FINANCIAL DEVELOPMENT IN EMERGING ECONOMIES – STOCK-TAKING AND POLICY IMPLICATIONS

Domestic financial development is an issue with broad economic and policy implications, which this article addresses by focusing on emerging and developing economies, also taking account of their financial and economic links to advanced economies. Four implications of financial development stand out from the perspective of emerging and developing economies. First, progress in financial development is likely to be associated with higher potential growth via, for example, an increase in investment levels, as a vast body of literature has explored. Second, more developed domestic financial markets tend, on the whole, to increase the resilience of emerging economies, provided they are based on very strong and rigorous prudential surveillance. Third, deeper and more liquid markets are also likely to attract foreign investors, as developments in gross private capital inflows to emerging economies confirm. Larger cross-border financial exposures may, under certain circumstances, give rise to sudden retrenchments in capital flows, as the experience with the ongoing financial crisis illustrates. Fourth, the existence of major differences in the level of financial development between advanced and most emerging economies has been one of the factors underlying the accumulation of global imbalances in the years preceding the financial crisis. It could, therefore, be inferred that a greater degree of symmetry in financial globalisation – that is, a process of catching-up of emerging economies in financial terms – may, over the longer run, contribute to more sustainable saving-investment and current account configurations via higher domestic demand in, and lower official capital outflows from, emerging and developing economies. This also requires appropriate improvements to reinforce the stability of the global financial sector.

Against this backdrop, this article presents and discusses measures of domestic financial development in emerging economies in comparison with advanced economies. The article then addresses two of the aforementioned facets of financial development: (i) its relationship with global imbalances and the ensuing implications both from an emerging market and a global perspective; and (ii) the link between domestic financial development and financial stability, focusing on rapid bank-based financial development in eastern and south-eastern Europe as a case study.

1 INTRODUCTION

Domestic financial development can be defined as the capability of a country to channel savings into investment within its own borders. This capability hinges on institutional and organisational progress in the local financial system, which reduces asymmetric information, brings in new important market segments, promotes financial innovation, adds possibilities for agents to engage in financial transactions, reduces transaction costs and increases competition.[1] Given this definition, the notion of "domestic financial development" should be kept distinct from other concepts, such as those of "financial system", "financial integration" and "financial openness".[2] In particular, for the purposes of this article the distinction between financial stability and domestic financial development is of the essence: a country can be very developed in financial terms and yet experience financial crises if its performance from a financial stability perspective is inadequate, as the ongoing crisis has clearly illustrated.

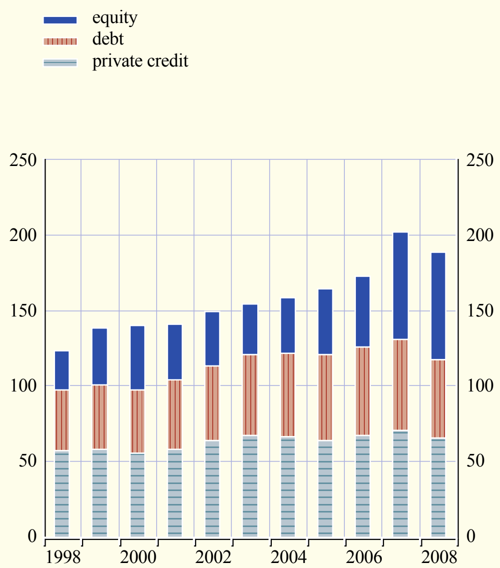
In view of the broad economic and policy implications of domestic financial development, the international community has been paying increasing attention to the issue, its implications and the required policy actions (e.g. in the fields of regulatory and microeconomic reforms, macroeconomic management and cooperation among central banks). International fora and

1 See P. Hartmann, F. Heider, E. Papaioannou and M. Lo Duca (2007), "The role of financial markets and innovation in productivity and growth in Europe", ECB Occasional Paper No 72.

2 Regarding the conceptual background to which this article refers, see the article entitled, "Assessing the performance of financial systems", in the October 2005 issue of the ECB's Monthly Bulletin; and ECB (2008), "Financial integration in Europe".

Chart 1 Total funding sources of emerging economies

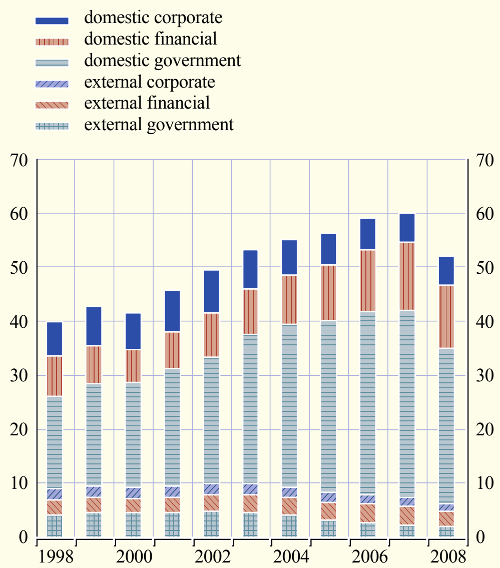
(percentages of GDP)



Sources: BIS, IMF World Economic Outlook and Datastream.
Note: The 17 emerging market economies (EMEs) portrayed in Charts 1, 2 and 3 are: Argentina, Brazil, Chile, China, Hong Kong SAR, India, Indonesia, Malaysia, Mexico, the Philippines, Singapore, South Africa, South Korea, Taiwan PoC, Thailand, Turkey and Venezuela.

Chart 2 External versus domestic debt of emerging economies

(percentages of GDP)



Sources: BIS, IMF World Economic Outlook and Datastream.
Note: See the note to Chart 1.

organisations, such as the G7/G8, the G20, the International Monetary Fund, the World Bank and the Bank for International Settlements, have called for progress in domestic financial development in emerging and developing economies (hereafter referred to as "emerging economies" for the sake of brevity) in order to enhance their resilience and contribute to an orderly unwinding of global imbalances via lower net flows of capital from surplus to deficit countries.[3] As regards the complex link between domestic financial development, capital flows and financial stability, the BIS-based Committee on the Global Financial System (CGFS) and the G20 have recently published reports addressing this among other issues.

Some stylised facts suggest that the pace of domestic financial development has been accelerating somewhat since the late 1990s in most emerging economies:

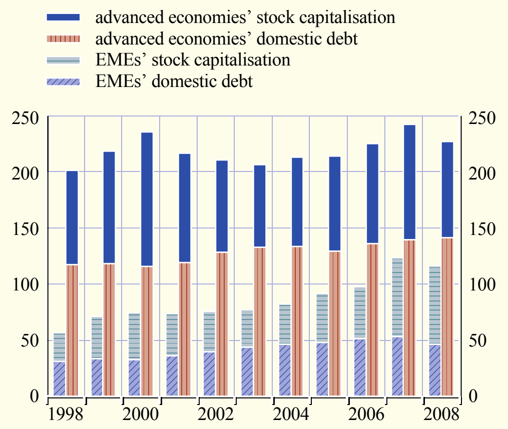
Looking at the overall financing of these economies, i.e. including both domestic and external funding, the ratio of total private bank loans, debt instruments and equity liabilities (the latter excluding external funding) to GDP increased significantly in the period 1998-2007, to over 200% of GDP (see Chart 1). The subsequent financial crisis produced a decrease of this broad measure in 2008. However, in annual terms this decline was relatively contained compared with the major retrenchment in foreign private capital flows to emerging economies that took place especially in the last quarter of that year.

