt market was twice the size of the US dollar debt market (Polychronopoulos and Binstock, 2013).

<sup>16</sup> That is, J.P. Morgan EMBI Global for US dollar debt and J.P. Morgan GBI-EM for local currency debt.

Chart 12: Emerging Market Debt Outstanding in U.S. dollars and Local Currencies  
(Billions of U.S. dollars)



Source: Polychronopoulos and Binstock (2013).

However, since a large proportion of total external debt of EDEs is still in bank loans and since these as well as their official debt are mainly in foreign currencies, for many countries the bulk of *total gross external debt* is still in foreign currencies despite some increase in the share of local-currency debt in recent years (Table 11). This is true particularly for poorer countries dependent on official lending, countries with rudimentary domestic debt markets or with too low a credit rating to be able to attract foreign investors to domestic debt markets or to issue local-currency denominated international bonds. A growing number of such countries, notably in SSA, have been issuing eurobonds and many of them for the first time, taking advantage of expansion in global liquidity, lower interest rates and improvements in global risk appetite, but assuming significant currency and refinancing risks. These first-time issues between 2009 and 2013 reached almost \$9 billion. While the average size was small, at some \$450 million, it reached 10 per cent of GDP in some of them (Guscina *et al.*, 2014).

Table 11: Share of Local Currency in Total Gross External Debt  
(Per cent)

	2003	2008	2013
Argentina	1.1	7.2	5.9
Chile	0.8	3.4	5.0
Colombia	0.0	6.6	6.0
India	...	15.3	20.9
Korea	8.5	18.4	28.7
Peru	0.0	2.8	1.0
Philippines	...	...	4.0
South Africa	26.4	41.0	55.7
Thailand	11.2	23.8	31.8
Turkey	0.1	5.9	6.9

*Source:* World Bank Quarterly External Debt Statistics/SDDS.

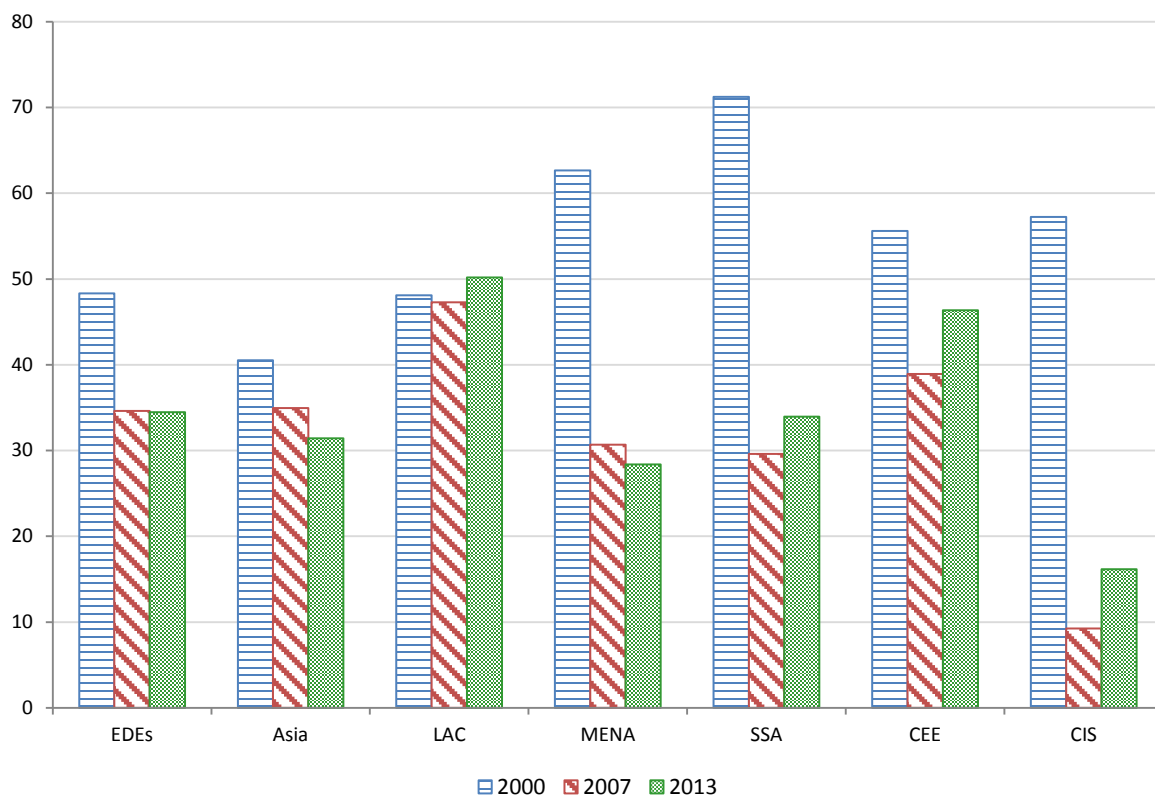
*Note:* 2013: Q3 numbers.

## **II.6. Public commercial debt**

There are three important developments in public debt of major EDEs in the new century. First, in 2013, in most countries total and external public debt as a percentage of GDP stood well below the levels seen in the early 2000s, notwithstanding the tendency for public indebtedness to rise since the crisis in 2008. Second, a greater proportion of public debt is now in local currencies. Finally, there has also been an extension of maturity and a shift from variable or indexed debt to fixed interest rates in domestic debt markets.

Public sectors' finances in EDEs improved significantly before the onset of the crisis. On average, general government budgets were in deficit by some 3-4 per cent of GDP at the beginning of the 2000s. By 2007-08 they had moved to a surplus, at around 1 per cent of GDP. This decelerated public borrowing and the ratio of public debt to GDP in EDEs taken together fell from around 50 per cent to less than 35 per cent during that period (Chart 13). The decline was particularly impressive in MENA, SSA and CIS. In Asia where public debt had been already lower than other regions, the debt ratio declined further in the first half of the 2000s. Even in highly-indebted Latin American countries, the drop was significant, from over 60 per cent of GDP to less than 50 per cent. In several countries which had suffered from severe crises in the late 1990s and early 2000s, including Indonesia, Thailand, Russia and Turkey, the public debt ratio went down by as much as 20 percentage points and even more (Table 12).

Chart 13: General Government Gross Debt: Regions  
(Per cent of GDP)



Source: IMF WEO (April 2014).

Note: 2000-2003: highest; 2006-2008: lowest.

Table 12: General Government Gross Debt  
(Per cent of GDP)

	2000-02	2007-08	2013
EDEs	51.5	34.6	34.5
Argentina	165.0	58.5	46.9
Brazil	79.4	63.5	66.3
Chile	15.1	3.9	12.2
China	18.9	17.0	22.4
Colombia	43.9	30.5	31.8
India	82.9	74.0	66.7
Indonesia	95.1	33.2	26.1
Korea	18.7	30.1	36.7
Malaysia	43.1	41.2	58.2
Mexico	43.5	37.6	46.5
Peru	43.2	26.8	19.6
Philippines	63.3	44.2	38.3
Russia	59.9	7.9	13.4
South Africa	43.5	27.2	45.2
Thailand	57.8	37.3	45.3
Turkey	77.9	39.9	35.8

**Source:** IMF *WEO* (April 2014).

**Note:** Highs for 2000-02 and lows for 2007-08.

There can be little doubt that the lessons drawn from recurrent crises in previous decades led to efforts by governments to improve their debt profiles and reduce their vulnerability to crises. However, improvements in public debt profiles and the resilience of EDEs to fallouts from the crisis in AEs cannot be explained by improvements in macroeconomic policies and public debt management alone.<sup>17</sup> These owe a great deal to favourable global economic conditions resulting from the factors that generated consumption and property bubbles in the US and Europe and their policy response to the consequent crisis as well as the emergence of China as a major commodity importer. This is particularly true for deficit EDEs dependent on capital inflows and commodity exports (Akyüz, 2012).

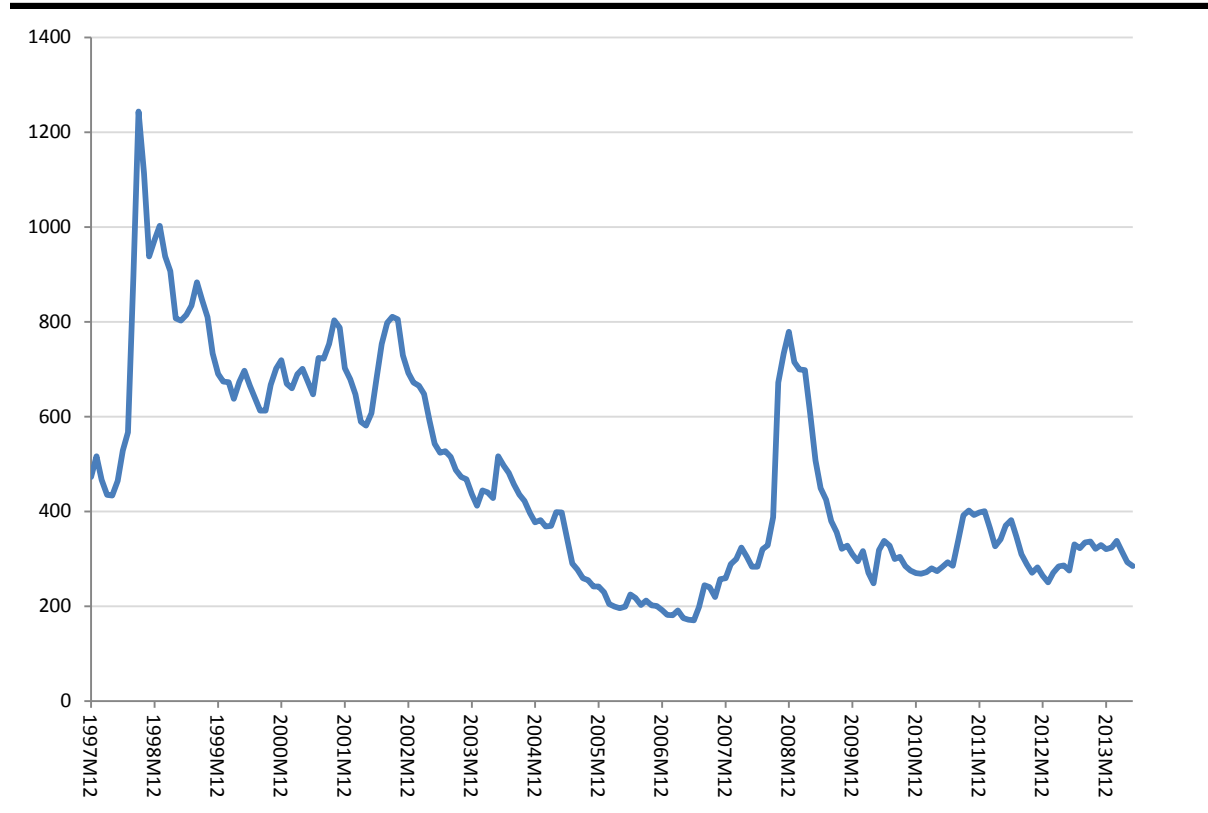
Starting in the early 2000s, most EDEs enjoyed significant improvements in the terms and conditions of borrowing. At the beginning of the millennium, sovereign spreads had

<sup>17</sup> See, e.g., Anderson *et al.* (2010) which explains the resilience of EDEs to financial shocks from the crisis primarily in terms of better macroeconomic and debt management and improved fundamentals prior to the crisis and policy response to shocks. The same view in fact underlined the so-called decoupling thesis widely held, including by the IMF, until growth started faltering and currency and financial instability increased in several EDEs after 2011; see Akyüz (2013).



come down from the peaks reached on the wake of the Asian crisis, but they were still hovering between 600 and 800 basis points (Chart 14). They dropped further after 2002, falling below 200 basis points in 2007 and hitting a historical low of 170 bps in the middle of that year. The Lehman collapse caused a temporary hike in spreads. The subsequent decline, together with exceptionally low long-term rates in the US, resulted in a sharp drop in yields on internationally-issued US dollar sovereign bonds (Chart 15).

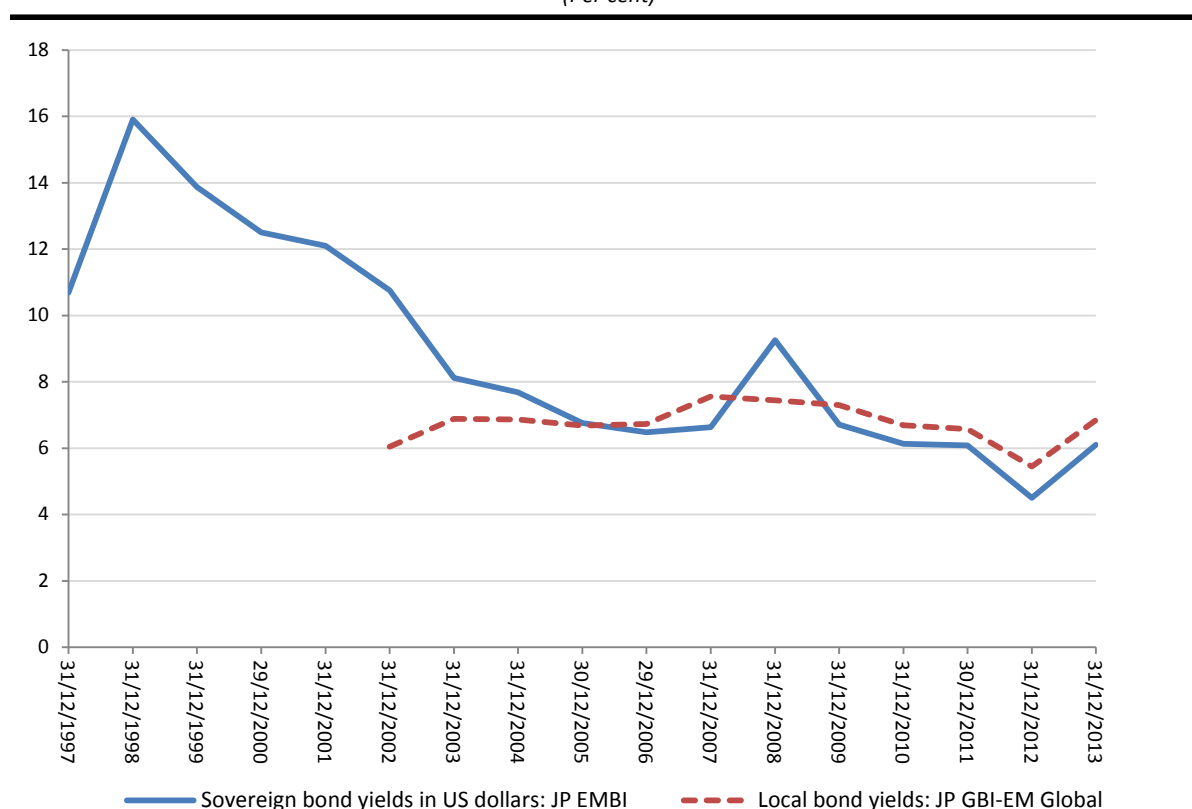
Chart 14: Sovereign Bond Interest Rate Spreads in EDEs  
(Basis points over US Treasuries)



**Source:** World Bank *Global Economic Monitor*.

**Note:** Monthly average data.

Chart 15: Government Bond Yields in Emerging Markets  
(Per cent)



**Source:** J.P. Morgan.

**Note:** Year-end data.

Yields on local-currency government bonds also have remained at exceptionally low levels from 2002 onwards thanks largely to increased foreign holdings resulting from a search-for-yield triggered by exceptionally low US Treasury yields (Ebeke and Lu, 2014; P Turner, 2014). Currency appreciations also encouraged foreign holding by creating sizeable capital gains. Success in bringing inflation under control, together with improvements in current account and reserves positions in many EDEs, kept the currency risk down. After the EZ crisis, returns on local-currency bonds started to move more closely with those on international assets regarded as “safe” (Miyajima *et al.*, 2012).<sup>18</sup>

The external trading environment has been equally benign for commodity exporters. In Latin America, an important part of the decline in budget deficits after 2002 was due to rising commodity prices, with revenues from commodity taxes, profits and royalties accounting for as much as 50 per cent of the total increase in the fiscal revenue ratio in some countries (Cornia *et al.*, 2011). The fiscal record in Latin America was less impressive in

<sup>18</sup> On average, countries issuing local-currency bonds have higher credit ratings than those relying mainly on US dollar bonds and this tends to narrow the average margin between local-currency and US dollar bonds. For instance, for several non-investment grade first-time sovereign bond issuers in dollars, the spread during 2009-13 exceeded 500 basis points (Guscina *et al.*, 2014). The dollar bond market is heavily exposed to low-rated Latin America which accounted for 43 per cent of the dollar bond index but some 25 per cent of the local bond index in 2012; see AFCG (2013).

terms of structural balances since several governments in the region pursued pro-cyclical expansion in spending (IMF, 2007; IDB, 2008; and Jiménez and Gómez-Sabaini, 2009). African commodity exporters also benefited from rapidly expanding Chinese imports generated by massive investment stimulus. Every percentage point increase in China's domestic investment growth is estimated to have been associated with a 0.6 percentage point increase in SSA countries' export growth and the impact was larger for resource-rich countries, especially oil exporters (Drummond and Liu, 2013).

