# FINANCIAL INSTABILITY AND COUNTERCYCLICAL POLICY Yilmaz Akyüz\*

#### Abstract

This paper examines policy challenges that developing countries face in dealing with greater vulnerability to sudden and large shifts in international capital flows made possible by rapid capital account liberalization. It argues that developing countries should have the space for adopting counter cyclical policies, including restrictions on capital flows, that may help them exante to avoid such fluctuations and their destabilizing effects. The paper also calls upon the IMF to switch from protection of interests of the investors from developed countries to protection of employment and income of people of developing countries themselves as a guide in confronting large scale capital fluctuations.

JEL Keywords: Capital movement, Foreign exchange, IMF, Economic integration

JEL Codes: F3, F4

#### 1. Introduction

The evolution of real economic activity; production, investment, employment and trade, has come to be increasingly dominated by financial cycles in industrial and developing countries alike. Rapid capital account liberalization has increased the role that conditions in global financial markets play in determining stability in developing countries. Driven primarily by factors beyond the control of these countries, international capital flows are susceptible to large and sudden shifts and affect countries regardless of their monetary and fiscal discipline or their track record in industrial development. These flows often behave procyclically, becoming more easily available at times of expansion of income and leading to excessive spending and overindebtedness, but drying up during downturns when they are most needed, thus aggravating economic contraction.

Macroeconomic stability and sustained growth in developing countries have thus come to depend largely on how international capital flows are managed. Various policy instruments are available at the national level for mitigating their procyclical effects and reducing the likelihood of financial crises. However, the scope and effectiveness of these instruments are limited and they involve significant costs or other policy dilemmas, particularly in countries with weak fundamentals. Moreover, there is often very little room for countercyclical policies to avoid deep and prolonged recessions at times of sudden stops and reversals in capital flows. Developing countries therefore often need to rely on multilateral institutions for support to mitigate the effect of financial crises. The way this intervention is conducted plays a key role in managing financial instability and its impact on the real economic activity in developing countries.

This paper addresses policy options in the management of financial cycles and economic instability at the national and international level, focusing on systemically important areas of

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intervention. Its main policy conclusion is as follows: developing countries need to manage surges in capital inflows to prevent unsustainable exchange rates and current account positions, and to prevent exposure of private balance sheets to currency turmoil. By providing adequate liquidity, the IMF can support countercyclical policies adopted in affected countries to dampen the impact of adverse external shocks, currency attacks and large capital outflows. Emphasis of IMF support must however be on maintaining imports, income and employment, whilst repayment of debt to private creditors and investors, and capital account convertibility should be dealt with using orderly debt workouts, internationally sanctioned temporary debt standstills, and exchange controls.

The discussion of the paper is organized as follows. Section 2 discusses financial instability and its impact on real economic activity. It is argued that the benefits of exceptionally rapid economic expansions driven by financial excesses, including surges in capital inflows, are more than offset by losses of jobs, output and productive capacity during recessions associated with financial turmoil. The adverse economic impact of such recessions is more persistent and has a particularly negative impact on labour, adding to permanent unemployment, promoting pressures for flexible hiring-and-firing practices, and creating job insecurity.

Section 3 gives a brief description of the policy issues involved in managing financial cycles. Instability in asset markets, rather than in product and labour markets, has become the major source of instability of macroeconomic aggregates and key relative prices. Contrary to the orthodox view, price instability is not sufficient for financial stability; disinflation may indeed be achieved at the expense of financial stability, as happened in many countries pursuing exchange-rate-based stabilization programs. The task of managing financial cycles and securing sustained stability is difficult enough for industrial countries which are often able to respond to financial turmoil and recessions by relaxing monetary and fiscal policy. This option is not always open to developing countries, making it all the more important to start countercyclical policies during expansions and surges in capital inflows.

Sections 4 and 5 examine the scope for and effects of monetary policy and financial regulations and control, respectively, in the management of capital surges. In using monetary policy under conditions of relatively high inflation, there are serious tradeoffs between domestic and external objectives. The task becomes somewhat more manageable when authorities have control over the banking system. However, interventions in currency markets can help avoid unsustainable exchange rates and current account imbalances, but not the exposure of private sector balance sheets to currency turmoil. The latter calls for prudential measures and direct control. However, the nature of regulations is also important. Conventional prudential regulations increase cyclicality of finance. There is therefore a strong case for regulatory measures with built-in financial stabilizers and extending them to cross-border and foreign-exchange transactions in order to reduce currency and maturity mismatches and exchange-rate-related credit risks. However, few governments resort to countercyclical tightening of capital account measures in times of capital surges for fear of adverse market reactions. Loosening restrictions over resident outflows is more appealing, but such a policy may not be easily reversible when conditions become less favourable.

The examination in section 6 of the recent accumulation of international reserves that is taking place in many developing countries as a form of self-insurance against sudden stops and

reversals in capital flows shows that there is a greater degree of diversity among developing countries in terms of the sources and effects of such reserves than is typically appreciated in the literature. Some countries generate reserves at the expense of imports and economic growth. Others accumulate them by borrowing. In yet another group reserves are partly borrowed and partly earned from current account surpluses. In total, about half of the reserves of developing countries are borrowed, entailing a carry cost of \$100 billion per annum. This is equivalent to a transfer of resources to reserve-currency countries that exceeds total ODA. Fear of floating and repetition of the 1997 crisis appear to be why several Asian countries with trade surpluses and net capital inflows intervene in currency markets and resist appreciations. Uncertainties about the future direction of capital flows have become a source of tension in international trade.

Section 7 examines the multilateral approach to capital flows and counter-cyclical policies. It is argued that the multilateral system has moved away from the objectives sought by the planners of post-war economic architecture, particularly with respect to avoiding contractionary adjustments to temporary payments shocks through provision of adequate liquidity at appropriate terms and conditions. Rather, conditions attached to multilateral lending have increasingly promoted procyclical policies. Furthermore, a large proportion of IMF lending over the past decade has been targeted to securing repayment to creditors, avoiding default and maintaining open capital account in countries hit by financial crises, rather than supporting income, employment and trade. More generally, the international community has followed an approach of muddling through "crisis prevention and intervention" in emerging markets. Several initiatives undertaken since the mid-1990s have failed to materialize, including for instance the initiative to establish a global capital account regime, quasi-international-lender-of-last-resort facilities and orderly debt workout procedures. The Fund has been more successful in its recommendations of self-insurance, but at the expense of rendering itself largely irrelevant for an important group of developing countries.

In the past decade, there has not been much prospect for reform to secure greater stability of international capital flows through regulations at source. However, after recurrent crises a consensus seems to have emerged on restricting IMF bailout operations, reorienting its lending policies to the support of trade, income and jobs, introducing debt workout procedures in order to discourage imprudent lending and borrowing, and involving the private sector in the resolution of liquidity crises. However, the surge in private capital flows to developing countries, decreasing risk spreads, and the strong trade and growth performance that have taken place since the turn of the millennium have placed this agenda on the backburner. This has however left many developing countries exposed to sharp reversals of these exceptionally favourable global cyclical conditions.

## 2. Financial instability and the real economy

#### a. Procyclicality of finance

With greater deepening of financial markets and rapid growth of financial wealth, business cycles in both developed and developing countries are increasingly dominated by developments in the financial sector. It is true that there is not always a one-to-one correspondence between real and financial cycles, and that recessions do not always go in

tandem with financial crises. Nevertheless, the growing tendency of the financial system, including international capital flows, to respond pro-cyclically to impulses emanating from the real economy reinforces expansionary and contractionary forces, thereby amplifying swings in investment, output and employment. The financial system is also capable of generating autonomous influences that can result in gyrations in real economic activity. This is particularly the case in developing countries where boom-bust cycles in capital flows driven by external factors can exert a disproportionately large impact on economic performance, producing unsustainable expansions followed by financial crises and recessions.

Procyclical effects of finance on real economic activity derive mainly from the procyclical behaviour of risk assessments by lenders and investors: that is, risks are underestimated at times of expansion and overestimated during contractions. Increased optimism and sense of security generated by an economic expansion often results in declines in risk spreads and provisions and improves credit ratings. Given the herd behaviour intrinsic in modern capital markets and "mark-to-market" practices in the valuation of asset and liabilities, these tend to produce a cumulative process of credit expansion, asset-price bubbles and over-indebtedness which, in turn, add to spending and growth momentum. Asset prices at such times are driven not so much by improved prospects of income streams as expectations of further price increases. Thus, stock prices tend to rise to levels not justified by long-term capital gain prospects and earning capacity of firms, and price-earnings ratios can climb to exceptionally high levels. This is also true for the property market where booms produce unsustainable increases in price-to-rent ratios.

Financial bubbles almost always give rise to excessive investment in certain sectors which becomes unviable with the return to normal conditions. This is true not only for investment in areas susceptible to speculative influences such as residential and commercial property, but also in machinery and equipment, as in Japan in the late 1980s, in the United States during the dot-com bubble of the second half of the 1990s, and in East Asia in the run up to the 1997 crisis. Furthermore, with increased access of households to credit, financial booms can also produce sharp increases in consumer spending, reducing household savings and raising indebtedness.<sup>3</sup> This was the case in Latin America in the 1990s where, unlike East Asia, surges in capital inflows were generally associated with booms in consumption. Similarly, much of the stimulus in the recent expansion of the United States came from increased consumer spending made possible by mortgage refinancing encouraged by the boom in the property market.

<sup>&</sup>lt;sup>1</sup> This is the essence of the financial instability hypothesis developed by Minsky following on the footsteps of Fisher and Keynes. Minsky (1975, chap 6; 1977; and 1986; chap. 8) starts from the proposition that stability (tranquillity), including that of an expansion, is destabilizing since it increases the confidence, reduces the value placed on liquidity and raises the acceptable debt-to-equity ratios. He sees financial instability as an intrinsic feature of market economies and financial fragility as endogenous. For key features of his analysis see Papadimitriou and Wray (1998) and for its relation to Irwin Fisher's debt deflation theory of the Great Depression see Davis (1992).

<sup>&</sup>lt;sup>2</sup> For a survey of the evidence on procyclical behaviour of risk assessments, credit and asset prices see Borio, Furfine and Lowe (2001).

<sup>&</sup>lt;sup>3</sup> Minsky's financial instability hypothesis emphasizes finance-investment link; in fact, it is built around "a financial theory of investment and an investment theory of the cycle" (Minsky 1978: 31). With increased access of consumers to credit, the Keynesian link between income and consumption has become much looser with the result that consumption booms can be a driving force of the aggregate demand.

These cycles are accentuated by mutually reinforcing feedbacks between credit and capital markets and "mark-to-market" practices. Stock and property booms give rise to credit expansion by raising collateral values and reducing loan-loss provisions. Faster growth in lending, in turn, adds fuel to increases in the market valuation of assets, making investment even more attractive. However, as balance sheets adopt smaller margins of safety, the system develops endogenous fragility à la Minsky, and with a cyclical downturn in economic activity and/or increased cost of borrowing, incomes on assets acquired can no longer service the debt incurred. Increased loan delinquency leads to a widening of risk spreads and falling asset prices and collateral values, producing a credit crunch. As risks are overestimated, even the borrowers that normally qualify for credit become unable to borrow. This in turn increases the pressure on debtors to liquidate assets and can set off a process of debt deflation, which amplifies the contraction in economic activity.<sup>4</sup>

Capital account liberalization has added a new and increasingly important dimension to financial cycles in developing countries, creating mutually reinforcing interactions among credit, capital and currency markets. On the one hand, international capital flows tend to respond procyclically to domestic cycles. Economic expansion and booms in stock and property markets attract foreign investment and lending which can, in turn, appreciate the currency and hence make such inflows even more attractive. In the downturn falling domestic asset prices can trigger capital outflows and currency depreciations which may, in turn, aggravate credit crunch and debt deflation. More importantly, international capital flows can trigger domestic financial and business cycles. Surges in capital inflows due to favourable global financial conditions and the consequent currency appreciations could generate booms in domestic assets and credit markets, encouraging borrowing and spending. When such inflows abruptly stop or are reversed, it may be impossible to prevent financial meltdown without adequate foreign exchange reserves or international lender of last resort facilities.

Destabilizing feedbacks between domestic financial markets and capital flows are much stronger in developing than industrial countries. Currency instability in industrial countries rarely spills over to domestic capital markets and the banking sector, while in emerging markets major payments and currency crises are seldom contained without having a significant impact on domestic financial conditions and economic activity. Similarly, major banking and/or asset-

<sup>&</sup>lt;sup>4</sup> For such episodes of financial and investment cycles in industrial and developing countries see UNCTAD TDR (1992, chap. II; 1998, chap. III; 2001, chap. I); Davis (1992); and Akyüz (2006).

<sup>&</sup>lt;sup>5</sup> For evidence on the procyclical effects of capital flows on economic activity in emerging markets see Prasad *et al.* (2005).

<sup>&</sup>lt;sup>6</sup> A classical example is the 1992 EMS crisis which produced sharp drops in the lira and pound sterling without provoking financial crises in Italy and the United Kingdom. Similarly, at the end of the 1990s the dollar-yen rate was seen to change by over 20 per cent within a matter of a week. Such swings were comparable to those experienced in East Asia in 1997 but did not produce widespread defaults and bankruptcies. A notable exception is the 1987 stock market break which was closely linked to the instability of the dollar after the Plaza agreement.

market crises in developing countries often have adverse effects on international capital flows and currency markets, which is not always the case in industrial countries.<sup>7</sup>

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The greater susceptibility of domestic financial conditions and economic activity in developing countries to international capital flows and exchange rates is due to extensive dollarization of balance sheets and widespread currency mismatches. In a large majority of developing countries external liabilities in foreign currencies exceed by a large margin external assets with the result that exchange rate changes can produce important shifts in net worth positions and procyclical wealth effects. This is a main reason why about 85 per cent of all defaults in developing countries during 1970-99 were linked with currency crises (IMF 2002; Reinhart 2002). Countries that hold large stocks of foreign currency reserves often have these concentrated in central banks or treasury funds while private balance sheets manifest vulnerability to currency declines. Even export sectors can be highly vulnerable to exchange rate swings when there is a maturity mismatch between their foreign-exchange-earning illiquid real assets and short-term foreign currency liabilities. Currency swings exert procyclical effects on economic activity; appreciations during boom lead to increases in net worth in balance sheets, supporting expansion in aggregate demand while depreciations at times of sudden stops and reversals add to contractionary impulses.

