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Chapter III

FINANCING THE REAL ECONOMY



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FINANCING THE REAL ECONOMY

A. Introduction

A redesign of development strategies involves structural change as well as an expansion of productive capacities and their adaptation to new demand patterns, all of which require financing. The availability and conditions of such financing have evolved significantly over the past few decades. In addition, the recent economic and financial crisis presents new challenges for the financial sector and its capacity to provide long-term credit for investment. This chapter analyses the challenges and options currently available to developing and emerging market economies¹ to finance their development.

Investment financing in developing countries, especially low-income countries, has been frequently linked to foreign capital. The view that foreign financing is necessary and efficient is based on the neoclassical assumption that, since capital is scarce in developing countries and abundant in developed ones, the marginal return on capital is higher in developing countries, thus providing strong incentives to investment in the latter. Moreover, since the level of income is low in developing countries, and the majority of the population consumes most of it, resulting in a shortage of savings, it is argued that with open capital accounts, foreign capital could fill the savings-investment gap. The owners of that capital would obtain a higher return in developing countries than in their home country, while the rate of investment would rise in the recipient economy

without reducing the already low levels of domestic consumption there. In addition to the long-term benefits of higher investments in capital-poor economies, access to foreign capital would enable short-term smoothing of the economic cycle. For instance, a negative external shock that reduces export earnings could be cushioned through a foreign loan, which would be reimbursed when export earnings rise again. Access to foreign finance would therefore support domestic expenditure during bad times and moderate it during bonanzas, producing an overall countercyclical effect.

However, empirical evidence has repeatedly invalidated these theoretical assumptions. For sure, foreign capital in amounts that can be productively absorbed by the domestic economy may be very helpful in accelerating productivity growth, diversification and industrialization when it is properly oriented to investment in real productive capacity. But, as discussed in this chapter, unrestricted capital inflows generally have not been accompanied by a sustained increase of investment in real productive capacity; nor have they led to higher and more stable GDP growth rates. First, not all capital inflows are used for the financing of productive investment. Foreign loans may be channelled through domestic financial intermediaries towards financial speculation or imports of consumer goods. They may also be used for servicing foreign debt or re-channelled abroad through an increase in external private financial assets ("capital flight"). And second, foreign capital inflows have often been procyclical, accentuating (or even generating) the business cycle in the recipient countries. Indeed, they have played a key role in all the "twin crises" (i.e. balance-of-payments and domestic financial crises) of the last three decades in the developing world.

Empirical studies conducted by economists from fairly diverse theoretical schools of thought have failed to find a positive correlation between openness to international capital flows and development (Bhagwati, 1998). Indeed, capital flows have not only been a source of instability; they have also proved to be either ineffective, or even negative, for long-term growth (Prasad et al., 2003; Prasad, Rajan and Subramanian, 2007; Jeanne, Subramanian and Williamson, 2012). This also explains why, since the late 1990s, an increasing number of developingcountry governments have become more cautious about receiving massive amounts of capital inflows which are often triggered by events on international markets and by monetary policies in developed countries. Policies in developed countries that might generate such capital movements, such as the recent huge injections of liquidity as part of "nonconventional" expansionary monetary policies, are criticized for not taking into account their possible macroeconomic effects on developing countries and for their potential to fuel a "currency war".

The recent global financial crisis is more than just the latest episode in a long list of boom-bust cycles over the past three decades; it is an event that should lead policymakers to call into question, even more seriously than before, the governance of the international financial system and to seek ways to improve it. This crisis, and the global imbalances that have contributed to it, have revealed fundamental flaws in the functioning of financial systems, not only in the major financial centres but also at the global level. The crisis has also revealed the shortcomings of monetary policies that narrowly focus on monetary stability, understood as low consumer price inflation. There is a pressing need for monetary authorities to pay greater attention to financial stability and to the strengthening of the real economy, in addition to

monetary stability. After all, it is the real economy that determines financial soundness and the capacity of borrowers to pay back their debts. From this point of view, the critical question is not how much money is generated by the monetary authorities or the commercial banks (as monetarist theory suggests), but whether that money is used for productive or unproductive purposes.

In a world of accelerated financial expansion and large international capital movements, developing countries face a dual challenge. On the one hand, they need to have effective mechanisms to protect themselves against destabilizing financial shocks caused by huge capital inflows and outflows. On the other hand, they need to ensure that the financial system – or at least the largest part of it – fulfils its main function, which is to serve the real economy by financing productive investment and supporting the development of firms and the economy as a whole. In order for domestic financial systems to fulfil these functions, they have to be organized and managed in such a way that they provide sufficient and stable long-term financing and channel credit flows to productive uses. This will probably require reduced dependence on foreign short-term capital and a greater reliance on domestic sources of finance, which are often much larger than is commonly assumed. Hence, a major policy issue in the financial sphere is: how can developing countries advance their development goals despite the crisis that continues to weaken financial and economic conditions in the developed world and the international financial system?

Section B of this chapter takes a longer term perspective on this issue by tracing the evolution of global finance since the 1970s, and considering how this has affected developing and transition economies. Section C then discusses the impacts on developing countries of both the global financial crisis and the policies followed in systemically important financial centres. Finally, section D discusses the lessons that can be derived from these experiences and the policy options that are available to developing and transition economies to reduce their macroeconomic and financial vulnerability and ensure that the structural changes needed in the new global environment can be financed in a sustainable way.

B. Global trends in finance and their impacts on developing and transition economies

1. Trends in cross-border capital movements and financial flows to developing countries

Since the mid-1970s, foreign capital flows to developing countries have increased dramatically, but they have been very volatile. The acceleration of financial globalization, spurred by far-reaching liberalization and deregulation of financial systems worldwide, led to a rapid increase in cross-border capital flows, which jumped from \$0.5 trillion in 1980 (equivalent to 4 per cent of global GDP and 25 per cent of the value of international trade) to \$12 trillion in 2007 (equivalent to 21 per cent of global GDP and 84 per cent of international trade) (chart 3.1A). Much of these capital movements took place among developed countries, which accounted for 80 per cent of the stock of foreign-owned financial assets by 2007 (Lund et al., 2013).

However, the relative importance of developing countries as recipients of international capital flows has changed significantly over the past few decades. These countries saw an increase in such inflows between 1976 and 1982 and again between 1991 and 1996, followed in both cases by abrupt decreases. Their share in total capital inflows reached its highest level soon after the onset of the global financial crisis (26.4 per cent of total inflows during the period 2008–2011). This reflected not only an increase of flows to developing countries, but also a sharp fall of flows to developed countries (table 3.1 and chart 3.1B).

Large and volatile capital movements remain a challenge for developing countries, and this has not diminished with the crisis. Indeed, in 2010–2011

capital flows actually exceeded their levels of 2007 in Africa, Latin America and China. Moreover, the structural factors contributing to their pre-crisis surge are still in place. There is still considerable potential for international investors in developed countries to diversify their portfolios, particularly to emerging market economies, in search of high returns. This is due to a gradual diminishing of the "home bias" in investment portfolios, a bias that makes investors hold domestic financial assets in excess of the share of such assets in global market capitalization (Haldane, 2011). Given the magnitude of global financial assets (estimated at \$225 trillion, or more than three times the world's gross product),² even minor portfolio adjustments oriented towards developing countries would represent an increase in such flows at a rate that could destabilize the economies of these countries.³

Another major change that has surfaced in the last few decades is related to the composition and use of capital flows. In the decades immediately following the Second World War, foreign financing was relatively scarce and consisted mainly of foreign direct investment (FDI) or loans from official sources, either bilateral or multilateral. Bilateral financing was mainly in the form of trade credits provided directly by public agencies of developed countries or insured by them. Such credits were directly linked to imports, particularly of capital goods. Multilateral loans from the World Bank and regional development banks were also oriented towards specific real investment projects. Loans from the International Monetary Fund (IMF) were of a different nature, since they sought to cover balance-of-payments deficits arising from macroeconomic disequilibria. On the borrowers' side, a large share of financing went to the public sector (including State-owned firms) or to private entities in the form of publicly-guaranteed loans.



NET CAPITAL INFLOWS BY ECONOMIC GROUP, 1976-2011

Source: UNCTAD secretariat calculations, based on IMF, Balance of Payments Statistics database. Note: Net capital inflows by economic group correspond to net FDI, portfolio and "other investment" inflows.

From the mid-1970s, private lenders increasingly replaced official lenders as the main sources of external financing for developing countries. International banks recycled petrodollars by providing syndicated loans at variable interest rates to developing countries, particularly in Latin America. By 1979–1981, such commercial bank loans accounted for some 57 per cent of net capital flows to emerging economies, while official lending (bilateral loans or credit from international financial institutions) declined to barely more than 20 per cent (table 3.2).

However, with the Latin American debt crisis in 1982 and a "sudden stop" of bank credit in the region, official financing again had to fill part of the gap. It was used for servicing debt to private creditors (in a scheme termed "revolving door") in order to prevent an outright debt default. But this increase in official lending did not last long. As international banks managed to recapitalize and build up provisions, and were therefore in a sufficiently strong position to be able to offload their loans that had been deeply discounted in secondary markets, they engaged in a debt restructuring process supported by the socalled "Brady Plan". Under this plan, implemented in several highly indebted countries in the region in the late 1980s and early 1990s, bank loans were transformed into long-term securities, which were then partly sold by the original bank creditors to a variety of financial investors. This was part of the larger trend of "securitization", which was accompanied by a change in the structure of creditors in which other (non-bank) private sources became an important source of finance for emerging economies (table 3.2).

Another major change in the composition of external financial flows to developing countries since the 1990s has been the rapid rise in FDI, which grew from around 15 per cent of net inflows during the period 1976–1982 to more than 50 per cent in the 2000s. This was a fairly general trend among developing countries as a whole, including both middle-income and least developed countries (LDCs).

During the 1980s, external financing from official sources to middle-income countries declined further, and recovered only for short periods in response to the various financial crises (in 1982– 1986, 1998 and 2009). By contrast, external financing

Table 3.1

	1976– 1982	1983– 1990	1991– 1996	1997— 2000	2001– 2007	2008– 2011	Cumulative total		
		In \$ billion (annual average)							
Developed economies	289	652	1084	2930	5543	3459	78 094		
Transition economies			12	22	99	146	1 436		
Developing economies	71	54	218	239	586	1291	12 462		
of which: Africa	12	9	17	27	30	100	978		
Asia	22	33	123	109	449	912	8 386		
Latin America and the Caribbean	37	12	78	102	107	277	3 087		
Memo item:									
LDCs	4	6	6	6	8	27	297		
World	360	706	1314	3190	6227	4896	91 992		
		As a percentage of total							
Developed economies	80.2	92.3	82.5	91.8	89.0	70.7	84.9		
Transition economies			0.9	0.7	1.6	3.0	1.6		
Developing economies of which:	19.8	7.7	16.6	7.5	9.4	26.4	13.5		
Africa	3.4	1.3	1.3	0.8	0.5	2.0	1.1		
Asia	6.1	4.7	9.4	3.4	7.2	18.6	9.1		
Latin America and the Caribbean	10.3	1.7	5.9	3.2	1.7	5.7	3.4		
Memo item:									
LDCs	1.2	0.8	0.4	0.2	0.1	0.6	0.3		
Total	100	100	100	100	100	100	100		
		As a percentage of GDP							
Developed economies	4.1	5.0	5.0	12.1	16.8	8.4	8.3		
Transition economies			6.3	4.9	8.4	6.6	6.8		
Developing economies of which:	4.0	2.0	4.7	3.9	5.7	6.8	4.3		
Africa	4.3	2.2	3.8	5.4	3.3	6.3	3.9		
Asia	2.8	2.2	4.7	3.0	6.7	7.3	4.3		
Latin America and the Caribbean	5.3	1.5	4.8	4.9	3.9	5.8	4.1		
Memo item:									
LDCs	5.3	4.5	4.2	3.7	3.1	5.2	4.3		
World	4.1	4.5	4.9	10.4	14.2	7.8	7.4		

NET CAPITAL INFLOWS BY ECONOMIC GROUP AND REGION, 1976-2011

Source: UNCTAD secretariat calculations, based on IMF, Balance of Payments Statistics database.

in the form of bilateral and multilateral loans remained important for LDCs until the mid-1990s, when, with the start of the Heavily Indebted Poor Countries (HIPC) Initiative in 1996, grants increasingly replaced concessional loans. Consequently, their capital account balance (which includes grants) increased significantly, from an average of 0.4 per cent of the GDP of LDCs countries for the period 1987–1996 to 1.9 per cent on average for 1997–2011.⁴ The low share of private capital in the composition of capital inflows in LDCs reflects the historical reluctance of private capital to undertake what they considered to be risky investments in LDCs. It effectively shielded LDCs from the waves of capital flows that affected and often destabilized other developing and transition economies over the last two decades.