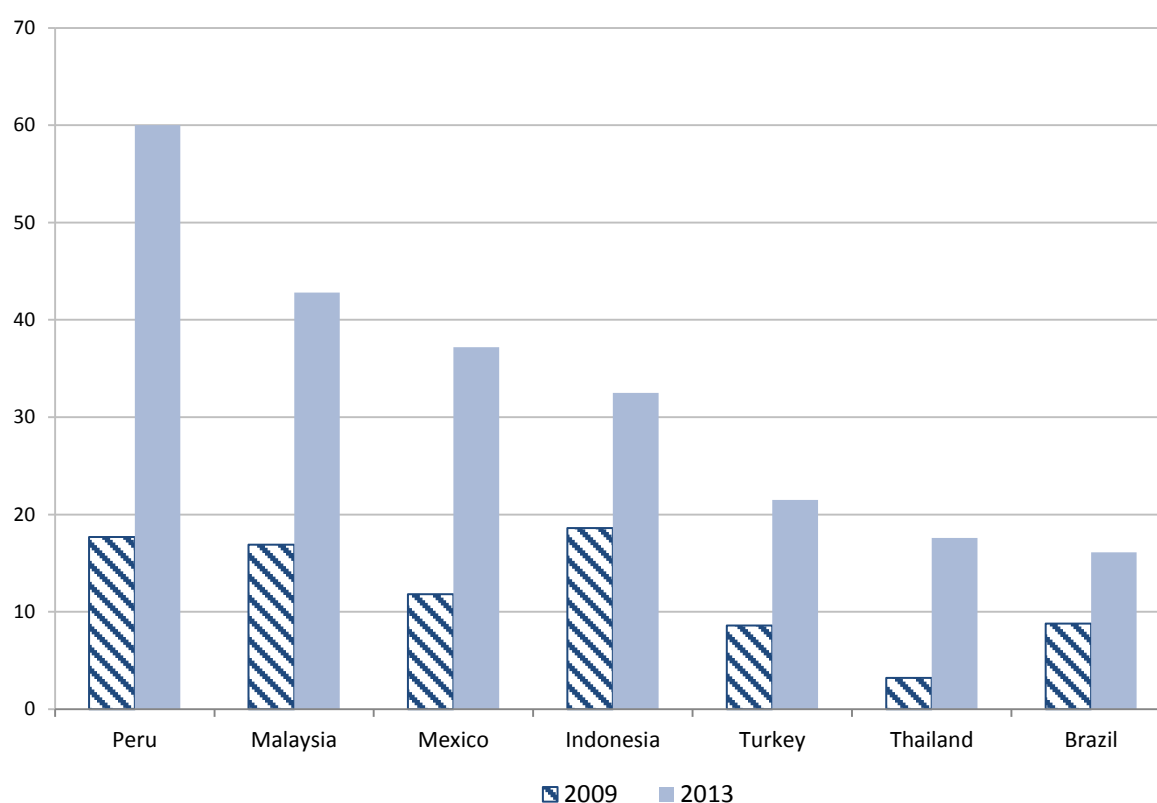
With the outbreak of the crisis in AEs, the fiscal space gained during the subprime expansion allowed an unprecedented countercyclical policy response in many EDEs to adverse fallouts. Consequently, fiscal and external deficits started to rise, aggravated by the weakening of commodity prices, capital inflows and currencies. After a strong recovery in 2010, growth slowed down almost everywhere in EDEs, including BRICS (Brazil, Russia, India, China and South Africa) creating cyclical deficits. During 2012-13 general government deficits reached 4 per cent of GDP in several countries and exceeded 7 per cent in India. At the end of 2013, government debt ratios were higher than the lows attained on the eve of the crisis in all developing regions (Chart 13) and in the majority of countries individually (Table 12). In China, Malaysia, Mexico, the Republic of Korea and South Africa, they were also above the levels seen during the turbulent times of the late-1990s and the early 2000s.

There are also important structural changes in public debt. Local and international securities continue to account for the bulk of public borrowing in EDEs while bank loans remain a small proportion of total public debt.<sup>19</sup> But, due to the shift of governments to domestic debt markets, the share of local issues in outstanding sovereign security liabilities shows a significant increase since the beginning of the century (Table 9). Domestic debt markets are now dominated by the public sector, while the private sector accounts for a higher share in international issues – around 70 per cent in 2013, up from less than 40 per cent in 2000. This shift also resulted in a concomitant increase in non-resident participation in local government bond markets (Chart 16). At the end of 2013, in Indonesia, Malaysia, Mexico and Peru non-residents accounted for more than one-third of locally-issued government bonds. Almost all these are in local currencies. Subsidiaries of foreign-owned international banks in EDEs also hold local government bonds, but these are not considered as external debt as conventionally defined.

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<sup>19</sup> A notable exception is China where less than 30 per cent of general government debt is in securities.

Chart 16: Non-resident Investor Participation in Domestic Markets for Government Bonds  
(Per cent of total outstanding)



Source: J.P.Morgan (2013).

Consequently, a higher proportion of sovereign bonds held abroad are now subject to domestic jurisdiction. At the end of 2013 this proportion was over 93 per cent in Malaysia and Thailand which barely issued any sovereign debt in international markets in recent years but opened up their domestic debt markets to non-residents. It was over 70 per cent in Brazil and Mexico. Even in countries with a large stock of international bonds, a growing proportion of externally held sovereign debt has come under domestic jurisdiction. This was between 35 and 45 per cent in Indonesia, Peru and Turkey at the end of 2013.<sup>20</sup> As discussed subsequently, this has important consequences for sovereign debt restructuring.

International investors are attracted also by internationally-issued local-currency government debt because of high yields and currency appreciations. Table 13 gives the share of non-residents in local-currency central government securities, including both domestically and internationally issued bonds and notes. In China and India where there is no significant international issuance of local currency debt by governments and access of non-residents to domestic markets remains restricted, non-resident shares in local-currency public debt are very low. In most others, after the crisis the share of non-residents in local-currency bonds increased while the exposure of domestic banks to sovereign debt fell as per cent of total

<sup>20</sup> These estimates are based on the data for non-resident participation in local bond markets given in Chart 16 and outstanding domestic and international bond issues as given by the BIS in its International Financial Statistics database, namely Tables 16B and 11E.

assets, notably in Asia and Latin America (Arslanalp and Tsuda, 2014). In 2013, outside Argentina, China and India, the average share of non-resident holdings of local-currency government securities for the countries in Table 13 was close to 30 per cent.

Table 13: Non-Resident Holdings of Local Currency Denominated  
Central Government Debt Securities  
(Per cent of total)

	2004	2007	2010	2013
Argentina	34.4	18.9	13.7	2.7
Brazil	1.0 <sup>a</sup>	5.1	11.4	14.5
China	0.0	0.0	0.0	0.7
India	0.1	0.6	1.0	1.6
Indonesia	2.7	16.4	30.5	31.8
Malaysia	7.3	14.2	21.6	30.9
Mexico	7.1	10.8	19.9	36.1
Peru	0.0	26.7	42.5	56.3
Philippines	0.0	0.0	9.2	14.7
Russia	2.1	1.5	4.0	24.6
South Africa	6.5 <sup>b</sup>	10.4	21.8	36.7
Thailand	1.9	0.9	7.3	17.9
Turkey	7.2	14.1	12.3	24.5

*Source:* IMF Sovereign Investor Base Dataset for Emerging Markets (December 30, 2013 version).

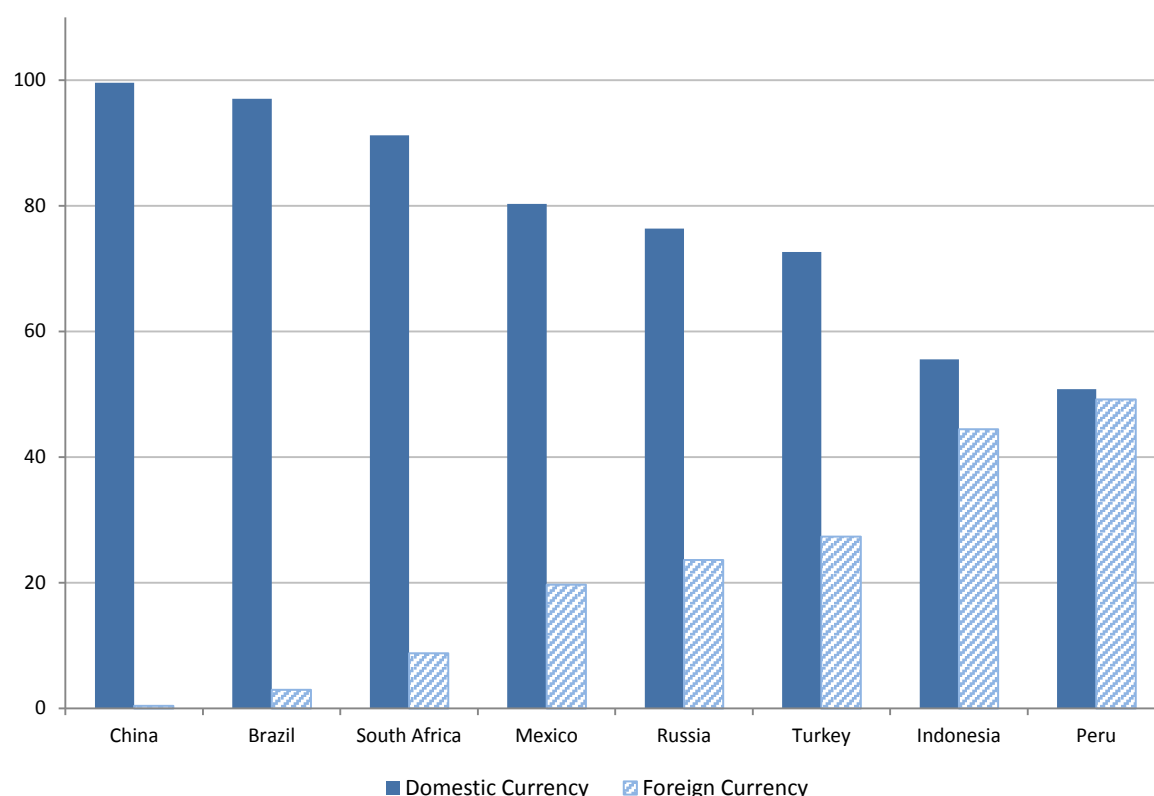
*Notes:* 2013: Q2 numbers.

a: 2005 Q4; b:2006 Q1.

A significant implication of growing acquisition of locally-issued public debt by non-residents as well as increases in the share of local-currency in international issues is the shift of the currency composition of *total* sovereign debt towards local currencies. According to IDB (2008), for 7 major Latin American borrowers, the share of local-currency debt in total public debt increased from 35 per cent in the late 1990s to 62 per cent in 2007. Another study for a sample of 11 EDEs estimates that the share of local currency debt in total sovereign debt increased from around 24 per cent in 1995 to almost 80 per cent in 2005.<sup>21</sup> According to the World Bank (2014) at the end of 2012, the domestic currency component of the central government debt of developing countries reporting to the Public Sector Debt Database averaged 57 per cent of the total. This figure excludes Brazil and China which now raise, on average, about 98 per cent of central government financing in domestic markets (Chart 17).

<sup>21</sup> See Fried (2013) which also gives a brief survey of empirical research on the currency composition of sovereign debt in EDEs and the factors affecting it.

Chart 17: Currency Composition of Central Government Debt in 2012  
(Per cent)



**Source:** World Bank *Public Sector Debt Statistics*.

Increased foreign access to domestic debt markets has also resulted in a shift in the holder profile of government debt towards non-residents in several EDEs. It is estimated that non-residents held \$1 trillion government debt of EDEs at the end of 2012, not counting official loans, and about half of this debt was incurred during 2010-12 (Arslanalp and Tsuda, 2014). The share of non-residents in *total* gross public debt shows an increase in several countries including Indonesia, Malaysia, Mexico, South Africa, Thailand and Turkey (Table 14). The increase in non-resident holdings is much more pronounced and widespread for public securities than for total public debt, including bank loans. In more than half of the countries in Table 15, the share of non-resident holdings in public sector *debt securities* in all currencies was higher in 2013 than in 2004. The increase was particularly rapid after the onset of the crisis. In Brazil, Mexico and the Russian Federation where the share of non-resident holdings had declined before the crisis, there is a rapid increase since 2007, notably after 2010. In several cases the share of non-resident holdings in total public debt is greater than their share in bonds and notes because a large proportion of public sector loans are from banks abroad.

**Table 14: Holders of General Government Debt**  
(Per cent of total)

	Non-residents				Domestic Central Banks				Domestic Banks			
	2004	2007	2010	2013	2004	2007	2010	2013	2004	2007	2010	2013
Argentina	45.0	43.4	38.5	30.0	15.7	13.2	22.2	34.4	24.7	18.8	24.0	23.8
Brazil	15.9	10.3	12.0	13.8	23.5	21.1	29.0	30.8	25.3	27.7	25.9	24.1
Chile	42.4	50.9	20.6	19.0	43.3	2.0	0.0	0.0	6.4	20.1	22.8	17.4
China	5.0	2.5	1.3	1.1	5.3	15.7	8.0	5.9	80.0	77.9	87.5	91.2
Colombia	41.3	30.6	31.2	29.5	0.8	0.9	0.6	0.0	21.3	15.7	18.6	19.9
India	7.5	5.9	6.0	6.3	3.3	2.9	7.3	10.0	26.9	26.6	29.5	31.3
Indonesia	50.3	52.0	57.1	55.5	21.1	20.1	16.6	17.3	25.0	22.8	14.4	13.8
Malaysia	27.7	22.5	24.2	31.8	0.1	0.9	0.5	0.4	16.0	12.3	25.8	21.6
Mexico	37.7	25.9	32.1	49.3	0.0	0.0	0.0	0.0	9.9	12.1	11.9	8.9
Peru	76.4	66.2	63.1	62.7	0.0	0.0	0.0	1.6	6.6	7.2	7.8	7.9
Philippines	43.1	38.6	45.3	42.7	4.2	11.3	7.0	6.9	24.5	26.4	31.8	30.8
Russia	55.9	29.6	19.1	22.6	9.5	12.0	6.4	4.6	17.0	29.3	36.1	35.3
South Africa	16.9	21.4	25.0	35.8	6.6	2.0	1.1	0.6	19.7	19.3	27.5	23.2
Thailand	12.5	3.6	7.5	17.2	5.7	4.3	7.5	7.8	24.6	28.8	27.9	21.2
Turkey	28.9	29.4	29.9	42.7	7.0	5.1	2.2	2.0	37.5	51.3	61.9	48.0

**Source:** IMF Sovereign Investor Base Dataset for Emerging Markets (December 30, 2013 version).

**Note:** 2013: Q2 numbers.

Table 15: Non-resident Holding of Government Debt Securities

*(Per cent of total)*

	2004	2007	2010	2013
Argentina	57.2	51.7	37.8	30.7
Brazil	12.8	8.7	10.7	12.5
Chile	71.5	43.7	16.2	16.6
China	2.3	1.0	0.4	0.9
Colombia	30.5	21.5	21.8	22.6
India	0.1	0.6	1.0	1.6
Indonesia	5.5	25.3	43.4	46.7
Malaysia	16.5	18.3	23.7	32.5
Mexico	37.7	26.2	33.3	53.7
Peru	49.2	46.9	53.3	60.4
Philippines	23.6	23.4	31.0	30.9
Russia	47.4	27.2	20.8	32.2
South Africa	14.4	17.9	23.5	35.0
Thailand	3.8	1.1	7.4	17.9
Turkey	15.3	21.6	21.0	36.5

**Source:** IMF *Sovereign Investor Base Dataset for Emerging Markets* (December 30, 2013 version).

**Note:** 2013: Q2 numbers.

The share of non-residents in total government debt is generally lower in EDEs than in AEs. However, the difference is quite small with AEs outside the EZ (Arslanalp and Tsuda, 2014). In fact, public debt in most EDEs is internationalized to a much greater extent than that in some major reserve-issuing countries. On some estimates, about 30 per cent of gross public debt of the US is held abroad, and this proportion is around 20 per cent for the UK and less than 5 per cent in Japan (Weisenthal, 2011).<sup>22</sup> For several EDEs the share of public debt held abroad is much higher. This is true not only for public securities denominated in all currencies as in Table 15, but also for those denominated in local currency (Chart 16 and Table 13). In most countries in Chart 16 the share of non-residents in *domestically-issued local-currency* government bonds exceeds the share of non-residents in sovereign bonds of Japan, the UK and the US. This is also true for *total* (domestically- and internationally-issued) *local-currency* central government securities (Table 13).