There can be little doubt that country-specific (pull) and global (push) factors can play important roles in determining the direction, size and nature of capital flows and their impact. Strong and sustained growth, discovery of rich natural resources, rapid liberalization, large-scale privatization programs and highly profitable corporate takeover opportunities can attract large amounts of foreign capital even when global financial conditions regarding risk appetite, liquidity and interest rates are not very favourable. Nevertheless, as also noted by the World Bank (2003: 26), the "dynamics of net capital inflows and the changes of official reserves over the cycle do indeed indicate that the push factor is more important for middle-income countries, while the pull factor dominates in high-income countries." In fact, the most damaging episodes of boom-bust cycles in capital flows to developing countries in the post-war period were those driven by special and temporary global push factors beyond the control of the recipient countries, including monetary and financial policies in major industrial countries.

The first of these cycles started towards the middle of the 1970s when the recycling of growing international liquidity resulting from oil surpluses by international banks to developing countries was encouraged by the IMF for fear of a global depression. The boom ended with a debt crisis when the United Stated responded to the second oil price hike and mounting inflation by monetary tightening, producing a deep recession and a cutback in bank lending to developing countries, forcing them to generate negative transfers by slashing imports and growth. The second boom started in the early 1990s after almost ten years of limited access of developing countries to international capital markets. Whilst it was facilitated by low interest rates and liquidity expansion in the United States and Japan, and encouraged by the success of the Brady plan in removing the debt overhang, and rapid liberalization, privatization and stabilization in Latin America, it again ended with a series of crises in Latin America, East Asia and elsewhere.

<sup>&</sup>lt;sup>7</sup> For instance, despite persistent difficulties in the financial sector in Japan throughout the 1990s, the yen saw periods of strength as well as weakness. By contrast, the recent instability of the dollar is influenced, at least partly, by the sub-prime mortgage crisis.

Deterioration of macroeconomic conditions, notably currency appreciations and widening current account deficits, no doubt played a central role in the reversal of capital flows. However, these were endogenously generated by capital inflows themselves rather than by shifts in macroeconomic policy. This was particularly true in East Asia where a strong fiscal posture and monetary discipline was maintained, while in Latin America capital inflows frequently encouraged procyclical fiscal polices.<sup>8</sup>

One can argue that a third post-war global cycle in capital flows to developing countries has taken shape. Historically low interest rates in the United States and Japan in 2002 gave rise to increased appetite for risk and higher yields, thereby drastically reducing spreads. Large oil surpluses are once again a major driving force behind the surge in international capital flows. However, unlike the 1970s, demand rather than supply shocks are driving these flows, which are directly channelled into asset markets in developing countries rather than intermediated by international banks as in the 1970s.

The surge in capital flows has contributed to the boom in stock markets in several developing countries, and produced a remarkable degree of monetary and exchange rate stability. However, these conditions have a close resemblance to what Minsky described as "destabilizing tranquillity": they have caused concern even among international bankers that "the pickup in flows into some emerging market assets has pushed valuations to levels that are not commensurate with underlying fundamentals." They have not only facilitated the financing of current account deficits, but have widened them through currency appreciations, particularly in high-inflation countries that have sought a credible external anchor for price stability, thereby creating external fragility and exposing them to a sudden stop. 11

Liquidity expansion and low interest rates have also resulted in a rapid growth of lending in property markets in industrial countries, notably the United States, in high-risk sub-prime mortgages. However, rising interest rates led to a sharp increase in foreclosures in 2006 and rapidly became a source of global instability. Its impact has been felt beyond the mortgage market by third party investors as the rights to mortgage payments had been transferred by original lenders in packages of mortgage-backed securities and collateralized debt obligations.<sup>12</sup>

<sup>&</sup>lt;sup>8</sup> For the two previous post-war cycles see UNCTAD TDR (2003: chap. 2). For the Mexican boom-bust cycle see UNCTAD TDR (1995: chap. II), and for the East Asian one UNCTAD TDR (1997, chap. III). On fiscal policy in Latin America and East Asia see Akvüz (2006).

<sup>&</sup>lt;sup>9</sup> Average spread on JPMorgan EMBI fell from over 1000 basis points to just over 200 basis points between July 2001 and July 2007. An important part of recent capital inflows is motivated by carry trade – UNCTAD TDR (2007: chap. I).

<sup>&</sup>lt;sup>10</sup> IIF (2005a: 4). On the vulnerability of emerging markets to a "reversal of cyclical factors" see also IMF (2006b, 2007c, and 2007d) and IIF (2005b).

The most prominent example is Turkey where the currency appreciated rapidly after the 2001 crisis with the return of foreign capital and where the current account deficit reached 8 per cent of GDP. Since 2001 South Africa has also experienced large appreciations and current account deficits. Current account deficits have also risen rapidly in some new members of the EU. While many countries in Latin America, including Brazil, Chile and Mexico, have seen their currencies appreciate significantly, they have avoided large current account deficits due to a boom in commodity markets; see UNCTAD TDR (2007: chap. I).

<sup>&</sup>lt;sup>12</sup> For a lucid account of the sub-prime crisis see Kuttner (2007).

Despite the intervention by central banks in industrial countries, conditions in credit markets are expected to tighten as banks reveal and realise losses, which could amount to several hundred billions of dollars. There are thus strong signals that exceptionally favourable cyclical conditions prevailing in the world economy since the early years of the decade are coming to an end, creating a growing concern that the financial excesses of the past 5-6 years may not be undone through an orderly correction.

# b. Financial cycles and investment and jobs

Financial instability and procyclical behaviour of finance have far reaching implications for the real economy. Sharp swings in asset prices, exchange rates and aggregate demand cause a fundamental uncertainty regarding the return on capital, shorten planning horizons and promote defensive and speculative strategies in investment which can, in turn, exert a significant adverse influence on the pace and pattern of capital accumulation, economic growth and employment. Episodes of exceptionally rapid economic expansion driven by financial bubbles can no doubt bring greater prosperity than expansions where finance plays a more passive and accommodative role. But they are also susceptible to producing deeper recessions or longer periods of stagnation, resulting in considerable waste of resources, including both capital and labour. These problems are particularly serious in developing countries in view of their limited scope to pursue effective countercyclical macroeconomic policies.

Investment has always been the most unstable component of effective demand, particularly in developing countries.<sup>14</sup> In fact, a negative correlation is observed between investment volatility and the level of economic development as investment in low-income countries is closely linked to imported capital goods and as commodity price movements amplify investment volatility. Procyclical responses of international financial markets to export shortfalls often aggravate the impact of commodity shocks further while official flows also appear to be procyclical for this group of countries (Akyüz 2007a). Consequently, the burden of adjustment to external shocks almost invariably falls on capital spending.

Evidence also suggests that instability of investment increased relative to GDP in the 1990s both in developing and industrial countries. Investment cycles are now much more pronounced than income cycles, with investment rising faster than income during expansions and falling faster during contractions. Increased instability is even more pronounced in middle-income countries due to the growing influence of international private capital flows. Although these are procyclical in both industrial and developing countries, they tend to lag domestic investment cycles in the former while they often, though not always, lead them in developing countries (World Bank 2003: 26).

Trends in investment and employment over the entire cycle (from expansion to recession and to recovery) dominated by financial developments reveals some similarities between developed and developing countries. In particular, the economies are often unable to offset

<sup>&</sup>lt;sup>13</sup> For firms' investment and employment decisions under uncertainty see Dixit and Pindyck (1994).

<sup>&</sup>lt;sup>14</sup> For the evidence on the stability of investment see UNCTAD TDR (2003) and World Bank (2003).

during their recovery phase the contractions in investment and employment incurred during the previous recession. Accordingly, this gives rise to jobless recoveries.<sup>15</sup>

In the United States, for instance, the periods of expansion in the 1980s and 1990s were characterised by excessive investments in certain sectors, notably property and information respectively, asset-price inflation and over-indebtedness while the ensuing recessions involved widespread financial difficulties and debt-deflation. In both episodes recoveries from recessions were commonly described as jobless, particularly in the dot-com cycle where financial factors played a more important role. After a strong expansion in the second half of the 1990s the United States economy went through a short-lived recession in spring 2001. In terms of investment the recovery that followed was the weakest since 1949. In terms of jobs, it took 38 months for employment to recover, compared to a typical period of 8 months observed during a typical expansion in the period 1960-89. Furthermore, there was an increased trend towards flexible employment practices after 2001 recession: "growth occurred only in the employment of more flexible labour inputs, such as temporary and part-time workers and overtime. In contrast, less flexible labour inputs, such as traditional full-time workers were used less intensively." 16

Many explanations have been offered, but there is an agreement that financial factors played a significant role in job losses over the entire cycle. <sup>17</sup> The deflation-cum-recession following the dot-com bubble exposed financial fragility and over-indebtedness of corporations, and directed their efforts during the subsequent recovery towards restoring the health of balance sheets. Increased profits were used either for industrial restructuring or for reducing debt rather than expansion of production capacity and employment. Downsizing and labour shedding resulted in falling employment amidst rising labour productivity and profits. 18 In fact, the industries that expanded rapidly during the dot-com bubble were precisely those that lost jobs during the 2001 recession and continued doing so in the subsequent recovery; communications and electronic equipment, and securities and commodities brokers. In other words, industries that attracted too much investment during the boom were "paying it back" by reducing their workforce and structurally declining (Groshen and Potter 2003). The continued tight conditions in financial markets also impaired the ability of small firms to hire. These firms, particularly in services, are the main creators of employment and typically rely on equity financing and venture capital rather than debt. After the dot-com bubble burst, such financing almost disappeared due to heightened uncertainty, making it difficult for small firms to expand. If

<sup>&</sup>lt;sup>15</sup> Here recovery refers to the phase of expansion where growth is only sufficient to make up for income losses during the preceding recession. It is jobless if the growth rate of employment is not positive.

<sup>&</sup>lt;sup>16</sup> Shreft, Singh and Hodgson (2005: 81). See also Schreft and Singh (2003) on temporary and part-time employment and overtime during the 2002 recovery.

<sup>&</sup>lt;sup>17</sup> For a discussion of various explanations offered see Bernanke (2003) who emphasizes increased productivity and Freeman and Rodgers (2005) who reject it.

<sup>&</sup>lt;sup>18</sup> UNCTAD TDR (1994: 80-84; and 2003: 6-9). For corporate debt in the United States see Arestis and Karakitsos (2003).

<sup>&</sup>lt;sup>19</sup> See Chichilnisky and Gorbachev (2005) who point out that such financing declined by 86 percent during 2001-03. Earlier Groshen and Potter (2003: 5) had argued that "financial headwinds (particularly for risky new ventures) might arise from the collapse of initial public offering and venture capital financing" noting that "such 'financial headwinds' were blamed for extending the 1990-91 recession and cited as a reason for monetary easing at that time by Federal Reserve Chairman Alan Greenspan."

There are often considerable uncertainties about the strength of the recovery following finance-driven recessions. This discourages firms from making long-term commitments to employment, resulting in a wait-and-see attitude in hiring more permanent workers (Schreft, Singh and Hodgson 2005). Indeed, one of the consequences of increased financial instability is the growing demand by firms for more flexible hiring-and-firing practices as a buffer against large and unexpected swings in the overall level of economic activity. Such practices would also protect firms' profits against unexpected shifts in their international competitiveness resulting from instability in international capital flows and exchange rates — a phenomenon which gains added importance in developing countries. All these can generate considerable income and job insecurity even under conditions of relatively strong expansion.

The expansion-recession-recovery cycles driven by international capital flows are characterised by similar developments in investment and employment in developing countries. Not only do boom-bust cycles affect the composition of investment, but they tend to lower its average level over the entire cycle. In the four countries hit by the 1997s crisis in East Asia the boom supported by strong capital inflows in the mid-1990s raised the average investment ratio by some 7 percentage points of GDP while during the crisis the average decline was more than 16 percentage points. Investment stagnated in the subsequent recovery with the result that there was a sharp decline in the investment ratio over the entire cycle (UNCTAD TDR 2000).

In the labour market, booms generated by capital inflows often raise real wages, but the behaviour of employment depends on several factors.<sup>20</sup> Employment in traded-goods sectors tends to fall if the currency appreciates significantly and investment and productivity growth is sluggish. This contraction may only be partly offset by expansion in services. Evidence shows that while in almost all emerging markets real wages rose during the boom phase, there was little change in unemployment in Latin America where productivity lagged behind wages, and in East Asia overall unemployment fell. In all these countries real wages fell and unemployment rose sharply during recessions, and in many of them unemployment rates exceeded those reached before the boom. Again, in all these cases the subsequent recoveries were jobless; the unemployment rates remained between 4 and 6 percentage points above those attained during expansion, even after income losses had been fully recovered. Indeed, evidence suggests that under conditions of increased instability and uncertainty, even longer periods of growth may fail to generate decent jobs. This is noted by the World Bank in the case of Turkey: "the growth that did occur [during 1993-2004] was relatively 'jobless' as the volatility of the economy made employers less likely to hire new workers than to extend work hours of existing employees" (WB/IEG 2006: 4).