Table 3.2

COMPOSITION OF EXTERNAL FINANCING TO EMERGING MARKET ECONOMIES, 1979–2012

(Annual average, per cent)

	1979– 1981		1991– 2000		- 2008– 2012
Official flows	21.0	42.9	15.8	-1.0	9.1
FDI	9.9	25.1	40.0	57.5	41.1
Portfolio equity investment	3.2	4.1	9.3	3.7	-0.9
Commercial banks	56.8	9.5	10.2	19.0	13.5
Other private creditors	9.2	18.5	24.7	20.9	37.2
Total	100	100	100	100	100

 Source: UNCTAD secretariat calculations, based on Institute of International Finance, *Capital Flows* database.
 Note: Numbers do not add to 100 due to rounding.

LDCs' lack of access to private capital was also due to the stringent limits on private borrowing set by the Bretton Woods Institutions in order for them to continue to access concessional borrowing in the context of debt reduction programmes. Countries with more severe debt problems remain dependent on high levels of concessional financing to maintain debt sustainability (IMF, 2010).⁵

In the middle-income countries, the general shift to private sources of finance occurred in parallel with a change in recipients within each country and in their use of financing. Since the mid-1970s, foreign financing has been directed increasingly to private banks and firms, much of it associated with purely financial movements, such as "carry trade" operations and financial speculation in the recipient country, eventually leading to large capital outflows. Concomitantly, there has been less external financing directed at imports of capital goods and productive inputs. This implies that it was often the decision of lenders (international investors) to invest in developing countries rather than the decision of borrowers to seek loans, but the receiving countries initially welcomed such inflows as a sign of their creditworthiness and as recognition of their economic performance and potential. However, the increasing "privatization" of capital flows, and the fact that they frequently represented purely financial operations rather than transactions related to real investment, contributed to their greater instability, as they became prone to sudden stops and reversals. Given the very

large amounts of funds involved relative to the size of the recipient developing economies, financial globalization became a major destabilizing factor for many of them.

2. Capital flows, booms and busts in emerging market economies

External financial flows to developing and transition economies have repeatedly proved to be a double-edged sword. On the one hand, they have often been a way of alleviating balance-of-payments constraints on growth and investment. On the other hand, the large size of financial inflows and their instability have often led to an overvaluation of currencies, lending booms and busts, asset price bubbles, inflationary pressures and the build-up of foreign obligations without necessarily contributing either to growth or to improving a country's capacity to service those obligations. And the drying up or reversal of such inflows has frequently resulted in pressures on the balance of payments and on the financing of both the private and public sectors. The magnitudes involved in these swings can be large visà-vis the size of the asset markets of the developing countries concerned and also relative to the size of their economies. Reliance on private capital inflows has therefore tended to increase macroeconomic and financial instability that has hampered, rather than supported, long-term growth.

The experience of past episodes of strong net capital inflows⁶ followed by sharp slowdowns or reversals offers important lessons for the present situation. There were three major waves of capital inflows to emerging market economies prior to the most recent financial crisis: in 1977-1981, 1990-1996 and 2002-2007 (chart 3.2). All these episodes presented some common features. First, they all started when there was abundant liquidity in the developed countries resulting from their pursuit of expansionary monetary policies, and/or their large balance-of-payments deficits which were financed by the issuance of debt in international currencies (mainly in dollars). At the same time, developed countries experienced significant slowdowns related to different shocks: the oil shock in the second half of the 1970s, the Savings and Loan crisis in the United States, the crisis of the European Exchange Rate

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NET PRIVATE CAPITAL INFLOWS TO EMERGING MARKET ECONOMIES, 1978–2012

Source: UNCTAD secretariat calculations, based on Institute of International Finance, Capital Flows database; and UNCTADstat. Note: Data for 2012 are estimates.

Mechanism (ERM) and the financial crisis in Japan in the early 1990s, and the bursting of the dot-com bubble in the early 2000s. On all these occasions, the monetary authorities in the developed countries lowered their policy interest rates to support their economies and financial systems. Given these developments, developing countries appeared to present attractive alternatives for international investors, as their economies were growing faster than those in the North and were providing opportunities for higher returns (Akyüz, 2012).

Second, the reduction or reversal of capital inflows in emerging market economies in the late 1970s, mid-1990s and mid-2000s followed increases in policy interest rates in developed countries. Although expansionary monetary policies in developed countries were a major factor contributing to those capital movements, these policies alone were not enough to generate strong outflows to developing countries; for instance, the reduction of interest rates in developed countries between 1984 and 1986 did not generate large outflows to emerging market economies because banks needed to recapitalize and create adequate provisions due to their risky Latin American assets resulting from the debt crisis in that region.

Third, how the capital inflows were used by recipient countries has been an important additional factor determining their impact on these countries. When a large proportion of the inflows was used to finance a higher oil-import bill or investment projects which required imports of capital goods, they helped to stabilize the domestic economy and support growth. In other cases, however, where capital inflows were directed mainly to private banks for financing consumption or speculative financial investments, or to firms for financing current expenditure, they had (often strong) destabilizing effects. If capital inflows are not used primarily for imports, they can lead to a strong real appreciation of the local currency and severely harm domestic industries. In some countries, where currency appreciation was the cornerstone of anti-inflationary policies, capital inflows were mainly channelled to the private sector through deregulated financial systems. This generated an uncontrolled expansion of domestic credit, which led to financial fragility associated with real estate and financial bubbles, currency appreciation

and significant current account deficits, eventually resulting in a crash.

The last major wave of capital inflows to emerging market economies was building up when these economies progressively surmounted the effects of the financial crises of the late 1990s and developed economies turned once again to an expansionary monetary stance. Capital inflows first poured into East and South-East Asia and the transition economies of Central and Eastern Europe, which resumed rapid growth rates in 2000-2002, while GDP growth in Africa, Latin America and West Asia accelerated later, in 2003–2004. Between 2005 and 2007, inflows of private capital to all developing regions reached unprecedented levels: in 2007, those inflows into emerging market economies amounted to 8 per cent of their GDP and total capital inflows to developing countries exceeded 10 per cent of their GDP. During this period, about 80 per cent of such inflows to developing countries went to Asia, which was also the region where private capital inflows accounted for the largest proportion of GDP (more than 10 per cent on average during that period compared with 4.9 per cent in Latin America and 4.2 per cent in Africa). The transition economies also received very large amounts of foreign capital during that period $(12.4 \text{ per cent of GDP}).^7$

This last major wave of capital inflows came to a halt in 2008 and 2009. This was atypical, because the reversal did not occur in response to an increase in interest rates in the major developed countries; on the contrary, those countries had lowered interest rates in efforts to mitigate the crisis. Rather, what is likely to have caused the reversal this time was that the crisis in the most advanced financial markets was still fresh in the minds of investors, making them extremely risk averse and eager to minimize the overall risk of their portfolios. However, this proved short-lived, as capital flows to emerging markets surged once more in 2010 and 2011. Again this was atypical, because "sudden stops" are usually followed by prolonged reversals of capital inflows into emerging market economies. This confirms the finding by Shin (2011), that the cycle of financial flows is dominated by the leverage cycle of big banks, which in turn is associated with their perceptions of risk.

Another difference relating to the recent waves of capital inflows since 2004 is that their main counterpart in emerging market economies was not large current account deficits, but rather the accumulation of foreign assets (i.e. capital outflows from these economies), including international reserves. This largely explains why the sudden stop in 2008–2009 did not lead to severe economic crises in these countries. The main exceptions to this rule were the emerging market economies in Europe, which saw huge current account deficits and experienced a severe economic setback due to a reversal of foreign capital inflows.

The most recent experience shows that large capital inflows followed by a "sudden stop" do not necessarily trigger an immediate financial collapse as in previous "waves" of capital flows. This raises the question as to whether the financial vulnerability of emerging economies has changed, and if so, why. What are the challenges they now face and how can they be overcome? These questions are addressed in the next two sections.

C. The global crisis and the challenges ahead

1. The financial situation and monetary policies in developed countries

(a) Impacts of the crisis and policy responses

In order to understand the challenges for developing countries, especially emerging market economies that are potential destinations of a new wave of capital flows, it is worth recalling some important features of the latest crisis and the policy response of developed countries.

The recent financial crisis resulted from a surge of private indebtedness in developed countries. A widespread view five years after the outbreak of the crisis is that excessive public debt was the cause, and that it is also the main obstacle to recovery. However, it was the private sector debt that increased rapidly from the mid-1990s onwards, while public sector debt, for the most part, remained flat or even declined (chart 3.3). It is only since 2008, following the onset of the global economic crisis, that public sector debt began to rise as a result of large-scale government bailout packages, the effect of automatic stabilizers and additional fiscal policy measures to stabilize aggregate demand. Notwithstanding this rise, private debt is still a multiple of public debt. It is surprising that neither the economic authorities, nor the credit rating agencies or the managers of financial institutions, seemed to be aware of the mounting risks caused by such a rapid increase in private debt. All of them appear to have had extreme, but unjustified, confidence in the efficiency of financial markets and in the ability of private sector debtors (unlike the public sector) to honour their debt obligations.⁸

Once the financial crisis broke out, followed by the broader economic crisis, there was a marked change in the financial behaviour of all actors households, financial and non-financial firms and governments - in the major developed countries. Following years of mounting prosperity, during which financial markets had fuelled the build-up of asset price bubbles, households and firms suddenly saw a dramatic deterioration of their balance sheets. They found it more and more difficult, if not impossible, to revolve their debts, let alone increase their borrowing, as the prices of their collateral plunged. On the other side of the ledger, banks found themselves burdened with poor-quality or non-performing loans and securities of dubious value. The sudden disruption of credit flows forced a process of deleveraging in the private sector that led to a sharp downturn of economic activity. The contractionary effect of the crisis on economic activity in the developed economies could be contained only by increasing debt-financed public spending by governments, which acted as borrowers, investors and consumers of last resort. These abrupt changes are reflected in the net lending or borrowing positions of the private and public sectors (chart 3.4).

When the crisis erupted, governments in developed countries reacted with strong monetary and fiscal measures. Public spending rose quite significantly, while central banks provided emergency liquidity to the financial system in order to compensate for the sharp fall in interbank lending and reduced interest rates. When the worst of the crisis seemed to be over, and many governments and international institutions (wrongly) believed that the major hindrance to a sustained recovery was not the lack of global demand but the rise in public debt, this multipronged supportive approach came to an end. The view that their "fiscal space" was exhausted led to a shift towards fiscal austerity, and monetary policy appeared to be the sole available instrument of support.



SELECTED DEVELOPED COUNTRIES, 1995–2012 (Per cent of GDP)

PRIVATE SECTOR AND GROSS PUBLIC DEBT,

Source: UNCTAD secretariat calculations, based on OECD.StatExtracts database.

Note: Data for the United States on "gross public debt" refer to "debt of central government". Data on "gross public debt" for 2012 are projections.

NET LENDING/BORROWING BY SECTOR, UNITED STATES AND EURO AREA, 2000-2012



(Per cent of GDP)

Source: UNCTAD secretariat calculations, based on United States, Bureau of Economic Analysis; and European Central Bank, Statistical Data Warehouse.

Note: Net lending positions are indicated by positive values, net borrowing by negative values.

As interest rates were already at or approaching the lowest possible limits, central banks in all the major developed economies turned increasingly to "unconventional" policies, which led to a rapid expansion of their monetary base. Moreover, in addition to rescuing private financial institutions in trouble, they sought to revive credit and demand, and also to reduce the perceived risk of financial assets. Most importantly, the central banks agreed to buy (or to finance the acquisition of) their own governments' sovereign bonds. This expanded their role of lender of last resort and also blurred the boundaries between fiscal and monetary policies. Their efforts resulted in a ballooning of their balance sheets. For instance, between the onset of the subprime mortgage crisis in August 2007 and the end of 2012, the balance sheet of the Bank of England grew by 380 per cent, and those of the European Central Bank (ECB) and the United States Federal Reserve System grew by 241 per cent and 221 per cent respectively.

The central banks used different instruments, depending on the structure and needs of their economies. This is reflected in the different compositions and profiles of their balance sheets. The ECB, given the more bank-centric nature of the euro-area economy, supplied liquidity directly to the banking sector, mainly through a long-term refinancing operation (LTRO) (chart 3.5A).9 In addition, it implemented bond purchase programmes, including a new Outright Monetary Transactions programme. The United States Federal Reserve, by contrast, supplied liquidity through security purchases, not only Treasury securities, as it had traditionally done, but also private mortgage-backed securities (chart 3.5B). These large-scale asset purchases aimed to stop the decline of asset prices, revive consumer spending and support economic growth. A similar approach was followed by the Bank of England and, more recently, by the Bank of Japan.