More significantly, the externally-held local-currency government debt of EDEs is not in the hands of foreign central banks and other official bodies, but mostly in the portfolios of

<sup>22</sup> This ratio is around 50 per cent for German public debt, but a large proportion of it is held within the EZ.



fickle investors, including foreign asset managers. It is estimated that as of end 2012, foreign central banks held only between \$40 billion and \$80 billion of government debt of EDEs out of about \$1 trillion held by non-residents. And out of a total of 24 EDEs, government debt of only 7 countries is included in central bank reserve assets (Arslanalp and Tsuda, 2014). Except for a few EDEs with large official debts, foreign official holdings, including official loans and central bank holdings as reserve assets, fall far short of private holdings.

## **II.7. Private debt**

The evolution of private external debt in EDEs shows important differences in some respects but similarities in others with the evolution of public external debt since the early 2000s.<sup>23</sup> First, as already noted, in EDEs taken together and in several countries individually, private external debt has been growing faster than public external debt in both international bank loans and securities. Second, unlike public debt, there has been no tendency for private external debt to decline as a percent of GDP. Third, as for public debt, in several EDEs a growing proportion of private debt is held by non-residents. But, unlike the public sector, the share of foreign-currency debt securities in total debt issued by corporations, including domestic issues, has been rising. Overall, a much greater proportion of private external debt is denominated in foreign currencies than public external debt. Finally, there is a renewed tendency towards dollarization in domestic loan markets whereas in most major EDEs the public sector has effectively stopped issuing forex-linked domestic debt.

Private international debt of EDEs grew by about 10 per cent per annum during 2000-2013, faster after the onset of the crisis in AEs than before (Table 16).<sup>24</sup> However, in the run up to the crisis it registered a small decline as a percentage of GDP because of rapid economic growth and currency appreciations. It started rising after 2010 as growth slowed but private borrowing abroad kept its momentum. Its ratio to GDP was slightly higher in 2013 than the levels recorded during the surge in international lending in the mid-1990s. Several major EDEs including China, India, Mexico, the Republic of Korea and Turkey recorded sizeable increases in private external indebtedness between 2000 and 2013 (Table 17). Turkey has had the fastest increase in private indebtedness. Bank borrowing in that country grew by almost three-fold between 2008 and the first quarter of 2014, encouraged by the so-called reserve option mechanism (Fitch Ratings, 2014).<sup>25</sup> There were also significant increases in China, India and Brazil, but from a relatively low base. In these countries private international debt-GDP ratios in 2013 were below the average for the EDEs as a whole.

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<sup>23</sup> It should be noted that some of the corporations included in the private sector data are state-owned enterprises. These are often run on the same commercial basis as privately-owned enterprises. This is true not only for China where state ownership is widespread, but also in some major EDEs such as Brazil and India.

<sup>24</sup> Table 16 does not give private *external* debt as conventionally defined since international bank loans include local claims of international banks in foreign currencies as well as cross-border lending. Thus, to differentiate, it is called private *international* debt. This is also the case for Table 17. However, as noted earlier, the evolution of private *external* debt closely follows that of private *international* debt.

<sup>25</sup> This mechanism allows banks to hold required reserves in foreign currency. It encourages them to borrow abroad in dollars to release local currency for lending in domestic markets at higher interest rates. Domestic credit (deposit) expansion thus leads to increased borrowing by banks abroad which, in turn, raises domestic lending.

Table 16: Private International Debt in EDEs

*(Billions of U.S. dollars)*

	1995	2000	2007	2010	2013
International bank loans	620.9	695.3	1370.5	1756.7	2540.9
Banks	360.4	287.5	571.4	757.1	1137.5
Non-Bank Private	260.6	407.8	799.1	999.6	1403.4
International debt securities	124.4	211.2	397.6	518.0	918.1
Financial Corporations	69.4	97.0	226.3	296.9	555.7
<i>Banks</i>	49.7	61.3	125.7	155.5	305.3
<i>Other Financial Corporations</i>	19.7	35.7	100.7	141.4	250.4
Non-Financial Corporations	55.0	114.2	171.3	221.1	362.4
Total ( <i>billions of U.S. dollars</i> )	745.3	906.5	1768.1	2274.7	3459.0
Total ( <i>per cent of GDP</i> )	15.2	15.6	14.4	13.3	15.6

**Source:** BIS *International Financial Statistics* database.**Notes:** 2013: Q3 numbers.

EDEs include Argentina, Brazil, China, Chile, Colombia, India, Indonesia, Korea, Lebanon, Malaysia, Mexico, Pakistan, Peru, Philippines, Russia, Saudi Arabia, Singapore, South Africa, Thailand, and Turkey.

Table 17: Private International Debt  
(Billions of U.S. dollars)

		1995	2000	2007	2010	2013
<b>China</b>	<i>Bank loans</i>	38.8	50.2	189.7	298.2	780.3
	<i>Securities</i>	9.2	7.4	13.1	17.8	36.4
	<i>Total (% of GDP)</i>	6.6	4.8	5.8	5.3	8.9
<b>India</b>	<i>Bank loans</i>	11.5	16.8	131.3	190.6	194.8
	<i>Securities</i>	3.7	4.4	27.9	28.5	23.1
	<i>Total (% of GDP)</i>	4.2	4.5	12.9	12.8	11.6
<b>Korea</b>	<i>Bank loans</i>	71.3	52.8	170.4	166.4	144.6
	<i>Securities</i>	26.2	41.9	97.2	123.1	168.4
	<i>Total (% of GDP)</i>	18.4	17.8	25.5	28.5	25.6
<b>Indonesia</b>	<i>Bank loans</i>	37.8	32.3	35.6	51.3	85.5
	<i>Securities</i>	3.5	2.1	3.2	4.7	19.7
	<i>Total (% of GDP)</i>	20.4	20.8	9.0	7.9	12.1
<b>Malaysia</b>	<i>Bank loans</i>	14.6	17.2	35.2	38.0	56.7
	<i>Securities</i>	4.8	12.0	20.5	23.5	32.0
	<i>Total (% of GDP)</i>	21.8	31.1	28.8	24.8	28.4
<b>Brazil</b>	<i>Bank loans</i>	40.6	54.7	89.9	143.0	163.7
	<i>Securities</i>	15.5	27.3	29.5	66.0	98.2
	<i>Total (% of GDP)</i>	7.3	12.7	8.7	9.8	11.7
<b>Mexico</b>	<i>Bank loans</i>	33.8	47.8	68.4	77.1	87.1
	<i>Securities</i>	20.0	24.6	25.3	47.7	120.9
	<i>Total (% of GDP)</i>	15.6	10.6	9.0	11.9	16.5
<b>South Africa</b>	<i>Bank loans</i>	13.9	14.8	26.3	25.2	26.1
	<i>Securities</i>	1.5	2.5	13.7	15.7	21.0
	<i>Total (% of GDP)</i>	10.2	13.0	14.0	11.2	13.4
<b>Russia</b>	<i>Bank loans</i>	48.3	34.4	177.4	132.5	163.4
	<i>Securities</i>	1.1	0.4	28.5	34.3	78.6
	<i>Total (% of GDP)</i>	15.8	13.4	15.8	10.9	11.4
<b>Turkey</b>	<i>Bank loans</i>	13.4	31.6	94.4	98.5	139.5
	<i>Securities</i>	1.1	1.4	1.9	4.3	30.9
	<i>Total (% of GDP)</i>	6.3	12.4	14.9	14.1	20.6

Source: BIS International Financial Statistics database and IMF WEO (April 2014).

A large proportion of private debt to international banks is due to borrowing by local banks. In the 1990s they accounted for almost 60 per cent of total international bank claims on the private sector in EDEs (Table 16). After recurrent crises in the latter half of the decade, this proportion fell to almost 40 per cent with a concomitant increase in the share of non-bank corporations. The shares of banks and non-bank corporations in total private debt to international banks remained relatively stable during 2000-2013.

There is a visible shift in the composition of private international debt from bank loans towards debt securities. International bank lending to the private sector in EDEs barely increased during the second half of the 1990s while corporate bond issues showed a relatively strong growth. There is an acceleration of corporate bond issues in the new millennium, particularly after the onset of the crisis when corporations shifted to low-interest debt in reserve currencies, assuming currency and interest rate risks (IMF GFSR, April 2013; Oprita, 2013). Between 2007 and 2013 corporate international security issues grew much faster than international bank loans. They shot up after 2010, with outstanding securities rising by almost 80 per cent in a matter of three years, reaching almost \$1 trillion in the third quarter of 2013. Two-thirds of these belonged to non-bank corporations. By contrast, banks in EDEs continued to rely mainly on loans from international banks, but their outstanding external debt securities almost doubled between 2010 and 2013.

The post-crisis shift from bank loans to security issues was particularly rapid in Mexico and the Republic of Korea where securities accounted for a large part of corporate international debt in 2013 (Table 17). In Brazil, Indonesia, Malaysia, the Russian Federation, South Africa and Turkey too, corporate international security issues accelerated after the onset of the crisis, but in these countries bank loans still account for a larger proportion of corporate external debt. This is even more so for China and India. In fact in China corporate borrowing from banks abroad expanded much faster than security issues, particularly after 2010, whereas in India outstanding securities fell while borrowing from international banks grew moderately.

The proceeds of international debt issues by non-financial corporations in foreign currencies appear to be used in several ways. Some firms in China borrow in foreign currencies to fund acquisition of foreign assets (He and McCauley, 2013). Chinese firms also use foreign borrowing for the acquisition of domestic assets such as property, thus assuming the currency risk. In Latin America, high rates of issuance of foreign currency debt by non-financial firms, including those in non-traded sectors, appear to have been behind the rapid growth of their deposits in the region's financial system. When global conditions tighten, a rapid withdrawal of these deposits could result in a significant contraction of domestic credit. In the event of sharp declines in local currencies, these firms could also incur large losses and face solvency problems (IDB, 2014).

Corporations in EDEs also borrowed from international markets through issuance by their overseas subsidiaries, including financial vehicles established in Offshore Financial Centres (OFCs). As seen in Table 18, the amounts involved are by no means trivial. While on conventional residency basis, between 2010 and 2013, total bond issues by corporations of EDEs amounted to \$480 billion, on nationality basis the figure reached \$940 billion, with the difference being bonds issued by overseas subsidiaries. In other words, during that period corporations in EDEs issued almost as many bonds through their subsidiaries as they did directly. On nationality basis, the BRIC countries account for over 50 per cent of total corporate issues in EDEs, including by their overseas subsidiaries.

Table 18: International Emerging Market Corporate Bond Issuance  
(Billions of U.S. dollars)

	2010	2011	2012	2013
Total: Nationality Basis	151.5	167.1	284.0	335.6
BRIC	81.5	89.2	159.4	165.3
Brazil	33.8	33.9	54.9	23.6
China	23.6	42.8	48.3	97.4
Russia	20.7	6.2	51.0	27.7
India	3.4	6.3	5.2	16.6
Total: Residence Basis	80.4	98.9	143.5	161.3
Issues by Overseas Subsidiaries*	71.1	68.2	140.5	174.3

Source: P. Turner (2014).

\* Differences between nationality and residence basis issues.

According to an estimate, as of mid-2013, one-quarter of all international debt securities outstanding of corporations of EDEs had been issued in OFCs compared with 22 per cent in AEs. This surge is primarily due to China and Brazil. Total issues by Chinese corporations in the 12 months ending in mid-2013 reached \$51 billion, up from less than \$1 billion during 2001-02, and constituted 70 per cent of all international debt securities issued by Chinese firms. Although Chinese corporations also issued renminbi-denominated securities in OFCs to take advantage of lower cost than domestic issues, these accounted for only 16 per cent of their outstanding issues in 2013 while the bulk (77 per cent) was in US dollars. In the same period, issuance by Brazilian firms in OFCs reached \$20 billion or more than 40 per cent of their total international issuance (McCauley *et al.*, 2013; Pinto, 2014). In June 2013, the stock of Brazil's external liabilities on a nationality basis was 137 per cent larger than its liabilities on residency basis (IDB, 2014).

Since external debt is defined on the basis of cross-border liabilities, issues by TNCs from EDEs through their overseas subsidiaries are not included in external debt and balance-of-payments statistics as long as the proceeds are kept abroad. Nevertheless, since the risks they entail impinge directly on the corporations involved, liabilities defined on the basis of nationality rather than residency constitutes a "better measure of risk exposures" of such corporations (P Turner, 2014: 5; see also IDB, 2014). To what extent and in what form funds borrowed by overseas subsidiaries enter the home country is not always clear. If they enter as inter-company loans, they would be recorded as FDI rather than debt. If global financial conditions tighten and corporations find themselves unable to roll over debt issued by their subsidiaries, payments might have to be made by parent companies. This could result in large withdrawals of corporate deposits from local banks, credit contraction and large claims on international reserves.

The increase in international debt issues of corporations of EDEs since the onset of the crisis, notably since 2010, becomes more pronounced if debt issued by their overseas subsidiaries is taken into account. This suggests that, as in public debt in several EDEs, a growing proportion of corporate securities are held by foreigners, although in public debt this

is because of increased acquisition of domestic sovereign bonds by non-residents rather than growing international issues. Since a very large proportion of corporate international issues are denominated in reserve currencies, this also implies that, unlike public debt, the composition of corporate debt securities has been changing in favour of foreign currencies. Since the local-currency component of external debt in securities is greater for the public sector than for corporations and since a much higher proportion of corporate external debt is in forex-denominated bank loans, it follows that foreign-currency debt accounts for a higher share of total corporate external debt than total public external debt.

This difference between private and public sectors in terms of their reliance on domestic-currency *versus* foreign-currency debt also reflect how international investors may be differentiating between them in terms of exchange rate and default risks. It is argued that international investors overwhelmingly demand that corporate issuers from EDEs float debt in major currencies in order to hedge against foreign exchange risks (Delikouras *et al.*, 2013). By insisting on lending in foreign currency, investors would be hedging against the currency risk and passing it onto borrowers, which in turn raises the probability of default; that is, investors are substituting currency risk for default risk. By contrast, in lending to the public sector in local currencies, they are substituting default risk for currency risk. This implies that, *ceteris paribus*, international investors assign a higher probability to sovereign default than to private default. This may well be because the corporations that are able to borrow in international markets are often important enough for governments to bail them out.

In contrast to rapid growth of foreign-currency denominated external private borrowing in EDEs, in domestic loan markets dollarization is now lower than in the 1990s, particularly in Latin America where the share of foreign currency loans had reached and even exceeded 50 per cent of total domestic loans in several countries. This proportion came down to less than 20 per cent in recent years (Hake *et al.*, 2014; Didier and Schmukler, 2013; IMF GFSR, October 2012). Still some countries in the region such as Peru and Uruguay continue to have high shares of foreign currency in domestic loans. Relatively large volumes of bond issuance in foreign currencies by banks in several Latin American countries in recent years also suggest a renewed trend towards loan dollarization (IDB 2014).

Loan dollarization is also widespread in Eastern Europe and Central Asia. In Russia and Turkey despite declines after the early 2000s, the share of foreign-currency loans remains quite high and much of these are loans to non-financial corporations (Kutan *et al.*, 2012 for Turkey and Ponomarenko *et al.*, 2011 for the Russian Federation). According to Moody's (2014), more than 80 per cent of the total debt outstanding for rated Turkish corporates is denominated in foreign currency.

Similarly, in several EDEs in East Asia, the combination of low interest rates on reserve currencies and appreciation pressures on exchange rates resulted in a rapid expansion of foreign-currency credit relative to local-currency credit in recent years (Borio *et al.*, 2011). The dollars acquired by Chinese financial corporations through debt issuance abroad are partly used to fund domestic lending in dollars. While they are a small proportion of aggregate credit, they have been growing rapidly since the exceptional easing of global credit conditions. For instance during 2012-2013, foreign currency loans in China grew twice as much as renminbi loans, at a rate of 35 per cent for the 12 months ending in March 2013 (He and McCauley, 2013).

Exceptionally low interest rates in AEs tend to generate conflicting influences on dollarization in EDEs and the incidence of the associated risks. On the one hand, they create incentives for banks to engage in international arbitrage by borrowing abroad in foreign currency and lending at home in local currency while assuming the currency risk. On the other hand, they, together with appreciation pressures, lead to deposit de-dollarization but increase the demand for foreign currency loans and bank borrowing abroad.

The balance of these forces, shaped very much by the nature and effectiveness of rules and regulations regarding foreign currency lending and currency mismatches in the banking system, determines the extent to which appreciation pressures and interest rate differentials affect loan dollarization. Where currency mismatches in the banking system are successfully restricted, loan dollarization and external borrowing by banks can be expected to increase. In that case the currency risk would migrate to ultimate borrowers, but this, in turn, would result in greater credit risk for the banks. By contrast, where banks can engage in international arbitrage, increased external borrowing would be associated with faster growth of loans in local currency than in dollars. In this case, loan de-dollarization may well be an indication of increased exposure of the banking system to the currency risk.