## 3. Financial cycles and counter-cyclical policy: issues at stake

A main challenge facing policy makers almost everywhere is how to manage financial cycles without sacrificing growth and employment. For most emerging markets this is more about the management of international capital flows in view of their autonomous and strong

<sup>&</sup>lt;sup>20</sup> For the evidence on the evolution of employment and wages in boom-bust-recovery cycles in emerging markets see UNCTAD TDR (2000:chap. 4), ILO (2004), and van der Hoeven and Lübker (2005), analysed in greater detail in Akyüz (2006).

influence on domestic financial conditions and real economic activity. It perhaps presents a greater challenge than attaining price stability which was once thought to be both necessary and sufficient for financial and economic stability. In most countries, both in the north and the south, financial boom-bust cycles, asset price and exchange rate gyrations, and credit surges and crunches have all occurred under conditions of low and stable inflation.<sup>21</sup> In some developing countries where price instability is traditionally regarded as structural and chronic, single digit and stable inflation rates have been attained at the expense of increased financial fragility and instability through exchange-rate-based stabilization programmes, relying on short-term, unstable capital inflows (UNCTAD TDR 2003).

The task of managing financial cycles and stabilizing an inherently unstable economy can be overwhelming even for the major industrial countries with strong institutions and where domestic financial conditions are reasonably insulated from developments in international capital flows and exchange rates. It calls for more than macroeconomic fine-tuning or aggregate demand management a là Keynes. Minsky (1986: 287) knew this too well when he remarked that "I feel much more comfortable with my diagnosis of what ails our economy and analysis of the causes of our discontents than what I do with the remedies I propose", noting that a once-and-for-all resolution of the flaws of capitalism cannot be achieved because financial innovations introduce new mechanisms of instability.

The Keynesian tradition does not place much faith in monetary policy either, whether in smoothing financial excesses at times of expansion or fighting unemployment during recessions. It is viewed as counterproductive for the former and impotent for the latter task: "Monetary policy to constrain undue expansion and inflation operates by way of disrupting financial markets and asset values. Monetary policy to induce expansion operates by interest rates and the availability of credit, which do not yield increased investment if current and anticipated profits are low" (Minsky 1986: 304). The policy challenge is seen as designing a system of financial institutions that dampens instability. Emphasis is placed on containing the destabilizing effects of bank lending and investment through prudential regulations, including controls over the level and the rate of increase of bank assets with instruments such as the capital-assets ratio. It is considered necessary to have a Big Bank, a lender of last resort, to deal with debt deflations and credit crunches, and a Big Government, a spender of last resort, to prevent economic contraction and unemployment. It is, however, recognized that Big Bank and Big Government can create moral hazard, making financial regulation all the more important.

In practice central banks in industrial countries do not generally respond to asset price inflations but tend to relax policy when the bubble bursts.<sup>22</sup> There are no doubt difficulties in identifying when an asset price increase represents a bubble rather than improved fundamentals, but these difficulties are not insurmountable.<sup>23</sup> A more important reason is the deep-seated belief

<sup>&</sup>lt;sup>21</sup> On the view that financial stability depends on price stability see Schwartz (1995) and Bordo and Wheelock (1998). By contrast Borio and Lowe (2002) argue that financial imbalances and instability can emerge in a low inflation environment.

<sup>&</sup>lt;sup>22</sup> For a discussion of monetary policy and asset prices see the papers in ECB (2003); and Detken, Masuch and Smets (2003) for a summary of the issues raised.

<sup>&</sup>lt;sup>23</sup> According to Borio and Lowe (2004: 18) "identifying **in a timely way** the developments of financial imbalances with potential unwelcome implications for output and inflation, while very hard, is not impossible." Kindleberger

that the job of central banks is to keep inflation under control, and that a monetary policy stance that maintains price stability would also promote financial stability. This seems to be why, for instance, the Fed refrained from acting during the dot-com bubble even though its chairman warned in 1996 that the United States economy was suffering from "irrational exuberance" as the stock market, led by the information sector, was booming. More importantly, this indifference of monetary policy to asset bubbles has been accompanied by progressive deregulation of financial markets and lack of attention to new sources of instability on grounds that financial markets regulate themselves. Their failure to do so explain why the United States could go from one bubble to another within a span of a decade.

Industrial countries are often able to respond to financial turmoil and recessions by expanding liquidity and lowering policy interest rates, and occasionally through fiscal expansion. The United States, for instance, responded to several instances of turmoil in financial markets and the threat of economic contraction by aggressive monetary easing and liquidity injection, including the 1987 stock market break, the 1990-91 recession, the LTCM debacle triggered by the Russian crisis, the bursting of the dot-com bubble of the 1990s, and now the sub-prime crisis. In some cases the monetary policy response carried the risk of sowing the seeds of subsequent troubles, however it was generally successful in averting deep and prolonged contractions. Similarly, Japan responded to continued financial difficulties and sluggish and uneven growth resulting from the bursting of the investment and stock market bubbles of the late 1980s with several large public spending programs and monetary easing, even though these were not always fully successful in restoring self-sustained growth.

Such policies are however not feasible options for developing countries facing the threat of recession due to rapidly declining capital inflows, let alone increasing capital outflows, as they can neither stabilize debt contracted in foreign currencies nor undo the balance of payments constraint. In a credit crunch involving foreign lenders and investors, central banks cannot act as lenders of last resort to stabilize the exchange rate and avoid hikes in the debt burden. Nor is there an international lender of last resort to undertake this task. Consequently, even when the problem is, in essence, one of lack of international liquidity, the collapse of the currency and hikes in interest rates could lead to insolvency of otherwise sound debtors.

Even in industrial countries where balance sheets are largely insulated from the impact of large currency swings, monetary easing designed to weather difficulties in the domestic financial system can run against external hurdles. It could weaken the currency and increase inflationary pressures, particularly when there is a large current account deficit that needs to be financed by capital inflows. This is exactly the dilemma that the United States Fed is currently facing in designing a response to the sub-prime crisis and the threat of recession— that is, its autonomy to run an independent monetary policy is now threatened.

The problem is certainly more acute in developing countries where external obligations are denoted in foreign currencies. In Korea, for instance, as in Japan, corporations had traditionally pursued aggressive investment strategies with a high degree of leverage, and the

<sup>(1995: 35)</sup> argues for using judgement and discretion in monetary policy, rather than "cookbook rules of the game", at times when speculation threatens substantial rises in asset prices with a possible subsequent harm to the economy.

government often stood as a lender of last resort to bail out their creditors. This approach was also underpinned by a strong government guidance of private investment to avoid moral hazard, speculation and excess capacity. However, in the 1990s when corporations were allowed to borrow freely abroad, lack of an international counterpart to the domestic lender of last resort to smooth out liquidity problems drove a number of them into serious problems, including bankruptcy (Akyüz 2000).

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This is why in developing countries it is all the more important to start counter-cyclical policy during expansion and manage surges in capital inflows so as to prevent macroeconomic imbalances and exposure to a reversal of international capital flows. Feasible tools are essentially countercyclical macroeconomic policy, in particular monetary policy, and countercyclical adjustments in the regulatory framework applied to the financial sector, including direct or indirect restrictions over capital flows. There are however difficulties in both spheres of policy and success often depends on a judicious combination of the two.

## 4. Countercyclical monetary policy

It has long been recognized that the capital account regime has important bearings on the scope and effectiveness of monetary and exchange rate policies. According to the standard economic theory, policymakers cannot simultaneously pursue an independent monetary policy, control the exchange rate and maintain an open capital account. All three are *potentially* feasible but only two of them could be chosen as *actual* policy – thus, the dilemma known as impossible trinity. Once the capital account is opened, a choice has to be made between controlling the exchange rate and an independent monetary policy. Using monetary policy as a countercyclical tool to stabilize economic activity could result in large cyclical swings in the exchange rate and balance of payments. Conversely, if monetary policy is used to stabilize the fixed exchange rate, it cannot act as a countercyclical macroeconomic tool and prevent large cyclical swings in economic activity.

However, in most developing countries with open capital accounts, the erosion of monetary policy autonomy is often greater than is typically portrayed in economic theory. Monetary policy cannot always secure financial and macroeconomic stability, whether it is geared towards a stable exchange rate or conducted independently as a countercyclical tool, for two reasons. On the one hand, as already noted, large-scale liability dollarization contributes to strong spillovers from exchange rates to domestic economic and financial conditions. Fluctuations in economic activity are hence increasingly associated with capital-account cycles. On the other hand, the effect of monetary policy and policy interest rates on exchange rates is much more uncertain and unstable in modern financial markets than is typically assumed in the theory of impossible trinity due to volatility of risk assessments and herd behaviour. During financial turmoil hikes in interest rates are often unable to check sharp currency declines while at times of favourable risk assessment a small arbitrage margin can attract large inflows of private capital and cause significant appreciations.

<sup>&</sup>lt;sup>24</sup> For a lucid account of options available in responding to excessive capital inflows see Williamson (1995b).

Monetary policy on its own has limited scope in managing business cycles associated with surges and rapid exits of capital in large part because policies necessary to achieve domestic goals may differ from those necessary for achieving international goals. This is most clearly seen at times of large capital outflows as monetary expansion and cuts in interest rates needed to prevent financial meltdown and to stimulate economic activity may simply accelerate currency flight. As a result, monetary authorities are often compelled to pursue procyclical policy in an effort to restore confidence. However, under crisis conditions the link assumed in the traditional theory between the interest rate and the exchange rate also breaks down. When the market sentiment turns sour, higher interest rates aiming to retain capital tend to be perceived as increased risk of default. As a result, the risk-adjusted rate of return can actually fall as interest rates are raised. This is the main reason why procyclical monetary policy and interest rates hikes implemented as part of IMF support during several episodes of financial crises were unable to prevent the collapse of the currency, serving, instead, to deepen economic contraction.

Monetary policy also faces hurdles at times of economic expansion associated with surges in capital inflows. In a high inflation economy relying on the exchange rate and capital inflows for disinflation, there is little scope to prevent appreciations, trade imbalances and currency mismatches in private balance sheets. This is why exchange-rate-based stabilization programmes have often ended in financial crises and recessions (UNCTAD TDR 2003). Neither is floating a panacea in high-inflation economies. Prevention of appreciations, trade imbalances and currency mismatches would call for lower interest rates to discourage arbitrage flows, but this could conflict with the objective of bringing inflation under control, particularly when disinflation relies on a strong currency to bring import costs down and to act as an anchor for inflationary expectations. This is why such countries tend to allow their currencies to float only upward, tightening monetary policy as soon as capital inflows show a tendency to slow down, causing the currency to depreciate. 26

Economies operating under a reasonable degree of price stability also face dilemmas in monetary policy at times of strong cyclical expansion associated with surges in capital inflows – a situation which has confronted some Asian economies in recent times. Tightening monetary policy in order to check asset price bubbles and overheating could encourage external borrowing and short-term arbitrage flows while lower interest rates would discourage such flows but lead to domestic credit expansion and overheating. A way out could be to employ countercyclical tightening while intervening in the foreign currency market and sterilizing its impact on domestic liquidity by issuing government debt. Intervention and sterilization can succeed when capital inflows are moderate in size and concentrated in the market for fixed-income assets. However, under strong surges across various segments of financial markets, sterilization could result in higher interest rates, attracting even more arbitrage flows. Furthermore, since interest earned on reserves is usually much lower than interest paid on public debt, there will be fiscal (or quasi-

<sup>&</sup>lt;sup>25</sup> Lower interest rates are unlikely to generate significant domestic demand pressures on prices, since in such countries business rarely borrows in domestic currency, preferring much cheaper dollar credits while assuming the exchange rate risk.

<sup>&</sup>lt;sup>26</sup> This was the Turkish response to the impact of global instability in financial markets in May-June 2006 when interest rates, almost in double-digit figures in real terms, were aggressively raised to check the depreciation of a highly overvalued currency. This suggests that the fear of floating (Calvo and Reinhart 2002) is asymmetrical, more overwhelming downwards than upwards.

fiscal) costs, which can be large when interest rate differentials are wide and the surge in capital inflows is strong.<sup>27</sup>

There are less costly methods of sterilization such as raising the non-interest-bearing reserve requirements of banks. This would also increase the cost of borrowing from banks, thereby checking domestic credit expansion. However, it could also encourage firms to go to foreign creditors. Banks may also shift business to offshore centers and lend through their affiliates abroad, particularly where foreign presence in the banking sector is important. A certain degree of control over the banking system would thus be needed to prevent regulatory arbitrage and reduce the cost of intervention.

During the recent surge in capital flows several developing countries have intervened in currency markets to absorb excess capital inflows and avoid appreciation of their currencies. Evidence suggests that sterilized intervention has generally been more successful in emerging markets than in advanced countries, particularly where a more strategic approach is followed in integrating with global capital markets and financial deregulation.<sup>28</sup> In China intervention has not only been successful in managing the exchange rate but is also less costly because of the close control that the government has over the banking system. This is also true for several other countries in Asia, including those hit by the 1997-98 crisis, which have returned to quasi dollar pegs, stabilizing their currencies within relatively narrow margins, even though their task has been less difficult because of the moderate size of capital inflows and smaller current account surpluses.<sup>29</sup> There have also been examples of successful intervention in other parts of the developing world where capital inflows were relatively small.<sup>30</sup>

When successful, interventions in foreign exchange markets serve to prevent currency appreciations and deteriorations in the trade balance; in doing so they reduce the likelihood of currency turmoil and the extent of payments adjustment needed in the case of such an event. They do not however prevent the build up of currency mismatches in private sector balance sheets and their exposure to currency turmoil in the event of an external shock and contagion. This calls for effective measures to control and regulate international capital flows.

<sup>&</sup>lt;sup>27</sup> For some estimates of fiscal cost of intervention in emerging markets see Mohanty and Turner (2006).