Their strategies have been partially successful. In particular, the commitment by the ECB to buy (in the secondary market) unlimited quantities of sovereign bonds of euro-zone periphery countries (Greece, Ireland, Italy, Portugal and Spain) led to a reduction of their sovereign risk premiums. However, neither in Europe nor in the United States has the large



ASSET COMPOSITION OF THE EUROPEAN CENTRAL BANK AND THE UNITED STATES FEDERAL RESERVE, 2003–2013

Source: UNCTAD secretariat calculations, based on United States Federal Reserve, Factors Affecting Reserve Balances (H.4.1) database; and European Central Bank, Statistical Data Warehouse.

injection of "high-powered money" translated into increased bank lending to the private sector; on the contrary, outstanding credit to the private sector has actually declined as a percentage of GDP (chart 3.6). The question is whether the failure of banks to increase lending is due to their reluctance to lend or the unwillingness of companies and households to borrow. What is clear is that the credit crunch is not due to banks lacking liquidity or access to central bank refinancing.

Euro-zone banks appear to have been using the additional liquidity created by the ECB as a means of refinancing themselves or for accumulating deposits at the ECB itself: commercial bank deposits with the ECB increased to the historically high level of \notin 800 billion during 2012. At the same time, ECB surveys of small and medium-sized enterprises (SMEs) in the euro zone show that lending activity is still very low, not only because of weak demand for credit but also because firms are finding it difficult to obtain loans. This is seen as evidence that credit markets in the euro-area remain highly dysfunctional.

Economic history provides evidence that credit is slow to recover after a major financial crisis, and this time is no different. Private actors in the euro zone, Japan and the United States are increasing their savings, hoarding cash or paying down debt, and therefore their demand for credit is largely limited to refinancing loans that are reaching maturity. Many of them that are willing to borrow more are experiencing difficulty in accessing credit due to uncertainty about their future income stream and the value of their collateral. In addition, many banks need to be recapitalized owing to a deterioration of their loan portfolios, which is further limiting their credit supply.

The failure of monetary expansion to boost private expenditure is a reminder of the "liquidity trap" analysed by Keynes (1936/1973), which occurs when economic agents prefer to keep cash holdings rather than investing funds in areas that present a high risk of capital loss. Anecdotal evidence suggests that this may be happening to some extent: liquid reserves held by industry and the banking system





(Per cent of GDP)

Source: UNCTAD secretariat calculations, based on IMF, *International Financial Statistics* and *World Economic Outlook* databases. **Note:** Monetary base for euro area corresponds to currency issued and central bank's liabilities to depository corporations.

in the United States at the end of 2012 amounted to more than \$3 trillion, four times as high as the stimulus package of \$831 billion provided under the 2009 American Recovery and Reinvestment Act. One recent study argues that almost half of this amount was in "excess" of reasonable precautionary requirements, estimating that if it had been redirected into productive investments it would have helped create millions of jobs and lower the unemployment rate to below 5 per cent (Pollin et al., 2011).

Other major economies have similar stockpiles, suggesting that the "precautionary motive" for holding liquid assets is undermining policymakers' attempts to use cheap capital as a means of injecting life into a nervous and demand-deficient economy. In Japan, for example, recent estimates put companies' liquid assets at around \$2.8 trillion, up 75 per cent since 2007. Similarly, in the euro zone, households currently hold some €7,000 billion in currency and deposits, and non-financial companies hold around €2,031 billion.¹⁰

This coexistence of idle liquidity held by a group of economic agents and liquidity shortages faced by others is new evidence of the "broken transmission mechanism" on the monetary and financial markets. It suggests that policy responses should include better targeting of the recipients of money creation. In other words, monetary authorities should find a means of making credit available to agents that really need it for using in a productive way.

(b) Impact on capital flows

The previous subsection has described typical conditions that are conducive to strong capital outflows from developed countries. Indeed, they are likely to be even more conducive to a surge in outflows than those at the beginning of previous "waves". This is because there is a large interest rate differential in favour of developing countries, a huge amount of liquidity in the banking system and low demand for credit in developed countries. Although immediately following the onset of the financial crisis there was a sharp increase in public sector borrowing, the subsequent policy switch to fiscal austerity and public debt reduction is causing demand for public credit to fall as well. But these conditions have not induced strong and sustained capital outflows from developed countries; rather such outflows have been very volatile.

Capital outflows from the United States fell significantly immediately after the crisis erupted, and there was even an increase in inflows in 2008, testifying to the continued perception of this country as a "safe port in a storm" even though the storm had originated there. Outflows from the United States recovered partially in the subsequent years, but displayed marked volatility, and remained lower than their pre-crisis levels (chart 3.7A). This shows that the above-mentioned factors are not sufficient conditions to induce such outflows; other factors, such as a general climate of uncertainty, can also have a major impact on the size of capital flows (Shin, 2011), as discussed below.

Capital flows in and out of Japan, unlike those of the United States, recovered swiftly after some contraction in the years immediately following the onset of the crisis, and even surpassed pre-crisis flows, accounting for between 10 and 15 per cent of GDP in 2010–2011. Portfolio outflows in 2011 remained relatively high, as investors and speculators took advantage of close-to-zero interest rates to borrow in yen and invest abroad. This recovery of capital outflows from Japan was partly bolstered by its supportive regional environment of East and South-East Asia, which contrasts sharply with that of Europe.

In Europe there was a simultaneous contraction of both inflows and outflows of capital (chart 3.7B). By 2011, capital flows were equivalent to less than 20 per cent of GDP, compared with over 30 per cent during the period 2005–2007. And some components of those flows declined sharply. For example, eurozone portfolio outflows fell from \$1,386 billion in 2005 to just \$288 billion in 2010, and even turned negative in 2011. The contraction of capital flows to and from European countries reflects the sudden stop in intraregional credit movements due to the crisis. Prior to the crisis, easy availability of all kinds of cross-border financing had fuelled mounting imbalances within the EU, which have been a major cause of its present problems. Also of relevance has been the "balance sheet recession" that has deterred banks from lending both domestically and abroad, and which has been deeper and longer in Europe than in other developed economies where banks' recapitalization has progressed more rapidly (Koo, 2011).

Capital movements within Europe reproduce much of the "centre-periphery" pattern that many developing countries have endured in the past. In the lead-up to the crisis, integrated financial markets allowed commercial banks in the core European countries (France, Germany and the United Kingdom) to build up large cross-border exposures in the euro zone's "periphery" countries. During the subsequent years, however, European banks significantly scaled back their exposures to their counterparts in the periphery (chart 3.8). Faced with market volatility and uncertainty, banks in the core European countries began to reduce their claims on the periphery countries in 2008. This continued to follow a downward trend, accounting for a reduction of 51 per cent from the first quarter of 2008 to the fourth quarter of 2012 and it is likely to be much greater if other periphery countries are included.11 The stock of German banks' claims on peripheral Europe fell by roughly 50 per cent from their pre-crisis peak until the end of 2012, from under €600 billion to €300 billion (BIS, 2013). At the level of individual European banks, outstanding loans to periphery banks declined by 30-40 per cent. For example, HSBC reduced its holdings in euro-zone periphery banks by 39.5 per cent in just four months, and Lloyds reduced them by 28 per cent over the same period (Goff and Jenkins, 2011).

The pattern of capital outflows differed among developed countries, which may be due to the different recipients of these outflows. The strong decline in capital flows into and out of euro-zone countries was mainly due to intraregional developments. Japanese capital outflows, on the other hand, were not strongly affected by the financial crisis, probably because they targeted mainly emerging market economies and developing countries in Asia that were not as severely impacted by the crisis. As for the United States, as a major financial centre, it has strong links with both other developed economies and emerging market economies. However, the major generators of capital movements are large banks whose main offices in various countries handle capital movements based on their interests, and they generate gross outflows towards third countries that may have originated from several different countries. Consequently, there is not necessarily a direct link between the macroeconomic and monetary conditions prevailing in a specific country and the value of its capital inflows and outflows. Those conditions may promote or hinder the incentives for international banks to increase their international capital flows, which may therefore originate from their branches in different countries.

NET CAPITAL INFLOWS AND OUTFLOWS, 2005–2012 (Billions of current dollars)



1 500 1 000 500 - 500 - 1 000 - 1 5000 - 1 500 - 1

C. Developing countries

2 000

-2 000

-2 500 -3 000

2005

2006

2007

2008

FDI: incurrence of liabilities

Net errors and omissions

Current account balance

Portfolio: incurrence of liabilities

2009

Financial derivatives: incurrence of liabilities

Other investment: incurrence of liabilities

2010

2011

D. Least developed countries





Other investment: acquisition of financial assets

Capital account balance

Source: UNCTAD secretariat calculations, based on IMF, *Balance of Payments Statistics* database. **Note:** Data were available for only 67 developing countries (excluding LDCs) and for 28 LDCs.

Change in reserve assets



EUROPEAN UNION: CORE COUNTRIES' COMMERCIAL BANK EXPOSURE TO PERIPHERY COUNTRIES, 2001–2012

(Billions of dollars)

Source: UNCTAD secretariat calculation, based on BIS, *Consolidated Banking Statistics* database. **Note:** Core countries are France, Germany and the United Kingdom.

2. Impacts and policy responses in developing economies

The historical experience discussed in section B shows that several factors have played a role in determining capital movements from developed to developing countries. At least until the global crisis, all the waves of strong capital flows from developed to developing countries were started by "push factors" related to conditions in developed countries. But in addition there are also "pull factors" relating to the demand for foreign capital in developing countries that influence the size and direction of capital flows to and from these countries.

Box 3.1 presents the results of an econometric exercise that analysed the determinants of capital flows received by 19 emerging market economies between 1996 and 2012. The disparities in GDP growth rates and in returns on financial investments appear to be significant explanatory variables.

The first indicates that faster GDP growth rates in emerging market economies than in the G-7 group of developed countries had a positive impact on capital flows from the developed to the emerging market economies; the second estimates the positive impact of interest rate differentials between emerging market economies and the United States, adjusted for gains or losses from exchange rate changes. As these variables combine indicators from both source and receiving countries, they may be seen as both "pull" and "push" factors. Risk perception in developed countries was the main purely "push factor" identified in this exercise, and shows a negative sign. This means that a rising perception of risk in developed countries discouraged capital outflows to emerging market economies. Symmetrically, stock market indices in emerging market economies reflected investor sentiment in the receiving economies, hence representing a "pull factor".

All these factors appear to have had a significant impact on capital flows. However, different factors

may also have had opposite effects simultaneously, as seems to have been the case during most of 2011 and 2012, and also in the first half of 2013. Some push factors (particularly monetary conditions) in developed countries appear to have had a positive impact on capital outflows to emerging market economies, while other push factors, such as an increase in perception of financial risk discouraged such movements. This may explain the considerable volatility of these capital flows, and uncertainty about a possible new big wave of capital inflows to emerging market economies similar to that of 2003–2007.

While the occurrence of new waves of capital outflows depends to a large extent on circumstances in the developed countries, the impact it can have on developing countries largely depends on the economic situation and government policies in the latter. In that respect, there were some unique features in the most recent crisis that can provide valuable lessons for the future. Unlike previous financial crises, a sudden stop of capital inflows did not generally translate into balance-of-payments problems or domestic financial crises, the main exceptions being a number of Central and East European countries (as mentioned above). Consequently, fiscal policy could be used for supporting the real economy rather than bailing out the banking system, leading to a rapid recovery of GDP growth, although not to pre-crisis rates.

The impact of the financial shocks on developing countries depended critically on their pre-crisis situation. External balances played a major role: historically, capital reversals had a greater adverse impact on countries already running large current account deficits, as they were forced to suddenly undertake recessionary adjustments when they could no longer finance external imbalances. Hence, one reason for the relative resilience of emerging market economies is that, in general, they were not running current account deficits, at least not on the same scale as occurred during previous surges of foreign capital inflows. Several countries, including China, even had "twin surpluses" - an unusual situation of surpluses in both the current and the financial account – the counterpart of which was a strong accumulation of official foreign currency reserves and, in some cases, a net repayment of external debt. Some of the reasons for the healthy current accounts of most emerging market economies before the crisis were favourable terms of trade for commodity exporters and/or an increase in export volumes owing to strong demand

from developed countries. These favourable factors had not existed in previous "waves" of capital flows. Another factor explaining the relative resilience of the emerging market economies was that in many of them the authorities had been able to prevent excessive currency appreciation through intervention in the foreign exchange market or through some form of capital account management. These measures helped them avoid, or at least contain, an appreciation of their real exchange rate. Other countries, such as Brazil, Chile, China and the Russian Federation, though less successful in this regard, had rather undervalued currencies (from a historical perspective) at the time their currencies began to appreciate (around 2004–2005) (chart 3.9).