## **II.8. Foreign banks: Cross-border and local lending**

Cross-border bank lending to EDEs has fluctuated sharply during the past three decades but there is a long-term decline in its share in total external commercial debt of EDEs. This is due to two main factors. First, the growing reliance of EDEs on security issuance. Second, the shift of international banks from cross-border lending to local lending by establishing commercial presence in EDEs.

This shift started in the 1990s and continued with full force in the new millennium until the crisis in the US and Europe. Initially, in the 1990s, privatization of state-owned banks was an important factor in the growing presence of foreign banks in EDEs. Subsequently, joint ownership with local private banks and fully owned subsidiaries gained importance.

According to the most comprehensive and up-to-date data available, “in terms of loans, deposits and profits, current market shares of foreign banks average 20 percent in OECD countries and close to 50 percent in emerging markets and developing countries” (Claessens and van Horen, 2012: 3).<sup>26</sup> Between 1995 and 2009 the share of foreign banks as a percentage of the total number of banks doubled in both emerging markets and developing countries (Table 19). A large majority of these banks are from AEs. Despite the growing importance of EDEs in the world economy, the share of OECD in foreign banking barely declined, remaining roughly at three-quarters of the total. However, the crisis in AEs resulted in a certain degree of withdrawal of their banks from foreign activities, including declines in the number of foreign subsidiaries (Buch *et al.*, 2014).

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<sup>26</sup> The definition of “emerging markets” used by these authors include all countries that are included in the Standard and Poor’s Emerging Market and Frontier Markets indices and that were not high-income countries in 2000. Thus, it contains some current OECD countries from Central and Eastern Europe.

Table 19: Share of Foreign Banks – Regions  
(Per cent of total number)

	1995	2000	2009
East Asia and Pacific	18	19	25
Eastern Europe and Central Asia	15	28	47
LAC	25	35	39
MENA	18	23	36
South Asia	7	9	14
SSA	31	37	54
Emerging Economies	18	27	36
Developing Countries	24	32	46
OECD	19	21	24
<i>Memo: Share of banks from AEs</i>	75	74	72

**Source:** Claessen and van Horen (2012).

In LAC foreign banks had a high share of the market already in the 1990s and this increased further until the onset of the global crisis. Eastern and Central European and Central Asian countries experienced the fastest growth of foreign banks, due to their rapid integration into the global economy after the fall of the Berlin wall. South Asia also saw a rapid increase, albeit from a low base. The share of foreign banks is typically higher in poorer and smaller countries than in major EDEs, reaching 100 per cent in some. Among the major EDEs there are considerable variations of foreign bank presence (Table 20). The Republic of Korea, which had no foreign banks before it joined OECD in 1996, saw the fastest increase in their presence in the past two decades even though their share is still lower than the average for other countries in Table 19. Three of the BRICS, China, India and South Africa, also have lower degrees of foreign bank presence than other major EDEs. This is true not only in terms of number of banks but also their shares in total banking assets. Several national banks of these countries have themselves become global players.<sup>27</sup>

<sup>27</sup> In China the share of foreign banks in total assets of the banking system is a bare 1 per cent, in India 5 per cent and South Africa is 22 per cent. In China they are quite small in comparison with the giants such as the Industrial and Commercial Bank of China, China Construction Bank, Agricultural Bank of China, and Bank of China which have been expanding globally in recent years. This is also true, to a lesser extent, for India and South Africa. On the rise of banks from major EDEs as global banks, see van Horen (2012).



Table 20: Share of Foreign Banks in Selected EDEs  
(Per cent of total number)

	1995	2000	2009
Indonesia	26	33	52
Mexico	32	49	48
Turkey	11	15	43
Brazil	23	35	38
Argentina	22	37	35
Korea	0	6	24
South Africa	18	14	22
China	13	9	19
India	6	8	12

**Source:** Claessen and van Horen (2012).

In addition to joint ownership with local partners, foreign banks enter into host countries by establishing branch offices or full subsidiaries. Foreign branches are unincorporated banks or bank offices located in a foreign country. They are integral parts of the parent banks and not independent legal entities with separate accounts and capital base. They cannot incur liabilities and own assets in their own right. Their liabilities represent real claims on parent banks. They provide globally funded domestic credits. By contrast foreign subsidiaries are stand-alone legal entities created under the law of the host country. They have separate accounts and capital base from those of the parent company and are financially independent. They have to comply with the host country regulations and supervision and are covered by the host country deposit insurance schemes.

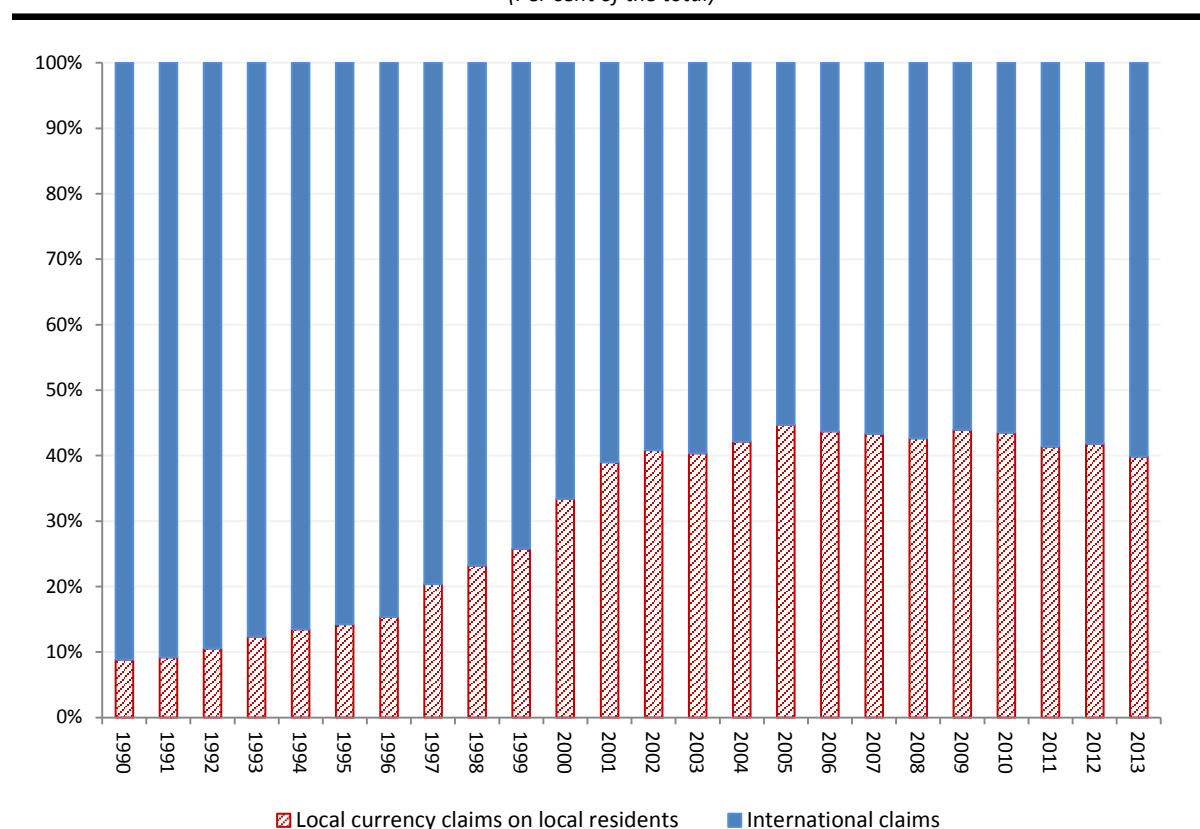
Branching provides greater freedom in transferring funds across borders and entails lower funding costs and hence is more attractive for international banks with wholesale operations serving large clients. By contrast, international banks prefer subsidiaries for retail banking involving considerable local intermediation (Cerutti *et al.*, 2005; Fiechter *et al.*, 2011). In several Asian countries including India, the Philippines, the Republic of Korea, Singapore and Thailand, with the notable exception of China, branching is more widespread than subsidiaries. This is also true for several countries in Africa, including South Africa. By contrast, with the exception of Argentina, subsidiaries are the main form of entry of foreign banks in Latin America.

The increased penetration of international banks in the markets of EDEs has resulted in a significant shift in the composition of foreign banks' claims. According to the BIS classification, total foreign claims of international banks consist of local claims in local currency and international claims. The latter includes not only cross-border lending but also local lending in foreign currencies. Thus, the BIS concept of foreign claims of international

banks corresponds to external bank debt of EDEs defined on *nationality* basis. On the other hand, the distinction between local claims in local currency and international claims provides a measure of currency composition of foreign bank claims on EDEs.

At the beginning of the 1990s local currency claims of international banks on residents of EDEs barely reached 10 per cent of their total claims while the rest was mainly in international claims (Chart 18). Starting in the second half of the decade local claims in local currency shot up rapidly, reaching 45 per cent of the total foreign bank claims by mid-2000s. This upward trend came to an end with the onset of the crisis in AEs. There is a moderate decline in the share of local currency claims after 2009. This reflects, in part, the increased attractiveness of foreign-currency loans for private borrowers in EDEs and in part the withdrawal of certain banks from international business after the onset of the crisis, particularly in the EZ.<sup>28</sup>

Chart 18: Structure of Foreign Bank Claims in EDEs  
(Per cent of the total)



Source: BIS *International Financial Statistics* database.

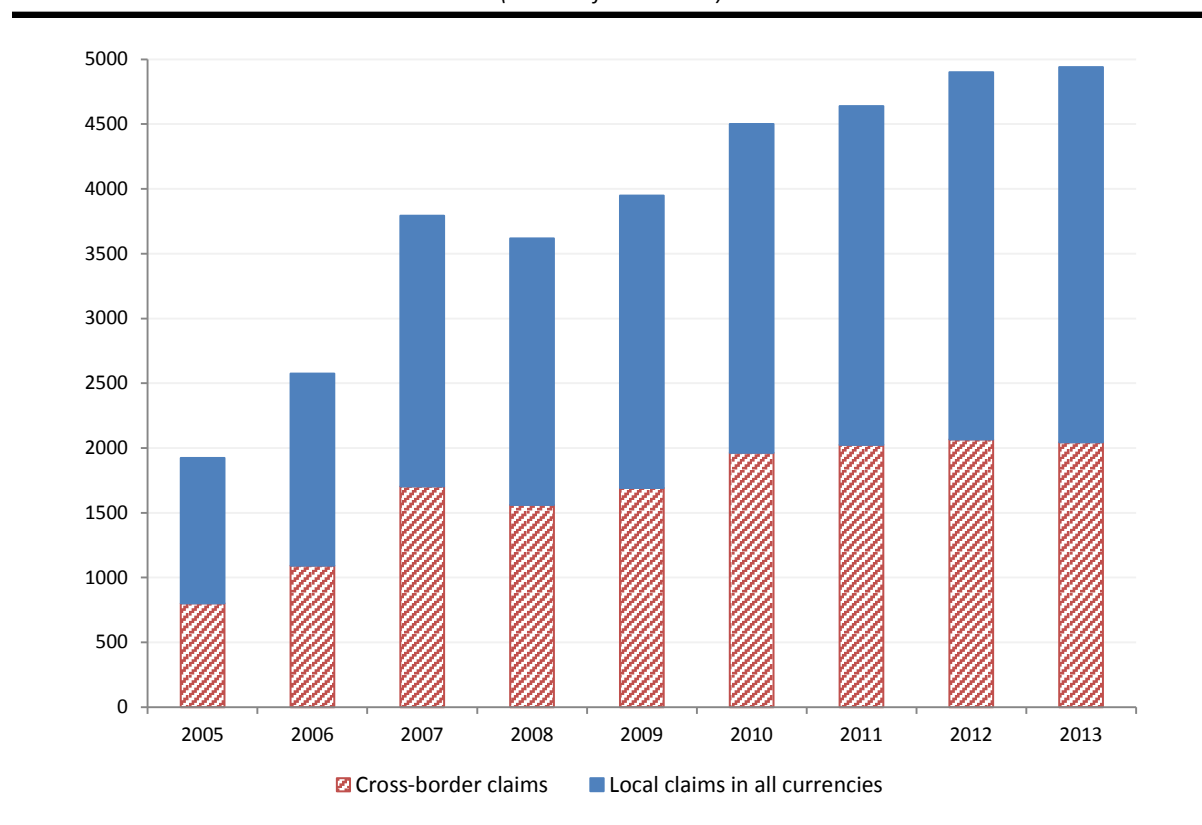
Note: 2013:Q3 numbers.

The evolution of local and cross-border lending by international banks to EDEs since mid-2005 is given in Chart 19. Here local claims include claims in both local and foreign currencies while cross-border claims correspond to the conventional measure of external debt

<sup>28</sup> For instance, international assets held by German banks through subsidiaries abroad fell to some 10 per cent of their total assets whereas they were over 15 per cent before the crisis (Buch *et al.*, 2014).

to international banks defined on residency basis. Local lending in all currencies is now more important than cross-border lending, accounting for almost 60 per cent of total foreign bank claims in 2013. A comparison of Charts 18 and 19 shows that since the onset of the global crisis, a growing proportion of local lending by subsidiaries of international banks in EDEs is in foreign currencies; the share of such claims rose from around 12 per cent of total local claims in 2007 to almost 20 per cent at the end of 2013.

Chart 19: Foreign Banks: Cross-Border and Local Claims in EDEs  
(Billions of U.S. dollars)



**Source:** BIS International Financial Statistics database.

**Note:** Ultimate risk basis.

### III. EXTERNAL VULNERABILITIES

#### III.1. *Credit and asset bubbles*

After three decades of recurrent financial turmoil in the world economy, it has become increasingly evident that a close and unfettered integration into the global financial system could severely expose EDEs to shocks and crises. Still, in the past ten years, many of these countries have sought closer integration, liberalizing international capital flows and allowing greater room for foreign investors and banks in their markets. This, together with the rapid expansion of international liquidity, historically low interest rates and greater appetite for risk has resulted in a significant build-up of financial imbalances and fragility in many of these countries, including unsustainable currency appreciations and payments deficits, currency and maturity mismatches in private balance sheets and bubbles in credit and asset markets. This has particularly been the case since the beginning of the crisis in AEs in 2008. The monetary expansion resulting from the policy response of the US to the crisis accelerated the search for yield in EDEs that had already started in the early years of the 2000s, giving rise to large and sustained inflows of capital and growing presence of foreign investors in EDEs as well as a large build-up of domestic and external private debt well beyond the levels seen during previous financial booms.

Many EDEs were hit by “taper tantrum” in May 2013 when the US Fed revealed its intention to start tapering its bond purchases. Subsequently financial and currency markets have stabilized, but they remain highly susceptible to changes in risk sentiments as well as the exit of the US Fed from the ultra-easy monetary policy. The tapering that started in January 2014 does not mark the beginning of monetary tightening, not only because historically low policy rates are still with us, but also because tapering reduces not the level of long-term assets on the Fed’s balance sheet but monthly additions. A full exit would mean both the end of zero-bound policy rates and the normalization of the Fed’s balance sheet; that is, a significant contraction of its size and a large shift of its assets back to short- and medium-term Treasuries. Thus it would imply not only a rise in short-term rates, but also a significant tightening of bond markets, possibly pushing the long-term rates well above the levels seen in the last 6 years (Akyüz, 2014). The more robust the growth of the US economy, the faster the normalization of monetary policy and the greater the financial shocks to EDEs.

Recent conditions in financial markets, notably exceptionally low market volatility, growing cross-border bank lending and asset and credit bubbles resemble what Minsky (1977) described as periods of tranquillity which typically produce a high degree of confidence and encourage excessive risk taking, thereby sowing the seeds of future instability.<sup>29</sup> Stock prices have reached historical highs in the US and they are still strong in the EZ despite the spectre of deflation. The boom in property markets in some countries such as the UK is a cause of concern (Osborne and Monaghan, 2014). The pace of private debt build-up is dazzling in several emerging economies. Cross-border lending by international banks has increased sharply, particularly to China, taking the outstanding stock of cross-border claims on that country above \$1 trillion (BIS, 2014b). The credit and construction

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<sup>29</sup> In mid-October 2014 there was a dramatic upswing in volatility involving a large sell off in stocks and bonds, triggered by fears over global growth and the impact of an eventual rise in US interest rates, attesting to the susceptibility of international financial stability to sudden changes in sentiments.

bubbles resulting from Chinese policy response to fallouts from the crisis in 2009 has continued unabated, driven largely by its shadow banking system, with the total credit rising from 130 per cent of GDP to 200 per cent (A Turner, 2014). In most other EDEs external private debt is a major driver of domestic credit expansion, implying that capital reversal could create not only external but also banking instability.<sup>30</sup> In Brazil, the Republic of Korea, Turkey, South Africa, Indonesia, Malaysia and Thailand, private debt as per cent of GDP has been rising at double-digit rates since the end of 2008 and property markets have been booming (IMF GFSR, April 2014; Colombo, 2014a, 2014b and 2014c). While aggregate debt level as per cent of GDP, including private and public debt, is lower in EDEs than that in AEs, it has nevertheless grown rapidly since the onset of the crisis – from around 60 per cent of GDP to over 150 per cent at the end of 2013 (BIS, 2014a).