Focusing on debt liabilities, in line with the G8 action plan emerging economies have been reducing their issuance of external debt since 2003, thus increasingly relying on domestic

3 For instance, in October 2007 G7 finance ministers and central bank governors welcomed the G8 action plan for developing local bond markets in emerging economies.

Chart 3 Domestic market funding in emerging and advanced economies

(as a percentage of GDP)



Sources: BIS, IMF World Economic Outlook and Datastream.
Notes: The 17 emerging market economies (EMEs) portrayed in Charts 1, 2 and 3 are: Argentina, Brazil, Chile, China, Hong Kong SAR, India, Indonesia, Malaysia, Mexico, the Philippines, Singapore, South Africa, South Korea, Taiwan PoC, Thailand, Turkey and Venezuela. Advanced economies comprise the United States, Japan and the following EU countries: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Portugal, Spain, Sweden and the United Kingdom.

debt – a process that has resulted in lower vulnerability to e.g. exchange rate shocks. This process has been driven by sovereign issuers (until 2007) and, to a lesser extent, banks. Conversely, the ratio to GDP of debt securities issued domestically and abroad by the corporate sector has not changed significantly in the period 1998-2008 (see Chart 2).

Finally, while starting from very low levels, in the period 1998-2008 the domestic market-based funding (i.e. excluding bank loans) increased at a much faster pace in emerging economies than in advanced economies (defined here as the United States, Japan and a sub-set of 14 EU countries), i.e. by 105% against 13%. As a result, in 2008 the funding of emerging economies in domestic markets accounted for 117% of their GDP (more than half the ratio for the advanced economies) compared with only 57% in 1998 (which was less than one-third of the ratio for advanced economies) (see Chart 3).

These stylised facts and the above considerations call for a more thorough measurement and assessment of domestic financial development in emerging economies. In doing this, Section 2 presents and discusses measures of domestic financial development in such economies, using advanced economies as a point of reference. Section 3 examines the relationship between domestic financial development and macroeconomic variables such as savings, investment and current account balances, and the ensuing implications both from an emerging market and a global perspective. Finally, Section 4 addresses the link between domestic financial development and financial stability, with the main focus on eastern and south-eastern Europe during the financial crisis.

2 MEASURING DOMESTIC FINANCIAL DEVELOPMENT IN EMERGING ECONOMIES

In this section, the degree of domestic financial development reached by 26 emerging economies – the G20 members, the main non-G20 commodity exporters and other systemically relevant emerging economies – is compared with domestic financial development in all G7 economies except Canada (with euro area G7 members grouped in a weighted aggregate called the "euro area G3"). The year chosen is 2006, a period which is indicative of the degree of domestic financial development reached across the globe prior to the process of rebalancing triggered by the financial crisis under way since summer 2007.[4]

Domestic financial development is measured on the basis of a composite normalised index[5] including three dimensions (institutions, etc.), eight sub-dimensions (quality of institutions, etc.) and twenty-two variables summarised in

4 In 2006 (the year preceding the financial crisis) the size of financial markets is likely to have been inflated by factors such as the search for yield and the underpricing of risks. This raises the question of whether certain financial markets, e.g. in advanced economies, were inflated more than others – an aspect that should be borne in mind as a caveat.

5 The composite indices discussed in this section are based on an original methodology and database described in E. Dorrucci, A. Meyer-Cirkel and D. Santabárbara (2009), "Domestic financial development in emerging economies: evidence and implications", ECB Occasional Paper No 102.

Table 1. In particular, the three broad dimensions are designed to capture different aspects relevant for domestic financial development, namely: (i) the institutions and rules supporting domestic financial development, as indicated by the World Bank "Doing Business" database and the International Country Risk Guide (ICRG); (ii) the relative size of financial markets in each economy and the possibility for economic agents to access such markets efficiently; and (iii) a number of proxies trying to summarise the "performance" of each market in terms of market liquidity, banking efficiency and the degree of "crowding in" of the private sector in comparison with the relative weight of the government and the central bank.

The main rankings and scores obtained with the DFD (domestic financial development) index are summarised in Table 2, which shows that in 2006 the bulk of emerging economies still needed to make substantial progress to achieve a degree of domestic financial development close to the selected G7 economies. The latter indeed presented a (non-weighted) average score of about 68 (out of a maximum score of 100),

Table 1 Index of domestic financial development: dimensions and variables used

1. Institutions		2. Size of and access to markets			3. Market performance		
Quality of institutions	**Regulatory and judicial framework**	**Size of "traditional" private financial markets**	**Financial innovation**	**Possibility for residents to access finance**	**Banks' efficiency**	**Liquidity (market turnover)**	**Distribution of domestic asset base between the private and the official sector**
Level of corruption (-)	Strength, impartiality and observance of the legal system (+)	Stock market value/GDP (+)	Gross issuance of ABS and MBS/GDP (+)	Number of bank branches per 100,000 inhabitants (+)	Banks' costs-to-income ratio (-)	Value of shares traded as a ratio of equity market capitalisation (three-year moving average) (+)	Central bank claims on the private sector over total claims on the private sector (-)
Bureaucratic quality (+)	Investor protection (strength of minority shareholders) (+)	Private bond market/GDP (+)		Number of ATM machines per 100,000 inhabitants (+)			Amount of public sector funding over total bank claims (-)
	Strength of collateral and bankruptcy laws in protecting the rights of borrowers and lenders (+)	Total bank claims/GDP (+)		Life insurance penetration (volume of life insurance premiums/GDP) (+)			Domestic private debt over domestic government debt (-)
	Degree of information available in lending operations (+)	Assets of non-bank financial institutions/ GDP (+)		Non-life insurance penetration (volume of non-life insurance premiums/GDP) (+)			
	Efficiency in enforcing contracts and resolving commercial disputes (+)			Cost of maintaining a savings account (annual fees) (-)			

Source: E. Dorrucci, A. Meyer-Cirkel and D. Santabárbara (2009), op. cit. (see pp. 52-54 for the specific source of each variable).
Notes: Expected effect on DFD in parentheses. ABS stands for asset-backed securities and MBS for mortgage-backed securities.

whereas the average score was below 48 for the emerging market group taken as a whole. At the same time, the scope for catching-up varies considerably from country to country. Three Asian financial centres (Hong Kong SAR, Singapore and Taiwan PoC) and South Korea present scores comparable to those of G7 economies. An intermediate group of countries, ranging between Malaysia and Kuwait, shows intermediate scores between 58 and 48. Finally, a large group of 14 countries (54% of the sample) includes slightly or much lower scores, spanning from Saudi Arabia (46) to Venezuela (29). Regarding G7 members, in 2006 the United States ranked first across all dimensions of financial development. Similar conclusions have been drawn in other contributions to the literature.[6]

Table 2 also illustrates that there may be some variance among the three aforementioned broad

6 See, in particular, World Economic Forum (2008), "The Financial Development Report". For a seminal contribution, see T. Beck, A. Demirgüç-Kunt and R. Levine (2000), "A New Database on Financial Development and Structure", World Bank Economic Review No 14.