The lower vulnerability of emerging market economies to financial shocks also resulted from the fact that many of them had already experienced financial crises between the mid-1990s and the early 2000s, which had led to a significant contraction of outstanding bank loans to the private sector (chart 3.10). Consequently, in the years following those crises many banks were unwilling or unable to increase their credit operations as they sought to consolidate their balance sheets. At the same time, firms and households restrained their demand for credit. This explains why capital inflows did not have a strong impact on domestic credit expansion in several of those countries that had been hit at the end of the "second wave" of capital inflows in the late 1990s, such as Argentina, Indonesia, Malaysia, Mexico, the Philippines and Thailand. In other countries, such as Brazil, the Russian Federation, Turkey and Ukraine, which had also experienced financial crises earlier, but had again received massive capital inflows in the years preceding the 2008–2009 global crisis, domestic credit expanded rapidly.

In LDCs as a group, financial plus capital inflows accounted for about 6 per cent of GDP in 2010–2011, a level similar to that of other developing countries. Most of the inflows were in the form of FDI and official development assistance (ODA) in the capital account, which represented rather stable capital. In addition, the LDCs have been able to accumulate reserves for several years in a row and reduce their current account deficit to about 1 per cent of GDP (chart 3.7). However, the situation varies considerably among these countries, with oilexporting LDCs posting current account surpluses

Box 3.1

CAPITAL INFLOWS INTO EMERGING MARKET ECONOMIES: SOME ECONOMETRIC RELATIONSHIPS

This box presents the results of an econometric exercise that analysed the determinants of capital inflows received by 19 emerging market economies between 1996 and 2012.

The dependent variable is capital inflows, as measured by net capital inflows as a percentage of GDP.

The retained explanatory variables are:

- The differential between the real GDP growth of the emerging market economies and the G7 GDP growth rate (G-DIFF). A positive differential indicates that the emerging market economies grew faster than the developed economies, whereas a negative differential indicates the opposite.
- The national stock exchange indices (NSEI) measures the equity market performance of the companies covered by the index. A change in the index represents changes in investors' expectations of the yields and risks.
- The Chicago Board Options Exchange Spx Volatility Index (VIX) measures the expected stock market volatility over the next 30-day period from the prices of the S&P 500 index options. The VIX is quoted in percentage points, and higher values indicate that investors expected the value of the S&P 500 to fluctuate wildly over the next 30 days.
- The emerging markets investment returns (EMIR) represent the differential between the interest rates of emerging markets and the United States at the beginning of the quarter, adjusted by the ex-post appreciation rate of the corresponding emerging market currency. It corresponds to what a foreign investor can obtain by borrowing in a currency at a low interest rate and investing in domestic assets that give a higher interest rate, corrected by the exchange rate appreciation.

The data

The capital inflows data for these estimations covered 19 emerging market economies: Argentina, Brazil, Chile, China, Colombia, Ecuador, India, Indonesia, Malaysia, Mexico, Morocco, Peru, the Philippines, Poland, the Republic of Korea, Romania, Singapore, South Africa, Thailand and Uruguay. Quarterly data from the first quarter of 1996 to the fourth quarter of 2012 were extracted from the IMF Balance of Payments database and complemented by national sources.

Quarterly real GDP data were taken from the IMF International Financial Statistics and national sources. They were seasonally adjusted using the census X12 method. Data for the remaining variables were taken from the Bloomberg database, the IMF's International Financial Statistics and national sources.

Results

The table below shows the regression results based on panel data. The panel data model with fixed effects was estimated using feasible generalized least squares (GLS) along with robust standard errors.

Column (1) shows that for the full period the four explanatory variables were statistically significant for explaining capital inflows in emerging markets. More specifically, the results indicate that a wider differential growth in GDP, an increase in the stock exchange market index of emerging market economies and an increase in the investment return differential had a positive impact on capital inflows into emerging

market economies. Conversely, a higher degree of investor risk aversion (as measured by the VIX index) was associated with lower capital inflows in emerging market economies.

Recursive coefficient estimates were used to evaluate stability of the coefficients. Results show changes in the coefficients across time, indicating that there was a break around 2005. Therefore the full period was separated into two sub-periods: 1996–2005 (first quarter) and 2005–2012. The regression results are presented in columns (2) and (3). They show that, except for the volatility of the S&P 500 index, the impact of the explanatory variables was much larger in the period after 2005 than in the earlier period. Even the GDP growth differential is not meaningful for the 1996–2005 period. These results are consistent with the observation that carry trade strategies of investors contributed to capital inflows into emerging market economies during the period of low interest rates in the United States. The coefficients of the other two variables were found to remain stable.

Short-term capital inflows (i.e. the difference between net capital inflows and net inward FDI) were also regressed based on the four explanatory variables. For the full period (column 4), as expected, the impact of investment returns on short-term capital inflows was larger than that on total capital inflows, whereas the other three variables showed lower coefficients. Columns (5) and (6) show results for the two sub-periods. They present similar patterns to those observed for total capital inflows: the impacts of the GDP growth differential, emerging market stock market indexes and investment returns were much greater in the period 2005–2012 than in the period 1996–2005.

	C	apital Inflow	/S	Capital Inflows (excl. FDI)			
	(1)	(2)	(3)	(4)	(5)	(6)	
Period	1996–2012	1996–2005	2005–2012	1996–2012	1996–2005	2005–2012	
Pull factors							
Ln(NSEI) (+)	1.704***	1.068***	3.421***	1.272***	0.800***	3.117***	
Push factors							
VIX (-)	-0.115***	-0.097***	-0.111***	-0.094***	-0.080***	-0.090***	
Combination of both factors							
G-DIFF (+)	0.135***	0.050	0.321***	0.110***	0.069**	0.263***	
EMIR (+)	0.183**	0.099**	0.250***	0.204***	0.129**	0.277***	
Number of observations	68	37	32	68	37	32	
Number of countries	19	18	19	19	18	19	
Total pool (unbalanced observations)	1 066	525	559	1 066	525	559	
R-squared	0.445	0.447	0.509	0.336	0.326	0.416	
F-test	33.096***	19.389***	25.302***	23.94***	11.572***	17.347***	
Durbin-Watson	1.442	1.533	1.740	1.465	1.616	1.710	
F-test on fixed effects	31.010***	19.038***	25.201***	15.938***	9.264***	15.947***	
R-squared (without fixed effects)	0.148	0.092	0.094	0.153	0.115	0.103	

REGRESSION RESULTS FOR EMERGING MARKET ECONOMIES, 1996–2012

(Dependent variable: capital inflows as a percentage of GDP)

Note: Estimation used Generalized Least Squares with cross-section weights and was based on panel data and quarterly data.

*** Significant at 1 per cent.

** Significant at 5 per cent.

* Significant at 10 per cent.

REAL EFFECTIVE EXCHANGE RATES (REER), SELECTED COUNTRIES, 1990–2012

(Index numbers, average for 1990–1995 = 100)



Source: UNCTAD secretariat calculations, based on UNCTAD stat. Note: REER are calculated using GDP deflators.

and non-oil exporters relying on foreign capital for financing important current account and fiscal deficits (UNCTAD, 2012).

Foreign reserve accumulation and improved debt management have been two effective strategies adopted by developing countries to shield themselves from the volatility of capital flows and international financial shocks. During the 2000s several developing countries accumulated large external reserves through market intervention in order to avoid currency appreciation arising from capital inflows, and as a self-insurance strategy against the risk of sudden stops and liquidity crises. Foreign exchange accumulation in pre-crisis times enabled developing countries to withstand adverse consequences of capital outflows in the months following the collapse of Lehman Brothers. Contrasting with many of those countries' responses to financial crises in the late 1990s, this time they did not defend fixed exchange parities at any cost by adopting tight monetary and fiscal policies; rather, they allowed their currencies to depreciate, with central banks selling part of their international reserves in order to avoid an uncontrolled depreciation. This reflected pragmatic and flexible approaches to exchange rate policies, which preferred intermediary regimes rather than "corner solutions" (i.e. free floating or irrevocably pegged exchange rates). It gave them more room for manoeuvre in handling the financial crisis and for implementing countercyclical policies in response to the global recession. It also showed that, in the absence of an international lender of last resort, foreign reserves offer a natural protection against financial market shocks.

The greater resilience of several developing and emerging market economies to adverse financial events was also due to their lower levels of external debt and its more favourable currency composition compared with earlier episodes. Prior to the global financial crisis, most of these countries had managed to sharply reduce their average debt ratios and to develop or expand domestic markets for the issuance of debt instruments denominated in local currencies. A greater reliance on domestic capital markets for the financing of public expenditure helps developing countries to reduce their vulnerability to lending booms and exchange-rate effects generated by surges of capital inflows followed by sudden stops and reversals of such flows. Although it does not solve the eventual problem of a foreign exchange

Brazil Mexico Argentina 1995 2000 2005 2010 1995 2000 2005 2010 2000 2005 India China Indonesia 0 ______2012 0 2012 1990 1995 2000 2005 2010 1995 2000 2005 2010 1990 1995 2000 2005 2010 Philippines Malaysia **Republic of Korea** 1990 1995 2000 2005 2010 1990 1995 2000 2005 2010 1995 2000 2005 2010 Thailand Turkey Nigeria 0 _____ 1995 2000 2005 2010 2012 1995 2000 2005 201²⁰¹² 1990 1995 2000 2005 201²⁰¹² South Africa **Russian Federation** Ukraine 1990 1995 2000 2005 2010 2012 1995 2000 2005 2010 2012 1990 1995 2000 2005 2010²⁰¹²

BANK CLAIMS ON THE PRIVATE SECTOR, SELECTED COUNTRIES, 1990-2012

(Per cent of GDP)

Source: UNCTAD secretariat calculations, based on IMF, International Financial Statistics database.

shortage, it should be the first option for financing expenditure in domestic currency. Debt denominated in local currency also increases policy space because it allows external shocks, such as sudden capital outflows, a rise in global interest rates or the widening of sovereign yield spreads, to be countered by currency devaluations without increasing the domestic currency value of that debt. Furthermore, debt denominated in local currency allows the government a last-resort option of debt monetization in a time of crisis. The sole possibility of monetizing debt dramatically reduces the insolvency risk, and consequently lowers the risk premium on the debt.

Summing up, policies aimed at minimizing risks have played an important role in helping developing countries ride out the global crisis. These include the accumulation of foreign reserves, the development of domestic debt markets and the issuance of debt instruments that provide insurance against domestic and external shocks. Although such insurance policies may entail some costs,¹² they reduce developing countries' vulnerability to financial shocks and the likelihood of disruptive financial crises, the costs of which can be incommensurably higher.

The observation that developing countries have been better able to withstand shocks originating in international capital markets than in previous decades does not mean, however, that they are shielded against financial turbulence in the near future. Some emerging market economies, particularly Brazil, China, the Russia Federation and Turkey, have seen rapid growth in domestic credit, even after the 2008 crisis, which may be partly related to capital inflows (chart 3.10). These same countries have experienced real appreciation of their domestic currencies, although in Brazil and Turkey there has been a partial reversal. However, they remain exposed to further surges in capital inflows, which might put additional pressure on their credit and currency markets, but also to sudden capital outflows, which would lead to steep corrections in those markets. In addition, those countries that presently run significant current account deficits are likely to be faced with balanceof-payments problems. The degree of financial vulnerability depends to a large extent on how capital inflows (and the domestic credit they may generate) are used in the recipient economy: if a large proportion of the flows is used for financing the purchase of real estate, leading to a housing bubble, there is a risk of greater financial fragility than if it is used for productive investment.

The instability of capital movements to developing countries since the crisis, with a temporary return to their previous peak in the first half of 2011 and a subsequent fall thereafter, contrasts with the experience of the last few decades. Previously, it took several years after a crisis before a new wave of capital flows to developing countries commenced, and it would last for several years before receding. Investors driven to developing countries in 2010 and most of 2011 seem to have been encouraged by the ability of these countries to resume their very rapid pre-crisis GDP growth rates and by the perception that their financial systems were more stable than those of developed countries. However, by then developed countries were also recovering from the crisis, and consequently investments there appeared less risky. But, as paradoxical as it may seem, worsening prospects in developed countries in the second half of 2011, including higher perceived risks relating to the sovereign debt of some of them, curtailed capital flows towards better performing developing countries. This seems to indicate that instability in the developed countries reinforced the risk aversion of financial agents, particularly the large financial institutions that are the main drivers of international capital flows. Moreover, some of these institutions still needed to consolidate their balance sheets by recapitalizing and cleaning up their balance sheets by shedding non-performing loans.