As put in a recent BIS report “it is hard to avoid the sense of a puzzling disconnect between the markets’ buoyancy and underlying economic developments globally” (BIS, 2014a: 3). Under these conditions, even without a significant tightening of monetary policy in the US, asset and credit bubbles may well come to an end with a bust à la Minsky as balance sheets adopt smaller margins of safety and the system becomes endogenously fragile. This time instability may not be as short-lived as that caused by the Lehman collapse because the governments have already used up their ammunition in moderating financial shocks. In some ways the international financial system appears to be more fragile today than it was in the build-up to the Lehman crisis, in large part because of the attempt to solve a crisis caused by excessive debt by creating even more debt.

For EDEs, the most likely outcome of a tightening of global financial conditions would be a sudden stop and even reversal of capital flows of the kind seen during the Lehman collapse and a sharp correction in domestic asset markets, including equities, bonds and property. Still, it is often argued that for several reasons EDEs are now more resilient to external financial shocks than they were in previous decades. First, they moved away from fixed exchange rates, allowing currency movements to absorb part of the shocks and facilitate balance-of-payments adjustment. Since they are also less exposed to the currency risk, the destabilizing impact of currency movements on balance sheets would remain limited. Second, most EDEs have accumulated large amounts of reserves as self-insurance against capital flow reversals. Third, the likelihood of sovereign external debt crises has diminished considerably because of improved fiscal posture and the shift of governments from international to domestic debt markets. Finally, greater presence of international banks from AEs could help increase the resilience of the banking system in EDEs to external financial shocks.

It is not clear if and to what extent these could protect EDEs against a tightening of global financial conditions. This will be discussed below, taking into account the differences in the way countries have managed their exchange rates, capital flows, balance-of-payments, external balance sheets and foreign presence in domestic securities and credit markets during the recent global financial bubble. Generally, in countries with weak external positions, a severe tightening of global financial conditions could be expected to lead to both external instability and turbulence in domestic credit and asset markets. Others with strong payments and NFA positions could avoid external financial turmoil but still face severe instability in domestic credit and asset markets.

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<sup>30</sup> There is growing evidence that rapid domestic credit growth plays a dominant role in predicting subsequent crises and that banking crises are more likely when capital inflows accompany a domestic credit boom. For a review of the link between external debt and domestic credit, see Al-Saffar *et al.*, 2013.

### ***III.2. Exchange rate flexibility, capital flows and external vulnerability***

The shift to more flexible exchange rate regimes in financially open EDEs has no doubt a lot to commend. At times of favourable risk appetite hard nominal pegs offer a one-way bet to international speculators and encourage short-term inflows in search of quick profits, resulting in real appreciations and deterioration of the current account, particularly in countries with relatively high inflation rates. In bad times such pegs could rarely be defended with success. Experiments with fixed pegs often end up with balance-of-payments and currency crises with severe adverse effects on the real economy.

However, the recipe is not to move to the other corner and let the currency float freely. It is one thing to allow exchange rates to respond to changing fundamentals in order to facilitate external adjustment, it is another to leave them to the whims of unstable international capital flows. Floating can be effective in absorbing short-term volatility in capital flows, but not gyrations and boom-bust cycles. At times of a boom, free floating could generate even greater appreciations than nominal pegs. When capital inflows are strong, such a regime could lead to nominal as well as real appreciations even as current account deficits are widened – that is, it could generate unsustainable exchange rates and current account positions which could be exposed with sudden stops and reversals. A period of persistent currency misalignments, which often fuel bubbles in non-traded sectors, notably in property, could also produce significant distortions in the structure of production and trade, increasing foreign penetration of domestic markets and creating pressures for deindustrialization which could compromise the ability of the economy to respond to an eventual correction of the exchange rate.

Indeed, if capital flows and the exchange rate are not managed judiciously during the boom and external deficits and debt are allowed to pile up, floating freely at times of capital reversals would provide little cushion for the economy. Indonesia was praised for not trying to defend its currency but letting it float after the Thai baht came under attack in 1997. But this did not help stabilize the exchange rate and prevent a free fall. In most EDEs, notably those dependent on commodities, such currency declines do not provide a significant boost to exports to secure an expansionary balance-of-payments adjustment. Even in economies with robust industries, an increase in exports could be impeded by disruptions to the credit system resulting from the reversal of capital flows and currency declines as seen during many episodes of payments crises in emerging economies. As a result, the immediate balance-of-payments adjustment often takes place by retrenchments of imports and income.

To the extent that there are large currency mismatches in balance sheets, sharp declines in the exchange rate could increase the debt burden, thereby causing bankruptcies and reducing effective demand. Currency mismatches in the private sector tend to be particularly damaging. At times of capital reversals, private borrowers often attempt to close their open positions and this in turn accelerates the fall of the currency. It is true that with the opening of domestic bond markets to non-residents and increased international issuance of debt in local currencies, the exposure of most EDEs to the currency risk has significantly declined compared to previous decades. However, reductions in currency mismatches are largely limited to sovereign debtors while private corporations have been building up debt in low-interest reserve currencies both at home and abroad. In any case, in many EDEs a very large proportion of external debt, including sovereign debt, is still in reserve currencies. Taken together, EDEs have accumulated more than \$2 trillion foreign currency debt since the

beginning of 2008 (BIS, 2014a). Thus, they face significant currency risks, particularly where misalignments have been tolerated for an extended period.

There is a growing recognition that a viable alternative to corner solutions is managed floating, using a judicious combination of monetary policy, currency market interventions, prudential regulations and capital controls. Looking back at the past ten years, however, the record is not very encouraging (Akyüz, 2013). During both pre- and post-Lehman booms in capital inflows, with the exception of a few East Asian countries, most EDEs, particularly those pursuing inflation-targeting such as Brazil, South Africa and Turkey, experienced sustained currency appreciations. During the pre-Lehman boom many of them nevertheless managed to maintain viable current account positions thanks to a favourable international trading environment, but they started running large deficits during the post-Lehman boom as the international trading environment worsened and they had to turn to domestic demand for growth.

Most EDEs welcomed the strong recovery in capital inflows after the Lehman collapse and the boom in asset prices, ignoring the build-up of vulnerability resulting from increased corporate borrowing abroad and growing foreign presence in domestic securities markets. However, as upward pressures on their currencies persisted, several of them attempted to control capital inflows using market-friendly measures. Still, with the exception of a few countries, these were not very effective in preventing appreciations in large part because they were too timid to meet the challenge. These measures were dismantled after 2011 as capital inflows weakened and became unstable, and the currencies of most EDEs faced downward pressure at a time when they began to have a growing need for external financing in view of their widening current account deficits.

To sum, in the past ten years many EDEs have allowed their exchange rates to go up and down with international capital flows, driven in large part by policies in AEs and the risk appetite in financial markets, rather than their own fundamentals. They have also succumbed to the highly accommodating global financial conditions in allowing asset and credit bubbles to develop and ignored the vulnerabilities resulting from growing external liabilities, notably through private borrowing abroad and increased presence of foreign investors in domestic securities markets. It is no wonder that three of the five BRICS that had been identified a decade ago by financial markets as the “emerging markets” with the brightest economic prospects, Brazil, India and South Africa, are now listed among the countries dubbed “fragile 5” with the addition of Turkey and Indonesia, again countries among the recent rising stars (Lord, 2013).<sup>31</sup>

### ***III.3. Reserve accumulation: How much self-insurance?***

The large amounts of reserves built up by EDEs in recent years, including both surplus and deficit countries, are expected to serve two purposes: to prevent and mitigate balance-of-payments and currency crises by boosting confidence among creditors and investors and reducing the risk of liquidity-driven panics on the one hand, and by providing

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<sup>31</sup> The “fragile 5” has now become “fragile 8” with the addition of Argentina, Chile and the Russian Federation.

international liquidity against sudden stops and reversals of capital inflows, on the other. A key question is the extent to which these would really allow EDEs to weather a sharp turnaround in global financial conditions.

Traditionally international reserves were seen as an insurance against current account shocks and amounts needed to cover three months of prospective imports were considered as adequate. After the Asian crisis of 1997, attention increasingly turned to capital account shocks, and vulnerability has come to be assessed on the basis of short-term external debt. The so-called Greenspan-Guidotti rule stipulated that in order to significantly reduce the likelihood of liquidity crises, international reserves should cover short-term external debt in foreign currencies, defined as debt with a remaining maturity of up to one year. While this is the most widely used indicator of external sustainability, empirical evidence does not always show a strong correlation between pressure on reserves and short-term external debt. Often, in many countries suffering large reserve losses, sources other than short-term foreign-currency debt have played a greater role (IMF, 2011).

Indeed, vulnerability to liquidity crises is not restricted to short-term foreign currency debt. What matters is the liquidity of external liabilities, including those denominated in local currencies of EDEs. Countries with extensive foreign participation in equity and bond markets could be highly vulnerable even in the absence of high levels of short-term foreign-currency debt. This is particularly true where reserves are borrowed. But even where reserves are earned from current account surpluses, currencies can come under stress if there is a significant foreign presence in domestic securities markets. To the extent that foreign entry enhances market liquidity, individual investors can exit without incurring large losses, but when sentiments sour, a bandwagon effect may develop, leading to sharp declines in both asset prices and exchange rates, as seen during the Lehman collapse. A rapid and generalized exit could create significant turbulence with broader macroeconomic consequences, even though losses due to declines in asset prices and currencies fall on foreign investors and mitigate the drain of reserves. Financial turmoil could be aggravated if foreign exit is accompanied by resident capital flight. Resident outflows rather than exit by foreign investors may well play a leading role in the drain of reserves and currency declines as seen in some previous episodes.

These sources of drain on reserves are now widely recognized. After the onset of the crisis in AEs, the IMF has developed a framework for assessing reserve adequacy for emerging market economies, the so-called “EM ARA Metric”, for determining the level of reserves needed for precautionary purposes (IMF, 2011 and 2013d). The metric includes four potential sources of pressure on reserves; short-term debt, medium-term and long-term debt and equity liabilities, broad money as a potential source of capital flight by residents and export earnings to reflect potential shortfall in foreign exchange earnings resulting from a drop in foreign demand and terms-of-trade shocks. FDI liabilities are not included as a potential source of drain because of lack of evidence of exit by direct investors at times of stress. Different risk weights are assigned to these sources of drain, based on observed outflows from EDEs during periods of currency pressures. Reserves in the range of 100-150 per cent of the composite metric are considered to be adequate. It is found that while reserves of most countries were above the ARA threshold in 2012, there were around 20 countries that fell below 100 per cent of the ARA metric and bringing these above the threshold would add to global reserves by around \$700 billion. It is also recognized that the risks associated with portfolio liabilities and commodity dependence may not have been fully captured by this algorithm.



Table 21: Reserves and Foreign Claims: 2013  
(Per cent of GDP)

Country	Reserves	Current Account	Short term international commercial debt <sup>a</sup>	Non-resident holdings of local government debt <sup>b</sup>	Non-resident holdings of equities <sup>c</sup>
Argentina	5.8	-0.9	1.8	...	0.6
Brazil	15.9	-3.6	4.4	9.2	10.3
Chile	14.8	-3.4	9.6	...	7.7
China	41.8	2.1	7.6	...	4.7
Colombia	11.2	-3.3	3.4	...	2.4
India	14.8	-2.0	6.7	0.5	8.5
Indonesia	11.1	-3.3	6.2	3.0	8.6
Korea	28.0	5.8	10.2	...	19.8
Malaysia	42.7	3.8	12.5	20.7	28.4
Mexico	14.0	-1.8	3.7	11.4	8.2
Peru	31.2	-4.9	10.1	3.7	2.0
Philippines	27.9	3.5	5.0	...	11.2
Russia	22.3	1.6	3.4	...	5.5
South Africa	12.9	-5.8	4.0	...	27.3
Thailand	41.7	-0.7	5.2	4.3	28.1
Turkey	13.5	-7.9	11.4	4.9	6.1

**Source:** IMF *IFS*, *WEO* and *CPIS* database; BIS *International Financial Statistics*; and J.P. Morgan (2013).

- a. Short-term international commercial debt does not include international money market instruments for Chile, India, Indonesia, Malaysia, Peru, Philippines, Russia and Thailand.
- b. Shares of non-resident holdings in local government bonds (see Chart 16).
- c. June 2013 numbers.

Table 21 provides information for 2013 on the level of reserves for a sample of major EDEs and some of the most important potential sources of drain; that is, current account deficits, short-term external debt, and non-resident holdings of local-currency public debt and equity portfolios. Short-term external debt issued by overseas subsidiaries of corporations in EDEs is not included although it is a major potential source of drain on reserves in some countries. Data on foreign participation in local bond markets are readily available only for a few countries. As discussed above, non-resident holding of equities as reported by the IMF's CIPS database underestimates foreign participation in equity markets and figures from national sources for some countries suggest much higher levels of holding. FDI holdings are not included as a potential source of drain even though some of the recorded direct

investments are not really distinguishable from portfolio equity holdings. Nor does the table include any potential source of capital flight by residents.

With these considerations in mind, Table 21 suggests three broad categories of countries in terms of vulnerability to an interruption of access to international capital markets and sudden stop of capital inflows. The first category includes countries where reserves do not cover the current account deficit plus short-term external debt. Turkey falls in this category. In the event of a sudden stop of inflows, Turkey cannot both finance its current account deficit and remain current on its external debt payments even in the absence of exit of non-residents from domestic bond and equity markets and capital flight by residents. This means that unless short-term debt is rolled over and/or international liquidity support is provided by the IMF or bilaterally, Turkey could not continue to run such a high level of deficit and would have to drastically retrench to accommodate a significantly worsened external financial environment. The more recent data are even greater cause for concern with the level of reserves in mid-2014 barely matching short-term debt and there is no significant decline in the current account deficit. The risk that an interruption to access to international financial markets could directly destabilize the banking system is also high since a large part of external debt is due to banks and their corporate creditors with large currency mismatches.

The second category includes countries where reserves cover current account deficits and short-term debt without leaving much room to accommodate a sizeable exit of foreign investors from domestic securities markets, capital flight by residents and/or trade shocks. It includes Argentina, Chile, Indonesia and South Africa which all have narrow margins to respond to a reversal of capital flows by deploying reserves. Indonesia and South Africa have a relatively high degree of foreign presence in domestic securities markets while Argentina, Chile and South Africa are vulnerable to commodity shocks. Brazil, India and Mexico have more room, but they are both vulnerable to a large scale exit of foreign investors from securities markets. Brazil is also vulnerable to current account shocks because of its dependence on commodity exports and financial shocks because of short-term external debt issued by overseas subsidiaries of its corporations.

A third category includes EDEs which run current account surpluses and hold reserves higher than the levels needed for precautionary reasons, including China, Malaysia, the Republic of Korea, the Russian Federation and Thailand. Foreign presence in domestic securities markets is limited in China and the Russian Federation so that foreign exit would not be expected to cause external payments and currency problems. But China has a domestic debt overhang due to investment (property) bubbles and the Russian Federation is vulnerable to commodity and political shocks and capital flight. Foreign presence in domestic securities markets is strong in Malaysia, the Republic of Korea and Thailand so that a generalized exit from domestic securities by non-residents could place strong pressure on the exchange rate despite a very high level of reserves. Indeed, when hit by fallouts from the crisis in AEs in 2008, the Republic of Korea lost some \$60 billion in reserves and was given a swap line by the Fed.

International reserves held by central banks are not the only assets that EDEs could draw on in the event of sudden stops and reversal of capital flows. Assets accumulated abroad by the private sector are often seen as an additional safeguard in the event of an interruption of their access to international financial markets. However, such assets are often leveraged. Furthermore, they could help only if they are liquid and held by corporations with open foreign exchange positions, rather than other residents such as institutional investors who

might not be able or willing to sell them to close the funding gap (Al-Saffar *et al.*, 2013). Liquid assets of Sovereign Wealth Funds may also be deployed. However, such funds are important mostly in surplus countries with strong external payments and reserves positions – that is, those with no significant vulnerability to external instability. Again, swap arrangements with central banks of major reserve-currency countries may be of some help. However, such arrangements are highly politicised and unreliable, and do not constitute reasonable substitutes for international reserves.

