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The International Monetary Fund and capital flows

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Abstract

Controls on international capital flows were a central issue for the International Monetary Fund at Bretton Woods in 1944. But by the 1970s, mainstream thinking was encouraging open capital flows. A succession of damaging crises followed: Latin America in the 1980s, Mexico again in 1994 and Asia in 1997. Fund policies were tweaked, but the causes were seen as being largely in the recipient countries. Capital controls were specifically rejected. Nevertheless, the Fund's view began to shift, probably encouraged by the 2008 global financial crisis. There was a growing recognition that the capital-flow surges at the heart of these crises were often externally driven, reflecting global factors. The appropriate response would include capital flow management (CFM). The Fund recognized this in its 2012 Institutional View, but CFM was at the bottom of the policy toolbox, surrounded by conditions and constraints, maintaining the stigma on CFM. Meanwhile many emerging economies were enhancing their ability to cope with excessive capital flows, although at some cost (slower growth, tighter fiscal policy, large foreign-exchange reserves). At the same time the flows were increasing, with a bigger component of flighty portfolio flows. CFM measures still have an important place in this new environment, but the Fund's reluctance to embrace them means that a deep discussion on operationalizing effective CFMs is still lacking.

JEL Codes: F32, F33, F34, F42, F65

Key words: International Monetary Fund; capital flow management; economic crises

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Preface

International capital flows have been an abiding concern of the International Monetary Fund, going back to Bretton-Woods in 1944. The signatories recognized that the stable parities at the heart of the original Bretton-Woods model would be undermined by speculative capital flows. Thus capital controls were seen as an integral element of the system. But by the time currency convertibility under this fixed-parity system had been widely implemented in the early 1960s, the major economies had begun to actively encourage capital flows.

Fund policy adapted smoothly, switching to advocacy of capital flows, opposing any regulatory constraints. This position was maintained in the face of capital-flow crises in Latin America in the 1980s, in Mexico again in 1994, then in Asia in 1997. None of this adverse experience dampened the Fund's proselytizing enthusiasm for free capital flows.

The Fund's explanation of the crisis episodes was largely in terms of domestic shortcomings – macro-economic mistakes (Latin America in the 1980s), and financial sectors made vulnerable by poor institutions and governance (Mexico 1994, Asia 1997). Other domestic policy failures, such as fixed or overvalued exchange rates, were often part of the story. If the explanations were domestic and idiosyncratic, the Fund's policy advice could focus on country-specific reform advice relating to each crisis, without questioning the global environment of international financial flows. Missing from this discussion, at least until around the time of the 2008 global financial crisis, was a major role for the external factors – policies in the advanced economies, developments in global financial markets and the global financial cycle (as described by Borio (2012) and Rey (2013)).

Prior to each of these crises, there were foreign-capital surges which were very large in relation to the embryonic financial sectors of the recipients. Indeed, they were very large compared with the GDP of these countries, routinely exceeding 5% of GDP during successive years, and in some cases over 10% of GDP. To achieve the real-goods counterpart of these financial inflows, real exchange rates appreciated and current account deficits widened sharply.

Thus these inflows created a vulnerable environment susceptible to a change of foreign-investor sentiment: large CADs and overvalued exchange rates were superimposed on weak financial sectors, often with other policy deficiencies as well. What occurred when sentiment changed was similar to a bank run. Like bank depositors, foreign investors had a powerful incentive to be 'first out the door' when risks were reassessed. Domestic investors who had borrowed in foreign currency wanted to close their open position. Just as a bank run feeds on itself, capital reversals are self-validating. Even strong financial sectors would have difficulty in coping with the sudden outflows. Weak finance and policy-making imperfections turned an outflow into a crisis.

Why did the IMF focus almost exclusively on the domestic shortcomings in its crisis-response and its policy recommendations, when a key causation was external 'push' factors? A big part of the answer was the mindset of many of the Fund staff: firm believers in the mainstream 'efficient markets' model. This model seemed of particular relevance to this period of world-wide financial deregulation and had a strong message on capital flows. Just as there was a strong presumption that free trade would benefit all parties, free capital movements would benefit all. As one of the principal institutional guardians of free trade, it might have seemed only a short stretch for the Fund to be the guardian of free capital flows as well. If things didn't work out well, it must because of some weakness in the imperfect policy-environment of the individual recipients.

This free-market orientation was supported by the academic mainstream. Less prominently but still powerful behind a lower profile, financial markets ('Wall Street') saw the profitable opportunities in arbitraging and intermediating inter-country financial markets, and wished to do so with the minimum of regulatory interference. As well, their influence played out on issues of rescheduling and restructuring of crisis debt, to protect their commercial interests. Thus none of these crises was seen as a call to revise the analytical framework, but instead was attributed to idiosyncratic deficiencies in the recipient countries. There were, indeed, plenty of these. Where the events did not fit the academic models, the models were tweaked. But the basic story remained the same: free markets were efficient and the causal shortcomings were elsewhere, mainly in the recipient countries.

A brief history of these three crises is offered in Section 1. It focusses on the external 'push' factors which account for the surges in capital that preceded each of the crises. This is not to deny the many domestic deficiencies in the recipient countries. Rather, it is to redress the balance in the standard narrative (especially that offered by the Fund itself) about the crises. Sections 2-6 trace the evolution of the Fund's thinking and actions over the course of these three crisis periods, followed by the quite substantial revisions of the Fund's approach which occurred after 2008, culminating in the Institutional View (IV) in 2012 -- fifteen years after the Asian crisis.

The narrative, however, does not end with the IV. The IV message is that, indeed, there might be challenges in the surges and retreats of global capital, but any policy to moderate inflows should be surrounded by caveats, conditions and constraints. There was still a stigma surrounding capital controls -- now called 'capital flow management' (CFM). CFM might be included in the policy toolkit, but it was right at the bottom of the box. This post-IV story is told in Section 7.

Meanwhile the environment in many of the recipient countries has evolved. The shortcomings identified earlier by the Fund (and others) have been addressed. Exchange rates have been floated, financial sectors have been shored up with regulation and prudential supervision, and policy-making experience has deepened. Nevertheless, the more recent experience with capital flows confirms their ongoing susceptibility to 'sudden stops', and the institutional 'pipes' which carry capital around the world have enlarged while financial instruments have become more complex and more flighty. There is an on-going need for the Fund to move to a specific endorsement of CFM as a first-line policy tool, together with detailed and specific discussion of the full range of policy options. Only when this is done will the stigma be removed, and operationally effective CFM will be developed to address the remaining still-serious challenges of international capital flows.

Section 8 explores the Fund policy-guiding model, with its limited recognition of the volatility of global capital flows. This 'efficient-markets' model was the basis for specific policy insights – Mundell's policy assignment[1]; the 'Impossible Trinity'[2]; the 'Lawson Doctrine'[3], advocacy of free-floating exchange rates and, above all, opposition to capital controls. This section also sets out where this 'efficient markets' model departs from the operation of real-world financial markets.

The IMF Independent Evaluation Office (itself a product of the Asian crisis) has reported three times on this evolution of Fund practice and thinking: in 2005, with an update in 2015, and most recently in 2020. The IEO is, by its nature, an understanding commentator and gentle critic. An arms-length commentary such as this can add to this incomplete narrative.

1. Capital flows to emerging economies

For three decades following WWII, emerging economies favoured exchange-rate regimes close to the original Bretton-Woods model: fixed-but-adjustable rates supported by capital-flow regulation. Their imperfect integration with global capital markets made this viable. Their main balance of payments challenges were to be found in the current account (a shortage of foreign exchange to pay for imports), as envisaged at Bretton Woods. But when greater global integration of financial markets brought substantial capital flows, first in the 1970s and again in the 1990s, these economies were unprepared for the volume of inflows.

Characteristically, the first of the major emerging-economy capital-flow crises was generated by events outside their domestic economies. OPEC 'petrodollars', accumulating after the oil-price increases in the 1970s, were 'recycled' (i.e. intermediated) via US banks in the form of dollar-denominated loans, largely to Latin America, which was experiencing strong growth and positive sentiment. The borrowers were governments (Mexico, Argentina, Brazil) and the private sector (Chile).

The foreign-currency debt owed to banks by non-OPEC developing economies rose from \$4.5 billion in 1973 to \$145.9 billion by the end of 1982, funding almost half of the burgeoning accumulated external deficits of \$336 billion[4]. Mexico's external debt rose from less than 20% of GDP in 1973 to nearly 70% by 1982 (with other Latin American countries close behind). The innovation of floating-interest-rate loans facilitated this by shifting the interest risk from banks to borrowers[5].

Paul Volcker's inflation-busting interest rate increase of 1979 sharply raised borrowing costs from the negative-real rates of the 1970s, dampened export markets and sharply appreciated the dollar, pushing up the local-currency value of borrowing. This produced the 1980s Latin American debt crisis, beginning with Mexico in 1982[6]. All major Latin American economies were affected: Mexico was the first to fall, but Brazil needed even more assistance.