<sup>&</sup>lt;sup>28</sup> On the effectiveness of foreign exchange market interventions in emerging markets and the recent experience see the articles in BIS (2005), notably Disyatat and Galati (2005) and Mihaljek (2005). For a general survey of the issues involved see Sarno and Taylor (2001).

<sup>&</sup>lt;sup>29</sup> According to Mohanty and Turner (2006), over the period 2002-06 most central banks in Asia eased monetary policy and lowered interest rates as they were building reserves without losing control over inflation. Nevertheless, there were still sharp increases in the supply of central bank bills, which reached 15, 20 and 30 per cent of GDP in China, Korea and Taiwan, respectively. In China where over 80 per cent of central bank securities are held by banks, reserve requirements were raised from 7 per cent in 2003 to 12.5 per cent in 2007, and the share of central bank bills in total assets of banks more than doubled.

<sup>&</sup>lt;sup>30</sup> In Argentina, for instance, sterilization has been successful in keeping the real exchange rate within a target range and absorbing resulting excess liquidity through emission of central bank paper since 2002-03 despite opposition from the IMF– see Damill, Frenkel and Maurizio (2007).

# 5. Prudential regulations, capital controls and risk management

There is a consensus that prudential regulation and effective supervision of financial institutions play a key role in reducing the likelihood of financial crises and building safeguards in the event of their occurrence. These aim at ensuring the solvency of financial institutions by establishing adequate capital requirements, appropriate standards for risk assessment and diversification, sufficient provisions for non-performing and questionable portfolios, and adequate levels of liquidity to address maturity mismatches between their assets and liabilities.

Since a large part of cross-border and cross-currency operations are intermediated by domestic financial institutions, notably banks, many prudential measures are considered as part of indirect and market-based controls over inward and outward capital flows and dollarization of assets and liabilities. In this sense, capital control measures cannot always be distinguished from prudential policies, and several measures that normally come under prudential policies can in fact be used for managing capital flows.

This position is sometimes taken to extremes by arguing that capital account liberalization should not be a cause for concern if it is accompanied by stronger and more comprehensive prudential regulations and effective supervision designed to manage the risks associated with international capital flows and to limit the vulnerability of the economy by discouraging weak credit evaluation and excessive risk-taking in borrowing and lending in foreign currencies. Prudential regulations are however not a panacea to instability, particularly in the face of macroeconomic shocks, even if these do not have an external dimension. Furthermore, it is not always possible to control capital flows through prudential measures because they are not always intermediated by the domestic financial system – for instance, when local firms directly borrow or invest abroad, or non-residents enter domestic securities markets.

Many of the traditional risk assessment methods and prudential rules, including Basel I and Basel II, can serve to amplify cyclicality. This is clearly the case for loan-loss provisions based on current rates of loan delinquency. At times of boom when asset prices and collateral values are rising, loan delinquency falls and results in inadequate provisioning and overexpansion of credit. When the down-turn comes, loan delinquency rises rapidly and standard rules on provisions can lead to a credit crunch. Similar difficulties also apply to capital charges. Banks typically lose equity when an economy suffers from large capital outflows, hikes in interest rates and declines in the currency. Enforcing capital charges under such conditions would only serve to deepen the credit crunch and recession.<sup>31</sup>

It is possible to design prudential regulations in a counter-cyclical fashion so that they act as built-in stabilizers and reduce the cyclicality of the financial system. <sup>32</sup> Forward-looking rules may be applied to capital requirements in order to introduce a degree of countercyclicality. This would mean establishing higher capital requirements in times of financial booms, based on

<sup>&</sup>lt;sup>31</sup> This happened in Asia during the 1997-1998 crisis as a result of extensive efforts to strengthen regulatory regimes as part of the IMF packages of financial support—see UNCTAD TDR (1998: chap. III, Box 3).

This approach is finding considerable support in the BIS (2001: chap. VII); see also Borio, Furfine, and Lowe (2001) and White (2006). For further discussion in relation to emerging markets see Akyüz (2004).

estimation of long-term risks over the entire financial cycle rather than only on the actual risk at a particular phase of the cycle. Similarly, not current but future losses can be taken into account in making loan-loss provisions, estimated on the basis of long-run historical loss experience for each type of loan. Again, long-term valuation may be used for collateral in mortgage lending in order to reduce the risks associated with ups and downs in property markets. Finally, other measures affecting conditions in credit and asset markets, such as margin requirements, could also be employed in a countercyclical manner, tightened at times of boom and loosened during contractions.

While useful in containing the damage that may be inflicted by financial crises, these measures neither deal adequately with the risks associated with sharp swings in capital flows and exchange rates nor prevent crises. Such risks can be restricted by more stringent rules for capital charges, loan-loss provisions, liquidity and reserve requirements for transactions involving foreign currencies or through direct restrictions over foreign borrowing and investment. More generally, banking regulations targeting risks of foreign exchange positions need to address three fundamental sources of fragility: maturity mismatches, currency mismatches and exchange—rate related credit risks.

While maturity transformation is a traditional function of the banking system, it should not be encouraged in the intermediation between international financial markets and domestic borrowers, because national monetary authorities cannot act as lenders of last resort in foreign currency. Banks tend to rely on central banks for the provision of international liquidity. Whilst this pushes the cost of carrying large stock of reserves onto the latter, it exposes the former to exchange rate and interest rate risks since in the event of a sudden stop in capital inflows and inadequate central bank reserves, banks may either not be able to obtain international liquidity, or only do so at very high costs. Liquidity and reserve requirements and/or direct limits can be however introduced to address ,maturity mismatches between foreign exchange assets and liabilities of banks, thereby reducing the liquidity risk and preventing borrowing short in international markets and lending long at home.

Similarly it is important to restrict currency mismatches between banks assets and liabilities and discourage banks from assuming the exchange rate risk. Banks with short foreign exchange positions (that is, where forex liabilities exceed assets) run the risk of losses from depreciations while those with long positions lose from appreciations. Furthermore, maturity mismatches between forex assets and liabilities can lead to exchange rate risks even when assets are matched by liabilities in aggregate. Currency mismatches can be restricted through quantitative limits on short and long positions (e.g. as a proportion of their equity or total portfolios) or minimum capital requirements on foreign exchange exposures, or prohibited altogether.

The third important risk associated with foreign exchange borrowing and lending by banks is the exchange-rate-related credit risk. Banks can eliminate currency and even maturity mismatches by lending in foreign currency, but unless their borrowers have foreign exchange earning capacity, this simply implies migration of the exchange rate risk from banks to their borrowers which, in turn, results in greater credit risk. This kind of lending behaviour is particularly common in economies with extensive dollarization where an important part of bank liabilities are in foreign currencies. It also proved problematic in some countries in East Asia

where banks lent heavily in foreign currency for investment in property as well as to firms with little foreign exchange earning capacity in the run up to the 1997 crisis. Such practices could be discouraged by applying higher risk weights and capital charges for foreign assets and more stringent standards of provision for foreign currency loans, or prohibited altogether. However, evidence suggests that while many emerging markets have taken measures to reduce vulnerabilities associated with foreign exchange risks, few have addressed the vulnerabilities arising from currency-induced credits risks (Cayazzo *et al* 2006).

Few emerging markets have attempted to curb surges in capital inflows through a countercyclical tightening of restrictions. In 1994 Malaysia imposed direct quantitative restrictions on acquisitions of short-term securities by non-residents; research suggests that these were effective in improving the external debt profile, preventing asset-price bubbles, and allowing greater space for macroeconomic policy. By contrast, Chile used a price-based measure, unremunerated reserve requirements, in a countercyclical manner, applied to all loans at times of strong inflows in the 1990s; this was however phased out when capital dried up at the end of the decade. Although the measure was effective in improving the maturity profile of external borrowing, it was less so in checking aggregate capital inflows, appreciations and asset-price bubbles.

A problem with introducing *ad hoc* counter-cyclical capital control measures is that they can trigger adverse reaction from financial markets, leading to sharp falls in stock prices and causing concern among governments. This was the case in Thailand when a 30 per cent reserve requirement was imposed at the end of 2006 on capital inflows held less than one year, including portfolio equity flows, in order to check continued appreciation of the currency. This provoked a strong reaction from the stock market, forcing the government to exempt investment in stocks from reserve requirements – something that was portrayed as a retreat in the financial press. More recently, in October 2007, the proposal by the Securities and Exchange Board in India to restrict foreign buying of shares through offshore derivatives resulted in a plunge in shares and suspension of trade, to recover only after a plea for calm from the government.

The adverse market reaction to the introduction of countercyclical restrictions could be much more dramatic in countries with large stocks of foreign debt, weak current account positions and a high degree of dependence on foreign capital. This is why governments in such countries are inclined to allow in speculative, short-term capital even when they are aware of their potential risks. For these reasons it might be more effective to have a permanent system of control in place, with instruments being adjusted according to cyclical conditions.

When capital inflows are excessive, it is also possible to adjust the regime of resident outflows to relieve the upward pressure on the currency. Chile followed this path in the 1990s for direct investment abroad. More recently China decided to permit investment by its residents in approved overseas markets for mitigating the pressure for appreciation. Such a policy response is, in fact, an alternative to sterilized intervention, but does effectively nothing to prevent currency and maturity mismatches in balance sheets. Besides, once introduced for cyclical reasons they cannot be easily reversed when conditions change. Therefore, regulatory measures on outflows by residents should also be part and parcel of the overall capital account regime, adjusted, rather than introduced on a cyclical basis.

## 6. Reserve accumulation as self-insurance: burden or blessing?

Traditionally, reserves covering three months of imports were considered adequate for addressing the liquidity problems arising from time lags between payments for imports and receipts from exports. The need for reserves was also expected to lessen as countries gained access to international financial markets and became more willing to respond to balance of payments shocks by adjustments in exchange rates. However, capital account liberalization in developing countries and greater access to international financial markets has produced exactly the opposite result. International capital flows have enabled larger and more persistent current account deficits than could be sustained by relying on international reserves. This has however also resulted in an accumulation of large stocks of external debt. Debtor countries have thus become increasingly vulnerable to sudden stops and reversals in capital flows, and this vulnerability has increased the need to accumulate reserves to safeguard against currency turmoil and speculative attacks. This has become all the more apparent since the East Asian crisis where the level of reserves was generally adequate to meet current account needs, yet fell far short of what was needed to stay current on debt servicing and to maintain an open capital account. On the other hand, even though many emerging markets have adopted more flexible exchange rate regimes after the 1990s, the "fear of floating" has continued unabated, with central banks using reserves to reduce short-term volatility.<sup>33</sup>

One of the lessons drawn from the Asian crisis by emerging markets was thus that they should have adequate reserves to cover their short-term debt – debt with a remaining maturity of up to one year.<sup>34</sup> The IMF has also urged emerging markets to hold sufficient reserves to reduce their vulnerability. Developing countries have furthermore been advised to reduce short-term debt and/or maintain contingent credit lines with international banks – that is, to arrange a private lender-of-last-resort facility – to be used in the event of a speculative attack (Blöndal and Christiansen 1999; Feldstein 1999). The latter is often seen as an unpractical and insecure way of safeguarding against external financial instability in view of the size of the amounts involved and the procyclical behaviour of financial markets. Indeed, as recognized by the IMF (1999) there is no guarantee that funds will actually be available when there is a massive withdrawal of foreign investment and lending; moreover, even if they are available, the funds provided may merely offset reduced access to normal credits. Reducing short-term debt, on the other hand, necessitates control over private sector borrowing abroad which is, as already noted, not favoured by most countries.

A problem in determining the adequate level of reserves is that vulnerability to withdrawal of funds is not restricted to short-term debt. What matters in this respect is liquidity rather than maturity of liabilities. A run by non-residents away from domestic equity and bond markets could also create significant currency turbulence even though in such cases asset price

<sup>&</sup>lt;sup>33</sup> The IMF Guidelines for Foreign Exchange Reserve Management recognize that reserves are held with a number of objectives linked to the capital account, including supporting and maintaining confidence in monetary and exchange rate policy, limiting external vulnerability, and providing confidence to markets that the country can meet its external obligations– IMF (2005b).

This has come to be known as the Greenspan-Guidotti rule. For a discussion see UNCTAD TDR (1999; chap. V). For an attempt to empirically determine the optimum level of reserves based on welfare criteria see Jeanne and Rancière (2006) who find that the optimal level suggested by their model is close to the Greenspan-Guidotti rule.

declines shift the losses to lenders and investors and mitigate the pressure over the exchange rate. The impact on the currency could be particularly strong when bond and equity markets are large and foreign presence is significant. Much the same is true if the economy is highly dollarized financially.<sup>35</sup> A shift to foreign deposits by residents as a result of loss of confidence in the domestic currency and/or a bearish mood in the domestic securities markets could result in considerable currency instability and require large scale interventions.

A policy of accumulating reserves at times of strong capital inflows and using them during sudden stops and reversals appears to be a sensible counter-cyclical response to instability in international capital flows. By intervening in the foreign exchange market and accumulating reserves, a country facing a surge in capital flows can both reduce its external vulnerability by preventing appreciations and trade deficits, and secure insurance against speculative attacks. Such a strategy, however, lacks a strong rationale since it implies that a country should borrow to hold short-term foreign assets rather than use the funds to finance investment and imports. This is all the more so because, as already noted, reserves accumulated by borrowing abroad are highly costly. There are basically two types of costs involved, which both fall on the public budget. First, there would be a net transfer of resources abroad since the return on reserves is less than the cost of external borrowing. Second, there is a transfer from the public to the private sector by the amount of the difference between the cost of sterilization and the cost of private borrowing abroad.<sup>36</sup>

When capital inflows are in the form of non-resident investment in domestic currency debt (that is, when interest arbitrage is undertaken directly by non-residents) the entire margin between domestic rates on government debt and the return on reserves would be a net transfer abroad. Indeed, in recent years a growing part of domestic-currency sovereign debt of emerging markets has come to be held by non-residents, including the hedge funds. The share of non-residents in domestically-issued local-currency debt is estimated to have doubled between 2000 and 2005 to reach 12 per cent, as international investors have become more willing to assume the currency risk to benefit from considerably higher interest rates in emerging markets. Some countries have also started to issue local-currency denominated global bonds at rates below those in domestic markets because of lower jurisdiction spreads, but above the rates on foreign currency debt.<sup>37</sup>

<sup>&</sup>lt;sup>35</sup> Financial dollarization is often measured in terms of the share of foreign currency in the total deposits of residents. This tends to be very high in emerging markets, reaching or exceeding 50 per cent in some – see Reinhart, Rogoff and Savastano (2003) for various concepts of dollarization, its determinants and consequences and regional differences.