Greater hopes are also pinned on South-South cooperation for contingency financing. There are two main arrangements – the Chiang-Mai Initiative Multilateralization (CMIM) of East Asian countries and the Contingent Reserve Arrangement (CRA) recently agreed by BRICS. The CMIM had started as bilateral swaps to complement, rather than substitute, the existing international facilities before it was multilateralized at the end of 2009. The initiative has never been called upon; during the Lehman collapse, the Republic of Korea and Singapore approached, instead, the US Fed and Indonesia secured finance with a consortium led by the World Bank. CMIM has several shortcomings making it almost unusable. It does not have a common fund, but is a series of promises to provide funds, with each country reserving the right not to contribute to the specific request by a member; its size is too small, some 1.5 per cent of total GDP of the countries involved; and access beyond 30 per cent of quotas is tied to an IMF program (Lim and Lim, 2012; West, 2014).

The CRA is widely praised as a strong political sign of solidarity among EDEs. While it is too early to pass judgement on it, the information available suggests that it is not very much different from the CMIM. It appears to be designed to complement rather than substitute the existing IMF facilities. Its size is even smaller than the CMIM, less than 1 per cent of the combined GDP of BRICS, and access beyond 30 per cent is tied to the conclusion of an IMF program.<sup>32</sup>

### ***III.4. Sovereign debt and financial stability***

For two main reasons a recurrence of the kind of international debt crises that devastated many EDEs in the past is now seen much less likely. First, in several countries fiscal discipline has improved significantly with public debt stabilizing and even falling as a proportion of GDP. Secondly, a growing proportion of sovereign external debt of many EDEs is now in local currencies because of the shift from international to domestic debt markets.

This view is in part a reflection of a long-standing belief that fiscal imbalances are at the origin of liquidity and debt crises so that budgetary discipline holds the key for external sustainability. A particular formulation of this was offered by the so-called Lawson Doctrine developed in the late 1980s that a large current account deficit is not a cause for concern if the fiscal accounts are balanced – that is, if the external deficit has its origin in the private

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<sup>32</sup> Another arrangement among EDEs is the Latin American Reserve Fund (FLAR) established in 1978 by 7 Andean countries to provide balance-of-payments support and improve investment conditions of reserves held by member countries. It has been operating without linking liquidity provision to IMF programs – see UNCTAD, 2011.

sector.<sup>33</sup> Even though this doctrine was discredited by several instances of currency and balance-of-payments crises in economies with sound fiscal positions, it appears to continue to influence the mainstream thinking. Indeed fiscal profligacy and sovereign debt were presented as the root causes of the EZ crisis even though this was true only for Greece.

Sovereign debt is rarely at the centre of external financial crises and internationally-issued bonds are even less so. In the last eight major external financial crises in EDEs (that is, Mexico, Thailand, Indonesia, the Republic of Korea, the Russian Federation, Brazil, Turkey and Argentina, in the order of occurrence), sovereign debt was the problem only in three cases (Argentina, Mexico and the Russian Federation) and in only one of them (Argentina) it was the internationally issued debt. In Mexico, the crisis originated in domestically-issued dollar-linked debt (tesobonos) while in the Russian Federation difficulties emerged in rouble-denominated domestic debt (the so-called GKO). In Asia (Thailand, the Republic of Korea and Indonesia), the crisis was due to excessive short-term cross-border borrowing by local banks and non-bank corporations while in Turkey banks holding domestic sovereign debt came under pressure and difficulties emerged in rolling-over short-term external bank debt (Truman, 2002; Akyüz and Boratav, 2003).

In almost all these cases, an important part of private debt, both domestic and external, was socialized through government bailouts, often through recapitalization of insolvent banks, raising sovereign debt. In Indonesia, for instance, bailouts raised public debt by more than 50 per cent of GDP, creating problems of sustainability despite its good track record in fiscal discipline (IMF, 2003b). For Thailand and the Republic of Korea corresponding figures are 42 per cent and 34 per cent respectively (Hoggard and Saporta, 2001) and for Turkey 33 percent (World Bank, 2003). In a sample of 12 countries hit by currency and external financial crises in the 1990s and 2000s, the average post-crisis public debt ratio was higher than the pre-crisis ratio by 36 per cent of GDP, and in most cases the increase in debt levels persisted several years before governments could roll-back the crisis-induced increases in debt ratios (de Bolle *et al.*, 2006).

This is very much the same in Spain and Ireland during the recent EZ crisis. On the eve of the crisis public debt was around 36 per cent of GDP in Spain and 25 per cent in Ireland, much lower than the ratio in the core EZ countries. In fact these countries adhered to the Maastricht Treaty much better than Germany where the debt ratio was over 65 per cent. They were running current account deficits in the order of 6 per cent and 2 per cent of GDP, respectively, but these were entirely due to a private savings gap. A growing part of the external debt was incurred by the private sector. The crisis originated in the banking system, and while depositors and creditors, both domestic and foreign, of troubled banks have largely escaped without a haircut, a large part of unpayable private debt has been socialized through bailout operations. This, together with the impact of the crisis on public finance, pushed the sovereign debt ratios up, to reach 100 per cent in Spain and 120 per cent in Ireland in the first half of 2014.

The standard framework for the assessment of debt sustainability and vulnerability to external shocks fails to account for such contingent liabilities even though in reality they are an important source of public debt accumulation – on some account even more important than budget deficits (Campos *et al.*, 2006). Likewise, private external debt and domestic

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<sup>33</sup> For a critical evaluation of this doctrine see UNCTAD TDR (1998) and Reisen (1998).

credit expansion are at the origin of current vulnerabilities to liquidity and solvency crises in several EDEs, and in the event of turmoil, sovereign debt problems could well emerge even in countries with strong fiscal postures.

Contingent liabilities apart, on standard measures many EDEs have comfortably met the conditions for sovereign debt sustainability since the early 2000s.<sup>34</sup> The interplay of three principal determinants of fiscal sustainability, namely economic growth, interest rates on foreign-currency and local-currency debt and exchange rates have been very favourable in large part because of favourable global conditions. These not only boosted growth and improved budget balances in the EDEs in the run up to the 2008 crisis, but also helped achieve a swift recovery after 2009. For several EDEs, real interest rates on foreign-currency debt have generally been negative because of low rates in major AEs, increased risk appetite and pressures for currency appreciations.<sup>35</sup> Since yields on local-currency debt have also remained low, some 5 per cent in nominal terms and 1 per cent in real terms, governments did not have to make much effort to stabilize or lower their debt ratios. They could even run primary deficits without facing an increase in the ratio of debt to GDP.

Although increases in non-resident holdings of local-currency sovereign bonds have played an important role in lowering their yields, particularly in the post-Lehman period, international investors in local bonds of EDEs earned a large return because of currency appreciations (AFCEG, 2013). For the same reason, the bond index in local currency terms outperformed the index in US dollars throughout the period 2008-2013, implying a persistent positive return to speculation in the currencies of EDEs (see Polychronopoulos and Binstock, 2013).<sup>36</sup> Thus, a win-win situation developed between international investors and sovereign debtors. As foreign investors added to their bond holdings in EDEs, yields came down but currency appreciations generated significant capital gains for them. On the other hand, lower yields and stronger currencies reduced the borrowing cost for governments and improved the sovereign debt profile.

However, these are reversible, particularly in EDEs with weak fiscal and external positions (Jaramillo and Weber, 2013). Since 2007, bond markets in many EDEs dropped sharply at least on two occasions when the risk sentiment went sour and external financial conditions tightened; during the Lehman collapse in 2008 and the “taper tantrum” in May 2013. Although the sell-off was much smaller during the latter episode than the Lehman shock, it produced a similar impact on yields (IMF GFSR, October 2013). In both periods, currencies also came under strong pressure, notably in deficit EDEs.

As in equity markets, even when non-resident investment accounts for a small share of the bond market, entry and exit can have a significant impact on yields. This is because in EDEs the domestic investor base is not strong enough to make these markets sufficiently

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<sup>34</sup> For sovereign debt and fiscal sustainability conditions, see Akyüz, 2007.

<sup>35</sup> Real interest rate on external debt is given by:  $[(1 + i)(1 + \hat{\epsilon})/(1 + \pi)] - 1$  where  $i$  is the nominal dollar interest rate,  $\hat{\epsilon}$  the rate of change of the exchange rate (positive for depreciation) and  $\pi$  the rate of inflation. This expression would be negative when  $i$  is low relative to inflation even in the absence of currency appreciation; see Akyüz, 2007.

<sup>36</sup> Turner (2012) finds persistent positive returns to speculation by comparing returns on hedged and unhedged portfolios both for 2002-2006 and 2007-2009.

deep and liquid. Domestic holders of bonds on the longer-end are mostly institutional investors that typically hold these bonds to maturity so that “even the small amount of foreign investment going into the long end of the yield curve can have a large marginal impact” (Pradhan *et al.*, 2011: 15-16). Foreign holdings reach several multiples of average daily trading volume in the issuing country bonds, and this creates “a systemic liquidity mismatch’ between the potential for portfolio outflows from emerging market economies and the capacity of local institutions and market makers (in particular international banks) to absorb these flows” (IMF GFSR, April 2014: 36-37 and Figure 1.25). The present risks are more emphatically stated by Morgan Stanley (2014: 3):

The Achilles’ heel of emerging market economies is the foreign ownership in the domestic bond markets. The spread of local bond yields over Treasuries used to be, but is now likely no longer wide enough to absorb interest rate shocks from the US. This combination has already proved to be near-fatal to EM last summer, and there’s no reason to think it won’t hurt again. As US interest rates rise, compressed risk premia mean that EM interest rates will have to rise too. As bonds sell off but cannot be sold, we think that foreign investors will sell other asset classes and even assets in other EM economies to protect capital.

By shifting from international issuance in reserve currencies to domestic debt market in local currencies, EDEs have sought to escape the perennial problem of original sin, passing the currency risk onto international lenders. However, they have become highly exposed to interest rate shocks which could prove equally and even more damaging in the transition towards normalization of monetary policy in the US. While the incidence of exchange rate shocks depends very much on external liquidity positions, even countries with strong payments and reserve positions are vulnerable to shocks to bond markets as long as there are sizeable foreign holdings and the domestic investor base is weak.

The shift from international to local debt markets has not just reduced the currency mismatch but also increased the proportion of public debt held by non-residents in several EDEs (Table 14). The increase in foreign holdings is even greater if bonds held by the subsidiaries of international banks located in EDEs are included. Whether in local currency or dollars, foreign ownership of debt is a key indicator of external vulnerability. This has become more visible in the EZ crisis where problems emerged not in countries with large stocks of debt but large foreign holdings (Gros, 2011). Belgium had a much higher public debt ratio than Portugal, Spain and Ireland, but did not face any pressure and in fact enjoyed a relatively low risk premium because it has sustained a positive net external asset position. Again, Italy is less affected than other periphery countries because a large proportion of its public debt is held domestically.

The increased foreign presence in domestic bond markets of EDEs implies that these markets may no longer be relied on as a “spare tyre” for private and public borrowers and provide an escape route at times of interruptions to access to external financing. When global risk appetite and liquidity conditions deteriorate and access of EDEs to international capital markets is impaired, domestic bond markets too can get crippled due to adverse spillovers. An exodus of foreign investors would expose domestic bond holders. Institutions such as pension funds may not be very much affected because they tend to hold bonds to maturity. But domestic banks, as major holders of sovereign local debt, could come under severe stress because of maturity mismatches in their balance sheets between long-term bonds and short-term liabilities. They could thus join in the sell-off, as seen during the Lehman collapse and

the “taper tantrum”, pushing bond yields up further. Governments may then become unable to refinance debt at reasonable interest rates. They could be inclined to solve the problem by forcing banks or pension funds to absorb sovereign bonds and, in the extreme case, pushing them onto the central bank.

The closer global integration of local bond markets in EDEs thus entails a significant loss of autonomy in controlling long-term rates in domestic debt markets. This has far greater consequences for financial and exchange rate stability than loss of control over short-term rates now that capital flows through bond markets have gained added importance relative to international bank lending. It also means further loss of monetary policy autonomy since, as seen in the last two episodes of bond market turmoil, bond prices and exchange rates in EDEs are now intrinsically linked.

The development and internationalization of bond markets of EDEs are widely seen as a recipe for enhancing the resilience of the financial system to external shocks as well as improving the volume and allocation of capital. Similar considerations have also encouraged major EDEs to develop offshore bond markets in local currency in order to have access to even larger and more diverse funds, thus enjoying the benefits of greater liquidity that such markets offer relative to domestic bond markets. However, it is now becoming evident that the risks associated with the internationalization of bond markets before establishing a sound and stable domestic investor base through strong and sustained growth of income and accumulation of wealth may have been seriously underestimated.<sup>37</sup>

We have now come to the end of the long period of exceptionally low long-term interest rates. The acid test for the wisdom of deep global integration of bond markets in EDEs may well arrive with the normalization of monetary policy in the US. It is sometimes argued that measures taken by governments to address the root causes of the last crisis often become the new sources of instability. This may well be the case with the internationalization of local bond markets in EDEs; it may turn out to be as big a sin as the original one, rather than a path back to Eden.

### ***III.5. Foreign banks and financial stability***

Much has been written on the pros and cons of foreign banks in EDEs. According to the orthodox view, vigorously promoted by the BWIs until recent years, foreign banks from AEs would not only bring efficiency gains, improve competitiveness, reduce intermediation costs and generate positive spillovers to local banks in EDEs, but also enhance their resilience to external financial shocks. At the same time, however, it has been widely recognized that these banks could cream-skim the banking sector, picking the best creditors and depositors and leaving smaller and marginal customers, including SMEs, to local banks. They tend to focus on more lucrative activities where they have a competitive edge, notably trade financing where they enjoy a cost advantage compared to local banks in being able to confirm letters of credit through their head offices, and international financial intermediation

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<sup>37</sup> On the risk of offshore markets in local currency bonds drawing liquidity away from the domestic market in EDEs, see Black and Munro, 2010. On a critical assessment of the benefits claimed for a well-developed bond market in the context of the Asian Bond Initiative, see Lim and Lim, 2012.

rather than domestic intermediation, often obliging the best customers using such services to move all of their business to them. They are also better able to benefit from regulatory arbitrage by shifting operations back and forth between the home and host countries. They can easily avoid the cost of legal reserves by moving large deposits to off-shore accounts and this also enables them to offer higher interest rates. Since local banks cannot easily avoid these costs, they would bear an unfair competitive burden.<sup>38</sup>

Since the onset of the global financial crisis, it has been increasingly recognized that extensive presence of foreign banks in EDEs can aggravate their vulnerability to financial shocks, including in an IMF Staff Discussion Note:

“The activities of cross-border banking groups can generate trade-offs between efficiency and financial stability. These groups can lower intermediation costs and improve access to credit by households and firms, facilitate a more efficient allocation of global savings, assist in the development of local capital markets, and make possible the transfer of risk management, payments, and information technology. At the same time, these groups are highly interconnected internationally and may expose individual countries to the risk that shocks in other countries will spill over into their domestic financial systems” (Fiechter *et al.*, 2011: 5).

Indeed, because of their close international linkages, foreign banks in EDEs act as conduits of expansionary and contractionary impulses from global financial cycles. As a result, their increased presence, together with the liberalization of international financial transactions, can be expected to intensify global financial spillovers to EDEs. When global liquidity and risk appetite are favourable, foreign banks can contribute to the build-up of external financial fragility. When global financial conditions become stringent, they can exacerbate their destabilizing and deflationary impact on host countries. Both of these influences were observed in the run up to the global crisis and subsequently.

Foreign banks intermediate between international financial markets and domestic borrowers much more easily than local banks, funding local lending from abroad, including through their parent banks. They have greater room to do this when they operate as branches in EDEs which can escape the prudential and other regulations designed to manage the capital account. In the run up to the EZ crisis, foreign banks were instrumental in the rapid accumulation of debt and build-up of mismatches in private balance sheets in the periphery, particularly where they lacked adequate domestic deposit base, funding local lending from their parent banks. Again during the recent surge in capital inflows to EDEs, foreign banks have been extensively engaged in carry-trade-like intermediations, benefiting from large interest-rate arbitrage margins between reserve-issuing AEs and EDEs and currency appreciations in the latter. This has no doubt played an important part in the unprecedented increase in local claims of international banks in local currency in recent years, discussed above.

Foreign banks can also act as a conduit of financial instability in AEs, transmitting credit crunches from home to host countries, rather than insulating domestic credit markets from international financial shocks. The shift of international banks from cross-border to

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<sup>38</sup> For a review of the pros and cons of foreign banks and some evidence from India, see Sarma and Prashad, 2013. See also Torre and Xu, 2012, and Claessen and van Horen, 2012.



local lending implies that at times of stress in the home country, deleveraging by parent banks could result in credit contraction in host countries. This was seen in Asia during the EZ crisis where lending by local subsidiaries and branches was a substantial part of overall European bank claims (Aiyar and Jain-Chandra, 2012; He and McCauley, 2013). Several other studies have also found that foreign subsidiaries cut lending more than domestically-owned banks during the global crisis (Claessen and van Horen, 2012; Chen and Wu, 2014). This is particularly true where they funded a large proportion of their lending from abroad rather than from local deposits (Cetorelli and Goldberg, 2009). At the height of the crisis in 2008, in China and Brazil, foreign bank credit growth lagged behind that of domestic banks and “foreign banks in one EME – apparently on instructions from their parent banks – withdrew earlier than domestic banks from the interbank market” (BIS, 2010: 3). During both the Asian crisis in 1997 and the crisis in AEs in 2008, foreign banks were slower than domestic banks in adjusting their lending to changes in host country monetary policy, thereby impairing its effectiveness (Jeon and Wu, 2013 and 2014).