[1] Fiscal policy is powerful when exchange rates are fixed, monetary policy when exchange rates are floating.
[2] Countries must choose two of three among free capital flows, independent monetary policy and fixed exchange rate.
[3] A CAD was of no concern provided that the imbalance reflected private-sector decisions.
[4] Lamfalussy (2000). 'Western bankers (were) queueing up outside the offices of developing countries during the IMF/World Bank meetings'.

[5] As we shall see later, financial innovation often shifts risks to those least able to understand it.

[6] There had been an earlier example of the inherent problems of recycling petrodollars. The Pertamina crisis of 1975 was facilitated by the ready availability of US banking funds seeking lending opportunities for recycling of

There followed a 'lost decade' for the borrowing countries, as the debt was slowly resolved: private capital flows reversed, to flow 'uphill'. The Fund provided what were at the time were seen as very large support programs to maintain viable external accounts. The US government stepped in to save the day (the US banks, as much as the borrowers). Dollar-denominated loans and floating interest rates had reduced some aspects of risk for the US banks, but left them with the risk of sovereign default[7]. Under US pressure, banks were persuaded to roll-over their loans ('concerted action') and even provide some new funds. Mexico's external debt rose even higher, from nearly 70% of GDP in 1982 to 80% by 1985. After the failure of the Baker Plan (which provided additional assistance aimed to 'grow out of the debt'), it was recognised that debt reduction would be necessary. Brady Bonds achieved this, beginning in 1989 -- the final act of this extended crisis. The delay in resolving the crisis had, at least, allowed US banks to strengthen their balance sheets so that they could absorb the losses.

Capital inflows resumed in the early 1990s. Flows increase to all emerging economies in 1990s, with substantial portfolio flows adding to bank flows.

By 1994 Mexico was in crisis again. Following the 1982 crisis, Mexico had been cut off from foreign financial markets until the resolution achieved with the Brady bonds in 1989. The floodgates of foreign capital opened soon after, with financial deregulation and capital-account opening -- a preparatory condition of the impending NAFTA. Unlike the earlier Mexican crisis, the private sector was the main borrower and, in addition to bank loans, portfolio investment and FDI were large. This substantial surge of capital was a shock that the flawed economic environment, with its recently privatized banks, was unable to absorb.

By 1994, Mexico's CAD, which had averaged almost 7% of GDP annually in the previous three years, had become a concern for foreign investors, only temporarily assuaged by the Mexican government taking the exchange rate risk by issuing Tesobonos. By the end of 1994 the peso had depreciated by over 30% and foreign capital was fleeing. The crisis was contained by the application of large support from the USA and the Fund, described in more detail in Section 3.

The revival of foreign capital flows in the early 1990s was not confined to Latin America. In South-east Asia, substantial flows began early in the decade. These inflows were huge, relative to domestic financial sectors. Thailand received flows in excess of 10% of GDP for successive years (and 13% in 1996). Indonesia's inflows ran at 6% of GDP annually. This global surge of capital was initially absorbed in Asia without crisis, but caused asset-price increases, fast credit growth, financial excesses and upward pressure on exchange rates. All this set the stage for the Asian crisis of 1997. Again, these inflows impinged on financial sectors which were insufficiently experienced to absorb the magnitude of the flows.

OPEC funds (see Lipsky (1978)). Of course these petrodollar flows, and their downside, were not confined to Latin America. Eastern European borrowers also ran into problems in the 1980s. The Philippines also suffered a capital-flows crisis in 1984-85 and was part of the Brady Plan in 1989. (Boughton (2001(a)))

[7] 'By 1982 the nine largest U.S. money-centre banks had Latin American debts equal to 176% of their capital'. Tyler Cowen, Bloomberg opinion December 11 2019 ; Volcker's concern for the American banks is recorded in Lissakers (1983)

Each of the countries which were to fall into crisis later in the decade welcomed the surge in inflows, easing existing restrictions. Thailand's welcome went one step further, with the establishment of the Bangkok International Banking Facility (BIBF) in 1993, designed to make Thailand a hub for global capital flowing to the region.

The inflows didn't just boost demand for goods and services. Much of it, whether channeled through the financial sector or lent direct to investors, pushed up asset prices, particularly equity and property prices. Increased inflation acted to appreciate real exchange rates and distort financial incentives. Reflecting this real appreciation and strong activity, current account deficits expanded (notably in Thailand). As in Mexico leading up to the 1994 crisis, the Asian CADs were *caused by* the large capital inflows. The budget positions were balanced or even in surplus.

The recipient countries were conscious of the dangers and tentatively tried to slow the surge in inflows[8]. Limits were often imposed on foreign borrowings, but enforcement fell short. Each of the recipients adopted the centre-piece of Fund crisis-response advice -- fiscal tightening.

In 1996 five Asian economies (Indonesia, Malaysia, the Philippines, Thailand South Korea) received net private capital inflow of $93 billion. One year later they experienced a net *outflow* of $12 billion, a change of more than 10% of the combined GDP of these economies, with further outflows in later years. Of course there was a spectacular crisis, which set growth back by a decade in Indonesia and seriously damaged the other economies. The falls in GDP were not triggered by an investment decline: investment *had to* fall very substantially to equate the savings/investment balance with the relentless capital outflow (Boughton 2001(b)). The Asian economies had to adjust from external deficit to external surplus far more dramatically than Mexico in 1994, where private capital inflows remained positive throughout (see this comparison in Appendix Table 1 in Fischer 2002 (b)). In contrast to Mexico, these economies had to 'adjust' (change their real-economy savings/investment balance), rather than finance a slower, less-painful, response.

The crisis revealed other substantial latent weaknesses in the economics and politics of these countries. It would, of course, be wrong to attribute these crises solely to the large inflows in prior years or the low US interest rates which encouraged portfolio flows from the USA. That said, the huge inflow and the reversal should be the central element of the crisis narrative.

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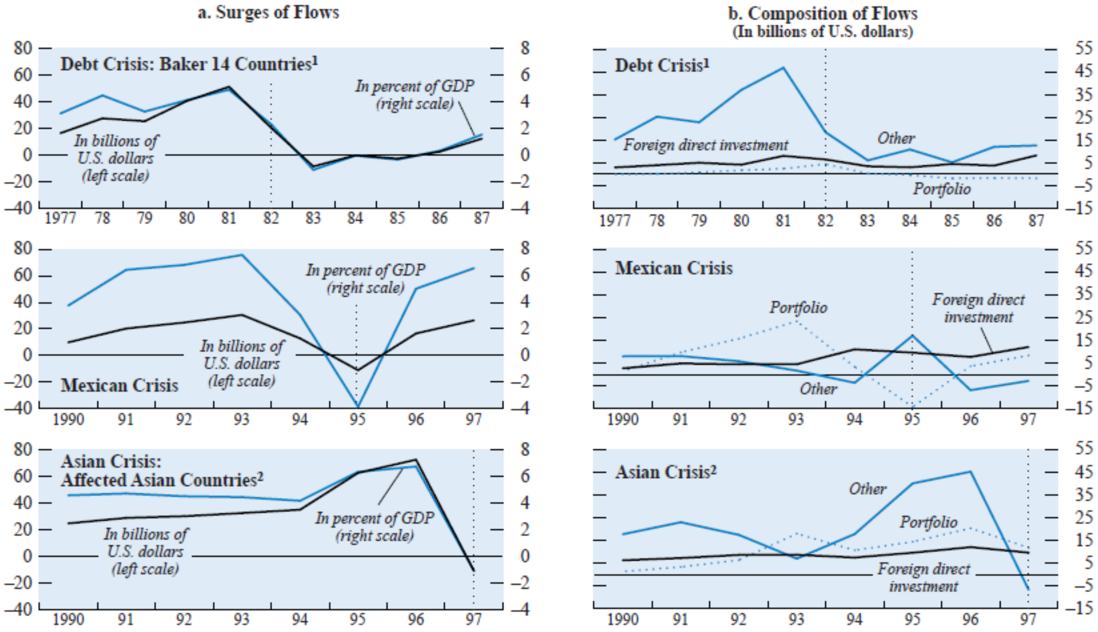
[8] Malaysia's quantitative controls in 1994 were effective in halting the huge flow (amounting to 25% of GDP in the year before), but these controls were removed the following year, apparently responding to financial market lobbying (Frenkel 2008).