<sup>&</sup>lt;sup>36</sup> The cost incurred by the public sector on each dollar of reserves is given by  $i_g - i_r = (i_g - i_x) + (i_x - i_r)$  where  $i_g$ ,  $i_r$  and  $i_x$  are the rates, in common currency, on government domestic debt, reserve holdings and external borrowing, and typically  $i_g > i_x > i_r$ . When non-resident claims are only in foreign currencies, the first term on the RHS is captured by the holders of public debt at home and the second term is the net transfers abroad – what Rodrik (2006) calls the social cost foreign exchange reserves. For the distinction between the two types of transfers and costs see UNCTAD TDR (1999: chap. V).

<sup>&</sup>lt;sup>37</sup> On increased holding by non-residents of locally and globally issued domestic currency debt of emerging markets see Mehl and Reynaud (2005), De Alessi, Hoggarth and Yang (2005), Tovar (2005) and IMF (2005a). In some countries such as Turkey non-resident holding of local currency debt has increased much faster – Yeldan (2007). Thus emerging markets have started to overcome the "original sin" at the cost of paying much higher rates.

Clearly, such portfolio inflows are seen as particularly attractive in many developing countries because the exchange rate risk is borne by non-residents. However, for the same reason, borrowing is more costly in local than in foreign currency. Besides, the interest differential is not always offset by currency movements – that is, uncovered interest parity does not hold. This is because when capital inflows are large, it would be difficult to avoid nominal appreciations so that the cost of reserves can even be higher than that indicated by the margin between the interest rate on domestic debt and the return on international reserves.<sup>38</sup>

For reserves earned through current account surpluses their opportunity cost is the return on alternative forms of investment. When the economy is growing below its potential, a high level of reserve holding as an insurance against external vulnerability would entail significant opportunity costs since these resources could be used for imports, investment and growth.<sup>39</sup> When the economy is already investing a large proportion of its income and sustaining a high growth rate, return on alternative investment opportunities abroad, such as acquisition of equity, may provide a more appropriate measure of the opportunity cost of holding reserves. However, in this case there is also a broader issue of whether it is efficient to sustain such a high savings ratio and generate large current account surpluses.

An examination of the recent experience with reserve accumulation in emerging markets in the light of these considerations lends support to a number of conclusions. First, since the early 1990s when developing countries started to integrate closely with global financial markets, there has been a tendency to increase reserve holdings relative to imports and GDP in order to secure insurance against exposure to sudden stops and reversals of capital flows as well as trade shocks and current account instability. There is indeed a strong correlation between capital account liberalization and reserve holding. Second, net capital inflows are increasingly absorbed into reserves; that is, countries generally prefer to accumulate reserves despite high costs, rather than controlling capital inflows. Finally, reserves may entail significant costs even when they are earned.

International reserves in developing countries covered, on average, about 3.5 months of imports during the 1980s. With the beginning of the second post-war surge in capital flows, they started to rise rapidly in the early 1990s, reaching, on average, 5.5 months of imports before the Asian crisis. These were entirely borrowed since developing countries as a whole ran current

This has certainly been the case in Turkey over the last few years where the lira appreciated in nominal terms vis-à-vis most reserve currencies while the domestic borrowing rates stayed at around 20 percent.

<sup>&</sup>lt;sup>39</sup> Even when reserves are borrowed, the social return on investment may exceed the cost of borrowing abroad so that insurance against vulnerability would be even more costly in terms of growth. Rodrik (2006) uses external borrowing costs in estimating the social cost of foreign exchange reserves, pointing to the difficulties in empirically measuring the social rate of return on capital.

<sup>&</sup>lt;sup>40</sup> Aizenman and Lee (2005) provides econometric evidence for the period 1980-2000 on the predominance of "precautionary" motive for reserve accumulation, notably after the East Asian crisis, and finds that a more liberal capital account regime and closer integration with global financial markets increases the amount of international reserves held by developing countries.

<sup>&</sup>lt;sup>41</sup> Choi, Sharma and Strömqvist (2007) show that the sensitivity of reserves to net capital flows was negative in the 1980s, but became positive after the Asian crisis when countries started to divert these flows to build-up of reserves. By contrast in advanced economies reserves have been negatively correlated with net capital flows.

account deficits. Reserves started to fall in the second half with recurrent crises in emerging markets, dropping to a level of 3.7 months of imports at the end of the decade. In most countries hit by financial crises in the 1990s, including Mexico, Korea, Thailand and Brazil, reserves followed the cycle in capital flows, rising in the run up to crises and falling sharply during sudden stops and reversals.<sup>42</sup>

Reserves started to rise strongly with the boom in capital inflows in the early years of the decade, gaining momentum as developing countries started to run current account surpluses. For developing countries as a whole (excluding the first-tier NIEs, Korea, Taiwan, Singapore and Hong Kong) they increased at an average rate of \$500 billion per annum after 2001, exceeding \$4 trillion or 6.8 months of imports at the end of 2007. About \$3.2 trillion of these have been accumulated after 2001. However, there are significant differences among regions and countries. Asian developing countries now account for more than half of the total reserves of the developing world and their reserves cover 9 months of imports compared to four months at the beginning of the decade. In developing Asia excluding China and India (and first-tier NIEs), reserves are not very high; they now cover just under 4 months of imports compared to 3.2 months in 2001. In Latin America and sub-Saharan Africa too import coverage now is around 4 months, only moderately up from the levels of the early years of the decade.

A large proportion of reserves accumulated during recent years are earned reserves. Since the beginning of the decade, developing countries taken together have run twin surpluses in their balance of payments; that is, on both current and capital accounts (table 1). Their cumulative current account surplus during since 2001 has been twice the capital account surplus.<sup>43</sup> Accordingly, of the \$3.2 trillion additional reserves accumulated after 2001, two-thirds are earned and one-third borrowed – borrowed in the sense that they correspond to increased claims on these countries in one form or another.

Since in previous decades the current account of developing countries as a whole was in deficit, the entire stock of reserves held at the beginning of this decade was borrowed reserves. Adding this to reserves borrowed since 2001 implies that almost half of current stock of reserves of developing countries – that is, some \$2 trillion – are borrowed reserves. This is about 250 per cent of their short-term debt and 65 per cent of their total debt to private creditors. Assuming a moderate average rate of 500 basis points margin between the borrowing rate and return on reserves, the annual carry cost of borrowed reserves of developing countries would reach some \$100 billion. This constitutes a net transfer of resources to reserve-currency countries and

<sup>&</sup>lt;sup>42</sup> For the behaviour of reserves in the 1990s see UNCTAD TDR (1999: chap. V).

<sup>&</sup>lt;sup>43</sup> Here capital account surplus is used in the traditional sense; that is, surplus on non-reserve financial account as defined in IMF (2007b).

<sup>&</sup>lt;sup>44</sup> The average spread of emerging-market bonds compared with United States 10-year Treasuries exceeded 700 basis points during the 1990s and never fell below 400 basis points. It reached 1400 basis points after the Russian crisis, falling by half towards the end of the decade. Until 2002 it was over 600 basis points, falling rapidly afterwards and hovering around 200 basis points in recent months—World Bank (2007).

<sup>&</sup>lt;sup>45</sup> The method used here to estimate the cost of reserves differs from the procedure applied in Rodrik (2006) in making a distinction between borrowed and earned reserves. Polak and Clark (2006) also refer to borrowed reserves in their estimation of the cost to poorest developing countries.

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exceeds the total official development assistance (ODA) by DAC countries, including bilateral ODA and contributions to multilateral institutions.

Tables 1 and 2 show considerable diversity among developing countries in the sources of reserves. Excluding China and Fuel Exporters, reserves in developing countries are 100 per cent borrowed since their current account has been in deficit. China enjoys twin surpluses in its balance-of-payments while Fuel Exporters run a surplus in the current account and a deficit in the capital account. Over a quarter of reserves accumulated in China after 2001 are borrowed, although this proportion has been falling in the past couple of years with rapid growth of its current account surplus. By contrast, the entire reserves accumulated by Fuel Exporters after 2001 have come from their current account surpluses. Unlike in China where government purchases reserves from the private sector through intervention in the foreign exchange market, in Fuel Exporters they come out of government earnings from oil exports. Over 2002-07, Fuel Exporters used about one-third of their current account surplus for investment abroad and the two-thirds for reserve accumulation. In several of them investment is undertaken mainly by Sovereign Wealth Funds (SWF). According to some estimates, total assets of SWF in Fuel Exporters now exceeds \$1.5 trillion with an important part invested in equity abroad (IMF 2007d; Annex 1.2; Truman 2007b).

Both in China and Fuel Exporters, current levels of reserves are very high, covering around 13 and 10 months of exports, respectively. In both cases short-term external debt is very small and net foreign asset position is positive. For Fuel Exporters the main reason for holding a large stock of reserves is insurance against income and current account instability associated with instability in oil prices. This is also true for commodity exporters generally where reserves serve to mitigate the exchange rate effects of term-of-trade shocks, thereby allowing a more stable pattern of imports over time when export prices and earnings fluctuate (Aizenman 2007). In the absence of reserves such shocks can result in severe instability in imports since exchange rate responses would not be very effective because of limited export diversification.

China's massive reserve accumulation is often linked to its development strategy based on export-led growth, supported by undervalued exchange rates and capital controls. It is argued that the viability of this strategy depends on China's willingness to provide the external financing needed to meet the current account deficits of the United States by holding large amounts of its current account surplus in United States securities. In this way China, as a surplus country, is providing a deficit country with the kind of automatic balance-of-payments financing though official capital outflows advocated by some of the architects of the Bretton Woods System, notably Keynes. Indeed, it is doing even more as it is also translating net private capital inflows, including those coming from the United States, into dollar reserves; that is, what markets put into China is officially re-channelled back to the United States. In doing so, however, China exposes itself to sharp swings in the exchange rate of the dollar and encounters the creditors' dilemma whereby the value of its assets depends on its continued lending to the United States.

It has also been argued that China's reserve holding reflects more a precautionary motive than what is called mercantilist policies. This evidence does not however cover the post-2000

<sup>&</sup>lt;sup>46</sup> See Dooley, Folkerts-Landau and Garber (2003 and 2004) and Aizenman (2007).

experience.<sup>47</sup> As noted above, in the early years of the decade much of China's rapid reserve accumulation came from net capital inflows rather than current account surpluses, suggesting a strong element of precaution. In any case, as the experience of the first-tier NIEs demonstrates, a development strategy emphasizing exports does not require generation of large and persistent current account surpluses through undervalued exchange rates.<sup>48</sup> There is also a broad agreement that China's trade surplus with the United States is not simply a reflection of bilateral exchange rate misalignments. The United States economy manifests a persistent structural imbalance between production and absorption of traded goods, and has constantly run trade deficits since the early 1970s. There is no guarantee that a sharp appreciation of the yuan against the dollar would significantly lower the Chinese surplus – Japan's high external surplus persisted despite a significant appreciation of the yen against the dollar after the mid-1980s.

China's high savings ratio, its exchange rate and its export promotion policies play an important role in shaping its external balance. To maintain rapid growth, a reduction in Chinese net exports would need to be compensated by increased growth in domestic aggregate demand. This would call for policies to promote private consumption, including redistribution from corporate to personal incomes, and provision of public goods in areas such as health, education and social security. The second security is a security in the second security in the second security is a second security in the second security in the second security is a second security in the second security in the second security is second security in the second second security is a second second

Although twin current and capital account surpluses are generally inefficient, countries may resist eliminating their current account surpluses and translating net capital inflows into a higher level domestic spending if they believe that the surge in capital inflows is a temporary cyclical phenomenon and that their exports may weaken due to a likely deterioration in global economic conditions. They may do so even when the trade surplus is generated at the expense of growth, as was the case in Brazil (discussed below).<sup>51</sup> This was the key lesson learned from the Asian crisis where many countries hit by the crisis had a history of sound and sustainable current account positions which they allowed to deteriorate with the surge in capital inflows in the first half of the 1990s by letting their currencies appreciate and domestic spending rise. In the event

<sup>&</sup>lt;sup>47</sup> See Aizenman and Lee (2005). However, Aizenman (2007) has subsequently argued that China appears to be a clear winner in competitive devaluations and the hoarding game because of its sheer size and lower cost of intervention.

<sup>&</sup>lt;sup>48</sup> Cheap currency can lead to terms-of-trade losses. This seems to be the case in China (UNCTAD TDR 2002, chap. IV, and Yongding 2007)). Like cheap labour, it can also discourage technological upgrading and productivity growth. For these reasons many of the early industrializers in East Asia, including Japan, rarely resorted to cheap currency for industrial development. To the contrary, they occasionally preferred moderate appreciations in order to provide an incentive for productivity growth.

<sup>&</sup>lt;sup>49</sup> High savings ratio has its origins in high retained corporate profits rather than high household savings, and it is greatly influenced by corporate tax policies. Aggressive export promotion strategies include tax rebates and foreign-exchange balancing requirements for FDI; see Yongding (2007) for further discussion.