At present, the prospect of some improvement in growth performance and lower perceived risks in some developed countries are creating uncertainty about the future of capital flows to developing and emerging market economies. On the one hand, lower risks could favour a portfolio reallocation in search of greater profitability, which could lead to a surge of capital outflows to these latter countries, as happened during the first half of 2013. But on the other hand, if prospects of economic recovery and a perceived risk of mounting inflation lead to tighter monetary policies in developed countries, there might be a drastic reversal of capital flows away from emerging market economies. For example, the sole announcement of a future, but non-imminent, discontinuation of the asset purchase programme by the Federal Reserve in June 2013 prompted a reversal of capital flows to emerging market economies.

In conclusion, it is necessary to exercise caution with regard to cross-border capital flows, especially in a climate of high uncertainty, when sentiments more than facts tend to drive capital movements, potentially leading to self-fulfilling prophecies. Developing countries should adopt precautionary measures, as discussed in the next section, bearing in mind that "the seeds of emerging market crises are sown in the build-up phase, as inflows dwarf the absorptive capacity of recipient countries' capital markets" (Haldane, 2011: 2).

D. Lessons and policy recommendations

1. The role and impact of financial markets: a reassessment

(a) Financial instability

In his History of Economic Analysis, Schumpeter observed: "People may be perfectly familiar with a phenomenon for ages and even discuss it frequently without realizing its true significance and without admitting it into their general scheme of thought" (Schumpeter, 1954: 1081). He made this remark in the chapter on money, credit and cycles. Indeed, this is the area where the gap between conventional theory - based on the hypothesis of efficiency, rationality, neutrality and self-regulating market mechanisms and actual experience is the most evident. The present crisis is a new reminder of the inadequacy of that theoretical framework. This time the message seems to be stronger, because at the epicentre of the crisis are the most sophisticated and "deep" financial systems of developed countries. Thus, financial dysfunction can no longer be attributed to underdeveloped financial institutions or governance shortcomings, which were commonly considered to be the cause of the repeated financial crises in developing and transition economies in the 1980s and 1990s. There is now increasing recognition of the need to reintroduce the notion of financial instability in the theoretical framework (Borio, 2013; Blanchard, 2013).

One essential lesson of the crisis relates to the assumed self-correcting mechanisms of financial markets and their supposed stabilizing role for the entire economy. Historically, repeated financial crises have followed fairly similar patterns, regardless of where and when they have occurred, which suggests that their cause lies in the very nature of finance. External shocks and occasional mismanagement may accentuate financial vulnerability or trigger a financial crash, but they do not by themselves destabilize what are considered intrinsically stable markets (Kindleberger, 1978; Galbraith, 1994; Reinhart and Rogoff, 2009). Rather, recurrent financial instability results from the fact that financial markets do not function like goods markets, where suppliers and purchasers are clearly distinct and where some material factors (e.g. productivity, costs and stocks) set limits to price movements. In financial markets, such limits are much scarcer or simply do not exist (Aglietta and Brand, 2013; Wicksell, 1935). Unlike in other markets, most agents can be buyers as well as sellers in financial markets. This may lead to "manias", when most investors anticipate price increases and buyers outnumber sellers, followed by "panics", when prices are expected to fall and buyers disappear from the market. In times of "euphoria", strong expectations of price appreciation will drive up demand for some financial assets, which in turn will increase the prices of those assets, thereby generating (at least for some time) a self-fulfilling prophecy.

Consequently, on financial markets, unlike other markets, rising prices encourage – rather than discourage – demand for financial assets, and the opposite is true when demand is falling, thus leading to overshooting. Investors can maximize their gains by incurring debt: when the expected gains are higher

than the cost of the debt, higher leveraging increases the ratio of profits to capital. If borrowers are able to provide collateral in the form of financial assets that are rising in price, lenders will be willing to meet their demand for credit. And as that credit is partly used for buying more financial assets, their prices will continue to increase, thereby feeding back the whole process and inflating a speculative bubble. In other words, there is a close correlation between credit supply and demand: they both grow in parallel during expansionary phases and validate the increase in asset prices, with no endogenous adjustment forces in the financial markets to stop the process (Aglietta and Brand, 2013). What eventually leads from manias to panics is anecdotal: at some point a number of financial investors and banks change their perception of risk, and the ensuing herd behaviour makes the financial markets abruptly turn from bullish to bearish. The downward phase is normally more abrupt and spectacular than the upward phase, although equally irrational. Financial crises are thus rooted in the euphoria phase.

The perception that financial markets are inherently unstable and potentially irrational challenges the orthodox view that they are essentially not only stable and efficient themselves, but also help to stabilize the economy as a whole. In that view, access to credit is supposed to smooth expenditure, as non-financial agents can borrow during bad times and repay their debts during good times. Financial markets are therefore seen as playing a countercyclical role. In addition, it is argued that financial markets help "discipline" policymakers, as they will react against "market unfriendly" policies that might undermine economic stability. Therefore, so the argument goes, policymakers should not regulate intrinsically stable financial markets beyond some basic microeconomic precautionary rules (such as capital ratios); instead, the markets should regulate policymakers. However, actual experiences, some of which have been reviewed in this chapter, show that, on the contrary, financial markets have a strong procyclical bias, and in many countries they have encouraged, rather than restrained, unsustainable macroeconomic policies.

(b) International capital flows

The divergence between these two views is particularly sharp with respect to cross-border capital

flows (Brunnermeier et al., 2012). For many years, the prevalent view considered almost any kind of foreign capital flows to developing countries as beneficial. They were seen as constituting "foreign savings" that would complement national savings of the recipient countries and lead to higher rates of investment there.

This view has been challenged on both a theoretical and empirical level. Theoretically, a preexisting stock of savings is not a precondition for investment, according to the alternative (Keynesian/ Schumpeterian) view. Investment can be financed through bank credit, and savings are an endogenous variable resulting from the income generated in the economic process (see TDR 2008 chap. III and IV; Dullien, 2009). In other words, as the causality runs from investment to (ex-post) savings, larger flows of foreign capital do not automatically increase investment. This conceptual view is supported by the evidence of huge capital inflows coexisting with stagnating investment rates (e.g. Africa and Latin America in the 1990s) and substantial increases in fixed investment, despite strong outflows or negative "foreign savings" (e.g. Argentina and China in the 2000s). Moreover, it cannot be assumed that all foreign capital finances investment in productive sectors. It is not because they are called "foreign savings", and that "savings equals investment", that capital inflows will automatically increase domestic investment. Even FDI does not necessarily consist of real investment, since some of those flows include mergers and acquisitions - including privatizations - and credits from headquarters to affiliates of transnational corporations (TNCs).

As noted earlier, experience with international capital flows shows that they repeatedly affected economic stability: they led to excessive expansion of domestic credit and generated bubbles in equity, real estate and other financial markets; they also caused an appreciation of the domestic currency, reduced the competitiveness of domestic producers in international markets, boosted demand for imported goods and services, and generated or increased the current account deficit.¹³ Of course, there are also examples of capital inflows financing higher investment rates, either directly, as with greenfield investments, or indirectly through loans effectively used for fixed capital formation and/or for financing imports of capital goods. Therefore, what matters for developing countries is not simply access to external financing,

but also a degree of control over how that financing is used. Countries need to be selective in terms of the quantity, composition and their use of foreign capital.

(c) Money, credit and banks

The fact that savings are not a prerequisite for higher fixed capital formation leads to the conclusion that the provision of credit (more specifically bank credit), rather than money, should be the focus of the analysis (Stiglitz, 2013). Credit expansion creates deposits, and consequently money, and not the other way around (Schumpeter, 1954: 1079–1080). This contrasts with the monetarist tradition that assumes that "high-powered money" issued by central banks determines the amount of credit and other monetary aggregates – an assumption that has been invalidated by recent experience, which shows how massive money creation by a central bank can have little, if any, impact in terms of increasing credit to the private sector. More importantly, by focusing excessively on the quantity of money, economists and monetary authorities have given less importance to how it should be utilized. Money is not neutral, in particular because it is not distributed evenly among all economic actors when it is created. Oversimplified monetarist views of monetary creation miss this essential point, and yet it is central to the writings of Cantillon, Wicksell and Schumpeter, for instance.

The channel through which supplementary purchasing power is introduced in an economy, the kinds of agents that receive it and how it is utilized have an impact on the amount and composition of aggregate demand (i.e. credit has different effects depending on whether it is used for consumption, investment, imports or exports) and on the sectoral structure of an economy (i.e. the relative importance of agriculture, manufactures and services). They also have an impact on economic power; for example, credit may concentrate property by financing the rich or reduce its concentration by supporting micro-, small- and medium-sized firms. Banks are key mechanisms through which this purchasing power is introduced in an economy. In order to perform efficiently, they must discriminate between good and bad projects, and reliable and unreliable borrowers, instead of behaving like passive intermediaries following mechanical protocols, or losing interest in their borrowers after having securitized their loans and transferred the risk to another entity.

Shifting attention from money to credit also implies making policymakers responsible not only for monetary stability but also for financial stability. The latest crisis has revealed that monetary stability, in the sense of price stability, can coexist with severe financial instability. Even worse, in some cases monetary stability has increased financial instability. In the euro zone, for example, the elimination of exchange rate risk and the prevalence of low inflation favoured large capital flows from banks in the core countries of the common currency area to countries in the periphery, and there was a virtual disappearance of interest rate differentials between these two sets of countries. However, those capital flows were not used for spurring competitiveness and production capacities: instead, they fed asset bubbles and increased current account deficits. This amplified intraregional disparities, rather than reducing them, and led to the difficult situation in which Europe finds itself today. This shows that, importantly, it was not the amount of money creation or the overall availability of financial resources, but who received those resources and how they were used, that mattered. Monetary stability based on a fixed nominal exchange rate led to similar outcomes in many developing and transition economies in previous decades, particularly in Latin America and South-East Asia.14

2. Countering financial instability

Given that financial systems are prone to significant instability with system-wide implications, and that self-regulation and self-correcting mechanisms cannot be relied upon, monetary authorities and supervisory institutions need to assume greater responsibility for financial stability in developed, transition and developing countries alike. This involves macroprudential policies relating to international financial integration, which aim at addressing the potentially destabilizing effects of cross-border capital flows. At the national level, it also requires policy measures and institutional reforms that should avoid excessive leveraging without discouraging credit for productive investment. Indeed, proactive policies by central banks may be needed to spur investment and growth, and create conditions conducive to financial stability. Financial stability will not be sustained in the long run in an economy that does not grow and create jobs, because sooner or later banks will accumulate non-performing loans in their balance sheets. There is also a need to reconsider how the financial sector is organized, such as separating commercial banking and investment banking, and extending transparency requirements, regulations and taxation to cover "shadow banking" and offshore centres as well. Finally, reform of the macroeconomic framework is essential, as the existing framework has contributed significantly to the generation of unsustainable financial processes.

(a) Exchange rates and capital account management

The potentially positive role of foreign capital in economic development is undermined by the risk of it becoming a major source of instability. This highlights the problems arising from an international financial system in which a small number of national currencies of developed countries (particularly the United States dollar) are used as international money. In each international credit cycle, monetary policy in these countries has been determined by domestic considerations and goals, such as supporting domestic economic activity and easing financial distress in some cases, or controlling domestic inflation in others. Little or no consideration is given to the effects of these policies on the global economy through their impact on exchange rates and current account balances.

Moreover, often, "sudden-stop" episodes of capital inflows have had a negative impact on emerging market economies by triggering balance-of-payments crises, usually combined with banking and fiscal crises. And when such inflows have been too large to be productively absorbed in those countries, they have generated price distortions and macroeconomic imbalances, eventually leading to capital reversals and financial collapse. Thus, often, it is not only volatile capital movements to and from emerging markets, but also, and primarily, the magnitude of those movements vis-à-vis the recipient countries that have adversely affected their macro economy. This can lead to the "big fish small pond problem", as stressed in Haldane (2011): as big fish (i.e. large capital flows originating in developed countries) enter the small pond (the relatively modest financial markets of capital-importing emerging market economies) they can cause ripples right across the international monetary system, and never more so than in today's financially interconnected world.

The existing international monetary and financial system is not equipped with mechanisms that promote exchange rate stability, prevent large and persistent current account imbalances and ensure smooth and orderly adjustments to, and corrections of, disturbances. It has been unable to restrain destabilizing capital movements and organize an exchange rate system that would reasonably reflect economic fundamentals. These shortcomings have become ever more evident and damaging with the deepening of financial globalization and the increasing volume of cross-border capital flows.

In the present (non-)system, the burden of adjustments to global imbalances falls entirely on deficit countries that depend on external financial resources, and not on any of the major actors: big surplus economies do not need financing, and the country with the largest deficit issues the major international reserve currency. This introduces a recessionary bias into the system, because the less powerful deficit countries are forced to cut demand, while there is no obligation for surplus countries to increase demand.