Figure 1. Comparison of three crises

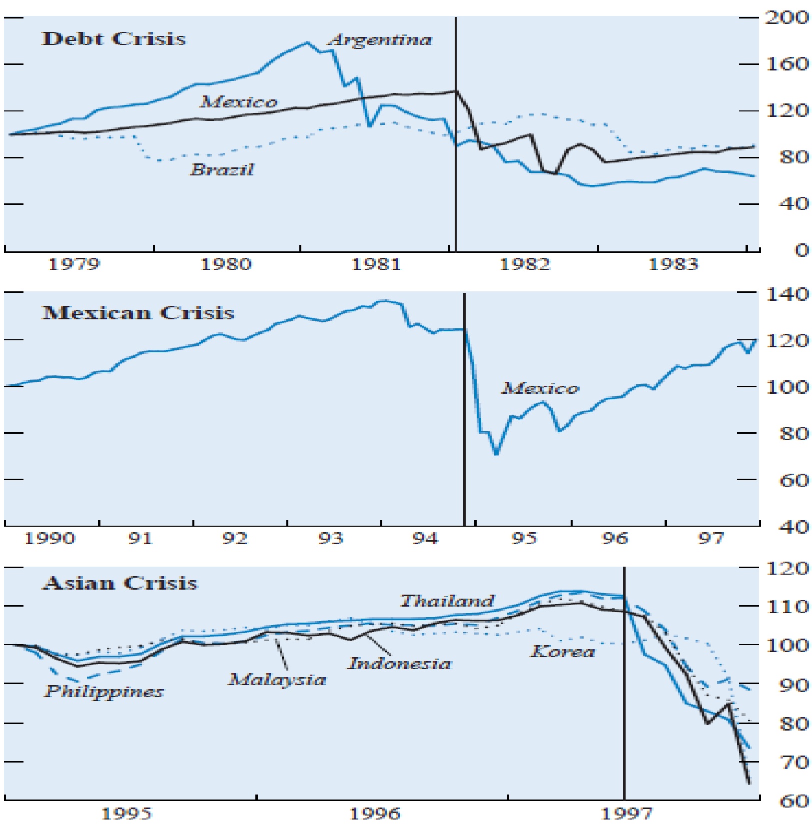


Source: International Monetary Fund, *World Economic Outlook* database.

[1]Aggregate flows to the Baker 14 countries: Argentina, Brazil, Bolivia, Chile, Colombia, Côte d'Ivoire, Ecuador, Mexico, Morocco, Nigeria, Peru, the Philippines, Uruguay, and Venezuela.

[2]Aggregate flows to Thailand, Malaysia, Indonesia, Korea, and the Philippines.

Figure 2. Real effective exchange rates on three crises.



Source: International Monetary Fund.

[1]Increase signifies real appreciation.

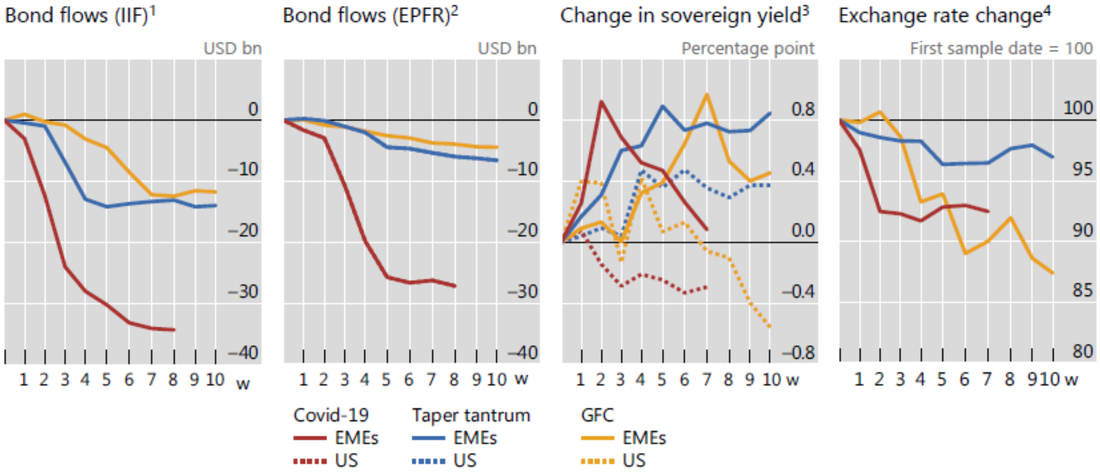
IMF International Capital Markets 1998

The following decades recorded further capital-flow crises in emerging economies, but to tell the story of the Fund's evolving stance, it will be enough to pause the crisis-narrative at the 1997 Asian experience.

For the Asian countries, the capital-flow narrative and challenge changed after 1997: no longer crisis-prone, but still adversely affected by the fickle nature of the capital inflows. A repeat of these dramatic crises seems unlikely. Lessons have been learned[9], exchange rates are more flexible, and prudential supervision has been strengthened. Recipient countries have accumulated large foreign exchange reserves and are ready to intervene, use prudential rules to protect their banks, and accept that when the inevitable outflows recur (as they did with the 'taper tantrum' in 2013, the China-devaluation scare in 2015, the 'Fed normalisation' in 2018, and Covid in 2020), fiscal and monetary policy must be tightened to slow the domestic economy (see Basri 2017).

Figure 3 Comparisons of three post-1997 sudden stops

EME portfolio bond flows, bond yields and exchange rates during market turmoil — Graph 1



Covid-19: 4 March to 24 April 2020; taper tantrum: 27 May to 28 August 2013; Great Financial Crisis (GFC): 15 September to 19 December 2008.

[1] Cumulative weekly portfolio debt flows to eight EMEs tracked by the IIF: Hungary, India, Indonesia, Mexico, Poland, South Africa, Thailand and Ukraine [2] Cumulative weekly EME local currency bond fund flows tracked by EPFR. [3] Cumulative weekly change in five-year local currency sovereign bond yield. Simple average across 19 EMEs used for analysis in the next sections of this Bulletin. [4] Cumulative weekly change in bilateral dollar exchange rate. Simple average across 19 EMEs used for analysis in the next sections of this Bulletin.

Sources: Bloomberg; EPFR; IIF; authors' calculations.

This new environment requires further adaptation of IMF policies. The narrative of adaptation has not ended. In the next five sections, we will examine the Fund's evolving thinking, from Bretton Woods to the current situation, as recorded in the latest IEO Report (2020),

[9] Elsewhere, Argentina seems to be a slow learner, as are its creditors.

2. The evolving Fund thinking, Part One: from Bretton Woods to the 1980s Latin American crises

Beginning with Bretton Woods in 1944, the Fund's position on capital controls was pragmatic and undogmatic. Foreign direct investment (FDI) and other longer-term flows were seen to be beneficial and were welcome, but controls would be needed to inhibit short-term speculative flows (Article VI specifically envisages this), to foster parity stability. In fact it was the OECD, rather than the Fund, that first staked out the case for free flows (OECD 2002). Its Codes of 1961 mandated the objective of free capital movements as an aspirational objective for of members[10], while accepting that it would take some time to implement and some controls on short-term flows might be necessary. At this time the Fund's attention (and its crisis responses) was still focused on current account crises (c.f. UK in 1967). The ambiguities about its mandate, which covered only the flows of the current account, may have contributed to its low profile.

Warren Buffett has noted that we learn who is bathing naked when the tide goes out. Similarly, financial crises reveal the key issues on capital flows which until then might not have been obvious. The test of capital-flow doctrine came with the succession of crises outlined above, clearly linked to excessive inflows prior to each crisis.

The 1980s Latin American debt crisis revealed, for the IMF, important differences between current account crises and capital-flow crises:

- While current-account crises were usually a result of domestic imbalances (e.g., lax fiscal policy and an exchange rate which had become uncompetitive because of inflation), the origins of capital-account crises were often predominantly *external*. Financial innovation and global integration opened new opportunities for foreign flows. Foreign investors with scanty detailed knowledge of the domestic situation misjudged the economic environment, the repayment capacity of the borrowers and the scope for things to go wrong. This produced the characteristic surges and 'sudden stops' (actually reversals) when reality asserted itself and collective expectations shifted.
- Capital-account crises generally unfolded with a more urgent time profile compared with current account crises. Dornbusch (1976) describes the sequence: 'The crisis takes a much longer time coming than you think, and then it happens much faster than you would have thought'. The traditional Fund tools to handle current account crises were tranches of money made available progressively to give the time needed for current account adjustment, with 'conditionality' disciplining the shift of resources into production of tradables. But this was a poor fit for the time-profile of capital flow crises. The urgency for 'up-front' funds was pressing. Creditors were demanding immediate repayment, and neither fiscal tightening nor a fall in the exchange rate could close the gap in the balance of payments, other than by inducing a huge fall in GDP (Boughton, 2001(b)).
- The Fund had no clear mandate to use its funds to repay foreign private-sector borrowers, who in any case might reasonably be expected to bear the risks – and costs

[10] In practice, capital controls were not fully removed until the 1980s, even in the advanced economies of Europe. The presumption of free capital flows may have impinged more strongly on later aspiring members. In the early 1980s, Mexico's deregulation was at least partly motivated by its desire to join the OECD. The same pressures encouraged South Korea to remove its controls prematurely.

> -- of default. Article VI prohibits use of the Fund's general resources 'to meet a large or sustained outflow of capital'. Nor did the Fund have a clear mandate to impose stand-stills on creditors, much less 'hair-cuts' to reduce the value of the debt burden. Thus the Fund, acting alone, had neither the mandate nor adequate resources to handle capital-account crises.