During the EZ crisis not only shocks to parent banks were transmitted to their subsidiaries in emerging economies, but the response of the latter amplified the impact on the banking system in host countries. While some global banks gave support to their foreign affiliates, subsidiaries in many European emerging economies acted as conduits of capital outflows in support of their parent banks in the EZ core, leading to depletion of reserves and putting pressures on currencies of European emerging economies (BIS, 2010; Cetorelli and Goldberg, 2011).

Strong adverse fallouts from parent banks in the European core to the CEE, where a small number of subsidiaries of banks from the core dominated the financial sector, necessitated international official intervention, the so-called Vienna initiative, involving the European Development Bank, the IMF and the European Commission (Pistor, 2012). The initiative was designed to prevent large scale exit from CEE and ensure that parent banks maintain exposure to their subsidiaries and the support given by core governments to parent banks, notably through recapitalization, could also benefit their subsidiaries. However, an important part of the burden of supporting the pan-European banking system fell on host countries. Foreign banks effectively avoided large losses while governments of host countries incurred new debt. A number of locally-owned banks in CEE failed but there were no failures among foreign-owned banks. More importantly, the agreement between banks and the international financial institutions were conditioned on pro-cyclical macroeconomic policies, including sharp cuts in wages in some countries such as Romania, mainly at the insistence of home countries and their transnational banks which formed a “vociferous creditor coalition” (Lutz and Kranke, 2010).

In what way the subsidiaries of banks from AEs could affect the transmission of destabilizing impulses to EDEs from the normalization of monetary policy in the US remains to be seen. The ultra-easy monetary policy has given rise to an important build-up of financial fragility in AEs themselves by triggering a search-for-yield in “the riskier part of the credit spectrum” including high-yield bonds, subordinated debt and leveraged syndicated loans, “a phenomenon reminiscent of the exuberance prior to the global financial crisis” (BIS, 2013: 1, 7).<sup>39</sup> Indeed, there is evidence that the medium-term credit risks of banks in AEs have

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<sup>39</sup> Two senior economists from the Fed also warn that “[v]ulnerabilities, such as compressed risk premiums, and excessive leverage or maturity and liquidity transformation in the financial system, can increase the probability of a financial crisis and severe recession in the future” (Adrian and Liang, 2014: 4).

increased while risk premia fell (Lambert and Ueda, 2014). Thus, the end of ultra-easy monetary policy could create destabilizing impulses for these banks, again with adverse spillovers to EDEs through their affiliates.

Recent experience suggests that local subsidiaries of foreign-owned international banks are unlikely to act as stabilizers of interest rate shocks to local bond markets of EDEs. During the bond market collapse in 2008, rather than increasing their exposure to offset the impact of the exit of foreign investors, these banks joined them, reducing their holdings of local government bonds and scaling back their market-making activity (Turner, 2012). Nor can they be relied on to deploy their greater access to diversified sources of liquidity in international markets and reduce the pressure on reserves and play a stabilizing role in the event of a capital reversal. Parent banks are not legally obliged to support subsidiaries during funding stress and other international creditors cannot be expected to increase their exposure to a country through foreign subsidiaries when they are exiting on a large scale.

#### **IV. CRISIS MANAGEMENT AND RESOLUTION**

In terms of build-up of financial fragility in recent years, there are two broad categories of EDEs. The first one combines weak external positions with bubbles in domestic credit and asset markets. In the event of a significant tightening of global financial conditions, these could face not only the problem of external financial sustainability but also the risks of domestic credit crunch and asset deflation. The second group comprises mostly East Asian countries with strong external positions. These may not face external turbulence but run risks of domestic financial instability because of credit and asset bubbles generated by the combination of global financial conditions and their own domestic policies. Accordingly, any financial turmoil in the first group would, in all likelihood, require international action for crisis management and resolution, but this would not be the case for the countries in the second group.<sup>40</sup>

In a typical external financial crisis, an emerging economy finds its access to international financial markets interrupted and faces a sudden stop in capital inflows. Its reserves get depleted by short-term debt payments and current account deficits and its currency and asset markets come under stress. All these are aggravated if the sudden stop translates into a capital reversal as a result of exit of foreign investors from deposit, bond and equity markets and capital flight by residents.

In a typical international intervention in a typical external financial crisis, liquidity is made available by the IMF, often well in excess of the country's normal access limits. The more the IMF has failed in crisis prevention, the more it has become involved in crisis lending. After almost every major financial crisis it has sought a new role and there has been a proliferation of crisis lending instruments in the past two decades. The central objective is to keep debtors current on their payments to private international creditors and to maintain an open capital account. As a result, obligations to private creditors are translated into debt to the IMF which is much more difficult to restructure in the event of an eventual default because the IMF enjoys *de facto*, though not *de jure*, seniority. Austerity is imposed by means of hikes in domestic interest rates, fiscal retrenchment and wage cuts in order to achieve a sharp turnaround in the current account, mainly through import compression, and to restore confidence among international creditors and investors. Sometimes, when the crisis is one of liquidity and the IMF lending proves insufficient, a concerted rollover of short-term debt is sought. This is easier to do when debt is owed to banks, as seen during the crises in the Republic of Korea, Indonesia, Brazil and Turkey, than when it is held by widely dispersed bondholders. It is often hoped that the liquidity crisis is temporary and the IMF lending and programme would encourage private creditors to resume lending. But when it turns out to be a solvency crisis, the outcome is more often than not a messy default, as in Argentina, since the international system lacks arrangements for orderly debt workouts.

It has been increasingly agreed that this approach to the management of external financial crises in emerging economies is inefficient and inequitable. First, the austerity imposed intensifies the impact of the crisis on incomes, jobs and poverty in debtor countries. Second, lending by the IMF to keep countries current on their debt payments creates

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<sup>40</sup> Even in this latter case international action may be needed to prevent contagion. The third group noted in Section C.3., that is, countries with strong external positions but excessive foreign presence in domestic markets, may eventually fall in one of the two categories above as the events unfold.

creditors' moral hazard, as it often helps the latter to avoid assuming the full consequences of the risks they have taken and been paid for in risk premia. These result in significant inequality between debtors and creditors in the incidence of the burden of a crisis. Inequalities also emerge among creditors. In the event of default and restructuring those who exit first could escape without haircut, leaving the others to take the full brunt of debt write-offs. Profit opportunities are also created for vulture funds, at the expense of genuine creditors as well as the debtor, as recently seen in the case of Argentina.

#### **IV.1. Sovereign debt workouts**

Various proposals have been made for an orderly and equitable resolution of external financial crises. They mainly concentrate on sovereign debt and seek to involve private creditors in crisis resolution. UNCTAD is the first international organization which made such a proposal during the Latin American debt crisis in the 1980s, drawing on chapter 11 of the US bankruptcy code, noting that the absence of a clear and impartial framework for resolving international sovereign debt problems trapped many developing countries in situations where they suffered the stigma of being judged *de facto* bankrupt without the protection and relief which come from *de jure* insolvency (UNCTAD TDR, 1986).<sup>41</sup>

The application of these principles entails imposition of temporary standstills on debt payments by both private and public sectors, accompanied by exchange restrictions to prevent capital outflows. They need to be sanctioned by an impartial international authority to stop litigation and asset grabbing by creditors. These measures would be necessary whether external payments difficulties are perceived to be as one of liquidity or solvency. This is often difficult to identify with a reasonable degree of precision *ex ante*. But if it is found necessary to impose restrictions not only on debt payments and capital outflows but also on income transfers, including interest payments and profit remittances, this could be taken as a reasonably good sign that the debtor country may have in fact been engaged in Ponzi financing and hence may not be solvent. In principle such measures would be subject to the Fund's Article VIII jurisdiction and prior approval because they concern current account convertibility (IMF, 2013a).

Second, any external financing provided to the debtor country in distress should be used for current transactions in order to maintain imports and the level of economic activity, rather than for repaying debt or maintaining capital account convertibility. This would involve the so-called debtor-in-possession financing which grants seniority status to new debt contracted after the sanctioning of the standstill. The task could be assumed by the IMF. Needless to say, there should be limits to IMF lending during capital account crises if the purpose is to secure private sector involvement in crisis resolution. If the terms of new loans are attractive, private creditors may also become willing to lend since they would be enjoying seniority in the event of an eventual debt restructuring.

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<sup>41</sup> The proposal was revisited after the East Asian crisis (UNCTAD TDR, 1998). For the application of Chapter 9 of the US insolvency law dealing with debt of public agencies, see Raffer, 1990. For the debate around mandatory debt-workout mechanisms, see Akyüz, 2002.

The third stage would be debt restructuring. In liquidity crises, standstills may need to be accompanied by extension of maturities of existing obligations and in some cases this can be negotiated between the debtor and creditors. In the case where debt can no longer be paid according to original terms and conditions, write-down would become necessary. The introduction of rollover clauses and collective action clauses (CACs) in debt contracts could facilitate but would not guarantee voluntary restructuring. There would then be a need for impartial arbitration in order to overcome creditor holdout and secure an orderly and equitable restructuring.

During the earlier episodes of crises the IMF (1999 and 2000a) recognized the need for “involving the private sector in forestalling and resolving financial crises”, but insisted on voluntary mechanisms, notably CACs and automatic rollover clauses in debt contracts and informal negotiations between debtors and creditors. However, as these proved ineffective and some AEs started to oppose bailouts, the IMF Board agreed that “in extreme circumstances, if it is not possible to reach agreement on a voluntary standstill, members may find it necessary, as a last resort, to impose one unilaterally”, and that since “there could be a risk that this action would trigger capital outflows ... a member would need to consider whether it might be necessary to resort to the introduction of more comprehensive exchange or capital controls.” The Fund could also signal its acceptance of a standstill imposed by a member by lending into arrears to private creditors (IMF, 2000b).

The Fund staff went further and proposed a formal Sovereign Debt Restructuring Mechanism (SDRM) to facilitate sovereign bond workouts for countries whose debt is deemed unsustainable by bringing debtors and bondholders together irrespective of the existence of CACs in bond contracts, and by providing a mechanism for dispute resolution. This mechanism would also “allow a country to come to the Fund and request a temporary standstill on the repayment of its debts, during which time it would negotiate a rescheduling with its creditors, given the Fund’s consent to that line of attack” and to impose exchange controls (Krueger, 2001: 7).

However, the SDRM proposal did not fundamentally address the problems associated with IMF bailouts. It was designed for countries facing insolvency while those experiencing liquidity problems were to continue to rely on IMF lending. The provision for statutory protection to debtors in the form of a stay on litigation was subsequently dropped. Creditor permission would be required in granting seniority to new debt. Even after significant dilution the proposal could not elicit adequate support and had to be withdrawn.

Recently the Fund turned its attention once again to sovereign debt restructuring, particularly after misjudging the sustainability of Greek debt, very much in the same way as it had done with Argentina about a decade earlier, pouring in money to bail out private creditors.<sup>42</sup> This time it has been less ambitious than the SDRM, focussing not so much on how to restructure sovereign debt as how to involve the private sector in the crisis resolution so as to “limit the risk that Fund resources will simply be used to bail out private creditors” (IMF, 2013b: 26).

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<sup>42</sup> In a subsequent evaluation of the 2010 Stand-By agreement for Greece, the Fund admitted that it had underestimated the damage done by austerity imposed in the bailout and that it had deviated from its own debt-sustainability standards and should have pushed harder and sooner for lenders to take a haircut (IMF, 2013c).

However, although the central idea is to secure some kind of creditor bail-in as a condition for Fund lending, it is not clear how this is to be done, particularly as the IMF shies away from statutory arrangements and throws the ball to the debtor country. The sovereign approaching the Fund for assistance would be asked to find ways of “reprofiling” its debt, rolling over all bonds and commercial loans falling due within the life of the Fund programme.<sup>43</sup> The decision for reprofiling would be taken by the IMF based on its debt sustainability analysis.<sup>44</sup> The reprofiling should be market-based wherein creditors are expected to voluntarily agree to reschedule existing debt through rollovers and bond exchanges. This was in fact tried during the debt crisis of the 1980s under the Baker plan when much of the sovereign debt was in bank loans. At the time banks were not all that willing to add to the debt of what turned out to be insolvent sovereigns and the plan failed (UNCTAD TDR, 1988). Such concerted lending is more difficult when debt is held by widely dispersed bondholders. If voluntary reprofiling fails, the debtor has no option but to default on its obligations to private creditors as long as the IMF is not prepared to lend without private sector involvement. The IMF proposes no statutory arrangements to provide protection against litigation in such a case.<sup>45</sup>

If the debt is successfully re-profiled but still proves not to be fully payable, a restructuring would be necessary. This is also supposed to be done on a voluntary basis. Again the central problem is how to overcome holdouts. Standard CACs in bond contracts are no panacea. Holdouts have become even more difficult to prevent after recent court rulings in the US on Argentinian restructuring (UNCTAD, 2014). Briefly, although this new thinking may be taken as a shift in the IMF’s approach to bailouts, it does not present a workable model for orderly workouts for sovereign external debt.

Various proposals have been advanced to address the holdout problem and protect debtors against litigation in market-based restructuring. A proposal made in a joint study by the Bank of England and the Bank of Canada is to introduce provisions in bond contracts to automatically extend maturity when a country receives IMF emergency liquidity assistance (Brooke *et al.*, 2013). A Brookings report on sovereign debt restructuring argued that “whereas CACs can be helpful, they do not—at least in the variety that is most common in sovereign debt contracts today—eliminate holdouts” (CIEPR, 2013: 19) and went on to propose strong aggregation clauses, legislative changes in major financial centres to immunize payments and clearing systems and a Sovereign Debt Adjustment Facility in the IMF to coordinate debt restructuring and official lending, backed up by changes in its Articles to block holdouts.

The International Capital Market Association, a group representing several banks, debtors and investors, agreed to a plan in August 2014 to include new clauses in future bond

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<sup>43</sup> The Fund issued another paper in June 2014 proposing to incorporate its new approach to bailouts into its Exceptional Access Framework established in 2002 by combining lending with upfront reprofiling in cases where debt is deemed sustainable but not with a high probability while continuing to require upfront restructuring when it is judged unsustainable (IMF, 2014a).

<sup>44</sup> On the track record of the IMF in debt sustainability analysis see Akyüz (2007).

<sup>45</sup> In its operational guidance on the management of capital flows the Fund also recognized the need for temporary restrictions on capital outflows in debt-distressed countries, but without offering statutory protection (IMF, 2013a).

contracts to make it possible to bind all creditors with a single vote across all bonds, with a 75 per cent voting threshold in order to avoid repetition of Argentina's predicament (ICMA, 2014). This could deter holdouts for large debtors because in such cases it would be difficult for vulture funds to acquire a blocking majority. The group has also proposed to modify the *pari passu* (equal footing) clause in bond contracts in order to prevent it from being used by hold-out hedge funds to block restructuring. To come into effect, these changes would have to be adopted by governments.<sup>46</sup>

Given their deep-seated misgivings about the governance and policies of the IMF and concerns about systemic repercussions of the US court ruling on the Argentinian restructuring, developing countries have taken the matter to the United Nations with a resolution titled "towards the establishment of a multilateral legal framework for sovereign debt restructuring processes" (United Nations, 2014). This was adopted on 9 September 2014 by a large majority of the members of the UN, with 124 voting in favour, 11 against and 41 abstentions. Even though the original resolution had been revised and the call for *convention* was changed to *framework*, the initiative was opposed by some major AEs including the US, Germany, Japan and the UK who hold key positions in international finance. Later in the month the UN Human Rights Council also adopted a complementary resolution, placing debt restructuring in the context of human rights and condemning vulture funds. This was also opposed by major AEs.

The fate of these resolutions may turn out to be no brighter than several others voted and adopted by a large majority of members of the UN in order to promote global public goods – peace, security, stability, development and so on. However, what is significant about this initiative is that the developing countries have demonstrated an unprecedented unity and solidarity in calling for a fundamental change in a key aspect of the international financial architecture and in placing the UN at the centre of the debate on sovereign debt restructuring.

#### **IV.2. Domestic sovereign debt**

Important as it is, sovereign international debt is not the only potential source of external vulnerability and instability of EDEs. In several emerging economies, domestically-issued sovereign debt and corporate external debt are now more important. In fact, as already noted, private external debt and domestically-issued public debt, rather than sovereign international bonds, were at the origin of the majority of the last eight most important crises in emerging economies. These have gained added importance as financial and non-financial corporations in EDEs have increasingly replaced the sovereign in international debt markets while governments have turned to domestic markets but allowed their locally-issued debt to be internationalized and become highly susceptible to conditions in the debt markets of major AEs.