<sup>&</sup>lt;sup>50</sup> Some commentators draw a parallel between China today and Japan in the late 1980s and early 1990s in several aspects including high savings and investment rates, asset-price bubbles and under-consumption – see e.g. Summers (2007a).

<sup>&</sup>lt;sup>51</sup> Williamson (1995b) argued if inflows are believed to be temporary, it would be rational to resist to an inward transfer by allowing the domestic consumption and/or investment to increase and the current account to run into deficits through faster growth and appreciations – a situation analogous to Dutch disease. Polak and Clark (2006: 555) refer to fear of floating in explaining reserve holding in China, Korea and Singapore.

they saw their export growth falter due to declining foreign demand and prices. When capital markets reacted procyclically, there was no way of avoiding financial meltdown and recession as reserves were insufficient and the required payments adjustment was relatively large. Therefore, twin balance-of-payments surpluses and growing reserve holdings may well be a rational response to uncertainty about the future course of trade and capital flows.

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This argument however runs against a paradox: if capital inflows are believed to be temporary, why allow them to come in and incur large carry costs? An important part of Chinese inflows are FDI, encouraged through various measures due to their expected benefits in terms of transfer of technology and know-how. There is however considerable doubt whether these benefits have materialised (Yongding 2007). There are also large short-term portfolio inflows motivated by expectations of yuan appreciation, which could be curbed through the kind of measures discussed above.

Second, why hold massive surpluses in low-yielding reserves rather than in equity investment abroad, notably the United States, which would continue to allow it to finance its deficits without incurring a large carry costs? This could be done through the Chinese SWF, the recently established China Investment Cooperation (CIC). However, at some \$200 billion, the assets of the CIC are only a fraction of total reserves of the country. Moreover, only one-third of these are used for investment abroad (Truman 2007b). In addition, there is also considerable hostility in the United States towards investment by SWF, sometimes seen as cross-border nationalization. On the one hand, China can allow its private sector to acquire equity abroad, and as noted, initiatives are already under way. However, if done gradually and in small doses, it may not address the problem. On the other hand, a rapid liberalization of resident investment abroad may well produce a large portfolio diversification and capital outflows which may not be easy to reserve when needed.

Table 2 provides further evidence on diversity among developing countries in their current account balances, capital inflows and reserve holdings. Brazil's combination of current and capital account surpluses is even more costly than China's. On the one hand, net capital inflows are not translated into additional investment and growth, but are held in low-yielding reserves. On the other hand Brazil's current account surplus is a symptom of sluggish growth rather than a strong export and growth performance. Its high degree of susceptibility to changes in financial market conditions imposes a tight monetary policy which, on the one hand, attracts arbitrage flow and, on the other hand, lowers growth below potential and helps generate a current account surplus by keeping imports down. In other words, Brazil appears to be paying a high premium in terms of foregone growth for self insurance against exposure to instability in capital flows.

According to Dooley, Garber and Folkerts-Landau (2007) China accumulates reserves in order to provide collateral for FDI in China. That this is not a plausible explanation see Truman (2007b).

<sup>&</sup>lt;sup>53</sup> See Weisman (2007) that "U.S. fears overseas funds could 'buy up America.'" Wolf (2007) refers to "state capitalisms." Several western commentators including Summers (2007b), Garten (2007) and Truman (2007a) call for greater transparency and accountability – something that is visibly missing in the case of western institutional investors and hedge funds. Others such as Wade (2007) see sovereign funds as "a partial redress to the unlevel playing field built into 'global system' through a panoply of international rules ... which confer structural advantages on western companies."

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Like China, both Russia and Venezuela, as major exporters of energy, have been generating relatively large current account surpluses. However, unlike China they do not combine these with capital account surpluses. The Russian capital account is, on average, balanced while in Venezuela where domestic investment and growth have been rising strongly in recent years, part of the current account surplus is used for investment abroad. Nevertheless, in both countries reserves are still exceptionally high in relation to imports and short term debt.

In India the current account has been broadly balanced and additional reserves have been coming primarily from net capital inflows. India has very little short term debt and its reserves are well above the traditional threshold of three months of imports. This is rather costly since the country has considerable need to raise the quality of its infrastructure. The challenge is how to translate excessive reserves into infrastructure investment without overheating the economy since the growth rate has been quite high in recent years.

By contrast, in Turkey and Mexico where reserves are also fully borrowed, the current account is in deficit. The deficits are however not high by traditional standards and there has been no significant increase in the import coverage since the beginning of the decade. In Turkey the current level of reserves is below the short-term liabilities of some \$100 billion, accumulated primarily by the private sector in search of cheap credit abroad as domestic rates are in doubledigit levels in real terms. Both countries have allowed capital inflows to appreciate their currencies significantly instead of intervening and accumulating reserves. In Turkey, where capital inflows have been stronger, appreciations, together with the acceleration of growth, have pushed the current account deficit to very high levels, while in Mexico the deficit has been contained due to slower growth and strong oil prices (UNCTAD TDR 2007; table 1.6). Thus, unlike most other emerging markets these countries do not appear to have taken adequate selfinsurance by translating capital inflows into additional reserves. These countries may be counting on considerable support from the international community in the case of a sudden stop and reversal of capital flows, thanks to their special relations with the United States. Indeed both Mexico and Turkey received much greater support at times of crises, compared to Thailand and Argentina, respectively, which were also hit under similar circumstances.

Thus, while reserves in developing countries have been rising in recent years for self-insurance, there is considerable diversity regarding their size, sources and costs. Countries with current account surpluses are translating most or all of these surpluses into international reserves at relatively high opportunity costs in terms of growth or return on investment in alternative assets. Countries with weak growth and balance of payments, such as is notably the case in Latin America, are compelled to absorb net capital inflows into low-yielding reserve assets rather than using them for investment and growth. Many poor countries are unable to accumulate adequate reserves as they either lack access to capital markets or cannot run current account surpluses, thereby remaining vulnerable to trade shocks. Finally, some countries lack self-insurance and are exposed to sudden stops as large amounts of capital inflows have generated an appreciating currency, which in turn has led to current account deficits.

# 7. Multilateral lending and countercyclical policy

There is considerable scope for national policy in developing countries to manage capital inflows so as to reduce their vulnerability to financial crises, even though policy interventions in the areas discussed above encounter limits and costs, particularly when surges in capital flows are driven by global factors beyond their control. However, none of these fully insulate them from external financial shocks and contagion, in which cases monetary policy and restrictions over capital outflows are highly ineffective. Self-insurance through accumulating reserves by borrowing entails significant costs. Opportunity costs can be even higher when reserves are accumulated by cutting growth. Generating current account surpluses through aggressive exchange rate and export strategies may not only be socially sub-optimal, it may also create frictions in international trade. Overcoming these difficulties calls for effective multilateral arrangements for countercyclical financing.

Many of the difficulties faced by national policy makers in sustaining stability and a high level of economic activity in the face of balance of payments shocks were recognized by the architects of the post-war international economic system. These all had become apparent during interwar years when countries facing shortages of international liquidity had been compelled to resort to beggar-my-neighbour trade and exchange rate practices in order to avoid deflationary adjustment, thereby causing frictions in international economic relations and contraction in trade and employment. The post-war international financial architecture was designed to avoid the repetition of this experience, based on three central components: restrictions over short-term capital flows, multilateral discipline over exchange rate policies and provision of adequate international liquidity. The IMF was created to oversee stability of international exchange and payments and provide international liquidity to countries facing temporary balance of payments deficits in order to avoid deflationary adjustments and ad hoc and discriminatory trade and exchange restrictions. Although the main objective was to secure orderly payments and exchange rates among industrial countries, the responsibility for addressing the problems associated with fluctuations in foreign exchange receipts of developing countries also fell under the IMF's role for the provision of international liquidity.

Regarding the issues under consideration here the Fund has departed from its original mandate in two key areas. First, through conditionality it has effectively sought to promote the kind of procyclical macroeconomic policies that the post-war architects wanted to avoid in countries facing payments difficulties. Second, originally access to IMF liquidity was restricted to current account financing and the Fund was prohibited to lend to meet capital outflows and was empowered to compel a member to exercise capital controls as a condition for access to its resources. However, over time it has moved away from current account to capital account financing so much so that its own financial viability has come to depend on crisis lending to emerging markets.

#### a. From countercyclical financing to procyclical conditionality

The past sixty years have seen a constant distancing of the IMF from its original modalities in the provision of financing in two respects. First, automaticity in drawing on Fund's resources has been abandoned and replaced by conditionality. The Articles in their original form

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did not make any reference to conditional drawing within the limits of members' quotas. Conditionality has been introduced by subsequent decisions by the Board and, eventually, by an amendment of the Articles in 1969 and combined with phased drawing through tranches for better enforcement of conditions attached to drawing beyond the reserve tranche. As argued by Helleiner (1999: 7) the Fund thus moved away from provision of liquidity, that is finance available on short notice and virtually unconditionally, towards finance supplied on the basis of negotiated conditions and made available through successive tranches.

Secondly, the content of Fund's conditionality has drastically changed and the balance between financing and adjustment has tilted towards the latter. Fund programs have almost invariably contained procyclical policy measures for adjustment to payments imbalances not only when these were due to excessive domestic absorption or exchange rate misalignments, but also when they resulted from terms-of-trade shocks, hikes in international interest rates or adverse trade measures introduced by another country. The distinction between temporary and structural disequilibria has become blurred, and the Fund programs have come to be built on the premise that a developing country should interpret every positive shock as temporary and thus refrain from using it as an opportunity for expansion, and every negative shock as permanent, thus adjusting to it by cutting growth and/or altering the domestic price structure.

Procyclical policy conditionality has applied not only to normal drawings from the Fund, but also to various facilities introduced to help overcome specific temporary payments difficulties faced by the members. A Compensatory Financing Facility (CFF) was introduced in the early 1960s as a result of a UN initiative to enable countries facing temporary shortfalls in primary export earnings to additionally draw on the Fund over and above their normal drawing rights, without the performance criteria normally required for upper credit tranches (Dam 1982: 127-8). However, the semi-automaticity enjoyed by members in their access to this facility was effectively removed by a subsequent decision of the Fund, "accommodating it to the highconditional, upper credit tranches" (Dell 1985: 245). The facility has not been used since the "reforms" introduced in 2000 tightened further the circumstances under which access could be sought, despite two recognized temporary shocks in the interim, including the attack in September 2001 which had a significant adverse effect on earnings from tourism in the Caribbean region (IMF 2004a). This is because access to the so-called stand alone CFF purchases would require a country to have a viable payments position except for the effects of the shocks. However, such a country would normally have access to alternative sources of finance. By contrast a country with unviable payments position would need to take austerity measures in order to become eligible for the CFF. Thus, under current arrangements the facility serves no useful purpose. Many Executive Directors in fact called for its discontinuation during the recent review, arguing that the CFF is not an attractive option for low income countries (IMF 2004b).

Much the same is the case for the Exogenous Shock Facility introduced in 2006 for low-income countries. This is designed to provide short-term assistance to address temporary balance of payments needs arising from exogenous shocks, including natural disasters. It is a high conditionality facility with access requiring macroeconomic adjustment – something that actually contradicts the underlying rationale of introducing such a facility which should in fact aim at preventing contractionary adjustments to temporary shocks.

A number of counter-cyclical facilities introduced in the past have been discontinued, including the buffer stock financing facility introduced in the late 1960s and two oil facilities in the 1970s. Of these, the latter constituted exceptional steps in IMF lending practices: they had been introduced as deliberate counter-cyclical devices to prevent oil price hikes from triggering a global recession and they allowed the kind of semi-automaticity of drawings advocated by Keynes during the Bretton Woods negotiations (Dell 1986: 1207). There has been no initiative to introduce similar global counter-cyclical facilities in the past three decades despite periods of widespread difficulties in the world economy, including global contraction in income and trade in the early 1980s and the threat of serious disruption to international trade and payments after the East Asian and Russian crises in the 1990s.

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## b. Crisis lending: current-account financing or financial bailouts?

Perhaps an even more fundamental shift in the role of the Fund in multilateral lending is that it has become a crisis lender and manager for emerging markets. Under the Bretton Woods system where private capital flows were relatively insignificant, the amount of deficits that countries could run was restricted (except for the United States) to their reserve holdings. Thus, when they went to the Fund for liquidity, the official financing needed was relatively small and could be accommodated by their quota-based drawings. However, as already noted, with rapidly increased capital flows and capital account opening, it has become possible to run much larger deficits than only reserve holdings would allow, and for much longer periods. However, since capital flows are subject to boom-bust cycles, the amount of official financing needed to stabilize the exchange rate at times of sudden stops and reversals far exceeds the volume of official liquidity that would be available on the basis of regular credit tranches. Under these conditions, prevention of default would necessitate exceptional access to Fund's resources over and above quota-based drawing.

The role of the Fund as a lender and manager of capital account crises in emerging markets effectively started with the outbreak of the debt crisis in the early 1980s when "many developing countries borrowed heavily from multilateral sources in order to finance debt servicing to private creditors" (Sachs 1998: 53). Such lending has effectively become the dominant financial activity of the Fund after recurrent crises in emerging markets in the 1990s. A Supplemental Reserve Facility (SRF) was established in December 1997 in response to the deepening of the East Asian crisis in order to provide financing above normal access limits to countries experiencing exceptional difficulties in servicing their external debt to private creditors, stabilizing exchange rates and maintaining capital-account convertibility, under a highly conditional stand-by or extended arrangement with a spread of 300 basis points. <sup>54</sup> Due to financial bailout operations, the outstanding IMF credits on the General Resources Account (GRA) doubled between 1995 and 2003 and in the latter year almost two-thirds of total outstanding IMF credits, including drawings from the GRA and Poverty Reduction and Growth Facility (PRGF), were accounted for by crisis lending to Argentina, Brazil and Turkey. From 1995 until the end of 2003 exceptional financing provided to 9 emerging markets (Argentina,

<sup>&</sup>lt;sup>54</sup> On the eve of the Mexican crisis the IMF had explored the possibility of creating a new "short-term financing facility" – see IMF (1994), Fitzgerald (1996) and Williamson (1995a).