The existing international financial arrangements have also failed to prevent the disorderly increase in short-term capital movements, which is a major factor contributing to economic instability. Countries wishing to avoid the procyclical and destabilizing impact of capital flows have to resort to unilateral measures, such as foreign-exchange market intervention or capital controls. Such measures have been relatively successful in curbing undesired capital movements or their impact on the domestic economy. However, an effective control of potentially destabilizing financial flows requires multilateral arrangements, which are also in the interest of countries from which such flows originate. The global financial crisis has shown that unregulated capital flows generate risk not only in recipient countries, but also in source countries, since solvency of the latters' banks may be threatened if they are involved in foreign countries' asset bubbles. Thus, financial supervision needs to be applied at both ends of capital movements.

Greater stability of external financing for developing countries is difficult – if not impossible – to achieve without broader reform of the international financial and monetary system. The experience of the financial and economic crisis has made it clear that weak international arrangements and institutions, and the absence of international rules and regulations in this area, carry high risks not only for developing countries but also for the most advanced developed countries. Yet the will for international cooperation to undertake the necessary reforms is still lacking. Under existing monetary and financial conditions, and in the absence of international reforms, developing and emerging market economies need to design national, and, where possible, regional strategies aimed at reducing their vulnerability to international financial shocks.

As long as there are no multilaterally agreed rules governing the exchange-rate system, the task of reducing the risks of currency misalignment and exchange rate volatility remains with the governments and monetary authorities of each country. These risks are likely to increase in the current global context of persistent growth disparities between the major reserve currency countries and emerging market economies, and could well be accentuated as the latter and other developing countries shift to a strategy that places greater emphasis than in the past on increased domestic demand as a driver of growth and development.

Following their experience of the high costs of adopting "corner solutions" for exchange rates (i.e. fully flexible or irrevocably pegged), most emerging market economies have turned towards a more pragmatic managed floating regime. This allows flexible intervention by central banks to avoid both excessive volatility and unsustainable real exchange rates resulting from speculative financial operations rather than from fundamentals.¹⁵

In addition, regional financial cooperation can support efforts to stabilize macroeconomic conditions. Since the 1960s, some regions have used certain mechanisms that make it possible to reduce dependence on foreign currency for regional trade, such as clearing payment systems and the use of domestic currencies for bilateral trade. Other institutions provide balance-of-payments financing without undesirable conditionalities attached. Some regional arrangements also facilitate the managing of exchange rates, for instance through credit (or swap) agreements among central banks or the pooling of reserves (e.g. the Latin American Reserves Fund (FLAR), the Arab Monetary Fund (AMF) and the Chiang Mai Initiative). As these regional institutions offer support without harsh conditionalities, they provide an effective tool for countercyclical policies.

Destabilizing effects and a procyclical bias caused by capital flows can also be prevented, or at least mitigated, by resorting to capital controls, which are permitted under the IMF Articles of Agreement. There is extensive experience with such controls in both developed and developing countries. They were the rule in the United States in the 1960s and in Europe until the 1980s. In the 1990s and 2000s, some emerging market economies (e.g. Chile and Colombia) sought to discourage short-term capital inflows through taxation or the imposition of nonremunerated deposits, while others imposed barriers on short-term capital outflows (e.g. Argentina and Malaysia). More recently, Brazil also introduced taxes on capital inflows. The use of capital controls is being increasingly accepted in international forums, although still with some reservations. For instance, the IMF has accepted that capital controls are legitimate instruments, but it suggests resorting to them only in situations when a balance-of-payments crisis is already evident and after all other measures (e.g. monetary and fiscal adjustment) have failed.¹⁶ The problem with such an approach is that it does not recognize the macroprudential role that controls can play in preventing such a crisis in the first place.

(b) A broader mandate for central banks

To achieve the goal of financial stability, central banks and other economic authorities need to adopt a coordinated policy approach. Not only should the mandates of the former be broadened, but also the number and kinds of instruments they can use should be increased, including for macroprudential regulation and for keeping track of what is being financed in the economy. All this requires a reassessment of the idea that central banks must maintain their independence (Blanchard, 2013). The rationale for their independence was to keep them free from political pressures as they implemented their (supposedly) technical responsibility of controlling inflation. Even in cases where their mandate was limited to one single goal (monetary stability) with one single instrument (policy interest rates), their "technical" nature was debatable. With the progressive broadening of their mandate and their use of more instruments (already under way), they have assumed wider responsibilities

in a comprehensive approach to macroeconomic and financial policy.

The need for reconsidering the role of central banks, and with it the concept of their "independence" for undertaking the sole task of ensuring stability of prices of goods and services, has never been more evident than during the latest financial crisis. The crisis obliged central banks to take more and more "unconventional" measures, which highlighted the gap between the theoretical basis for the concept of central bank independence and the need, derived from experience, to involve the monetary authorities in efforts to stabilize financial markets in the interests of the economy as a whole. The conventional view holds that the private financial sector is efficient, even to the extent of being able to ease the impact of shocks on the real economy. It excludes the possibility of mismanagement by financial institutions and markets on the assumption that they always have correct information about current and future economic developments, and that it is government mismanagement that leads to financial crises. The present crisis has turned that hypothesis upside down, as it was caused by the private sector. Central bank independence from government did not prevent the financial crisis, and the combined action of central banks and governments was indispensable for responding to the crisis, including bailing out institutions that were considered "too big to fail".

A further step forward would be to accept that central banks must play an active role in the implementation of a growth and development strategy. Monetary stability, in the sense of price stability, is insufficient to secure stable financial conditions for the real economy. Moreover, financial stability depends on the performance of the real sector of the economy, because, in severe crisis situations, banks have tended to accumulate non-performing loans and eventually fail. Thus, supporting economic growth should not be considered merely a supplementary responsibility of central banks; it constitutes the very basis of financial and monetary stability.

(c) Reconsidering regulation of the financial system

Financial systems in developing countries require appropriate regulations aimed at ensuring that they serve the real economy and the development process. Moreover, in seeking to achieve financial stability, the regulations should not hamper growth by unduly restricting credit. In particular, they should encourage long-term credit to finance productive investment. Indeed, there is a two-way relationship between financial stability and growth, in the sense that without financial stability it would be difficult to achieve growth; on the other hand, in a situation of economic stagnation, loans could very easily become non-performing, thus posing a risk to financial stability.

Several developed countries, having been severely affected by financial crises, are introducing or considering far-reaching changes in bank regulations. Some of these changes have been formulated by the Basel Committee on Banking Supervision (BCBS) through the Basel III rules, and others by the Financial Stability Board (FSB) as well as other bodies. Moreover, these new rules are being introduced or considered not only in developed countries, but also, to a large extent, they are shaping regulatory systems in developing and emerging market economies. For instance, Basel III capital standards have already been implemented in 11 (out of 28) Basel Committee member jurisdictions, seven of which are emerging market economies (China, Hong Kong (China), India, Mexico, Saudi Arabia, Singapore and South Africa), with Argentina, Brazil and the Russian Federation planning to implement them by the end of 2013 (BIS, 2013).

Capital requirements are the main aspect of the strengthened rules. Proposals negotiated at Basel III aim to revise and extend the existing Basel I and II capital requirements and establish a simple leverage ratio between assets and capital.¹⁷ Microprudential regulations of this kind are to be supplemented with an additional macroprudential overlay, such as the use of capital buffers, so that in the event of the prices of their assets falling, banks will not find themselves in non-compliance with capital requirements and having to demand extra capital when credit growth develops too rapidly. Also, for the first time, Basel rules will include liquidity requirements, but there is still a debate about their precise definition as banks are not in agreement over these new requirements.

The main idea behind these refurbished and strengthened rules is to reduce risks of bank failure and the need for public bailouts by containing excessive leveraging. They also seek to deter banks from funding medium- and long-term lending by resorting to the wholesale market for very short-term borrowing, rather than using a stable deposit base.

Critics argue that Basel III regulations are still procyclical, and remain geared to evaluating risk as estimated by the markets, which have repeatedly been seen to fail in this most important task. They are also considered to be overly complex, even for developed countries, and probably more so for developing countries. In addition, very little progress has been made concerning the "too-big-to-fail" institutions or in coping with the "shadow banking" part of the financial system. With regard to the latter, there is a complex debate about how to exercise greater supervision of derivative markets' over-the-counter (OTC) operations, including requiring public registration and clearing mechanisms.

Whether the regulatory capital framework of the Basel accords should be applied in developing countries is an open question. In fact, Basel accords, starting from Basel I in the late 1980s, were supposed to establish a level playing field for large internationally active institutions. For instance, in the United States, only a few institutions were supposedly required to follow those rules, while the rest of the system would continue to be regulated in the traditional way. From the point of view of the international financial system, there is no reason why banks from developing countries should follow the same rules as large international banks. Progressively, however, Basel rules have become a general standard: every country is supposed to apply them, even if none of their banks is a major active international player. More specifically, Financial Sector Assessment Programs (FSAPs) conducted jointly by the IMF and the World Bank are supposed to check whether the countries are following Basel rules. In addition, the supposition is that the developing countries belonging to the G20 – and therefore automatically to the Financial Stability Board¹⁸ – should set an example to other developing countries by promptly applying whatever is decided in those various committees, even if they do not exercise any formal authority on countries.

In fact, in many developing countries that have experienced serious banking crises since the 1980s, capital and liquidity requirements have been much higher than those prescribed by Basel rules (in what used to be called Basel+ rules). Experience in the application of those rules indicates that there was a generalized restriction on lending, in particular to small and medium-sized enterprises.

The recent financial crisis has also led to new thinking about the structure of banking. One main feature of the proposed reforms is the separation of commercial from investment banking activities. The idea is to insulate retail banking that is vital for the normal functioning of the economy (as it receives deposits and savings, delivers loans and manages payment mechanisms) from riskier activities related to securities trading (Gambacorta and Van Rixtel, 2013). In particular, the non-deposit-taking side will not have access to lender-of-last-resort facilities from the central bank. Hence, separating banking activities may also help to improve transparency in the financial sector, which would facilitate market discipline and supervision, and - ultimately - support efforts to recover from the present crisis, while also reducing risks of further crises.

Ongoing or proposed reforms are less radical than their notorious predecessor, the Glass-Steagall Act, adopted in 1933 in response to an even larger banking crisis. In the United States, the Volcker Rule prohibits proprietary trading by banks operating in the country, and it also restricts private equity activity. However, although the rule became law in 2012, banks were given two years to comply. In the United Kingdom, the Vickers Commission recommended placing a ring-fence around retail banking activities, separating them from the investment banking activities of financial institutions. Legislation is planned for 2015, and banks would have until 2019 to comply. In Europe, the Liikanen plan was announced in October 2012, which proposed that the investment banking activities of universal banks be placed in a separate entity from other banking activities, but there are no plans at present to legislate on these proposals.

The need to separate different banking activities is also closely related to concerns about bank size, in particular with the rise of very large universal banks that cover an extremely broad range of financial activities in many countries and jurisdictions. Hence, regulation seeking legal, financial and operational separation of different banking activities would help to avoid the eventuality of certain financial institutions growing so large and assuming such a diversity of activities that their performance becomes systemically important (Viñals et al., 2013). Developing countries, where financial systems are still in the process of taking shape and where there is considerable scope for an expansion of commercial banking activities may be well advised to draw lessons from the experience of the developed countries in this regard.

Other measures envisaged in developed countries, especially those aimed at improving banking governance and resolution in case of bank failure may also be of importance in developing countries. Such measures could possibly be easier to implement in countries whose banking systems are still relatively small but may expand as their economies grow. An important objective in this context is to reduce incentives for highly risky behaviour of market participants who can obtain large financial profits without having to bear the consequences of incurring losses. Resolution mechanisms must allow authorities to wind down bad banks, recapitalize institutions through public ownership, and force the bail-in of creditors that have become much more important than depositors in the funding of systemically important institutions. All this would help return banks to productive activities as quickly as possible, without having to use enormous amounts of scarce public revenue in bailout operations (Borio, 2012).¹⁹

In summary, these different categories of regulatory approaches reflect a welcome new political willingness to grapple with long-standing issues that stand in the way of sustainable economic recovery. However, their "one size fits all" approach is not necessarily the most appropriate for developing countries. A major limitation is that they tend to narrowly focus more on the stability of the financial system than on its efficiency in terms of serving the real economy. Yet this latter aspect is particularly important for developing countries, much more so than for developed countries. Much still remains to be done to help align the incentives of the financial sector more closely with the needs of productive investment, job creation and sustainable economic growth.

3. Orienting the financial sector towards serving the real economy

In order to support development strategies that give a greater role to domestic demand for driving growth, it is essential for developing countries to strengthen their domestic financial systems. They need to focus on the financial sector's key role in economic growth, which is the financing of fixed capital formation that boosts production and generates employment.