Given these shortcomings, it was fortunate that the Fund was not alone in responding to the 1980s Latin American crisis[11]. The potential damage to the American banking system (which had enthusiastically 'recycled' the surplus petrodollars during the 1970s[12]) meant that the US government took a leading role, providing (with the BIS) a bridging loan while the IMF negotiated a program of economic reform for the debtor countries, providing funding to soften the adjustment. The bank creditors agreed to supply net additional funds, putting off the issue of excessive debt. The attempt to restore growth (helped by Fund programs) without restructuring the excessive foreign debt (the 'Baker plan') failed. Resolution of the debt was by way of the Brady bonds settlement, at the end of the decade. There were substantial losses for the bond-holders. This US initiative used the power of the US administration to impose a settlement on creditors and coordinate the rescue. The Fund was largely a bystander in this resolution process.

This first major capital-account crisis might have provided lessons for the IMF in preparation for later crises[13]. In explaining the cause of the crisis, the lesson which might have been noted is that foreign flows often come in surges driven by waves of excessive but fragile optimism on the part of lenders. In guiding the crisis response, the 1980s experience highlighted the lack of any clear debt-resolution strategy, which will be seen again in the Asian crisis, and again in Greece in 2010, when once again the Fund's emergency assistance was used to repay creditors who had taken excessive risk. The core problem of excessive debt was 'kicked down the road' in the 'lost decade' of the 1980s.

The potential lesson was this: while it might be necessary for the recipient country to reform domestic policies in response to externally-driven excess inflows, *the first-best response would be to tackle the problem at source: to restrain the inflows* ***before the crisis arrives****. On the principle of optimal intervention, the correction should be put as close as possible to the cause of the problem.*

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[11] The BIS had foreseen problems with this bank recycling of the oil surplus as early as the mid-1970s, and had urged central banks to take action to at least collect comprehensive data on the borrowing, in preparation for later problems (Lamfalussy (2000)). True, the BIS concern was for the financial stability of the advanced economy banking system (this was a forerunner of macro-prudential policy) rather than out of concern for the borrowers. Moreover, the BIS' efforts were frustrated by the strength of the commercial pressures from banks.

[12] Walter Wriston, CEO of Citibank (which was a main recycling conduit) famously claimed that sovereign countries didn't go bankrupt.

[13] The Fund had not been oblivious to the impending problems, although its concerns were more for the stability of global finance than for the pain a crisis would inflict of the recipient country. The Fund view clearly put the cause on the side of the recipients: 'A number of developing countries … had over-accelerated their economies and… were borrowing up to 12% of their national income. Such a rate of borrowing was unsustainable and urgent adjustments were called for in order to avert major debt-servicing difficulties which would have serious repercussions on the entire international financial system.' (de Larossiere in 1977, quoted by Boughton (2001(a))). For his successor, the cause of the crisis was equally clear: 'A certain point comes when a country suffering from a prolonger deficit and which has failed to adopt policies that can reassure its foreign creditors, runs into a financial crunch … The consequences that a major default by one or more of the larger countries would have for the system as a whole.' (quoted by Boughton (2001(a))).

Before the next crisis (in Mexico in 1994), the Fund was tentatively articulating its views on capital flows and the appropriate policy response (Schadler et al. 1993). The Fund favoured capital flows, even if they tended to come in surges, while recognizing that these flows might present policy challenges.

> 'Surges in capital inflows are beneficial to recipient countries: they ease the external constraint, push down domestic interest rates, and often afford higher investment and growth. Yet too much of a good thing can be bad: when large capital inflows feed developments that signal overheating and instability, they become a policy concern.'

While the Fund recognized the possibility of reversals, the advice was more about finding room for the inflow to be absorbed through fiscal tightening, rather than constraining the inflow:

> 'What is the conventional wisdom about policies to contain or neutralize the unwanted effects of large capital inflows? In a fixed exchange rate setting, it is to reduce the fiscal deficit in order to restrain demand, inflationary pressures, and real appreciation.'

Two issues are worth noting in this response – while there is a notion of 'good' and 'bad' flows, there is no suggestion of disaggregation or differentiation among types of capital flows – total flows were considered as a whole, rather than identifing those which have least net benefit. Bretton Woods had implicitly differentiated between FDI and long-term loans, on the one hand, and short-term speculative flows, on the other. That distinction had been lost.

Second, while there is a mention here of 'containing or neutralizing' inflows, the specific policy suggestion was to accept the inflow rather than 'contain' it, making room by contracting domestic fiscal expenditure. Foreign flows should have precedence over domestic fiscal expenditures, which should be cut back to make room for the foreigners.

> 'In the face of large and persistent inflows, a tightening of fiscal policy is generally the only means of containing inflation and avoiding a real appreciation.'

Why should the foreigners' desire to get a share of the action be given priority over the budget's needs? A tighter fiscal policy might make sense if an unsustainable current account deficit (CAD) had been the cause of the crisis. But the large CADs were a *response* to the inflows – the deficit had to widen to achieve the transfer of goods and services that was the real-sector counterpart of the financial flows.

The Fund also explored the option of 'sterilization' – in the context of a fixed exchange rate, 'sterilization' required that the base money created by intervention should be offset through bond sales or, less favoured, higher bank-reserve requirements.

> 'Sterilization, particularly on a prolonged basis, is discredited as a response to inflows, because it sustains the high domestic interest rates that attract inflows and because it usually proves to be costly.'

This was, in fact, a misunderstanding of the standard monetary operations of the time, where monetary policy operated through the short-term interest rate, which required that any excess base money should be sterilized, through open-market operations, reserve requirements or policy-rates 'corridors'.[14] Under this system, there was no choice about sterilization: any

[14] For a detailed description, see Mohan (2009).

excess base money would have pushed the short-term interest rate to zero. It *had to be sterilized* to maintain the desired interest level. To discuss sterilisation as a policy choice was to misunderstand standard monetary operations. But the practical outcome was to leave just one policy response: fiscal tightening.

3. The evolving Fund thinking, Part Two: Mexico 1994

When the next crisis arrived, in Mexico in 1994, the Fund played a more substantial role than in the 1980s crises, providing around nearly a half of the crisis funding. But the dominant player in orchestrating the response was, once again, the USA.

Given Mexico's geo-strategic importance to the USA, the American government took the lead in managing the crisis. Stability was achieved thanks to a $50 billion standby package (largest contributions were $20 billion from the US[15], $18 billion from the IMF and $10 billion of more nebulous support from the BIS[16]). This crisis was treated like a bank run, with the massive standby credit reassuring investors, akin to the way a government guarantee reassures bank depositors. The important lesson: if the reassurance succeeds in re-establishing confidence, the money may not all be actually drawn.

The notable difference, compared with the earlier Latin American crises, was that the readily-available funding was seen as exceeding the potential outflows. The incipient capital outflow was fully covered. Thus it was feasible to treat this like a liquidity crisis, where the standby funds were credible enough to prevent a substantial outflow.

By avoiding a large outflow, there was no need to restrict demand drastically enough to repay the foreigners by creating a corresponding current account surplus, although of course the earlier large external deficits had to be reduced. This greatly lessened the severity of the crisis, with GDP growth restored after a sharp but short recession. Funding (even ephemeral funding) substituted for adjustment. A downside, perhaps, was the distribution of the burden of the crisis. Mexicans clearly suffered, as did foreign equity investors. However as Lamfalussy (2000) noted, foreign Tesobonos holders benefited from 'the massive bailout' and 'did not lose a penny'.

The lesson was this: whatever Mexico's domestic policy deficiencies (and these were many), the provision of very substantial liquidity support while the reforms were underway could stabilize the crisis quickly and less painfully than any market-based adjustment which required the current account to go into large surplus to fund the outflows. There was no need to make the difficult distinction between liquidity crises and solvency crises: if enough support was available immediately, questions of immediate solvency did not arise.

The early 1990s also provided some potential lessons for the Fund on the effectiveness of capital-inflow controls. The debt crises of the 1980s had sensitized some of the Latin American economies to the dangers of excessive inflows. When inflows resumed early in the

[15] These funds came from the US Exchange Stabilization Fund, designed to stabilize the US dollar. This misuse of the Stabilization Fund's purpose so annoyed Congress that it restricted the use of the Fund. This became important in the 1997 Asian crisis, depriving USA of any ability to participate financially in the 1997 bailout (more later).

[16] Boughton (2012) argues that the BIS money was not, in practice, available.

1990s there were tentative experiments with measures to inhibit short-term inflows – most notably the Chilean experiment with unremunerated reserve requirements (URR) or *encaja*. The evidence that this had some effect on the duration of inflows was treated with scepticism by many in the Fund. Certainly, the benefit of the *encaja* was at the margin, but it was a stretch to argue that it had done harm.
Such measures were seen by the Fund as either ineffectual at best or distortionary (or both). They were tolerated by the Fund, but the message was clear: just as 'real men don't eat quiche', serious countries don't put restrictions on inflows, even volatile short-term flows. Creating a stigma around capital-flow constraints was an important element in the policy environment. It gave the financial markets a powerful argument whenever policy-makers contemplated inflow measures.