Table 2 Index of domestic financial development: rankings and scores

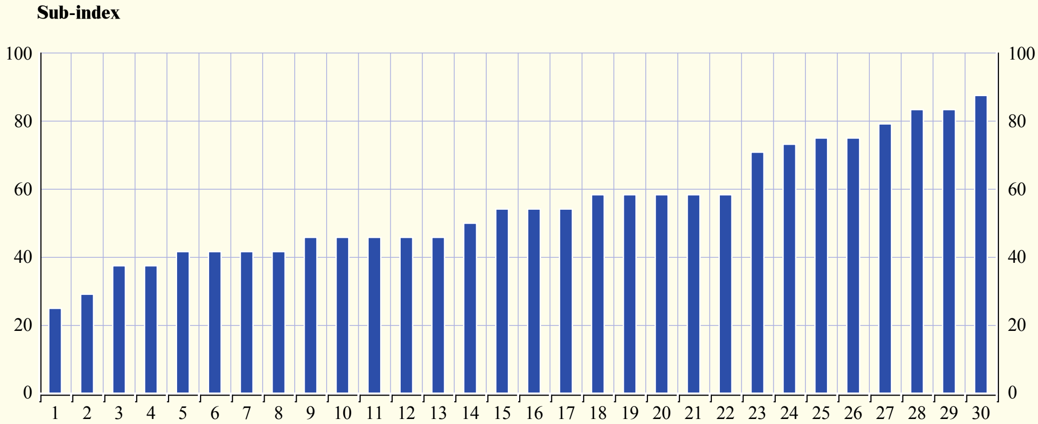
(2006)

Country/economy	Composite index of domestic financial development (DFD) Rank	Score (scale 1-100)	1st dimension: Institutions and rules supporting DFD Rank	2nd dimension: Financial market size and access to finance Rank	3rd dimension: Selected proxies of financial market performance Rank
United States	1	77.3	1	1	1
Hong Kong SAR	2	69.8	3	7	4
United Kingdom	2	69.8	4	3	11
Japan	4	66.2	5	2	22
Singapore	4	66.2	2	9	16
South Korea	6	64.6	8	5	2
Taiwan PoC	7	61.7	12	4	6
Euro area G3	8	58.6	10	6	5
Malaysia	9	57.9	7	11	8
Bahrain	10	55.4	13	12	7
Israel	11	54.4	6	10	18
Qatar	12	51.8	9	20	17
South Africa	13	49.8	18	8	13
China	14	49.5	21	16	3
Chile	15	48.4	11	13	25
Kuwait	16	48.1	15	17	15
Saudi Arabia	17	45.9	19	26	20
Turkey	18	45.5	16	21	12
Thailand	19	45.0	20	18	9
UAE	20	44.0	26	15	14
Mexico	21	43.2	14	23	21
India	22	42.4	22	19	24
Egypt	23	42.2	29	22	23
Oman	24	41.1	23	28	10
Brazil	25	40.8	24	14	26
Argentina	26	39.6	17	29	29
Philippines	27	36.9	27	24	28
Russia	27	36.9	28	27	19
Indonesia	29	34.1	25	30	30
Venezuela	30	29.4	30	25	27

Source: E. Dorrucci, A. Meyer-Cirkel and D. Santabárbara (2009), op. cit.

Chart 4 Quality of institutions

(2006)

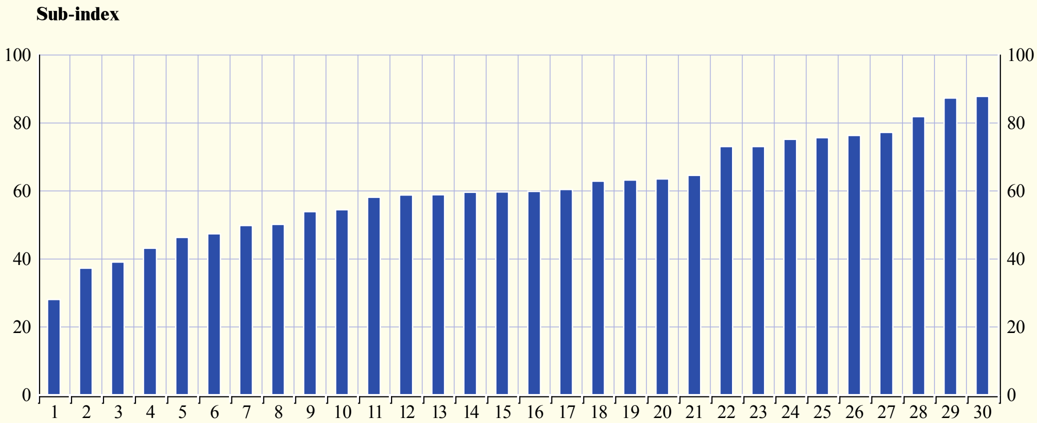


1 Venezuela (VEN)
2 Russia (RUS)
3 China (CHN)
4 Thailand (THA)
5 Bahrain (BHR)
6 Brazil (BRA)
7 Egypt (EGY)
8 Saudi Arabia (SAU)
9 Indonesia (IDN)
10 Oman (OMN)
11 Qatar (QAT)
12 South Africa (ZAF)
13 Turkey (TUR)
14 Kuwait (KWT)
15 Mexico (MEX)
16 Philippines (PHL)
17 United Arab Emirates (UAE)
18 Argentina (ARG)
19 India (IND)
20 Korea (KOR)
21 Malaysia (MYS)
22 Taiwan (TWN)
23 Hong Kong (HKG)
24 Euro area G3 (EUR)
25 Chile (CHL)
26 Israel (ISR)
27 Japan (JPN)
28 US (USA)
29 UK (GBR)
30 Singapore (SGP)

Source: E. Dorrucci, A. Meyer-Cirkel and D. Santabárbara (2009), op. cit.

Chart 5 Regulatory framework

(2006)



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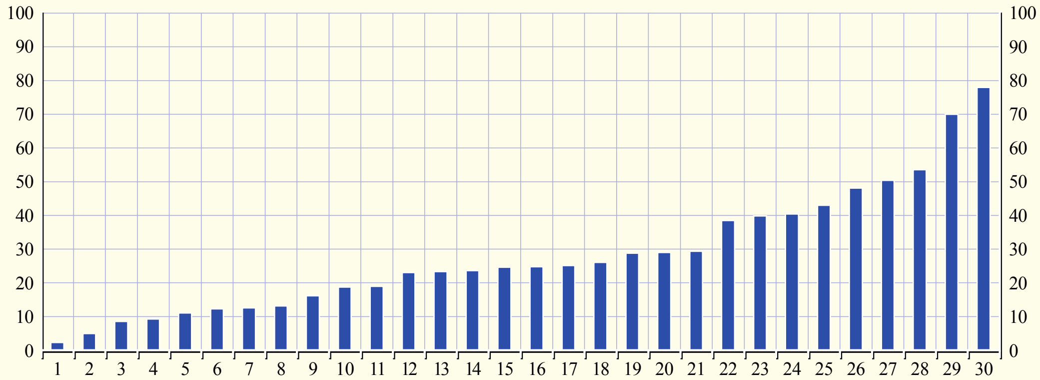
9 OMN
10 ARG
11 MEX
12 ZAF
13 SAU
14 KWT
15 CHN
16 THA
17 TUR
18 CHL
19 TWN
20 BHR
21 EUR
22 ISR
23 KOR
24 MYS
25 QAT
26 JPN
27 GBR
28 SGP
29 USA
30 HKG

Source: E. Dorrucci, A. Meyer-Cirkel and D. Santabárbara (2009), op. cit.