In most countries, investments in real productive capacity are financed primarily from retained profits (internal financing) or by resorting to bank credit (table 3.3). The observation that internal financing is the main source for the financing of investment highlights the importance of strengthening a profitinvestment nexus. This is important not only because of the decisive role of rising demand for making additional investment in productive capacity profitable, as discussed in chapter II, but also because of the need to finance private investment. This runs counter to the conventional idea that higher household savings, and thus lower consumption, are preconditions for greater investments. Indeed, a policy that aims at increasing those savings as a means to raising the rate of investment, rather than viewing savings as resulting from higher investment, weakens demand and economic activity, with a negative impact on profits, which are a major source of investment finance.

Moreover, financing by banks can enable firms to accelerate their capital formation over and above what is possible from retained profits. For potential investors to borrow for this purpose, financing by banks must be available in sufficient amounts and at a cost that is commensurate with the expected profitability of the investment project. Again, aiming at increasing the availability of financing for investment by encouraging an increase in savings deposits in the banking system would be counterproductive, because higher interest rates also mean higher costs of bank financing for potential investors, in addition to the demand-reducing effect of higher household savings.

Therefore, a more promising approach to increase both the propensity to invest and the availability of financial resources for investment is to support demand, encourage the reinvestment of profits and facilitate access to long-term, low-cost bank loans. New loans do not require an increase in savings deposits; they can be made available through the central bank's provision of adequate liquidity to the banking system and by keeping the policy interest rate as low as possible.

In developing countries, since the financial systems are mainly bank-based, banking reform should be a priority. The following section describes

Table 3.3

	Number of	Number of	Internal finance	Bank finance	Trade credit	Equity or stock sales finance	Other		
	countries	firms	(Per cent)						
All countries	136	70 781	68.4	17.2	4.8	3.8	5.7		
Developed Europe	5	3 354	57.7	20.5	3.3	4.9	13.6		
Emerging Europe	10	3 196	58.4	25.2	5.0	6.8	4.6		
Africa	44	17 971	81.1	9.4	3.4	1.5	4.5		
Latin America and the Caribbean	31	14 657	59.0	21.0	10.1	4.4	5.6		
Developing Asia	24	20 477	67.1	20.3	2.8	2.8	7.0		
Developing Oceania	5	619	53.3	25.8	3.2	9.0	8.7		
Transition economies	17	10 507	69.4	15.6	4.3	7.4	3.3		

SOURCES OF INVESTMENT FINANCE, SELECTED COUNTRY GROUPS, 2005–2012

Source: UNCTAD secretariat calculations, based on World Bank, Enterprise Survey database.

Note: Developed Europe comprises Germany, Greece, Ireland, Portugal and Spain. Emerging Europe comprises Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia.

a broad range of bank-related policy instruments and institutions which would enable a more effective distribution of credit that supports real growth.

Measures for orienting bank financing to serve the real economy

Various measures could be considered for orienting bank financing to support the real economy. To begin with, banks could be encouraged, or obliged, to undertake a more reasonable amount of maturity transformation operations (i.e. deliver long-term credits matched by short-term deposits). In the past, commercial banks in developing countries often preferred to grant mainly short-term personal loans or buy government securities because they considered the risks involved in maturity transformation to be too high. However, these risks may have been exaggerated, since, even during severe financial crises, withdrawals of deposits from banks never exceeded 25 per cent of their deposit base. A revised regulatory framework could include elements that encourage a different allocation of bank assets and credit portfolios, accompanied by requirements for provisioning and for adequate collateral to take into account the additional risks related to the longer maturity of a proportion of their assets. Moreover, public guarantees for commercial bank credit for the financing of private investment projects or their

co-financing with national development banks may encourage banks to provide more lending for such purposes. By reducing the credit default risk, such measures would also lower the risk premiums on such long-term investment loans. The resulting lower interest cost for investors would further reduce the probability of defaults, and thus reduce the likelihood of governments having to cover such losses under the guarantee scheme.

Central banks could support maturity transformation in their role as lenders of last resort (LLR) and by providing deposit insurance. The latter measure would reduce the risk of sudden withdrawals of deposits that could result in liquidity constraints for banks, while the former would address liquidity shortages, should they occur. These arrangements are of course not new: the LLR principle was proposed in the early nineteenth century and also advocated by Bagehot in 1873, while deposit insurance has been progressively implemented worldwide since the 1930s. But such arrangements have seldom succeeded in encouraging banks to provide a significant amount of long-term financing to the real economy. A more hands-on approach by the monetary authorities is therefore required.

Historically, central banks have used a wide variety of instruments to channel long-term finance in support of development objectives (Epstein, 2005), including direct financing of non-financial firms. For instance, before the First World War and in the inter-war period, the Bank of England supported different industrial sectors, including textiles, metallurgy, shipbuilding, aluminium, rayon and wood-pulp industries. Indeed, the Bank became heavily involved in some industries, taking equity stakes and participating directly in their management. In 1929, the Securities Management Trust was instituted as a holding company for managing the stakes acquired by the bank in various firms. Similarly, the Bank of Italy got involved in the financing and indirect management of different industrial firms (O'Connell, 2012).

Central bank and government intervention in credit allocation became widespread in the immediate post-war period in developed and developing countries alike. For example, France nationalized the main deposit banks and established the National Credit Council, which was in charge of allocating credit in accordance with national interests and priorities (Coupaye, 1978). Credit policy was partly implemented by a number of public, semi-public and specialized cooperative institutions, which financed agricultural activities and the development of rural infrastructure as well as regional and municipal investments, social housing and industrial and commercial investments in small and medium-sized enterprises (SMEs) at preferential rates. In addition, France's central bank influenced the lending decisions of the commercial banks through selective rediscounting at preferential rates, the conditional release of mandatory reserves, and the exemption of certain activities (e.g. export credits, medium-term loans for investment) from quantitative credit ceilings (encadrement du crédit) that were in place until 1986, as well as through a multitude of credit lines for specific uses at preferential rates. Other European countries, including Belgium, Germany, Italy, the Netherlands and the United Kingdom, also used similar instruments, not only to support some sectors and activities, but also to discourage credit-financed personal consumption, imports and inventory accumulation (Hodgman, 1973; O'Connell, 2012).

In several Asian and Latin American countries, the predominance of bank credit in firms' debt financing provided the basis for proactive credit policies aimed at influencing the allocation of bank credit and moderating the costs of interest. These policies played a decisive role in fostering the process of industrialization, especially between the 1950s and 1980s. Specialized institutions, including national development banks and other State-owned banks, channelled long-term credit to selected industries, agriculture and housing. Credit distribution by commercial banks, some of which were State-owned,²⁰ was also subject to government policies, or central bank regulations. For instance, in Indonesia, Malaysia, the Republic of Korea, Thailand and Taiwan Province of China, loans to SMEs had to constitute a given share of banks' assets. In addition, central banks introduced differential reserve requirements, rediscounting and access to central bank loans at regulated interest rates in order to orient credit allocation. These schemes played a central role in the rapid industrialization of many countries. However, they did not always deliver the expected outcomes, and in several countries they were misused, as State-owned banks sometimes provided credit to other public entities for purposes that were not related to productive investment. As a result, non-performing loans burdened their balance sheets and undermined their lending capacities. On the other hand, it was the privatization of State-owned banks and deregulation of financial systems that paved the way for major financial crises in Latin America and East and South-East Asia.

In light of these different experiences, developing countries need to carefully weigh the pros and cons of the different systems when shaping or reforming their domestic financial sectors. They should also ensure that public and private financial activities are undertaken by institutions equipped with appropriate governance structures and that they operate in the interests of the economy and society as a whole.

At present, flaws in credit allocation by deregulated private banks and difficulties in reestablishing the supply of credit for the real sector in developed economies (despite expansionary monetary policies) have led to a renewed interest in credit policies. For instance, in July 2012 the Bank of England established a temporary Funding for Lending Scheme, with the goal of incentivizing banks and building societies to boost their lending to the country's real economy. Under this scheme, the Bank of England provides low-cost funding to banks for an extended period of time, and both the price and quantity of funding provided are linked to their lending performance (increased net lending to SMEs, for instance, gives them access to a greater amount of cheap funding) (Bank of England, 2013). The Bank of Japan had launched a similar initiative in 2010 (Bank of Japan, 2010). In the same vein, several initiatives aim to increase lending by public institutions to SMEs. For instance, the German development bank (KfW Entwicklungsbank) is to lend \in 1 billion to the Spanish development bank (Instituto de Crédito Oficial, ICO), so that it can channel loans to SMEs in Spain at German lending rates. In addition, in June 2013 the European Council launched an Investment Plan with the support of the European Investment Bank, whose capital was increased by \in 10 billion. The plan envisages the provision of additional credit to provide SMEs with better access to finance and foster job creation, especially for the young (EIB, 2013).

However, these initiatives are frequently introduced as extraordinary measures for dealing with exceptional circumstances. There are strong arguments in favour of central bank and government intervention to influence the allocation of credit in normal times, especially in developing countries. Such credit should aim at strengthening the domestic forces of growth and reducing financial instability, since long-term loans for investment and innovation and loans to micro, small and medium-sized enterprises are extremely scarce even in good times (TDR 2008, chap. IV). Some recent reforms have sought to encourage this kind of intervention by the central banks, thereby reinforcing or restoring their historical developmental role.²¹ In addition to the objectives of monetary and financial stability, central banks should complement other government efforts and policies aimed at economic development in general, with an emphasis on improving productivity and generating employment.

Such policies would mainly involve commercial banks rather than investment banks, as part of a "social contract" between the former and the central bank. According to such a contract, the central bank would provide deposit insurance and liquidity support if needed (as an LLR), while commercial banks would assume the task of maturity transformation following guidelines by central banks, in addition to providing lines of credit under certain conditions. This is an additional reason for differentiating between deposit-taking institutions and investment banks which intermediate between investors willing to run higher risks and non-financial companies demanding long-term finance, and which would not have access to LLR facilities and liability insurance.

Managing a banking system with development objectives is not a purely technical matter; it also

involves political choices, and therefore calls into question the rationale for keeping a central bank independent of elected authorities. Strictly speaking, policy intervention aimed at securing monetary and financial stability is also political in nature, as illustrated by the way the crisis was managed. In the process, central banks had to distribute gains and losses, redistribute income and wealth, decide for or against bailouts and dictate rescue conditions, not only to private financial and non-financial agents, but also, as with the countries in the euro-zone periphery, to sovereign States. If it is accepted that the mandate of central banks should be broadened to include development objectives, the purely supposedly "technical" character of their activities becomes even more illusory. If the monetary authorities are to implement monetary, financial and credit policies as part of a development strategy, they need to coordinate their actions with the other economic authorities.

(b) Towards more diversified financial systems

Besides a growing awareness of the need to review the role of central banks and the structure of commercial banking, as discussed above, there is also a renewed interest in the scope and role of development banks. These typically State-owned banks can take deposits (although not as much as normal commercial banks), raise funds in capital markets and provide loans for projects that are intended to contribute to overall economic development. Historically, governments established development banks to provide financial services that private financial institutions were unable or unwilling to provide to the extent desired. Even today, despite decades of criticism of the public sector and a widespread belief that privatization of State-owned institutions would accelerate growth and raise productivity, a large number of development banks still exist. About 40 per cent of these were established between 1990 and 2011. More recently, new ones have been created in a number of developing and emerging market economies, including in Angola, Bulgaria, India, Oman and Thailand. In the United Kingdom, a Business Bank is in the process of being established, as well as a new "Green Bank" to finance environmental projects; in France a development bank was recently created and there are also plans for a new development bank in the United States. This indicates that governments still consider national development banks to be useful institutions

for promoting economic growth and structural change (de Luna-Martínez and Vicente, 2012).

State-owned financial institutions are estimated to account for, on average, 25 per cent of the total assets of the world banking system and for 30 per cent of the total financial system of the EU. In Latin America, 56 public development banks distribute \$700 billion a year – some 10 per cent of total credit - and hold assets amounting to 25 per cent of the region's GDP (IADB, 2013). One of the benefits of having a sizeable alternative source of credit creation and intermediation became clear during the latest crisis, as development banks played an important countercyclical role, increasing their lending portfolios just as many private banks were scaling back theirs. According to a recent World Bank survey of 90 development banks across developed and developing countries, between late 2007 and late 2009 these banks increased their loan portfolios by 36 per cent compared with an increase of just 10 per cent by private banks operating in the same countries (de Luna-Martínez and Vicente, 2012).

Because they add diversity to the financial system and have a broader range of objectives than the private banking system, development banks may also be seen once again – alongside more active central banks – as normal contributors to a healthy and robust financial system in good times as well as during crises.