In all the discussion of options, there was no place for directly addressing the excessive inflows with capital controls.

> 'Controls or taxes on capital inflows are the most controversial of microeconomic measures. They are generally seen as welfare-detracting distortions, although a case for them can be argued on the grounds that existing distortions prevent the efficient absorption of inflows. In a more practical vein, it is expected that such controls will be circumvented in even minimally sophisticated financial markets.' (Schadler et al. 1993)

4. The evolving Fund thinking, Part Three: Asia 1997

The Asian financial crisis of 1997 was the third major crisis in which capital flows played a central role.

It seems that the Fund was a fairly passive bystander in capital-flow policy in Asia during the pre-1997 crisis period -- in favour of free inflows in principle but neither vigorously promoting inflows nor warning strongly about the impending dangers[17]. Most of the recipients imposed some upper limits on particular borrowing, such as on state-owned enterprises, although these may not have been very effective. Other restrictive measures taken during the pre-crisis inflow period were temporary, which would fit the Fund's later doctrine, but it is not clear whether the Fund played an active role in winding these measures down, prior to the crisis[18].

In Asia the key problem with the IMF-favoured fiscal response prior to the crisis was that the required budget adjustment was just too big, with annual inflows over 10% of GDP in the case of Thailand. The inflow was so large and persistent that this fiscal strategy 'ran out of

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[17] 'There was no evidence that the IMF had indiscriminately pressured member countries to liberalize the capital account staff was 'to a surprising extent … supportive of country authorities' policy choices, whatever they may have been' (IEO, 2005). The evaluation further noted that while IMF staff was, in principle, opposed to capital controls, they 'displayed a remarkable degree of sympathy with some countries in the use of capital controls' (IEO, 2005). In Thailand, the focus of Fund macro-policy advice before the crisis was the exchange rate, but this was not linked to the huge inflows, or the way these flows were driving the current account deficit.

[18] Malaysia's controls introduced late in the crisis were severely criticized at the time, but with hindsight are generally judged to have been effective (Kaplan and Rodrik 2001). These were aimed at restraining outflows and preventing speculation in the form of foreigners borrowing ringgit and selling it for foreign currency, so this debate was not relevant to the question of inflow controls.

room' to go on operating by mid-decade. The modest size of budget expenditure meant that the opportunity to trim this back was limited. Thailand moved its budget towards surplus by 7% of GDP over four years (and was running a surplus of 3% of GDP in the years before the crisis), but the capital inflows *in any single year* were larger.

The Fund's Managing Director had described the 1994 Mexican crisis as 'the first crisis of the twenty-first century' (Camdessus 1995), recognizing how different it was from the current-account crises that the Fund routinely handled. He would have recognized, too, how different the response was – to treat it like a bank run, restoring confidence with the provision of ample liquidity (i.e. an apparent ability to meet the liabilities fully), rather than as a provider of adjustment funding. He would have accepted the general judgement that the Mexican rescue had been a success.

But the lessons of Mexico were not adopted by the Fund when the 1997 Asian crisis gave it the opportunity, for the first time, to be the principal manager of a major capital-flow crisis. The US, which had played key roles in the two earlier Latin American crises, assumed a backroom role in Asia in 1997. Perhaps the geo-strategic imperative was less (this was post-Vietnam). More important at the operational level, the use of the US Foreign Exchange Stabilization Fund in the 1994 Mexican crisis had so incensed the US Congress that they restricted its use, so there was no ready source of funds for a US contribution to Asia in 1997. Whatever the reason, the Fund was free to demonstrate its own policy response to a sudden reversal of foreign capital. It was very different from the 1994 Mexican rescue. The lessons of 1994 was that capital flow crises should be treated like bank runs. If there was not enough new money to do this, the 1980s crisis lesson was that debt stand-still and restructure would be needed, and the quicker these could be implemented, the better.

Perhaps influenced by its traditional role in resolving current-account crises, the Fund's initial reaction was to require its standard resort of fiscal tightening, even though budgets were not in deficit in these countries. The prescribed response to excessive inflows had been to tighten fiscal policy[19], and now that the crisis had arrived, the prescription was the same: to tighten fiscal policy.

The large pre-crisis capital inflows (particularly to Thailand) caused correspondingly large current account deficits. When the crisis arrived, balancing the capital outflows required a sudden huge transformation from external deficit to surplus. Perhaps fiscal tightening could be justified as helping to achieve the necessary reduction in domestic 'absorption', but the collapsing economy made this superfluous: Indonesian GDP fell 13% in 1998. In time, the Fund recognized its mis-diagnosis and reversed its fiscal advice six months into the crisis. The recommended response was to float the exchange rate and raise interest rates. Bangkok had used all its foreign exchange reserves in a futile defence of the baht. Observing this, Indonesia floated more-or-less freely in August 1997, with the rupiah depreciating relentlessly, to lose 80% (!) of its value by January 1998. A smooth transition to floating might have been feasible under stable conditions, but in the chaos of the crisis, it left the exchange rate unanchored, resulting in a huge overshoot.

Of course the Fund also made available funding, but Fund money was grossly inadequate to stabilize the market and avoid a 'run'. Fund money was supplemented by 'second-line'

[19] Fischer had recommended fiscal tightening to President Soeharto in 1996 i.e. before the crisis. (Boughton 2012)

contributions from other countries. With no US funds available in practice, financial markets understandably doubted that any of the 'second-line' money was really available[20]. To make matters worse, the Fund money was doled out in tranches (perhaps reflecting the Fund's usual response to current-account crises, in order to enforce conditionality of the reform program) rather than made available to meet the immediate needs of the outflows, as had occurred in Mexico. There was no hope that the inadequate available funding, backed by the mirage of the second-line funds supposedly 'in the shop window', would be enough to restore confidence.

In each of the crisis countries, the equivalent of a bank run began. Indonesia's creditors did their best to get their money back, while Indonesians who had borrowed in foreign currency repaid loans if they could, hoping to stay ahead of the fast-moving depreciation. Speculators added to the outflow.

The Fund's response illustrates its thinking (see Fischer 1997, 2001(b)). The portfolio model applied, with higher interest rates being the key factor in supporting an exchange rate under downward pressure. The belief was that free markets worked well enough to allow the market to determine the appropriate exchange rate, even in the 'fog-of-war' of a crisis, with the exchange rate totally unanchored and the vulnerable financial system in collapse. The Fund even disliked measures taken (e.g. by Malaysia) to contain speculation by preventing foreigners from borrowing local currency, which they immediately sold to speculate on – and cause -- further exchange rate falls.

If the Fund's dislike of any policies to slow capital *inflows*, capital *outflows* came in for even stricter censure. Yet the failure to strongly endorse (or better still, require) stand-stills and bail-ins was a serious gap in Fund crisis-response armoury in 1997, ignoring the experience of the 1980s Latin American crises. Capital outflow controls were specifically rejected, and debt restructuring (where quick bankruptcy for the debtors might have limited the outflow) was a secondary and tardy response, attempted more than a year after the crisis began. In Thailand and Indonesia, foreign creditors made no contribute to the rescue through haircuts and stand-stills (although in Korea, at the end of 1997, a stand-still was successfully imposed on foreign bank debt and contributed greatly to the relatively quick return to normalcy in that country)[21].

5. The evolution of Fund thinking, Part Four: response to the Asian crisis

[20] The usual tabulations exaggerate how much was available (Boughton 2012). For Indonesia and Korea, the second-line was 'window-dressing', not available in practice, and the contributions from the ADB and World Bank were largely re-allocations of existing funding. Thus in practice the only new funds available for Indonesia were the Fund's $10 billion, disbursed over time, with delays exacerbated by differences with the Indonesian authorities. These factors were well known in financial markets, so the helpful ambiguity which had made the Mexican 1994 package seem like $50 billion (rather than $40 billion) did not apply in Indonesia.

[21] On the eve of the Fund-organised crisis meeting in August 1997, the Australian delegation raised this issue privately with the Fund chair, Shigemitsu Sugisaki, who said that if this issue was raised at the meeting, the meeting would fail and he would blame us. In the Fund 10

How much did the traumatic experience of the Asian crisis, where many observers found serious fault in the Fund's handling, change the Fund's attitude to capital flow policy in general and capital controls in particular?