Chart 6 Financial market size

(2006)



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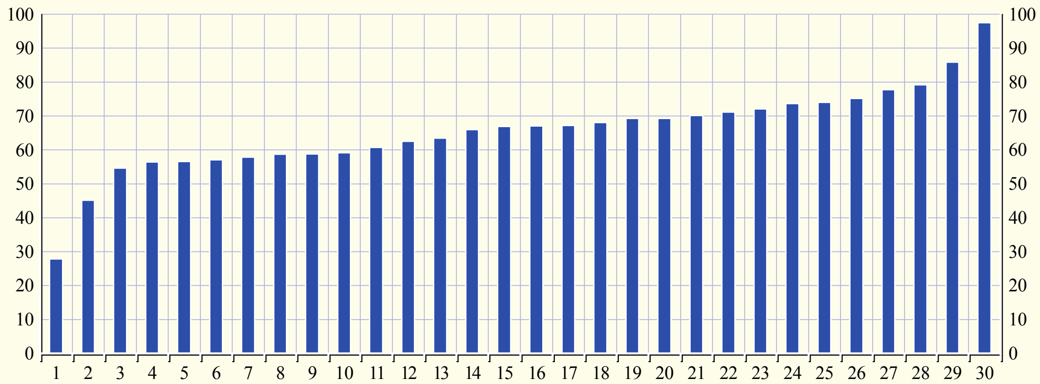
30 USA

Source: E. Dorrucci, A. Meyer-Cirkel and D. Santabárbara (2009), op. cit.

Chart 7 Distribution of the domestic asset base

(2006)



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26 TWN
27 MYS
28 KOR
29 HKG
30 USA

Source: E. Dorrucci, A. Meyer-Cirkel and D. Santabárbara (2009), op. cit.

dimensions of domestic financial development (in short, institutions, size and performance). A deeper analysis of some of the eight sub-dimensions listed in Table 1 helps to explain this variance. Regarding the quality of institutions underpinning domestic financial development, Singapore, Israel and Chile are the emerging economies ranking in the top positions, whereas Venezuela, Russia, China and Thailand present the lowest scores. In the sample, 27% of the economies considered present scores above 60, the bulk (60%) between 40 and 60, and 13% below 40 (see Chart 4). Turning to the sub-dimension of regulatory framework, most of the sample ranges between 50 and 70. Hong Kong SAR, Singapore, Qatar, Malaysia and South Korea have the best regulatory environments, while Venezuela, Egypt and the Philippines rank lowest (see Chart 5).

The sub-dimension "traditional size measures" comprises the size of the stock market and the private bond market,[7] as well as the assets of banks and non-banking financial institutions, as a share of GDP. These measures are "traditional" in the sense that they are the most widely quoted in the literature on domestic financial development. The highest values are reached by South Africa, Hong Kong SAR, Singapore, Taiwan PoC, Malaysia and South Korea. After Qatar, Chile and Thailand – which present intermediate scores – a gradual decline in values characterises the other economies until Venezuela's value of 2 only is reached (see Chart 6).

Finally, the distribution of the domestic asset base is portrayed by three variables: (i) central bank claims on the private sector over total claims on the private sector; (ii) the amount of funding accruing to the public sector over total bank claims; and (iii) domestic private debt over domestic government debt. This is a particularly important sub-dimension, as it captures possible crowding-out effects stemming from the public sector. Chart 7 shows that Hong Kong SAR leads on this score (86), followed by South Korea (79). Indonesia (28) and Turkey (55) are at the bottom.

A complementary picture is provided in Charts 8 and 9, where the focus is shifted from individual countries to a geographical distribution of the scores in the composite DFD index across different emerging market groupings and regions. Looking, for instance, at the so-called BRICs (Brazil, Russia, India and China), on the whole, their prominence in the global economy in terms of their contribution to world trade and GDP growth is not yet mirrored by an adequate level of financial development[8] (see Chart 8). Similarly, further progress in domestic financial development in the countries participating in the Gulf Cooperation Council would contribute to the domestic absorption of net savings in this region, thus limiting the need to reinvest the windfall from oil exports in financial assets of advanced economies, thereby helping unwind global external imbalances (see Chart 9). Similar considerations apply to the broader group of commodity exporters (see Chart 8).

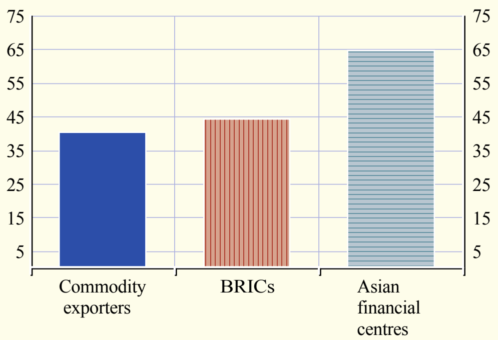
As a last point, Chart 10 illustrates the positive relationship between the "institutions/rules" and the "size/access" dimensions of the index. Interestingly, this chart also suggests that in 2006 the United States tended to be oversized in relation to the institutional index. Conversely, financial systems such as those of

7 While the importance of public debt in the earlier stages of domestic financial development is not denied, here this variable is not included since its excessive growth would not be desirable for an economy.

8 An unexpected finding that calls for further inspection relates to China, which ranks only 21st on the institutional dimension and 16th on the size and access measures, but 3rd in the sub-index of "performance" – admittedly the most controversial component of the index presented here. This result reflects a very low cost-to-income ratio for the banking system, which is not only due to low labour costs, but also – more importantly – to the setting by the central bank of benchmark interest rates on loans and deposits, which artificially ensure wide interest rate margins for the banking system. Moreover, statistics on the distribution of the asset base between the private and public sector tend to underestimate the proportion of banks in the country that are state-run. As a result, the scores in the performance component should be interpreted with caution, and indeed they decrease once the definition of "performance" is adjusted for the aforementioned factors.

Chart 8 Composite index of DFD: breakdown by selected country groupings

(GDP-weighted data)

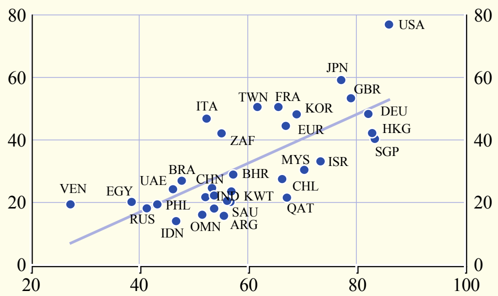


Source: E. Dorrucci, A. Meyer-Cirkel and D. Santabárbara (2009), op. cit.
Notes: Key commodity exporters are Chile, Venezuela, Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, the United Arab Emirates and Russia. The BRICs are Brazil, Russia, India and China. The Asian financial centres are Hong Kong SAR, Singapore and Taiwan PoC.

Chart 10 Relationship between financial market size and institutional quality

(2006)

x-axis: institutions and rules supporting DFD sub-index
y-axis: financial market size and access to finance sub-index

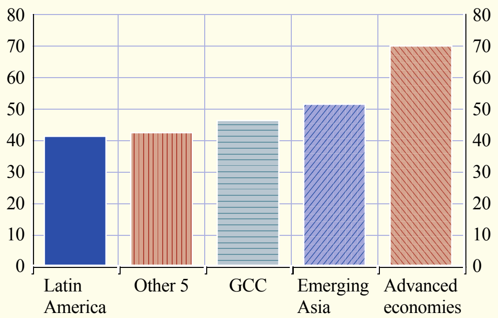


Source: E. Dorrucci, A. Meyer-Cirkel and D. Santabárbara (2009), op. cit.

Chile, Israel and Singapore present relatively strong institutions that are not fully reflected in their size and performance scores. The question why certain emerging economies have not yet fully translated their successful institutional and regulatory environments into well-sized and high-performing financial intermediaries and markets is certainly one that deserves further attention.