For potential entrepreneurs seeking to pursue new and innovative activities, financing options are particularly scarce, because they constitute a credit risk that is especially difficult for ordinary banks to evaluate. This is why smaller, more specialized sources of finance also have an important role to play in the overall dynamics of the development process. Typical examples include publicly sponsored incubators that are mandated to finance activities which have the potential to enhance diversification and structural change but would not normally have access to private banking support. Research and development (R&D) activities or creative industries, for example, are often publicly supported in most developed countries.

Other non-bank-based solutions to the problems of accessing credit have also emerged in recent years. For example, new forms of finance have developed through the social media, such as crowd-sourcing loans and payment mechanisms that operate through peer-topeer networks. Networks such as the New York-based Kickstarter, which has channelled over \$600 million to thousands of projects over the last four years, or the United Kingdom's Lending Club, suggest that innovative new mechanisms are emerging where traditional financial markets are failing to deliver. Certainly, there are many historical examples of institutional solutions that were innovative once but are now considered mainstream, such as workplace-based credit unions or corporate structures of cooperatives. However, such models would not be appropriate for all enterprises, and must been seen as part of a diverse range of choices existing within a broader financial structure that serves a variety of needs.

Within this broad argument for a more diversified financial system made up of many different banking and financial institutions of different sizes, objectives and mandates, it is clear that today's paradigm of universal banking involving very big institutions needs to be reconsidered. This is not only because of the "too-big-to-fail" problem, but also because there is a need to facilitate access to credit for specific needs and to provide stability to the system by not allowing closely correlated portfolios to spread contagion. Even if much of the directed credit is still channelled through commercial banks (for instance, under a funding for lending scheme), a proactive policy for directing credit to productive uses may need to resort to a network of specialized institutions, including cooperative and development banks. Building (or restoring) such a financial structure clearly exceeds the immediate concern of credit scarcity in troubled times. In addition, the development of a financial structure that would facilitate the allocation of credit to the real sector and to productive investment would also help avoid some of the negative effects of foreign capital flows feeding bubbles and consumption booms. On the contrary, the economy would be able to profit from long-term capital inflows by channelling them to investment projects that require imports of capital goods.

E. Summary and conclusions

The adjustment of productive capacities to changes in the composition of aggregate demand is not just a matter of reallocating existing resources; in most developing and transition economies, it also requires accelerating the pace of capital accumulation. This necessitates the provision of reliable and lowcost finance to producers for productive investment through appropriate monetary and credit policies, as well as access to external sources of finance.

While many developing countries have had limited access to international capital markets, others have been recurrently affected by massive capital inflows followed by their sudden stops and reversals. Frequently, such inflows have not served to support long-term growth and productive investment. Moreover, their size and volatility have often tended to create macroeconomic and financial instability. Therefore, the extent to which financial resources contribute to growth and structural change depends on their composition, their allocation among different groups of users, and how they are used by the recipients.

The latest financial crisis, like previous ones, has shown that unregulated financial markets have a strong potential to misallocate resources and generate economic instability. Since private capital flows are inherently unstable and often unproductive, active intervention by economic authorities is indispensable for preventing destabilizing speculation and for channelling credit to productive investment. A cautious and selective approach towards cross-border capital flows, including pragmatic exchange-rate management and capital-account management, would reduce the vulnerability of developing and transition economies to external financial shocks and help prevent lending booms and busts. Such an approach could also include measures aimed at using foreign capital for development-enhancing purposes, especially for financing imports of essential intermediate and capital goods that are not yet produced domestically and that cannot be financed by current export earnings. This could be particularly important in many least developed countries with a view to increasing their overall productivity and economic diversification.

Perhaps more importantly, developing and transition economies must increasingly rely on domestic sources of finance. As retained profits constitute the most important source of finance for investment in real productive capacity, followed by bank credit, strengthening the profit-investment nexus and influencing the behaviour of the banking system in the way it allocates credit are of particular importance. The market mechanism alone cannot be relied upon to achieve this; a variety of fiscal and regulatory measures can also be used, as demonstrated by many successful industrializing countries.

Moreover, monetary policy alone is not sufficient to stimulate investment, as evidenced by the policy response to the ongoing financial and economic problems in developed countries. Monetary expansion in these countries has failed to increase bank lending to private firms for reviving investment in real productive capacity. This points to the need for a credit policy as well. Central banks could support maturity transformation in the banking system and encourage, or oblige, banks to provide more lending for the financing of productive investment. There is nothing radically new in such a policy. There are numerous examples from both developed and developing countries of central bank involvement in orienting credit through, for example, direct financing of non-financial firms, selective refinancing of commercial loans at preferential rates, and exempting certain types of bank lending from quantitative credit ceilings.

Credit policy can also be partly implemented by other public, semi-public and cooperative institutions for financing agricultural and industrial investment, in particular by SMEs, at preferential rates. National and regional development banks may provide loans and financial services that private financial institutions are unable or unwilling to provide. More generally, a network of specialized domestic institutions may be more effective in channelling credit for development-enhancing purposes than big universal banks. There is also the danger that these banks may eventually expand to an extent that they become not only "too big to fail" but also "too big to manage" and "too big to regulate".

Thus, for supporting development and structural change what is needed is not only better regulation of the financial system aimed at achieving monetary and financial stability, but also a restructuring of the financial – particularly the banking – system to ensure that it serves the real economy better than in the past. Monetary and financial stability and sustained growth are complementary goals: without the first two, stable growth of investment, output and employment would be difficult to achieve, and without sustained growth, there is the risk that corporate failures and non-performing bank loans will undermine monetary and financial stability.

Notes

- 1 The term emerging economies (or emerging market economies) refers to a number of countries typically belonging to the middle-income group, that private financial institutions consider to be potential clients. They are also seen as offering higher profits than developed economies, but they also present higher risks. This group of countries includes several new entrants into the EU which previously were classified as transition economies.
- 2 This corresponds to the global stock of debt and equity outstanding, as estimated by Lund et al., 2013.
- ³ For instance, an increase of the exposure of United States institutional investors, such as pension funds, to emerging market debt from the current average of 4 per cent to 8 per cent of their portfolio (as recommended by some investment advisers) would funnel into emerging market bonds \$2 trillion, about twice the total amount of bonds sold by emerging market corporations and sovereign States in 2012 – a record year (Rodrigues and Foley, 2013).
- 4 UNCTAD secretariat calculations, based on IMF, *Balance of Payments Statistics* database and UNCTADstat.

- 5 These countries are: Afghanistan, Burkina Faso, Burundi, Djibouti, the Gambia, Grenada, the Lao People's Democratic Republic, Maldives, Sao Tome and Principe, Saint Lucia, Saint Vincent and the Grenadines, Tajikistan, Tonga and Yemen.
- 6 *Net* capital inflows correspond to gross inflows (e.g. an increase of inward FDI or a new credit received) minus the reduction of foreign liabilities (for instance, through disinvestment of inward FDI or the paying back of a foreign loan). It does not take into consideration capital outflows, such as outward FDI or the granting of credit to a non-resident.
- 7 UNCTAD secretariat calculations, based on IMF, Balance of Payments Statistics database and UNCTADstat.
- 8 Such a belief, popularized at the end of the 1980s in the United Kingdom by Nigel Lawson, the then Chancellor of the Exchequer (and often referred to as "Lawson's Law"), ended in the "sterling crisis" in 1992 and that currency's withdrawal from the ERM.
- 9 The intermediation of the banking system also allowed the ECB to circumvent its statutory lending limits in financing its member States. This was also

convenient for the banks that could obtain ECB loans at an interest rate of 1 per cent and acquire sovereign bonds with much higher returns.

- 10 Data from the ECB, Euro Area Accounts, *Statistical Data Warehouse*; available at: http://www.ecb.int/stats/html/index.en.html.
- 11 Data from the Bank for International Settlement, *Consolidated Banking Statistics* database.
- 12 In particular, if central banks sterilize money creation resulting from the accumulation of international reserves by increasing their liabilities, a financial cost arises if interest earnings from international reserves are smaller than the interest payments resulting from the new debt issuances.
- 13 In this respect, the recent ability of some LDCs to access private capital markets should be exercised with caution. Since 2007, several sub-Saharan African countries, such as Angola, the Democratic Republic of the Congo and Senegal, have issued sovereign bonds. However, while such foreign-currency denominated government debt allows them some room for manoeuvre, it carries significant maturity and currency risks, and makes those countries vulnerable to the destabilizing impact of private capital movements (Stiglitz and Rashid, 2013).
- 14 The case of the Argentinean "Convertibility Plan" between 1991 and 2001 was, in that sense, a harbinger for what is happening to the euro-zone periphery. In Argentina, policymakers sought monetary stability as the main macroeconomic target by adopting a currency board scheme with an irrevocably fixed exchange rate. At the same time, they deregulated both the domestic financial system and capital flows. As exchange-rate risk seemed to have disappeared, capital inflows of the carry-trade type spurred domestic credit and raised asset prices, leading to some years of rapid GDP growth, although it also led to increasing current account deficits. The subsequent loss of competitiveness eventually hurt economic growth and made the country dependent on ever-increasing capital inflows. Any slowdown of capital inflows led to economic recession, as in 1995 and 1998-2001. After several years of economic depression and increasing difficulties in maintaining the exchange-rate peg, a reversal of capital flows led to the collapse of the Convertibility Plan. The Government tried to restore the confidence of financial markets with a law that sought to eradicate fiscal deficits (through the so-called Zero-deficit Act) by requiring that current expenditures (except interest payments) be adjusted quarterly to expected fiscal revenues. This led to an across-the-board reduction of 13 per cent in public servants' salaries and pensions, among other expenditures, which actually aggravated the economic depression and, as a consequence, also affected public revenues. Meanwhile, the fiscal deficit remained static. As deposits were

increasingly withdrawn from banks and used for buying United States dollars, the illusion that "every peso is backed by a dollar" proved to be false, and the currency board had to be abandoned. There followed a huge devaluation and default of a large proportion of the external debt. These two unplanned and undesired outcomes set the foundations for economic recovery, as they restored competitiveness and led to debt restructuring and reduction.

- 15 This topic has been extensively discussed in previous *TDR*s (see, for instance, *TDR 2009*, chap. IV and *TDR 2011*, chap. VI).
- 16 In addition, the IMF introduces what amounts to a kind of conditionality by subjecting the countries that exercise their prerogative to introduce capital controls (established in Article VI, sec.3 of the Articles of Agreements) to surveillance disciplines, as stated in Article IV.
- 17 The proposal was put forward early in the reformulation process, but has gained strength after tests applied by the Basel Committee on Banking Supervision showed that there is huge variation between different banks' estimations of their risk-weighted assets, leading to significant "savings" in the amount of capital required to be set aside to support their activities.
- 18 Since 2009, all G20 members are represented on the Basel Committee on Banking Supervision (BCBS) and the Financial Stability Forum (FSF), and consequently on the Financial Stability Board (FSB).
- 19 In the United States, the Dodd-Frank Act seeks to impose a bail-in of creditors in the event of bank failure and prevent a government bailout of banks.
- 20 Until the 1980s, the bulk of deposits and loans was concentrated in State-owned commercial banks in Indonesia, the Republic of Korea and Taiwan Province of China, and these banks still play a major role in China and India.
- For example, in 2010, the central bank of Bangladesh 21 set commercial banks a target for loan disbursements to SMEs and women entrepreneurs, and the target is supported by a refinancing scheme. Achievement is a condition for the approval of new branches of the concerned bank. In addition, it required all private and foreign banks to direct 2.5 per cent of their total loans to agriculture (Bangladesh Bank, 2013). In India, the Reserve Bank of India established that 40 per cent of adjusted net bank credit must be targeted to the following priority sectors: agriculture, SMEs, micro credit, education, housing, off-grid energy solutions for households and export credit (for foreign banks only) (Reserve Bank of India, 2012). Several other central banks in Asian countries, including Cambodia, China, Malaysia, Nepal, Pakistan and Viet Nam, direct credit to priority sectors, areas or borrowers (typically SMEs), either by setting lending targets to commercial banks or through refinancing programmes (Bhattacharayya,

2012). In Latin America, most central banks abandoned their development mandates in the 1990s, and focused on inflation targets. However, a policy reorientation seems to be under way. For instance, in March 2012 Argentina reformed its Central Bank Charter, which increased its ability to implement credit policies. Under the new regulation, in July 2012 the central bank determined that all commercial banks must lend to productive investment at moderate interest rates – at least the equivalent of 5 per cent of their deposits – and at least half of those credits must be directed to SMEs. This scheme complements the rediscount line which was made available to banks that finance new investment projects under the Bicentennial Financing for Production programme launched in June 2010. Between July 2012 and May 2013, the credit granted through these two credit schemes accounted for more than 50 per cent of the total credit delivered to private firms during this period (BCRA, 2013). This should gradually reduce banks' strong bias in favour of short-term financing and facilitating access to credit by SMEs.

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