The Fund had now witnessed three episodes of major crises in emerging markets where excessive inflows had played a central role, two of which had led to 'lost decades' of growth. It was hard to maintain the view that unrestrained capital flows, with their characteristic surges and reversals, were on balance beneficial. It was even harder to think that the Fund's handling of Thailand and Indonesia, especially in the light of the relative success of the 1994 Mexican crisis, had been anything other than disastrous. What was the Fund response?[22]

Reading the Fund post-crisis discussion (e.g. Fischer 2002), the Fund clearly gave a much smaller role to excessive capital flows than is argued here. No initiating role was given to the huge capital inflows (i.e. no discussion of the 'push' factors). The very large foreign debts that were part of these inflows were identified well before the crisis (Radalet 1995), but these were the natural consequence of free capital markets. Afterwards, much was made of the prudential weaknesses in the domestic financial sector, without acknowledging that this was an inevitable phase on the embryonic deregulation process, vigorously promoted by the Fund. These weaknesses, too, had been identified beforehand by the Fund's own experts. There was certainly no suggestion that the right policy response to these weaknesses was to restrain the inflows.

Given these vulnerabilities, the huge capital inflows presented the 'forcing factor' which would overwhelm these fragilities, revealing the latent deficiencies. Few financial sectors, even in advanced countries, would survive an 80% decline in the exchange rate, as experienced in Indonesia. To see the key causes of the crisis in the financial sector weaknesses or some perceived inadequacies of macro-policy is to ignore the probability that without the challenge of absorbing huge capital flows, these countries would have muddled through and gradually reformed these administrative and institutional deficiencies.

Policy mistakes in handling the crisis -- e.g. Indonesia's misguided monetary tightening in August 1997; the disastrous lender-of-last-resort loans to banks; the distraction over a currency-board for the exchange rate; the soured relationship with President Soeharto – all these were products of the crisis which exacerbated it greatly. The central role given to crony-capitalism in the wider debate ignored the fact that Indonesia had experienced three decades of outstanding growth with these institutional weaknesses in place. The missing factor from the Fund's post-crisis discussion is the central causal role of excessive capital flows (Grenville 2004). The key take-away should have been that the flows were simply far too large to be absorbed by the fragile, embryonic financial sector.

Looking back, we can see Fund policy evolving at a snail's pace over the next fifteen years, leading towards the Institutional View (IV) in 2012. Looking in from outside, it is hard to follow the detail, but the insiders' account in the IMF Independent Evaluation Office report

[22] Perhaps the best insight into the Fund staff thinking during the peak of the Asian crisis was given by Fischer (1997). The risks of capital flows was acknowledged, but the focus was on the balance of the damage from these versus the benefits of capital inflow. The increase in flows in the pre-crisis period was seen as unambiguously beneficial, even noting that it reached 5-8% of GDP annually for some of these countries. The cause of the risks was clearly seen as being associated with deficiencies in the recipient countries, and the remedy was to be found in tighter fiscal policy and floating exchange rates. Restrictions on short-term inflows might be appropriate for countries with 'weak financial systems'.

of 2015 gives some hints of the struggle going on, mostly between the members of the staff who saw the need for a substantive shift, on the one hand, and the diverse members of the Executive Board, reflecting the different interests of the constituent countries. At the same time, there was also considerable diversity of opinion within the Fund staff.

There were some easy adaptations, all directed at changes in the *recipient* countries (see Box 1.1 in IMF 1998). The Asian crisis did bring a stronger emphasis on sequencing and highlighting the importance of the regulatory and institutional framework of the financial sector. This widened the discussion to include financial institutions and prudential measures, forerunner to the Fund's later enthusiasm for macro-prudential measures. Better data and more open discussion of financial risks were implemented[23].

All this was sensible enough, but to the extent that it depended on rapid improvement of institutions and processes, it was naively unrealistic for addressing current issues. Financial deregulation, even in the developed economies, had been largely a process of learning-by-doing trial-and-error, with institutions built up over time and necessary experience gained on-the-job. The problem of Sweden in 1992 illustrates the difficulty of creating a crisis-proof financial sector, even in a country with mature institutions. The deregulatory experience in the developed countries suggested that a crisis of some degree is common during the deregulatory process.

One area which *did* see substantial change of emphasis and policy recommendations was the exchange rate. Exchange rates had generally been fixed before the Mexico 1994 crisis, with change coming when it was forced by circumstances. Thus the exchange rate was not at the centre of policy options for handling excessive inflows before the Mexican 1994 crisis.

In the aftermath of the Mexican crisis, some had argued that greater flexibility before the event would have avoided or mitigated that crisis. Appreciation was discussed as a response to excessive inflows, in the hope of discouraging further inflow through the Dornbusch 'overshooting' mechanism (Dornbusch 1976): the stronger exchange rate would create an expectation of later reversion, and this expectation of future depreciation would discourage inflows. This response was attempted in Indonesia in the run-up to the 1997 crisis, with the BI intervention band progressively widened. But as the actual rate appreciated, clinging to the strong side of the widening band, this just added to the perception that the exchange rate was more likely to strengthen further than to depreciate (Goeltom 2008), further encouraging already-excessive inflow. The higher exchange rate created the expectation of further appreciation, rather than depreciation, as in the Dornbusch model.

This was the setting for the 1997 crisis. In the period leading up to the Asian crisis, the Fund had recommended that the Thai baht should be floated, which would have produced a substantial appreciation in this environment of big inflows. When the inevitable reversal of this over-valuation occurred, it would have caused fatal balance-sheet problems for the finance companies promoted in the BIBF, which had borrowed extensively in USD. Unsurprisingly, the Fund's urging to float was not implemented. If it had been, it might -- at best -- have precipitated the crisis earlier.

The Asian crisis confirmed the Fund's shift, to become a clear advocate of pure free floating as a key policy element in the emerging world of greater capital mobility. Post-crisis, the

[23] Notably, prudential supervision (FSAPs) and statistics (SSDS).

case for free-floating was promoted vigorously, often as part of the wider debate about 'corner solutions', which argued that exchange rate regimes should be either pure free-float or immutably fixed (Fischer 2001(a)). With very few countries ready to fix immutably (essentially a currency board regime), in practice this meant the Fund was arguing for universal free-floating.

This free-float advocacy never convincingly addressed the reasons why emerging economies had, hitherto, a well-developed 'fear of floating'. Domestic policy-makers knew that, as economies with strong trade dependence and shallow financial markets, unanchored exchange rates would be both volatile and likely to experience sustained misalignment through momentum-driven overshooting, way beyond the temporary overshooting envisaged by Dornbusch. When reversion occurred, it would be catastrophic for financial markets.

Central banks were concerned about the effect of a free float on inflation, although Latin America and Asia had different concerns. In Latin America the stability of the exchange rate was an anchor for inflation, so depreciation was the main concern. In Asia this was important but the greater concern was that excessive appreciation would undermine the key tenet of macro-strategy – a competitive exchange rate which fostered export-led growth[24]. But for all these countries, the danger of the exchange rate moving well away from equilibrium was a powerful reason for resisting a free float[25].

In advocating a 'pure' free float, the Fund strongly discouraged foreign exchange intervention, arguing that 'managed floats' were unsustainable. In practice, many of the emerging economies of Asia and Latin America began to implement *de facto* managed floating regimes, with very large accumulation of foreign exchange reserves and substantial intervention, while avoiding arguments with the Fund by claiming to have floating-rate regimes. Nevertheless, the Fund maintained strong recommendations for a free float in the decade after the Asian crisis, and only reluctantly came to acknowledge what was being successfully done in practice, where the exchange rate was flexible enough to avoid being an easy target for speculative flows, yet was held in check by intervention when the rate threatened to go beyond sensible equilibrium.

The Fund's decisive shift to free-floating *did* have implications for its thinking about monetary and fiscal policy, and capital flows. With the centrality of the Mundell/Fleming framework in Fund history, the Fund staff were familiar with the idea of the Impossible Trinity. Prior to the big increase of global capital flows in the early 1990s, the Trinity had not impinged much on emerging economy policy or the Fund's policy recommendations, because in practice it seemed feasible for emerging economies to maintain quite stable exchange rates while at the same time setting their interest rates according to the needs of the domestic economy (usually substantially higher than dollar-rates). The Trinity was inapplicable to countries which, even if they might be formally open to foreign capital flows, were in practice not integrated with global capital markets (Grenville 2013).

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[24] Indonesia had caried out a series of large depreciations in the decades before the crisis, and then implemented a crawling depreciation, always with the aim of maintaining strong international competitiveness.

[25] The extreme degree of non-fundamental crisis-related overshooting might be broadly judged by noting that the pre-crisis inflows into Asia appreciated recipients' exchange rates by 10% or so in real effective terms, and within a couple of years after the crisis, these economies had returned to within 10% or so or the pre-crisis real effective rate.

In the post-1990 world of greater financial integration, the case for some degree of exchange rate flexibility became overwhelming. For the Fund, the Trinity involved picking the corners of the triangle: pure free float with open capital markets, with the promise that this would deliver monetary policy independence. For the practitioners in S-E Asia, there was no need to choose the corners (Klein and Shambaugh, 2015). The answer to the constraints of the Trinity was some common-sense ad-hocery: a mix of foreign exchange intervention, judicious setting of interest rates keeping an eye on both domestic and external factors, and some tentative capital-flow management (CFM) to discourage short-term flows[26]. This seems to have worked in practice, but represents a clear departure from the Fund's view-of-the-world.