Chart 9 Composite index of DFD: geographical breakdown

(GDP-weighted data)



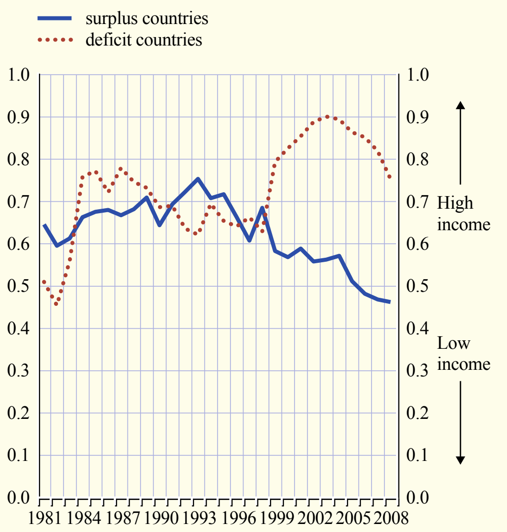
Sources: E. Dorrucci, A. Meyer-Cirkel and D. Santabárbara (2009), op. cit.
Notes: Latin American economies are Argentina, Brazil, Chile, Mexico and Venezuela. Gulf Cooperation Council (GCC) economies are Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates. Emerging Asian economies are China, Hong Kong SAR, India, Indonesia, Malaysia, the Philippines, Singapore, South Korea, Taiwan PoC and Thailand. The "other 5" economies are Egypt, Israel, Russia, Turkey and South Africa. Advanced economies comprise all G7 countries except Canada.

3 FINANCIAL UNDERDEVELOPMENT IN EMERGING ECONOMIES, INTERNATIONAL CAPITAL FLOWS AND GLOBAL IMBALANCES

3.1 REVIEW OF THE LITERATURE

In recent years, the group of countries with current account surpluses, i.e. recording net total outflows of capital, has on the whole been recording increasingly lower incomes per capita, despite the presence in the group of some rich countries such as Japan or Germany (see Chart 11). This section addresses the question of whether financial underdevelopment may have been one of the factors accounting for this phenomenon, which conventional economic models see as a puzzle. In fact, financial integration between two groups of economies with different levels of economic development – which are labelled here as "high income per capita countries" (HICs) and "low income per

Chart 11 Weighted average of income in the two groups of countries with current account deficits and surpluses



Source: IMF World Economic Outlook.
Notes: The sample includes 83 countries. The vertical axis measures the weighted average of per capita incomes in the two groups of countries recording, respectively, current account surpluses and deficits. To this end, the sample has been split into these two groups for each year of the period 1981-2008. For both groups, the share of each country in the group's total current account balance has been calculated and then multiplied by the relative income per capita of the country concerned, in turn measured as a share, ranging between zero and one, of the income per capita of the richest country in the sample in each year. Data have been adjusted for purchasing power.

capita countries" (LICs) – is expected to lead to net capital flows from HICs to LICs, where the rate of return on capital and potential growth are higher. This expected outcome could be called a "first-order effect". However, the recent experience has contradicted this expectation since total net capital has been flowing from emerging economies (taken, of course, as a whole since there are several exceptions, such as countries in central and eastern Europe) to advanced economies. Nonetheless, an important qualification is that in net terms private capital has continued to flow to LICs, as conventional models would have predicted, but this has been more than compensated for by official capital directed by emerging economies to advanced economies.[9]

Some recent contributions to the economic literature have argued[10] that a more important role than that of the aforementioned first-order effect may have been played by a second-order effect originating in financially underdeveloped LICs. The existence of underdeveloped financial markets tends indeed to feed private savings and hold back domestic demand, since consumers and firms face borrowing constraints[11] impeding both consumption smoothing over time and the financing of investment opportunities. As a result, economies with underdeveloped financial markets have, all other things being equal, a propensity to channel their excess savings abroad.

It is well known that trade development has preceded domestic financial development in emerging economies. Since a developed financial system cannot be created overnight, it is not surprising that several emerging economies have exploited their cheaper labour costs and other comparative advantages to integrate into the world economy, whereas their endowment and comparative advantages in the provision of financial services and instruments have remained relatively limited. Moreover, with globalisation, net lenders in LICs gain easy access to global assets of HICs, but only specialised investors and lenders in HICs gain equal access to net private borrowers in LICs, because the latter's liabilities are more local in nature, thus engendering a problem of asymmetric information. As a result, and despite the ongoing financial crisis, HICs are likely to continue to have a comparative advantage in the provision of financial services for some time to

9 This qualification is discussed further below. The expression "private capital" refers here to the financial account of the balance of payments net of "official capital", in turn defined as changes in reserve assets plus any other capital flows triggered by the public sector (e.g. sovereign wealth funds).
10 For an overview of arguments, see L. Bini Smaghi (2007), "Global capital and national monetary policies", speech given at the European and Economic Financial Centre, London, January.
11 The term "borrowing constraints" should be understood as a catchword referring to a broad and complex set of financial market features that are captured by the DFD index presented in Section 2 of this article. For instance, low domestic financial market liquidity tends to result in high domestic asset price volatility, thus creating incentives to invest abroad rather than domestically. Moreover, information asymmetries (due e.g. to an insufficient lenders' knowledge of borrowers) reduce the investment opportunities that can be financed in a profitable way, thus forcing extra savings to be channelled abroad. Finally, limits on consumer credit also contribute to containing domestic demand by limiting consumer spending.

come. This helps to explain the constellation of current accounts in which LICs tend to have a surplus and HICs a deficit.

In support of this interpretation, several authors[12] have claimed that the world has a shortage of supply of financial assets, to which fast-growing emerging economies would have contributed by seeking to store value in financial assets that they do not produce. These economies are indeed experiencing a large increase in their disposable income, but have not been able to sell in advance rights over their output – i.e. to create financial assets – owing to their financial underdevelopment. In this context, the fact that advanced economies such as the Anglo-Saxon ones have been supplying financial assets to those emerging economies which are unable to produce them would help to partly explain their external imbalances in the form of current account deficits.[13]

Other authors[14] have asked why the majority of emerging economies in the past recorded current account deficits despite even less developed local financial systems. The shift from deficit to surplus can only be understood in conjunction with a number of shocks to output growth and total savings of emerging economies that have occurred over the past 12 years: (i) the Asian crisis in the late 1990s, which resulted in a negative demand shock followed by the promotion of export-led growth, sometimes coupled with a massive accumulation of foreign exchange reserves and heavily managed exchange rates; and (ii) two positive supply shocks in the 2000s – a productivity shock and rising commodity prices – to which the domestic demand of several emerging economies has not reacted in a proportionate way owing to structural factors such as demographic trends and the lack of adequate welfare provision.[15] The extra precautionary savings engendered by such shocks to the income of emerging economies have tended to be channelled abroad due to their financial underdevelopment, thus resulting in current account surpluses.