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Brazil, Mexico, Thailand, Indonesia, Korea, Russia and Uruguay) amount to SDR 174 billion, with an average of 637 per cent of quota (IMF 2005c; table 10). In most countries hit by the financial crisis, notably in East Asia, IMF lending was accompanied by procyclical macroeconomic policies designed, on the one hand, to bring about a swift balance-of-payments adjustment and, on the other hand, to restore confidence, halt capital outflows and generate a catalytic impact on private lending. In the event, however, hikes in interest rates and fiscal retrenchment failed to stem capital flight but served to deepen credit crunch and recessions, leading to large losses of output and employment (UNCTAD TDR 1998: chap. III; and 2000; chap. IV).

The IMF intervention in the East Asian crisis laid bare two shortcomings of the SRF. First, assistance by the IMF was not designed to play a pre-emptive role in discouraging sudden stops and reversals, but came after the flight of capital and the collapse of the currency to meet the remaining demand of private creditors and to prevent default. Second, because it relied on regular Fund resources, it turned out to be inadequate in view of the sheer scale of the financing required. For instance the financing made available to Korea fell far short of its outstanding short-term inter-bank debt so that the country had to suspend payments, and default could only be averted when the creditor banks agreed to restructure their claims in January 1998. These events thus gave rise to suggestions to convert the IMF into an international lender-of-last-resort. On this view, if the IMF stood ready to provide adequate liquidity without conditions to countries with sound policies, they would be protected against contagion and sudden stops. <sup>55</sup>

There are, however, serious difficulties in translating the IMF into a genuine international lender of last resort. The effective functioning of such a lender depends on two conditions: it should have the discretion to create its own liquidity (or to have unconstrained access to international liquidity), and there should be reasonably well defined rules and conditions that the borrower must meet. Strictly speaking the IMF, as it stands, does not satisfy either of these conditions to qualify as a lender of last resort. However, it is in principle possible to overcome the resource constraint by allowing the Fund to issue reversible SDRs to itself for use in lender-of-last-resort operations; that is to say the allocated SDRs would be repurchased when the crisis was over (Ezekiel 1998).

The terms of access to such a facility could pose even more serious problems. A genuine lender-of-last-resort ready to lend in unlimited amounts without conditions except at a penalty rate would need to exercise tight supervision over borrowers to ensure their solvency. But this is not easy to reconcile with sovereignty. While automatic access would ensure a timely response to market pressures, it would also create moral hazard for international borrowers and lenders and considerable risk for the IMF. By contrast, conditional withdrawal of financial support and a degree of "constructive ambiguity" would reduce the risk of moral hazard, but negotiations could cause long delays, perhaps leading to a deepening of the crisis.

<sup>&</sup>lt;sup>55</sup> See Fischer (1999). The report of the Meltzer Commission (2000) virtually proposes the elimination of all other forms of IMF lending, including those for current account financing which should, in their view, be provided by private markets. This was found objectionable, including by some members of the commission since, inter alia, it implied that only a small number of more prosperous emerging economies would be eligible for IMF financing (Summers 2000: 14).

Pre-qualification is often seen as away out: that is, countries meeting certain *ex ante* conditions would be eligible for lender-of-last-resort financing with eligibility determined, for instance, during Article IV consultations. Under such an arrangement, automatic access to the lender-of-last-resort facility on a pre-qualification basis could be subject to limits but, after a crisis occurred, the country might receive additional funds subject to its commitment to undertake certain actions.

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However, pre-qualification involves its own set of problems. First, IMF would have to act like a credit-rating agency. Second, the result could be a further segmentation of the Fund's membership, with attendant consequences for its governance. Third, lending at penalty rates might not be enough to avoid debtor moral hazard. Finally, it would be necessary to constantly monitor the fulfillment of the terms of the financing, adjusting them as necessary in response to changes in conditions (which might include those in financial markets or others beyond the control of the government of the recipient country). In these respects difficulties may emerge in relations between the Fund and the member concerned. 56

Nevertheless, the new emphasis on pre-emptive instruments with a strong predictability of access led to the creation of the Contingent Credit Line (CCL) in 1999 as the Russian default gave rise to fears of contagion and threatened to deepen the global liquidity crisis. The CCL was designed to provide a precautionary line of defence for countries facing the threat of financial contagion in the form of short-term financing. Thus, unlike the SFR which is available to countries in crisis, the CCL was established as a preventive measure and a signaling device. Countries would pre-qualify for the CCL if they complied with conditions related to macroeconomic and external financial indicators and with international standards in areas such as transparency, banking supervision and the quality of its relations and financing arrangements with the private sector. The pressures on the capital account and international reserves of a qualifying country must have resulted from a sudden loss of confidence amongst investors triggered largely by external factors. Moreover, although no limits on the scale of available funds were specified, like the SRF, the CCL depended on the existing resources of the Fund.

Originally it was expected that the precautionary nature of the CCL would restrict the level of actual drawings. However, in the event, no country applied for this facility. Under its initial terms, countries had little incentive to pre-qualification because access was not automatic, subject to Board's assessment of likelihood of contagion and policies. The facility failed to provide predictability of access because of phased disbursements subject to policy review. Besides, fees and interest charges on the CCL were the same as under the SRF which was available to countries eligible to the CCL. The IMF Board took steps in September 2000 to lower charges as well as to allow some automatic access with a view to enhance the potential use of the CCL. However, this facility was discontinued in November 2003 as countries continued to avoid

<sup>&</sup>lt;sup>56</sup> Such problems emerged in the Brazilian agreement with the IMF in 1999 which constituted an experiment with the provision of international lender-of-last-resort financing to an emerging market: it was intended to protect the economy against contagion from East Asia, subject to a stringent fiscal adjustment and a gradual depreciation of the *real* throughout 1999. After a political struggle the Brazilian Government succeeded in passing the legislation needed to meet the fiscal target but, when the currency came under attack, the Fund allowed the agreement to collapse, requiring additional and more stringent conditions regarding the fiscal balance in order to release the second tranche of the package.

recourse to it owing to fears that it would give the wrong signal and impair their access to financial markets.<sup>57</sup>

There is now another initiative under way for a new liquidity instrument for market access countries, the Reserve Augmentation Line (RAL), to be established as part of the SRF, evidently in response to request from some emerging markets for a pre-emptive facility, drawing on the lessons from the ill-fated CCL.<sup>58</sup> According to the proposal, countries would have predictable access of an external shock and a threat of contagion if they commit themselves to "sound policies." Qualification would be assessed at the request of the member, rather than during Article IV consultations. The qualification criteria include strong macroeconomic policy, sustainable debt, transparent policies and progress in removing remaining vulnerabilities to shocks. Those meeting the criteria would be guaranteed automatic access at a level of 300 per cent of quota and at the same terms as the SRF. Policy performance would be constantly monitored to safeguard the Fund's resources. Arrangements would be for one year with a single mid-year review, but a series of several RALs are not ruled out. A global cap of SDR50 billion is proposed in order to limit risks to Fund's liquidity and leave sufficient resources for traditional drawings.

This instrument can run against the kind of hurdles discussed above in relation to lender-of-last-resort financing, particularly since a certain degree of judgement would be involved in the assessments for qualification, the credibility of forward looking commitments and *ex post* monitoring of policy performance. As feared under the CCL, request for prequalification could send a negative signal and trigger adverse market reaction, particularly when the amounts committed are small compared to what may be required to meet the claims of international investors and lenders. The disparity can be important since external liabilities are not correlated with IMF quotas on which the drawings would be based. Termination of access due to failure to comply with policy commitments could be even more damaging as it would most likely lead to a massive exodus.

The emphasis on contagion here, as in the CCL, signifies the belief that "sound policies" do not themselves generate imbalances and fragility so that instability could result primarily from external shocks and contagion. What is meant by "sound polices" is fiscal discipline and tight monetary policy.<sup>59</sup> When external shocks and contagion occur, the appropriate response would be to tighten monetary policy and undertake further fiscal adjustment, and these, in combination with the signal provided by pre-qualification to exceptional access to liquidity, are expected to provide adequate protection and even eliminate the need to draw on the RAL.

There is a certain degree of circularity in the way this instrument is designed. A country would need to commit itself to procyclical policy in order to have access to what should in principle be a counter-cyclical financing facility. More importantly, as the East Asian crisis

<sup>&</sup>lt;sup>57</sup> For an assessment of the CCL see Goldstein (2000: 12B13) and IMF (2003a and 2006c).

<sup>&</sup>lt;sup>58</sup> See IMF (2006c). This proposal was still under discussion at the time of writing of this paper; see IMF (2006d and 2007a).

<sup>&</sup>lt;sup>59</sup> This is clearly stated in IMF (2006a) where an assessment is made of relative contributions of national policy and multilateral liquidity provision to crisis prevention.

shows, the assumption that monetary and fiscal discipline would prevent build up of fragility does not hold ground. Nor would floating be a panacea – a combination of tight monetary policy with floating could well serve to attract short-term arbitrage flows and appreciate the currency, thereby leading to unviable payments position and vulnerability to sudden stops and reversals. This is exactly what is happening in Turkey which has been generating, under an IMF program, an unprecedented primary budget surplus of 6.5 per cent of GDP while pursuing a very tight monetary policy.

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A sustainable debt position is considered essential for pre-qualification since lending into a position of insolvency could undermine the viability of the instrument and damage the IMF's reputation and financial integrity. However, even allowing for inherent difficulties encountered in the analysis of debt sustainability in emerging markets, the Fund's record in assessing the evolution of debt ratios and the impact of its recommended policies is not very encouraging (Akyüz 2007b). As in the case of HIPCs, its sustainability assessments for emerging markets yield highly optimistic projections. For instance, its medium-term fiscal projections for Argentina, Brazil and Turkey persistently showed stabilization of debt ratios while in reality debt levels continued to mount. More importantly, errors of projections are almost always greater for countries with IMF programs, suggesting that monetary, fiscal and exchange rate policies promoted by the Fund do not always generate stable payments balances and debt ratios, or prevent build-up of vulnerability.

A fundamental flaw of the IMF's policies of crisis prevention relates to its approach to capital inflows. As recognized by the Independent Evaluation Office in a report on the IMF's approach to capital account liberalization, the Fund has been ambivalent about controls over capital inflows, including market-based measures such as un-remunerated reserve requirements applied by Chile (IEO 2005: 60). It abstains from recommending controls even when surges in short-term capital are leading to sharp currency appreciations and growing trade deficits, advocating, instead, fiscal tightening and greater exchange rate flexibility. However, as noted in the same report, none of the standard policy measures recommended by the Fund for this purpose is a panacea and each involves significant costs or otherwise brings about other policy dilemmas. Although it is argued that "the IMF has learned over time on capital account issues" and "the new paradigm ... acknowledges the usefulness of capital controls under certain conditions, particularly controls over inflows" (IEO 2005: 11), this is still not reflected in the policy advice given in Article IV consultations or in stand-by programs.

The objective of maintaining an open capital account not only for inflows at times of surges, but also for outflows during exits underpins the initiatives undertaken for the provision of exceptional financing since the East Asian crisis, including the SFR, CCL and now the RAL. The moral hazard implications of these facilities are generally recognized, particularly for international creditors and investors, as they tend to encourage imprudent lending and investment practices, adding to bubbles. The debtor moral hazard is less of a problem since it must be now evident that the IMF bailout operations do not prevent financial meltdown and recessions. These facilities not only allow the creditors and investors to escape the full consequences of the risks

They "show ... nearly always a decrease in the debt ratio relative to the starting point" but "statistically it seems unlikely that such a broad range of countries would all experience declining debt ratios." IMF (2003b: 9).

they have assumed and, hence, weaken market discipline, but they also place a disproportionate burden on debtors who not only pay a hefty risk premium on inflows but also penalty rates for IMF funds in order to finance outflows.

Creditor moral hazard, inequitable sharing of the burden of a crisis between debtors and creditors, and the inadequacy of the level of lending to forestall speculative attacks all render exceptional IMF facilities rather poor instruments for crisis prevention and intervention. Capital account policies could present themselves as more viable alternatives, including both at times of surges and exits. Countries have scope to regulate capital inflows at times of surges and reduce their exposure. But without a multilateral framework it is considerably more difficult to impose control over outflows during sudden stops and reversals, and prevent financial crises and recessions.

After recurrent financial crises in the 1990s there was indeed a growing consensus on the need to limit Fund bailout operations and introduce multilaterally agreed debt workout procedures in order to overcome moral hazard and involve the private sector in financial crises. The IMF Board also recognized that at times of rapid outflows a need might arise for a unilateral standstill and comprehensive capital controls even though it was unwilling to provide statutory protection to debtors in the form of a stay on litigation, preferring instead signalling the Fund's acceptance of a standstill by lending into arrears to private creditors. The secretariat took an initiative and proposed the Sovereign Debt Restructuring Mechanism (SDRM). However, this was designed to address the problem of sovereign insolvency; it would apply only to countries with unsustainable sovereign external debt while those facing liquidity problems would continue to receive IMF support. The provision for statutory protection in the form of a stay on litigation was dropped to increase the likelihood of its acceptance. However, even this diluted version of the SDRM proposal could not elicit adequate political support and has been abandoned.

## c. Areas of Reform

The guiding principle of any reform of IMF financial operations must be incontrovertible: the Fund lending should focus on counter-cyclical financing designed to support economic activity, trade and employment in countries facing foreign exchange shortages due to trade and financial shocks, and the Fund should refrain from lending to support repayment to international creditors to, and investors in, developing countries. Even when capital account crises in emerging markets pose a systemic threat to international financial stability, the problem should not be addressed by the IMF, but by the governments of major countries hosting creditors and investors — as they did in the Long Term Capital Management debacle in the aftermath of the Russian default.