In the Mundell/Fleming model, greater exchange rate flexibility shifted the respective roles of monetary and fiscal policy, with monetary policy the more powerful instrument for GDP-management. Nevertheless, the Fund still favoured fiscal tightening as a response to excessive inflows. While the belief was that fiscal tightening would tend to lower interest rates, hence offset upward pressure on the exchange rate, this was less obvious in practice (see Schadler et al. (1993))[27]. In practice, monetary policy exerts strong control over domestic short-term interest rates, so the interest-rate response envisaged in the Mundell/Fleming model is greatly diminished (Grenville 2011) unless financial integration is so close that domestic and foreign currencies are close substitutes.

6. The evolution of Fund thinking, Part Five: creeping towards the Institutional View (IV) 2012 and beyond

Looking back, it seems extraordinary that the Fund could observe the three major crisis episodes within a space of fifteen years without major revision to its endorsement of free capital flows. Nevertheless, the Fund's enthusiasm for deregulation of finance was undiminished[28] and its suggestions for mitigating the risks were totally inadequate, sometimes inappropriate. The Fund's unqualified endorsement of open capital markets ignored the enormous damage done by these crises. Perhaps just as serious, its luke-warm and conditional acceptance of capital-flow management (CFM) set the agenda for policy options and gave the financial industry ammunition in its efforts to avoid any restrictions. 'IMF

[26] For example, Bank Indonesia applied a minimum-holding-period to SBIs, which seemed effective in limiting foreign holdings, although that may have just shifted holdings to government bonds.

[27] An alternative way of thinking about the influence of fiscal tightening on the exchange rate would be to note that a bigger budget surplus increases domestic saving, shifting the S/I balance (and the external balance) towards surplus, requiring an even-higher exchange rate to equilibrate this stronger external imbalance with the capital inflows. Fiscal tightening narrowed the gap through which the exogenous foreign flows were attempting to enter, putting upward pressure on the exchange rate. Thus fiscal tightening might well be counterproductive to the objective of restraining appreciation.

[28] Fischer (1997) wrote that 'Asia, in particular, has benefited from recent capital inflows, receiving more than $60 billion per annum in 1990-96 and a total of $107 billion in 1996'. Already, Thailand's problems had reached their nadir. Indonesia was on a path to a 13% fall in GDP the following year. He went on to note that 'the recent market turmoil in the region has raised two fundamental sets of question; the first, about the sustainability of the Asian miracle; the second, about the risks of capital account liberalization.' These were, in fact, parts of the same question: would Asia's outstanding growth performance come to an end because no satisfactory answer could be found to the problems created by open capital markets?

prescriptions play an outsized role in affecting whether a given policy will hurt investor confidence' (Korinek 2020).

Following a decision by its governing body, the Fund proposed that the Articles of Agreement should be amended to make free capital movements analogous to free trade –a required objective of policy. The timing in late 1997 was, however, exquisitely inappropriate, coinciding with the unfolding Asian Crisis, which had been triggered by excessive capital inflows into Thailand, Indonesia, and Korea.

The IEO report of 2005 endorsed this re-examination in its characteristic low-key, mutedly-critical manner, but with little apparent effect[29]:

> 'The 2005 IEO evaluation of The IMF's Approach to Capital Account Liberalization found that there was much ambiguity on the scope of IMF surveillance in this area and apparent inconsistencies in policy advice given to individual countries; the IMF's policy advice on managing capital flows, moreover, focused to a large extent only on what recipient countries should do' (IEO 2015).

While the message of the three crisis periods was slowly impinging on Fund thinking, the market failures associated with the global crisis of 2008 must have focused their minds. While the Fund was not much involved in the initial phases of the 2008 crisis, the challenge to conventional thinking was clear.

The GFC was not just a demonstration that financial crises could occur in developed economies with mature financial markets. The policy response was diametrically opposite to the policies pursued in Asia in 1997. Interest rates were lowered rather than raised; fiscal policy was eased rather than tightened; and the bankrupt financial sector was supported through near-universal lender-of-last-resort and prudential forbearance. This included *de facto* lender of last resort by the US Fed to rescue the European banking system which had exposed itself to huge liquidity risks by borrowing short-term dollars. The policies for the 2010 peripheral-euro debt crisis in 2010 completed the picture of totally-opposite policies to 1997: debt standstill, huge support from the official sector (both the Fund and the ECB), kicking the debt problem down the road to avoid financial chaos in the rest of Europe, followed eventually by debt restructuring with substantial bail-in haircuts.

The shift towards the Institutional View (IV) was underway well before the IV was formalized in 2012. As early as 1998, some Fund staff were looking for a way around the capital-controls phobia[30]. Some senior members of the Fund staff, mainly in the research area (e.g. Ghosh, Ostry and Quireshi, who seemed to have the support of Chief Economist Blanchard), were particularly active in exploring the issues and more open to finding a positive role for capital controls. See Ostry et al. (2010) and Ostry et al. (2011) for a clear exposition of research department views. This analysis had a very different tone and message,

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[29] 'At the Board discussion of the evaluation report in May 2005, no consensus was reached on how to clarify the IMF's approach to capital account issues—Executive Directors in favour of capital account liberalization worried that the official position might be construed as validating the use of capital controls. …' IEO 2015.

[30] See Eichengreen and Mussa (1998): 'Recent experience suggests, moreover, that short-term debt can pose special problems for maintaining financial stability. Correspondingly, capital account convertibility means the removal of foreign exchange and other controls, but not necessarily all tax-like instruments imposed on the underlying transactions, which need not be viewed as incompatible with the desirable goal of capital account liberalization.'

compared with the Asian Crisis post-mortems (Fischer 2002, Boorman et al. 2000). Within the tight constraints of the IMF formal structure, this group made the case for change sufficiently strongly that, following Korinek (2020), the 2020 IEO report could describe the IMF as 'an intellectual leader on capital flow policy'. Academics who had previously criticised the Fund view saw this as a substantial breakthrough[31].

Nevertheless, the result was typically so conditioned and tentative as to have little effect on the wider debate. In characteristic style, the IEO (2015) made the best of the progress: 'It (the IV) has done much to change the public image of the Fund as a doctrinaire proponent of free capital mobility.' But it went on to note 'However, the stigma associated with capital controls has not been eliminated entirely by the name change to CFMs.'[32]

This might give some indication of how hard it was to get reform endorsed within the Fund's overladen governance system. It might have been the G20 enunciation of a more intervention-tolerant view of capital flows in 2011 (G20 2011) that finally pushed the Fund to make the IV changes.

By the time the IV wound its way through the endorsement process, it accepted the broad terms that had been endorsed by the G20, but delivered a strong message, full of conditional 'ifs', on the detailed circumstances in which CFM would be appropriate:

> 'If the economy is operating near potential, if the level of reserves is adequate, if the exchange rate is not undervalued, and if the flows are likely to be transitory, then use of capital controls—in addition to both prudential and macroeconomic policy—is justified as part of the policy toolkit to manage inflows.' (IMF 2012)

The IV compromise was to acknowledge that some capital flow management (what had previously been derisively called 'capital controls') might be appropriate in a limited number of cases, applied temporarily. Similarly, foreign exchange intervention might be acceptable, but only to smooth short-term volatility.

The IV, however, left no doubt about where CFM ranked among the policy options – right at the bottom of the toolbox.

> 'In several circumstances, however, the use of CFMs is not recommended. …CFMs should not substitute for macroeconomic policies that are needed … From a practical standpoint, experience suggests that in most cases there will be a need (as well as room) to adjust macroeconomic and structural policies. Only rarely would CFMs be the sole warranted policy response to an inflow surge. Surges are usually driven by a variety of pull and push factors that indicate a need for adjustment in a range of policies on the part of both recipient and source countries. … Even when CFMs are

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31 The release of the staff position note on the role of capital inflow controls (Ostry et al. 2010) in February 2010 was welcomed as the first sign that the IMF was trying to adapt its advice on capital flow management to global economic realities. Rodrik (2010) called the paper "a stunning reversal—as close as an institution can come to recanting without saying, 'Sorry, we messed up.'" The publication of the Institutional View (IMF, 2012) almost three years later in December 2012 cemented the notion that the Fund had officially adjusted its approach to capital account liberalization for the better. Krugman (2012) noted that while the Institutional View was "basically a codification of recent practice," it was nonetheless an "indicator of the IMF's surprising intellectual flexibility."

32 Sensitivities were still strong: 'In two instances in 2010, mention of possible use of capital controls had to be deleted from Article IV staff reports before publication" (IEO 2015)

> desirable, their likely effectiveness remains a key consideration. … the design and implementation of CFMs should be transparent, targeted, temporary, and preferably non-discriminatory.' (IMF 2012)

While acknowledging that all policy measures have downside, the Fund made its dislike of CFMs crystal-clear:

> 'CFMs can generate negative market reactions if they are costly for investors or are misconstrued, affecting future willingness to invest. CFMs can also lead to distortions and divert flows to particular segments of the economy, creating new vulnerabilities, and can entail administrative costs.'