Differences in the degree of financial development can also help to explain portfolio composition, i.e. the reason why, as already mentioned, private capital tends to flow to LICs, as one would expect, whereas it is mainly official capital that is directed to HICs via the accumulation of foreign assets by central banks and sovereign wealth funds. Whatever the origin of excess savings in emerging economies, they tend to be channelled abroad by the official sector for three main reasons that can be partly related to financial underdevelopment: (i) the inefficiency of the private sector of most emerging economies in channelling savings abroad; (ii) the presence, in some countries, of asymmetric capital controls discouraging portfolio capital outflows; (iii) the attempt to create "national buffers" against future financial crises by accumulating foreign exchange reserves in a context of fixed or heavily managed exchange rate regimes.[16]

Regarding, finally, regional peculiarities, some authors[17] have focused on the case of emerging economies in central and eastern Europe,

12 See, for instance, R. J. Caballero (2006), "On the macroeconomics of asset shortages", NBER Working Paper No 12753; R. J. Caballero, E. Farhi and P.-O. Gourinchas (2007), "An equilibrium model of 'global imbalances' and low interest rates", American Economic Review; and R. J. Caballero, E. Farhi and P.-O. Gourinchas (2008), "Financial crash, commodity prices and global imbalances", paper presented at the ECB Conference on Global Financial Linkages, Transmission of Shocks and Asset Prices, Frankfurt am Main, 2 December.

13 Differently from the previous authors, who focus on a country's ability to supply assets, other authors have highlighted the link between financial underdevelopment and savings, hence the demand for financial assets. See E. G. Mendoza, V. Quadrini and J.-V. Rios-Rull (2007), "Financial integration, financial deepness and global imbalances", NBER Working Paper No 12909.

14 See, for instance, R. S. Kroszner (2007), "International capital flows and emerging market economies", speech given in Buenos Aires, 15 May.

15 For further details, see T. Bracke, M. Bussière, M. Fidora and R. Straub (2008), "A framework for assessing global imbalances", ECB Occasional Paper No 78.

16 See, for instance, Eurosystem (2006), "The accumulation of foreign reserves", ECB Occasional Paper No 43, prepared by a Task Force of the International Relations Committee.

17 See, for instance, P. R. Lane and G. M. Milesi-Ferretti (2006), "Capital flows to central and emerging Europe", Discussion Paper No 161 of the Institute for International Integration Studies (IIIS); A. Abiad, D. Leigh and A. Mody (2008), "International finance, capital mobility and income convergence: Is Europe different?", paper presented at the Economic Policy Forty-Eighth Panel Meeting hosted by the Banque de France, Paris, 24-25 October.

which provides a counter-example supporting a more conventional textbook perspective. Other authors[18] have observed that the low-return emerging market regions, such as Latin America, have over time received more capital than high-return regions such as the "Asian Tigers". This finding would further qualify the puzzle "why does capital not flow to poor countries?" into "why does capital not flow to high-return poor countries?"

In line with the literature summarised above, econometric analysis[19] has also supported the idea that financial underdevelopment in emerging economies has been one structural factor contributing to the accumulation of global imbalances and, in particular, to the phenomenon of net capital flowing "uphill" from LICs to HICs.

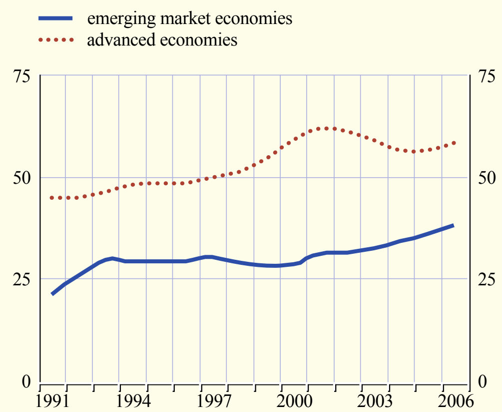
3.2 LOOKING FORWARD: POSSIBLE GLOBAL IMPLICATIONS OF FINANCIAL CATCHING-UP OF EMERGING ECONOMIES

While, as shown in Section 2, the scope for financial catching-up in emerging economies is still substantial, there is some indication that this process may have already started in certain countries. In particular, Charts 12 and 13 – which, due to data constraints in the time series, only focus on a narrower version of the index of financial market size described in Table 1[20] – show some interesting results:

- Chart 12 highlights that, in terms of financial market size, emerging market economies (EMEs) taken as a whole recorded some (limited) financial convergence towards advanced economies between 2002, i.e. after the bursting of the IT asset bubble, and 2006;

- Chart 13 focuses on selected emerging financial markets and shows that: (i) most of them grew in relative size between 1992 and 2006; (ii) Korea, Saudi Arabia and India have been clearly converging, in most recent years, towards advanced economies, as presented in Section 2.

Chart 12 Index of financial market size in emerging and advanced economies



Source: E. Dorrucci, A. Meyer-Cirkel and D. Santabárbara (2009), op. cit.
Notes: The index of financial market size portrayed in Charts 12 and 13 is narrower than the index of financial market size described in Table 1 (see footnote 20 for details). The emerging market economies portrayed in Chart 12 are Argentina, Brazil, Chile, China, Hong Kong SAR, India, Indonesia, Malaysia, Mexico, the Philippines, Singapore, South Africa, South Korea, Taiwan PoC, Thailand, Turkey and Venezuela. Advanced economies comprise all G7 countries except Canada.

As Charts 12 and 13 confirm, this process of financial convergence, at least in certain emerging economies, seems to have been significantly influenced by financial crisis episodes affecting either advanced or emerging economies.

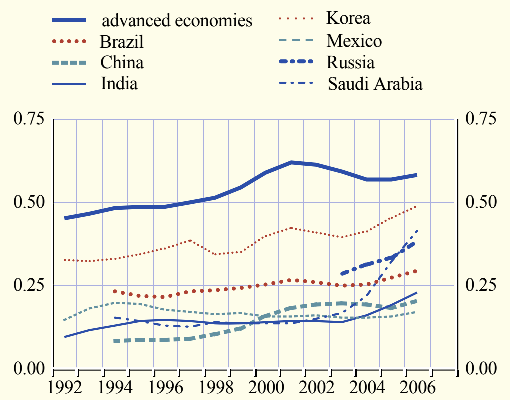
Looking forward, the ongoing crisis has shown that the financial sector in several economies, notably advanced economies and the United States in particular, is deleveraging and, ultimately, needs to shrink – a process which is indeed taking place. At the same time, once the negative spillover effects of the financial crisis on emerging economies has faded away, it is quite possible

18 L. E. Ohanian and M. L. J. Wright (2007), "Where did capital flow? Fifty years of international rate of return differentials and capital flows", paper presented at the ECB Conference on Global Financial Linkages, Transmission of Shocks and Asset Prices, Frankfurt am Main, 2 December 2008.

19 See M. D. Chinn and H. Ito (2005), "What matters for financial development? Capital controls, institutions, and interactions", NBER Working Paper No 11370; M. D. Chinn and H. Ito (2007), "East Asia and global imbalances: Saving, investment and financial development", NBER Working Paper No 13364; and Dorrucci et al. (2009), op. cit.

20 Due to data restrictions, this narrower index only comprises: (i) market capitalisation over GDP, calculated as a three-year moving average in order to smooth out sudden spikes; and (ii) non-life insurance penetration.

Chart 13 Index of financial market size: selected emerging market economies compared with advanced economies



Source: E. Dorrucci, A. Meyer-Cirkel and D. Santabárbara (2009), op. cit.
Notes: The index of financial market size portrayed in Charts 12 and 13 is narrower than the index of financial market size described in Table 1 (see footnote 20 for details). Advanced economies comprise all G7 countries except Canada.

that investors will look with renewed interest at their financial markets – a process which has also been observable in recent months. As a result, the gap between advanced and emerging economies in terms of domestic financial development might further narrow in the years to come.

More generally, if financial globalisation were to become more symmetric in nature, the view may no longer hold true that, thanks to the opening-up of capital accounts and developed financial markets, it would always be possible for financially developed economies to smooth consumption, share risk abroad and finance large current account deficits under any circumstances and over any time horizons.