We are no longer in a world where external and domestic debts are clearly differentiated in terms of their holders, currency denomination and governing laws. The

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<sup>46</sup> In October 2014, just as this paper was about to be completed, the Fund released new proposals for strengthening CACs and modifying the *pari passu* clause in new bond contracts to reduce the likelihood of holdouts, very much in line with those made by the International Capital Market Association (IMF, 2014b).

empirical evidence examined above suggests the following broad taxonomy of sovereign debt in EDEs today according to place of issue and holders:

	Internationally issued - all currencies	Locally issued - local currency
Non-residents	A	C
Residents	B	D

This categorization excludes local-issues in foreign currency which is no longer practiced in most major EDEs. Existing conventions for the collection of debt statistics do not always allow precise identification of holders of sovereign debt, particularly resident holdings of internationally-issued debt as in (B) and internationally-issued debt held by non-resident nationals of the issuing country under (A).<sup>47</sup>

The conventional *economic* definition of external debt is based solely on residency and hence includes debt held by non-residents regardless of place of issue, as in categories (A) and (C). The definition of external debt based on nationality includes all foreign (non-national) holdings regardless of the residency of the holders and place of issue. By contrast, *legal* definition of external debt is based on governing law and includes all categories of debt that are issued internationally and hence subject to foreign (external) jurisdiction regardless of nationality and residency of their holders and currency denomination – that is, categories (A) and (B) above. Legal and economic definitions diverge in two respects. First, internationally issued but locally held debt (B) is external debt in legal terms but not in economic terms.<sup>48</sup> Second, locally issued but internationally held debt (C) is external debt in economic terms but not in legal terms.

International debt workouts are needed to resolve the collective action problem for internationally-issued debt. For debt governed by domestic law and subject to the exclusive jurisdiction of the domestic courts, often the sovereign has the power and the means to resolve this problem. Indeed, the SDRM did not include local-law debt. According to the IMF (2002), foreign investors preferred domestic debt to be excluded from the SDRM as they thought holders of domestic debt should not be subject to the same legal framework as holders of external debt. Thus, although it was recognized that in “some circumstances, it may be necessary to restructure sovereign domestic debt if the overall burden is to be reduced to a sustainable level, ... domestic debt would not be restructured under the SDRM, since governments typically have at their disposal tools for restructuring domestic debt that are not available in the case of external debt” (IMF, 2003a). Indeed, it would be extremely difficult to devise a statutory international debt workout mechanism that overrides the domestic law of debtor countries because, *inter alia*, this would come into considerable conflict with national sovereignty.

<sup>47</sup> In this categorization cross-border bank lending would fall under (A) whereas local loans in local-currency by foreign subsidiaries would fall under (D).

<sup>48</sup> Such debt was particularly important in Argentina on the eve of its default as large amounts of international-law debt had been placed with domestic banks and pension funds (Roubini and Setser, 2004).



A key question is how to treat domestic (local-law) debt relative to internationally-issued debt in a sovereign debt crisis. Quite apart from legal prerogatives, there are strong economic reasons for separating domestic from external debt in sovereign debt restructuring and giving a differential treatment in favour of domestic debt. A sovereign external debt crisis is not simply a fiscal crisis that could be fixed through domestic transfers from private creditors. The turmoil caused by the crisis and the adjustments needed already create serious hardship in the economy even when international debt is re-profiled and restructured, and the treatment of domestic debt on par with international debt could aggravate the impact of the crisis by deepening economic contraction and endangering the stability of the financial system, thereby making the debt even less payable. Similarly, if the domestic bond market is expected to play the role of spare tyre, it would need to be treated more lightly than non-resident bond holders. Indeed, many of these economic rationales for differentiation in the treatment of domestic debt were recognized during the deliberations on the SDRM (IMF, 2002).

In the developing world default and restructuring is less common for local-law debt than for internationally-issued debt even though the sovereign has legal means to address the holdout problem on locally-issued debt and it is difficult for the holders of foreign-law debt to block restructuring because payments are made inside the country. As argued by Keynes in writing on what he called Aprogressive and catastrophic inflations@ in Central and Eastern Europe during the early 1920s, outright default on domestic debt is socially and politically problematic because it “is too crude, too deliberate, and too obvious in its incidence” and the “victims are immediately aware and cry out too loud.” Instead, governments often attempt to seek relief through monetization and inflation because it is anonymous in its incidence; “it follows the line of least resistance, and responsibility cannot be brought home to individuals. It is, so to speak, nature=s remedy, which comes into silent operation when the body politic has shrunk from curing itself” (Keynes, 1971: 53).

There are only a few instances of outright default on domestic debt in EDEs in the past two decades.<sup>49</sup> They involved mandatory bond exchanges at discounted values or conversion of par value bonds at lower-than-market interest rates. The most notable examples include Russia in 1998 and Argentina in 2001. In the former case where eurobonds were excluded from restructuring, an important part of losses from domestic debt default was incurred by non-residents which held about one-third of locally-issued rouble-denominated treasury bills (GKOs). In Argentina non-residents were not very much affected by the default on domestic-law debt while residents took a major hit from default on internationally-issued bonds because they were large holders; that is, on domestic debt in economic terms.

While there are strong reasons for giving a preferential treatment to domestic debt in sovereign debt resolutions, it should also be kept in mind that in several EDEs an increasing proportion of locally-issued debt is now held by non-residents. This means that any restructuring of external debt as conventionally defined in economic terms should involve locally-issued, externally-held debt. This calls for a differentiation between resident and non-resident holders of local-law debt. Again there are strong economic reasons for this, notably differential impact of restructuring of debt held by residents and non-residents on economic activity, social welfare and financial stability due to differences in their behaviour. There may

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<sup>49</sup> Defaults are not limited to EDEs. From 1920s to the 1960s there were several episodes of domestic and external debt defaults, restructuring and conversions in AEs (see Reinhart and Rogoff, 2013).

also be a need to differentiate among various local investors in local-law sovereign debt, such as banks and non-banks, so as to minimize the financial disruption and instability that may be caused by restructuring.

In practice sovereigns use considerable leverage to facilitate and shape restructuring of domestic-law debt. Greece was able to introduce retroactively a collective action mechanism on its local-law debt stock in a way that minimized the threat of holdout even though an important part of that debt was held by non-residents.<sup>50</sup> Considerable flexibility is also provided to national governments even in the new crisis resolution mechanism of the Eurozone, the European Stability Mechanism, which requires CACs to be included in both domestic and international law bonds, to be governed by the same law as the underlying bonds (see Haworth, 2012 and Hofmann, 2014).<sup>51</sup> While it is difficult to offer different terms of restructuring to holders of the same international debt instrument, it is possible for the sovereign to impose different terms to non-resident and resident holders of the same domestic-law debt. This was done by Russia for the holders of GKO. Similarly, Argentina was able to treat local holders of its debt differently after the exchange of eurobonds for a new domestic instrument (Roubini and Setser, 2004). Sovereign can also differentiate in restructuring among local holders of local-law debt, notably between banks and non-banks.

However, the power of the sovereign vis-à-vis the holders of its local-law bonds is not absolute. Some countries have erected constitutional barriers against what they see as the threat of sovereign violation of contractual obligations. Again, others have undertaken obligations under BITs with AEs that restrict their ability to impose losses on foreign investors in local-law bonds, thereby increasing their leverage in domestic debt markets of EDEs.

Restructuring involving partial debt cancellation or imposition of below-market ceilings on interest rates on existing stock of public debt is not very much different in their effect from a capital levy on bond-holders – the solution favoured by Keynes to remove a debt overhang. There are no doubt serious difficulties in introducing such a tax. But it may meet less serious legal handicaps than default, restructuring and conversion because taxation is a universally recognized sovereign discretion – notwithstanding that some countries have tied their hands in this area too in BITs. Where there is scope, taxes can also be differentiated among various bondholders so as to minimize their adverse impact on economic activity and financial stability. This is well worth considering as a complement or alternative to domestic debt restructuring when, as put by Keynes (1971), the piled-up debt demands more than a tolerable proportion of the fruits of work of the active and working elements of the community, to be handed over to the *rentier* or the bond-holding class.

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<sup>50</sup> A key role in Greek restructuring was played by cash sweeteners to incentivize participation (CIEPR 2013). This rescue money had to come from abroad because Greece could not print it. In this respect EDEs have much greater scope to sweeten restructuring of their local-currency, local-law debts.

<sup>51</sup> The Brookings report on sovereign debt restructuring noted above argued that the new EZ regime would not be adequate for the task and went on to make a number of proposals to fill the gaps (CIEPR, 2013).

### **IV.3. Banking crises and restructuring**

If external financial vulnerability in most EDEs today has its origin in private debt, why focus on sovereign debt restructuring? In what way could a sovereign debt restructuring mechanism help address the problems caused by corporate external debt? One answer is because corporate over-borrowing could cause external liquidity problems for the economy at large. When corporations cannot roll over or refinance their external debt, the economy could face a liquidity crisis in the absence of adequate reserves or access to international liquidity to allow financial and non-financial corporations to meet their obligations. Under these conditions, a statutory sovereign debt workout regime incorporating temporary debt standstills and exchange controls and stay against litigation could play a key role in averting the collapse of the currency and widespread defaults of private debtors.<sup>52</sup>

Another reason why a sovereign debt workout mechanism is needed even though the main problem is external private debt is that, as discussed, the latter is often socialized at times of distress, causing problems for fiscal sustainability. Sovereign bailout of private debt occurs often in banking crises, but non-financial corporations also get bailed out with public money when they are deemed to be strategically important or because their default could hurt the banking system. This implicit guarantee leads to under-pricing of risks and over-borrowing. To prevent moral hazard and avoid using public money, it is necessary to involve both shareholders and creditors in the resolution of private sector debt crises.

However, in most debt crises in EDEs with international dimensions, one of the first things that the governments do is to guarantee all liabilities of the banking system, including not only those that come under deposit insurance but also non-secured liabilities and debt to non-residents. The objective is to stem bank runs and create confidence among foreign creditors in order to prevent exit. However, this rarely succeeds in regaining access to international financial markets and halting capital outflows.

The European crisis is no exception. As pointed out by the chairman of the European Banking Authority, Andrea Enria, too few European banks have been wound down and too many of them have survived (Reuters, 2013). In Ireland and Spain where the crisis originated in the banking system, creditors and depositors of troubled banks largely escaped without haircut. Ireland gave a blanket guarantee to its bank depositors and Greek workouts also spared deposit holders both at home and abroad. Most bondholders escaped without haircut, even those holding subordinated debt.

By contrast, in Cyprus the bailout package, combined with capital controls, inflicted large losses on uninsured foreign depositors and bondholders. Iceland's debt resolution initiative also stands in sharp contrast to the standard approach to banking crises. Relative to the size of its economy, Iceland faced the biggest banking failure in economic history. However, it has managed to restructure the banking system by letting some of the banks fail and bailing in private creditors, but sparing both taxpayers and domestic depositors. It has imposed capital controls to stem exit and passed an important part of the burden onto

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<sup>52</sup> In arguing for a statutory mechanism UNCTAD TDR (1986) indeed referred to a case where three Costa Rican banks suspended payment in 1981 on a loan from a 39-bank syndicate under orders from the central bank of the Republic because of foreign exchange shortage. The US court first ruled in favour of Costa Rica but reversed its decision after intervention by the US government.

international creditors including bondholders and depositors. It forced banks to write off debt for more than a quarter of the population and declared, in the face of a collapsing currency, loans indexed to foreign currencies illegal, thereby providing significant resources to households for a demand-led recovery.

Public discontent in the US and Europe with large-scale operations to rescue banks with public money after the 2008 crisis has forced authorities to move towards mandatory debt restructuring mechanisms for financial institutions, notably the so-called systemic or too-big-to-fail banks. Such mechanisms give statutory bail-in powers to banking authorities, often regulators, in order to speedily restructure banks by dictating the terms of recapitalization. In this respect it differs from contractual creditor-based recapitalization such as bonds with write-off or conversion features. It also bypasses lengthy legal processes entailed by general corporate bankruptcy codes and minimizes the role of the courts, even limiting the power of follow-up judicial reviews to reverse the resolution. It imposes, *inter alia*, elimination or significant reduction of the original shareholders, change of management, losses on creditors including uninsured depositors and bondholders and conversion of debt to equity (see Zhou et al., 2012).<sup>53</sup>

Unlike sovereign debt, statutory debt restructuring of financial institutions is now very much in vogue with official thinking, including the IMF (Zhou *et al.*, 2012). In a report the FSB (2011) elaborated the Key Attributes of Effective Resolution Regimes for Financial Institutions, including mandatory bail-in powers, for the resolution of financial institutions without exposing taxpayers to loss. This was endorsed at the G20 Cannes summit in November 2011 and was followed by another report a year later intended to make the Key Attributes operational (FSB, 2012). The Bank Recovery and Resolution Directive adopted by the European Parliament in May 2014 is designed to bring national resolution frameworks in the EU in line with these Attributes. The Eurogroup has effectively agreed to formalize the bail-in applied in Cyprus in the single resolution mechanism of the Banking Union, with Germany taking the lead (Thomas, 2014). The US has given powers to regulators to impose losses on creditors as part of the Dodd-Frank financial reform act. New rules based on a consultative document by the FSB (2014) were adopted by the G20 in the Australian summit on 16 November 2014. Each country will introduce its own legislation to put them into practice. They are criticized on grounds that rather than reining in the massive and risky derivatives markets, they prioritize the payment of banks' derivatives obligations to each other, ahead of everyone else, including not only public and private depositors but also the pension funds.<sup>54</sup>

Whatever all these would mean in practice for AEs – something that would not be known until the next big crisis – EDEs should not go back to “business as usual” and socialize private liabilities in the event of corporate and banking crises with international dimensions. Rather, they should seek mandatory bail-in of creditors and uninsured depositors, both at home and abroad. They need to introduce statutory powers to restructure bank debt, in

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<sup>53</sup> Two bankers, Calello and Ervin (2010), illustrate how a mandatory restructuring could have been done in the case of Lehman.

<sup>54</sup> See Brown 2014 who argues that pension funds are the target market for the so-called bail-in bonds – that is, special bonds that would automatically bail-in banks' creditors to increase the amount of capital that could be used at times of crises to recapitalize them without destabilizing the financial system. For a critique of bail-in bonds, see also Persaud, 2013, and Durden, 2014.

principle, on a “going concern” basis, resorting to forced recapitalisation using private rather than public money. They should also allow banks to fail, as needed, without cost to taxpayers. In all these respects, there are some useful lessons to draw from Iceland’s restructuring. EDEs are now in a stronger position in resisting external pressures to bail out foreign creditors and large depositors than in past banking crises with international dimensions, given a wide international agreement on resolving them without exposing taxpayers to loss.

## V. CONCLUSIONS

One of the key lessons of history of economic development is that successful policies are associated not with autarky or full integration into the global economy, but strategic integration seeking to use the opportunities that a broader economic space may offer while minimizing the potential risks it may entail. This is more so in finance than trade, investment and technology. For one thing, the international financial system is inherently unstable in large part because multilateral arrangements fail to impose adequate discipline over financial markets and policies in systemically important countries which exert a disproportionately large impact on global conditions. For another, the multilateral system also lacks effective mechanisms for orderly resolution of financial crises with international dimensions.

Thus, closer integration of several EDEs into the international financial system in the past 10 years, after a series of crises with severe economic and social consequences, is a cause for concern. In many cases the pendulum has swung too far and would have to be rebalanced. Increased presence of foreign investors and financial institutions in domestic asset and credit markets of EDEs, together with dismantling of controls over international capital flows have made them highly vulnerable to global financial boom-bust cycles generated by policy shifts in major financial centres.

In all likelihood, these countries will be facing strong destabilizing pressures in the years ahead as monetary policy in the US returns to normalcy after 6 years of flooding the world with dollars at exceptionally low interest rates. During that time, many EDEs have also succumbed to easy money and allowed spillovers from the ultra-easy monetary policy in the US to generate significant financial fragilities. They often stood by as their industries were undermined by the foreign exchange bonanza, choosing, instead, to ride consumption and property booms driven by capital inflows and private borrowing abroad and allowing their currencies to appreciate and external imbalances to mount. Hastily erected walls against destabilizing inflows were neither wide enough nor high enough to prevent build-up of imbalances and fragility.

In weathering a possible renewed instability, EDEs cannot count on the more flexible currency regimes they came to adopt after the last bouts of crises or the reserves they have built from capital inflows or the reduced currency exposure of the sovereign. It is important that they, as well as the international community, avoid going back to business-as-usual in responding to a new round of financial shocks, bailing out investors and creditors and maintaining an open capital account at the expense of incomes and jobs. They need to include many unconventional policy instruments in their arsenals to help lower the price that may have to be paid for the financial excesses of the past several years. They should also take the occasion to rebalance the pendulum and to bring about genuine changes in the international financial architecture.

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