<sup>&</sup>lt;sup>61</sup> See, e.g., Group of 22 (1998); the Council of Foreign Relations Independent Task Force (CFRTF 1999); the Emerging Markets Eminent Persons Group (EMEPG 2001); and the High-Level Panel on Financing for Development (Zedillo 2001). For a discussion of issues in bailouts and reform see Goldstein (2000), Haldane (1999), Akyüz (2002) and Eichengreen (2002).

<sup>&</sup>lt;sup>62</sup> See IMF (2000). For further discussion of the debate in the IMF see Akyüz (2002: 123-128).

This is to say that the IMF should, in principle, lend for current account financing not for capital account financing. Instability in the capital accounts of developing countries should be dealt with using other policy instruments— something that calls for a fundamental reform of the approach of the IMF to international capital flows.

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Reform of multilateral arrangements regarding capital account issues should aim at widening the space for counter-cyclical national and multilateral policy in the presence of both positive and negative capital account shocks. As they stand, the Articles of the Fund do not give it clear and effective jurisdiction over capital account issues or allow it to include capital account measures as conditionality in its financial arrangements with a member (IMF/IEO 2005: 50). The Fund should be able to request exercise of control over inflows as well as outflows, and the guidelines for surveillance should specify the circumstances in which it can actually recommend the imposition or strengthening of the measures of control and regulation. It should also develop new techniques and mechanisms designed to separate, to the extent possible, capital account from current account transactions, to distinguish among different types of capital flows from the point of view of their sustainability and economic impact, and to provide policy advice and technical assistance to countries at times when such measures are needed.

The Articles of the IMF allow it to request members to exercise control on capital outflows, but they do not provide legal protection against litigation by international investors and creditors for countries imposing temporary standstills and exchange controls at times of rapid exit of capital. This would require an agreement on a definitive interpretation or an amendment of the Articles of the Fund, to be ratified by all members. The decision for a standstill should be taken unilaterally by the country concerned and sanctioned by an independent panel rather than by the IMF because the countries affected are among its shareholders and the Fund itself is a creditor. This would be similar to WTO safeguard provisions which allow countries to unilaterally take emergency actions to suspend their obligations when faced with balance-of-payments difficulties (Akyüz 2002: 124-25). However, the Fund should also be able to request a mandatory standstill, as well as exchange controls, when it lends into arrears if creditors are unwilling to reach an agreement on a voluntary one. This would be essential to ensure that the Fund money is not used to finance debt repayments and capital outflows.

Countries facing temporary difficulties on their current payments due to shortfalls in export earnings, surges in import prices, or hikes in interest rates should enjoy adequate access to IMF financing. Such lending should be available both to low-income countries without regular access to financial markets and to emerging markets whose access to private finance is often impaired at times of current account difficulties because of procyclical behaviour of markets. Exceptional current account financing may be needed at times of a contraction in world trade and growth, and/or sharp declines in capital flows to developing countries, as was the case in the early 1980s and after the East Asian and Russian crises. The Fund's regular resources may not be adequate for dealing with such cases because they are not large or flexible enough. This can be handled by a global countercyclical facility based on reversible SDR allocations, and countries could be permitted to have access to such a facility on a temporary basis within predetermined limits.

<sup>&</sup>lt;sup>63</sup> On conflicting interpretations of IMF provisions and judicial practices see UNCTAD TDR (1998: chap. IV).

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The level and terms of access of developing countries to IMF resources need to be reconsidered. An across-the-board increase in IMF quotas at current levels of allocation would not improve the access by many developing countries because of the small size of their quotas. Even a redistribution of quotas on the basis of income shares valued at purchasing power parities would only address a small part of the problem for low-income countries. One way would be to use different quotas for contributions and drawing rights. Different access limits may be set for different groups of countries according to their vulnerability to external shocks and access to financial markets. Under such an arrangement specific facilities such as the CFF would no longer be needed to meet the special needs of poorer countries. Access based on need, together with an overall expansion of Fund quotas and their redistribution in favour of developing countries, would increase unconditional access through reserve tranche purchases. However, it is also important to end the tendency to impose procyclical macroeconomic conditionality at higher access levels.

There has been considerable emphasis in the recent debate on the role that may be played by the SDR in a new design of the international economic architecture. There has been no SDR allocation since 1981; the special allocation agreed by the Board in 1997 has not taken effect because it has not been approved by the United States. Various proposals have been made to revitalize and use the SDR for development assistance or a lender-of-last-resort facility, but these do not have strong rationales. International taxes on global public bads such as currency speculation, gas emissions or arms trade provide more appropriate alternatives for development financing and the rationale for using reversible SDR allocations for a global countercyclical facility is much stronger than using it for financial bailout operations.

It has been suggested that while the original rationale of provision of additional liquidity to the system as a whole is no longer valid, SDR allocations can yield specific "benefits of permitting low-income countries to acquire and hold reserves at a much lower interest rate than they would have to pay in the market and a reduced dependence of the system on borrowed reserves that are liable to be recalled when they are most needed." (Polak and Clark 2006: 553). In their proposal, the total stock of SDRs would be limited by the amount willingly held at the SDR interest rate, and there would be no IMF designation as to which countries should hold them. This is particularly important for preventing the SDRs from becoming an instrument for financing capital outflows and repayment of creditors at times of financial turmoil.<sup>64</sup>

Perhaps one can go even further and replace quotas and GAB and NAB with the SDR to fund the IMF. This would require the Fund to allocate SDRs to itself up to a certain limit, which may be increased over time with growth in world trade and FDI flows. The demand for SDRs can be expected to be inversely related to buoyancy in global trade and production and the availability of private financing for external payments. Thus, it would help counter deflationary forces in the world economy and provide an offset to fluctuations in private balance of payments financing.

<sup>&</sup>lt;sup>64</sup> A further issue discussed by the authors is whether allocation should be made to all members or to low-income members alone. They advocate retaining the provision of the Articles which implies that the size of a member's allocation should not be based on the state of its payments position. This could further meet the concern expressed here that the SDR should not become an instrument of financial bailouts.

#### 8. Conclusions

Real economic activity is increasingly shaped by developments in the sphere of finance. This influence is not always benign. Contractionary and expansionary impulses emanating from the real economy are often aggravated by procyclical response of financial markets, amplifying swings in investment, income and employment and leading to waste of resources and creating income and job insecurity. In developing countries financial cycles are dominated by surges and sudden stops in international capital flows driven by factors largely beyond their control. Consequently, stabilization of economic activity and prevention of financial crises crucially depend on how integration with the global financial system and international capital flows are managed.

This paper has examined policy challenges and options at the national and international level in managing financial cycles without sacrificing output and employment, focussing on systemically important areas of intervention. A key conclusion relates to the complementarity between national and international policies. In the absence of appropriate multilateral arrangements for the provision of international liquidity and management of capital flows, the scope for national policy is quite limited and national authorities are forced into seeking suboptimal solutions to problems posed by the instability of capital flows. However, it is also true that multilateral arrangements can only support national policy rather than substitute it.

There is considerable diversity among developing countries in the space available for countercyclical policy in the areas of intervention examined here. The policy space is much more limited in countries with structural fiscal and current account imbalances, inadequate levels of domestic savings and investment, high stocks of public and external debt, and excessive dependence on foreign capital. These countries face serious dilemmas in reconciling domestic and external objectives in the conduct of countercyclical monetary policy. They are also more susceptible to adverse reaction of markets to various measures of control that may be imposed over capital flows.

Managing capital inflows are key to the prevention of capital account crises since policy options are much more restricted under sudden stops and reversals. However, the policy space available is not always exploited efficiently. Some countries still adopt an attitude of benign neglect at times of strong inflows, allowing them to generate fragility in private sector balance sheets, currency appreciations and trade imbalances. Although many countries, notably in Asia, show increased awareness of vulnerability to capital account crises, their policy response is not always optimal. Many of them continue to allow a high degree of freedom to capital movements, and intervene in foreign exchange markets to prevent sharp appreciations and trade deficits, and accumulate reserves as a safeguard against sudden stops and reversals.

Reserve accumulation is now seen as the only reliable defence against instability of capital flows. In some countries these are generated by cutting imports and growth. In others, including those running current account surpluses based on strong exports, an important proportion of reserves are borrowed. These entail large carry costs and transfer of resources to reserve-currency countries. Efforts to build reserves as a self insurance by generating current

account surpluses and resisting currency appreciations are also threatening to become a major source of tension in international trade.

Accumulating reserves by cutting growth, borrowing or generating large trade surpluses by beggar-my-neighbour trade and exchange rate policies is certainly inferior to cooperative multilateral solutions to the problem of instability in private capital flows. Solutions at the multilateral level could be sought in two main areas: provision of adequate international liquidity at appropriate conditions for current account financing to countries facing foreign exchange shortages as a result of trade and financial shocks; and orderly debt workout procedures designed to stem attacks on currencies, check capital outflows and involve the private sector in the resolution of crises. Multilateral policy surveillance and advice should also be used to help countries to manage surges in capital inflows.

However, the multilateral system has been moving away from countercyclical financing towards procyclical policy conditionality, and from current-account financing to capital account financing. Many facilities introduced in the past to allow countercyclical policy response to temporary payments imbalances have either disappeared or have been made highly conditional on the pursuit of procyclical macroeconomic policies. IMF crisis lending has focussed on the repayment of private creditors and investors and maintenance of convertibility, rather than restoration of income and employment.

The way the IMF has handled financial integration and stability of developing countries has indeed been quite abysmal, even by comparison with the muddling through the debt crisis of the 1980s, causing rapid loss of reputation and relevance of the institution. There was first an attempt to change the Articles to establish a global regime of open capital accounts, which had however to be abandoned willy-nilly after a series of crises. There followed calls for an international lender-of-last-resort as a pre-emptive measure, but the CCL established for this purpose proved to be deficient and had to be abandoned. Difficulties in establishing a last resort lender with adequate power of supervision over national policies and the concern over safeguarding IMF resources, aggravated by sovereign defaults in some emerging markets working with the Fund, led to an attempt to design orderly workout procedures for sovereign debt and recommendations of self-insurance. The SDRM was abandoned because of opposition from the financial markets and the United States, and lack of support among developing countries. But the advice on reserves has been taken to heart, making the Fund irrelevant for an important group of developing countries. The fate of the recently proposed RAL, as an attempt to keep the Fund in business for weaker and highly vulnerable emerging markets, is uncertain – the debate in the IMF Board indicates that there are serious concerns about its viability.

The prospects for reforming multilateral monetary and financial arrangements in areas crucial for financial and economic stability of developing countries are not very bright. This makes it all the more important for these countries be vigilant about their integration into international financial markets. In order to reduce their exposure to financial crises they need to make full use of the policy space available and create conditions for widening their policy space by addressing their structural and institutional weaknesses.

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TABLE 1: Current and capital accounts, reserves and short-term debt in developing countries (Billions of U.S. dollars)

	De	eveloping Co	ountries	China			Fuel Exporters		
	2001	2007	2002-07	2001	2007	2002-07	2001	2007	2002-07
CA	40.8	593.3	$2063.7^{a}$	17.4	379.2	939.9	84.9	367.0	1497.1
NCF	100.1	413.3	1066.9 <sup>a</sup>	34.8	110.9	371.6	- 23.3	- 83.2	- 439.2
R	897.5	4094.6	3197.1 <sup>b</sup>	216.3	1559.5	1343.2	214.5	1178.1	963.6
FDI	175.2	295.5	1294.9 <sup>a</sup>	37.4	70.1	345.3	15.3	19.1	114.4
STD	344.7	856.9	512.2 <sup>b</sup>	1.8	25.1°	23.3 <sup>d</sup>	0.3 <sup>e</sup>	14.4 <sup>e</sup>	14.1 <sup>de</sup>
R/M (months)	4.1	6.8	-	6.6	12.8	_	5.7	10.1	-

Source: IMF World Economic Outlook Database

CA: Balance on current account (WEO Table B15)

NCF: Net capital flows (Table B18)

R: International reserves (Table A15)

FDI: Foreign direct investment (Table B18)

STD: Short-term external debt (Table B22)

R/M: Reserves as a proportion of imports of goods and services (Table A15).

#### Notes:

- a. Cumulative over 2002-07
- b. Change between 2007 and 2001
- c. 2006
- d. Change between 2006 and 2001
- e. For 16 fuel exporters for which data are available

Table 2: Balance of payments, reserves and growth in selected emerging markets

	CA 2002-06 Billion U.S. \$	NCF 2002-06 Billion U.S. \$	Δ <i>R</i> 2002-06 Billion U.S. \$	Borrowed Reserves <sup>a</sup> (per cent)	R/M 2001 (months)	R/M 2006 (months)	Average Growth 2002-06 (per cent)
Brazil	35.7	10.8	49.8	21.7	4.19	5.9	3,2
China	560.6	260.7	853.2	30.5	6.6	10.5	10.1
India	-0.7	108.0	125.0	86.9	5.4	6.0	7.6
Mexico	- 37.0	73.5	31.5	100.0	2.0	2.2	2.8
Russia	303.8	0.6	263.1	0.0	3.7	11.3	6.5
Turkey	- 79.7	95.6	42.2	100.0	5.2	5.1	7.2
Venezuela	87.6	- 62.4	20.30	0.0	4.9	9.5	4.4

Source: IMF World Economic Outlook Database

CA: Cumulative current account balance NCF: Cumulative net capital flows ΔR: Changes in international reserves

R/M: Reserves as a proportion of imports of goods and services

#### Notes:

a.  $NCF/\Delta R$