4 DOMESTIC FINANCIAL DEVELOPMENT AND FINANCIAL STABILITY

4.1 A FEW GENERAL LESSONS FROM THE FINANCIAL CRISIS

Recent reports by the Committee on the Global Financial System (CGFS) and the G20[21] have discussed, among other things, the link between domestic financial development in emerging economies and financial stability in the light of the ongoing financial crisis. Both publications have remarked that limited progress in financial innovation has implied, as a welcome indirect by-product, very limited exposures of emerging economies to sub-prime mortgage markets. As a result, emerging financial markets were able to retain the confidence of international investors in the early stages of the crisis, and until summer 2008 suffered from limited spillover effects from the financial turmoil occurring in advanced economies. However, when the crisis intensified in mid-September 2008, factors such as global deleveraging, the sudden evaporation of market liquidity and flight to safety had a major impact on emerging financial markets, but these markets proved to be overall more resilient than in past crisis episodes (though the most financially developed ones were not necessarily the most resilient).

While the enhanced liquidity of financial markets in emerging economies has strengthened their financial resilience somewhat, the experience with the crisis has shown that considerable scope remains for further progress. For instance, in many countries local currency debt and interest rate derivatives markets are still in the early stages of development, which implies that shocks affecting capital inflows can lead to larger changes in financial asset prices than in deeper markets. Moreover, several markets suffer from vulnerability owing to a narrow investor base. Broadening the investor base calls for further reforms, e.g. of relevant regulations, pension funds and other institutional investors, capital market infrastructure, and the way central banks as fiscal agents design bond issuance and trading. Finally, market resilience can also be improved through well-developed hedging markets.[22]

21 See Committee on the Global Financial System (2009), "Capital flows and emerging market economies", report submitted by a working group established by the CGFS, CGFS Papers No 33 (January); and G20 (2008), "Study Group on Global Credit Market Disruptions", paper prepared by Australia.

22 For a broader discussion of the link between financial development and financial stability in emerging economies, see A. de la Torre, J. C. Gozzi and S. L. Schmukler (2007), "Financial Development: Maturing and Emerging Policy Issues", *The World Bank Research Observer*, Vol. 22, No 1.

Another important aspect is that the process of domestic financial development has been coupled with a significant foreign bank presence in many emerging economies, which raises a number of issues of potential relevance in the context of the current crisis. This topic is discussed in the remainder of this section, focusing on the case of eastern and south-eastern Europe during the financial crisis.

4.2 RAPID BANK-BASED FINANCIAL DEVELOPMENT: A CASE STUDY

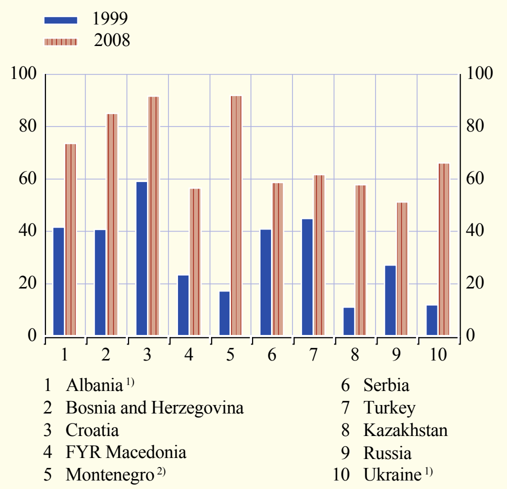
Several economies in eastern and south-eastern Europe have experienced very rapid bank-based financial development in recent years. Although financial intermediation, as measured by the share of total assets of the banking system in GDP, still lags far behind the euro area average of more than 300%, it has significantly trended upwards in the last decade (see Chart 14). Despite this general tendency, there are important differences across the countries concerned, both in the levels reached and in the pace of increase over this period. In Turkey, for instance, the increase in the size of the banking sector relative to GDP was among the smallest in the region.

The fast bank-driven domestic financial development has been facilitated by the entry of foreign banks into these countries. The privatisation of formerly state-owned banks often involved foreign buyers, who – given the growth potential of this market segment in such economies – entered the market as strategic investors and expanded their activities very rapidly afterwards. Therefore, in most countries foreign penetration increased substantially, again with considerable cross-country differences.[23] In the western Balkan economies, banking systems are dominated by foreign banks, with a share of foreign ownership in terms of assets close to or above 80% (see Chart 15). However, prevailing shares of foreign bank assets are significantly lower in other economies of the region, particularly in Russia and Turkey (below 20%). The parent companies of the foreign-owned banks are typically headquartered in the euro area. Their strategic focus on emerging Europe is also illustrated by the large increase in euro area bank claims on this region during the past ten

23 See World Bank (2009), "Global Development Finance 2009: Charting a Global Recovery".

Chart 14 Ratio of banking sector assets to GDP

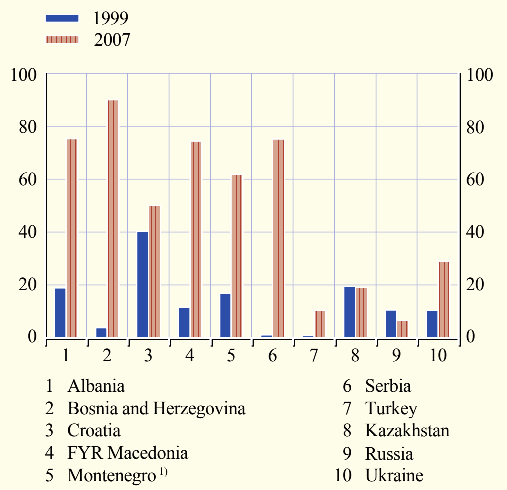
(percentages)



Sources: IMF, Haver Analytics.
1) Latest data point: 2007.
2) Earliest data point: 2003.

Chart 15 The ratio of foreign bank assets to total assets

(percentages)



Sources: European Bank for Reconstruction and Development, Haver Analytics for Turkey.
1) Earliest data point: 2003.

years, which significantly surpassed exposures to other emerging market regions (see Chart 16).

This financial development, spurred by foreign bank presence, has supported economic development and real convergence in the region. Since financing by parent banks is generally more stable than many other forms of capital inflows, especially portfolio investment, this bank-based development model offers numerous advantages. In addition, foreign banks contributed to economic transition in these countries not only by providing capital to financial systems, but also by transferring reputation, know-how, managerial skills and information technology. Moreover, foreign banks may act as a stabilising force in the case of domestic shocks. In general, more developed and more integrated financial markets allow access to international borrowing on more favourable terms, and thus raise domestic investment relative to domestic savings through the bank funding channel. In fact, the economic literature summarised in Section 3.1 suggests that this factor was crucial in bringing about, differently from other emerging economies, the "downhill" flow of capital from more capital-rich advanced economies to emerging Europe.[24]

At the same time, this rapid process of bank-based financial development has been coupled with some financial and macroeconomic vulnerabilities. On the financial side, these vulnerabilities have been manifest from rapid credit growth[25] (see Chart 17), which was enhanced by a fierce competition for market share among banks.[26] This led to increased credit

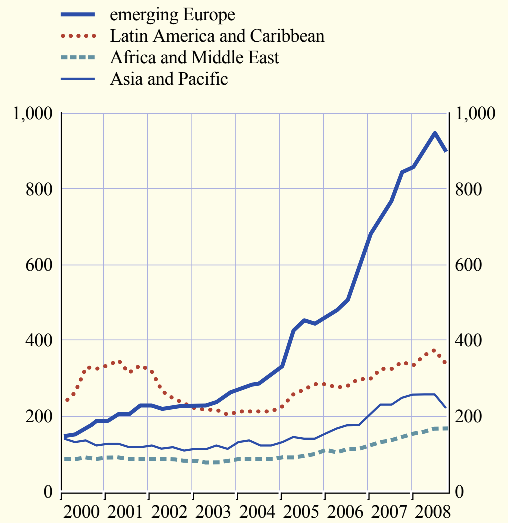
24 See S. Herrmann and A. Winkler (2008), "Real convergence, financial markets, and the current account: Emerging Europe versus emerging Asia", ECB Occasional Paper No 88.

25 Credit growth in the region exceeded that of other emerging markets. In 2004-08, credit to the private sector expanded, on average, by 44% annually in the countries analysed here (taking a simple average of the country growth rates), while the corresponding measure was 31% in Latin America and only 12% in emerging Asia.

26 See ECB (2008), "Financial stability challenges in candidate countries: Managing the transition to deeper and more market-oriented financial systems", by an expert group of the International Relations Committee, ECB Occasional Paper No 95.

Chart 16 Consolidated foreign claims on selected emerging market regions of banks headquartered in the euro area

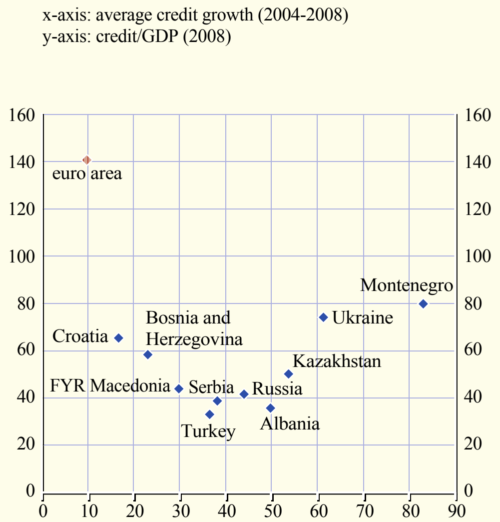
(EUR billions)



Source: BIS.
Note: Emerging Europe, as defined in the BIS statistics, comprises Albania, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, the former Yugoslav Republic of Macedonia, Moldova, Montenegro, Poland, Romania, Russia, Serbia, Turkey and Ukraine.

Chart 17 Average credit growth and the ratio of credit to GDP

(annual percentage changes; percentages)



Sources: ECB, IMF, Haver Analytics and national sources.

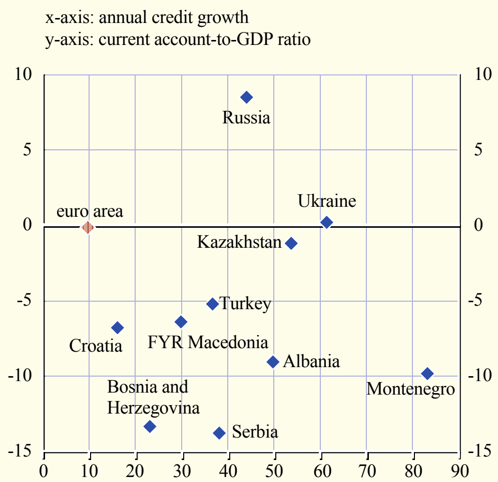
risks, as well as a large expansion of private sector debt. In fact, the fast expansion is in line with the catching-up process, and the room for convergence is indeed substantial, since the credit-to-GDP ratio in the region is still well below euro area levels. Nevertheless, the strong rate of increase and the expansion to customers without a credit history made the assessment of creditworthiness particularly challenging. The resulting vulnerabilities are partly magnified by the use of foreign currency loans to unhedged borrowers in some economies.[27]

On the macroeconomic side, the easier availability of credit and the pent-up demand led to increasing consumption and boosted gross fixed capital formation. As a result, domestic demand became the main contributor to output growth. The mirror image of domestic demand largely financed by the strong credit growth was the widening current account deficit (see Chart 18). This exposed countries to external financial vulnerabilities, which illustrates the importance of the link between macroeconomic imbalances and financial stability. In resource-rich economies such as Russia, external vulnerabilities were of a different origin, related to the high dependence on commodity prices. But as a result of elevated growth rates and booming domestic demand, several eastern and south-eastern European economies started showing signs of overheating, materialising in high inflation rates and/or high current account deficits.[28]

The current global financial crisis has suddenly exposed some of these vulnerabilities.[29] Although the direct impact on regional financial markets was limited as banks in the region had only a very small exposure to structured products, the second wave of the crisis hit these economies hard, especially via a collapse in external trade. Since most of the economies analysed here are small open economies or depend largely on commodity exports, they were strongly affected by the decline in external demand. As real economic activity declines, loan portfolios are expected to deteriorate. Moreover, banks often faced deposit withdrawal pressures in the region due to confidence effects

Chart 18 Average credit growth and current account-to-GDP ratio (2004-08)

(annual percentage changes; percentages)



Sources: ECB, IMF, Haver Analytics and national sources.

and, given their large external funding needs, were negatively affected by a reduced or more expensive access to international borrowing. Support from the parent companies may, for these reasons, be crucial in some cases. In general, foreign banks can be in a better position to recapitalise their subsidiaries or branches in the region than purely domestic banks. However, if the foreign parent banks have been hit by the financial crisis, their presence opens another potential transmission channel to these emerging countries.

In conclusion, the foreign bank-based banking models of eastern and south-eastern Europe are currently being put to the test. On the one

27 On the side of households and companies, taking out loans in foreign currency was motivated by the large interest rate differentials, while due to the real convergence process currencies seemed to be more prone to appreciation pressures. But it was also often in line with the incentives of the banks, given that the major source of funding for these foreign-owned banks was capital from their parent companies.

28 The impact of high credit growth on inflation and on current account positions was determined, inter alia, by the exchange rate regime of the countries concerned. In particular, the highest rates of inflation were experienced in countries with fixed exchange rates, where relative productivity gains could not translate into nominal currency appreciation.

29 See IMF (2009), "Regional Economic Outlook on Europe: Addressing the Crisis".

hand, foreign bank presence has acted as an anchor of stability across most countries, also during the crisis, as foreign funding pressures remained overall limited. Many parent banks have repeatedly communicated that they remain committed to the region and, in the case of a few countries under an IMF program, have formalised this commitment through voluntary agreements to maintain their exposure. At the same time, banks have partly acted as a transmission channel of shocks, which is potentially bi-directional, i.e. from advanced to emerging economies via the bank lending channel, as well as vice versa, e.g. in the case of a deterioration in profitability in the region. At the current juncture, it is too early to judge the overall performance of this financial development model in case of stress. However, it is by now well recognised that the presence of foreign banks, while providing many advantages, can become a source of shocks for both counterparties, which needs to be better taken into account by regulators and in risk assessments in the future.

5 CONCLUSION

Domestic financial development in emerging economies is a crucial ingredient in the pursuit of more symmetric financial globalisation, which in turn could play an important role in reducing global imbalances. While more developed financial markets are generally found to be beneficial for economic development, a process of rapid financial deepening may, under certain circumstances, entail some risks to financial stability. The quality of domestic financial development and the parallel development of financial supervision and regulation are, therefore, crucial for the avoidance of financial crises. In particular, financial development models relying to a very large extent on just one element of the financial system (e.g. banks or markets) may tend to be more vulnerable in times of crisis. Domestic financial development resting on more broad-based financial structures could prove to be more stable in the medium to long run.