One further innovation was to endorse macro-prudential measures – regulations that could be construed as protecting the stability of the financial system as a whole. But macro-prudential measures, while having an important place in the policy toolbox, do not address the overall problem. First, macro-prudential is largely confined to banks. Measures to restrain lending by banks will encourage borrowers (and lenders) to go outside the banking system – direct borrowing from foreign sources, for example. And non-bank finance can cause the same macro systemic problems as bank failures, as Thailand's finance companies illustrated in 1997 and Indonesia's private-sector direct foreign borrowing did later in the same year. Second, an economy could be experiencing potentially adverse effects from excessive capital flows without this being a threat to the stability of the financial system, which is the defining criterion for the maco-pru mandate. For example, non-finance companies could be borrowing overseas excessively, while the banking system remained well-capitalised and safe.
The Executive Board found it hard to reach consensus on these issues, reflected in the ambiguous and sometimes inconsistent wording[33]. Nevertheless, the broad message against capital controls remained[34].

What was missing from the IV was a specific and direct endorsement of the idea that there were risks in the system *which were best addressed by CFM* (following the principle of optimal policy response), with the Fund ready to provide operational guidance for implementation. The case was not made, for example, that when the supplying countries didn't correct the external problem, the recipients should use CFM as the first-best response. The 'spill-over' reports might have remedied this deficiency, but in practice did not[35].

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[33] 'The Board discussions of the institutional view were contentious and the final document reflected what is best described as a fragile consensus. Although there was general agreement within the Fund that CFMs could be effective in certain circumstances, some in the Board (and staff) remained of the opinion that once the capital account was liberalized, reversals were damaging on net and should be avoided as far as possible, whereas others were equally firm in their view that some types of capital flows needed constant managing and CFMs were a legitimate means by which to do so. The institutional view as presented in IMF was the furthest some Directors (mainly from major advanced economies) were prepared to go in condoning the use of CFMs and the minimum other Directors (mainly from major emerging market economies) were willing to accept as a repudiation of full capital account liberalization as a desirable goal.' (IEO 2015)

[34] Box 3 in the IEO report, quoting from Managing Directors over the period 2007-14, shows the limited and conditioned softening in the Fund's approach to CFM over this time. It would be hard to read any positive endorsement of CFM management into any of these quotes.

[35] The 2011 and 2012 spillover reports downplayed the adverse impact of quantitative easing on emerging markets, in terms of financial market and exchange rate volatility. Following the "taper tantrum" in May 2013, however, the 2013 and 2014 spillover reports appropriately highlighted the importance of finding the right pace of monetary normalization in the United States and for the Federal Reserve to communicate its intentions clearly so as to avoid excessive market volatility and reversals of capital flows to emerging markets (IEO 2015).

For further critical examination of the deficiencies of the IV, see Korinek (2020).

Capital controls came up again for examination by the Board in 2016, with a substantial staff paper, with much the same differences of views reflected in the conflicted wording[36]. It would take minute textual analysis to detect any shift towards positively endorsing a role for CFM[37]. The staff report noted that:

> 'Capital flow volatility has increased significantly during some episodes, often related to changes in global conditions. For example, EMDEs experienced elevated volatility for a few quarters following the "taper tantrum" in 2013. The bouts of increased capital flow volatility remain a policy challenge, particularly in the current environment of low capital inflows.'

Despite the greater volatility, the review notes that '… only a few countries used CFMs on inflows during this period' (IEO 2015).

The Fund's recommendations on foreign-exchange intervention might illustrate how little progress had been made. The possibility of useful intervention was acknowledged but intervention should be in response to volatility and should be temporary. The implication of this minimalist view was that the free market was effective in price discovery, with the main issue being the daily small ups-and-downs. In practice this sort of short-term volatility does little harm. Distortions arise when the exchange rate departs from equilibrium (either too high or too low) in a sustained and substantial way. Thus intervention is unnecessary and unhelpful in the face of daily volatility, but sustained intervention may be needed when the exchange rate is away from equilibrium far enough, and long enough, to send misleading signals to the real and financial sectors.

Perhaps the free-market model, with its assumption that the market will demonstrate efficient price discovery, influenced the Fund's mindset so that Fund staff saw any intervention as distortionary, taking the rate *away from* equilibrium. In practice, central banks, faced by imperfect and uncertain price discovery, were typically responding to an overshoot which had already taken the rate away from equilibrium. Intervention, sometimes sustained rather than temporary, would be encouraging a rate which was out of equilibrium to shift *in the direction of equilibrium*.

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[36] 'Directors underscored that capital flows provide significant benefits, but at the same time they also acknowledged that such flows carry risks if they are large and volatile. … Directors recognized that full liberalization of capital flows may not be an appropriate goal for all countries at all times, although many of them remained of the view that capital account liberalization should be an important long-term objective and emphasized that the Fund should clearly communicate its support for this objective. Directors also reiterated that capital flow management measures (CFMs) should not be used to substitute for warranted macroeconomic adjustment. They recognized that both push and pull factors remain important for capital flows, highlighting that source and recipient country policies have implications for the size and volatility of capital flows' (IMF 2016).

[37] 'In certain circumstances, introducing CFMs can be useful, particularly when underlying macroeconomic conditions are highly uncertain, the room for macroeconomic policy adjustment is limited, or appropriate policies take undue time to be effective. • CFMs could also be appropriate to safeguard financial stability when inflow surges contribute to systemic risks in the financial sector. Systemic financial risks that are unrelated to capital flows may be better addressed by macro-prudential measures that are targeted specifically to deal with such challenges. • CFMs should be targeted, transparent, and generally temporary—being lifted once the surge abates, in light of their costs' (IMF 2016).

The Fund's attitude, of policy purity with free-floating, may be symptomatic of a wider issue. The Impossible Trinity was seen as an all-or-nothing choice, where only the corners of the trilemma triangle could be chosen. In practice it seems feasible to choose intermediate positions, where some types of capital flow are inhibited (imperfectly open capital markets, with URRs, for example), the interest rate finds a balance between domestic and external objectives, and there is active intervention to smooth the wider departures of the exchange rate from its longer-term equilibrium.

Why were open capital markets prioritized over exchange rate stability? Why was the possibility of compromises and combinations of the Trinity objectives off the agenda? In the huge literature on the Impossible Trinity, such compromise positions are rarely discussed. (for an exception, see Klein and Shambaugh 2015).

With its reluctance to endorse what were clearly sensible responses to capital flow pressures, a gap developed between Fund policy and what was actually being implemented in post-crisis Asia, particularly in the countries most affected by the 1997 crisis. They not only got their current accounts back into surplus (largely by restraining growth), but accumulated very large foreign exchange reserves (with the foreign-exchange intervention that this implies). In the post-IV period, the Fund staff noted this policy reaction, without making comments on the fact that policy seemed so contrary to IV principles:

> 'In a setting where exchange rate volatility and financial conditions have real economic consequences, Asian EMEs make extensive use of foreign exchange intervention (FXI) to moderate exchange rate fluctuations in response to volatile capital flows. FXI is used more intensively against more volatile types of flow (for example, portfolio flows), where unhedged balance sheet mismatches are more salient, and where financial markets are shallow' (Ghosh et al. 2017)

Notably, Ghosh et al. recorded that the Fund's favorite policy response – fiscal tightening – was not included in the variety of policy responses.

7. Where is the Fund now? IEO report 2020

This quote from the 2020 IEO report on capital flows summarizes where the Fund now is:

> 'Many country officials appreciated that the Fund had become both more open to the use of CFMs as a policy tool to handle inflow surges and more cautious in pushing capital account liberalization. …
> Notwithstanding these accomplishments, recent country experience and research, including the IMF's recent work on an Integrated Policy Framework, have raised a number of questions about the Fund's advice on managing volatile capital flows: …
> At times, the guidance in the IV that new CFMs should not be used preemptively and should be imposed at most on a temporary basis during an inflow surge or during a crisis or near-crisis has faced considerable pushback from country authorities. ….
> Trying to make fine distinctions between very similar measures classified as CFM/MPMs and MPMs has led to repeated disagreements. … There also seems to be a greater role for FXI than sometimes acknowledged in IMF advice. …These challenges have contributed to concerns about the extent of the value added and influence of IMF advice on managing capital flow volatility. …. The key issue would be to consider some well-defined extensions of the circumstances in which CFMs

> would provide a helpful part of the policy toolbox, particularly when their preemptive and longer-lasting use could be justified.'

What is still lacking is specific Fund operational support for measures to restrain flighty short-term inflows (perhaps some targeted version of a Tobin tax or URR applied just to those assets which are attractive to foreigners[38]), including discussion of how these might be implemented. Whereas financial development has been about making transactions easier and cheaper, it might be better if some international capital transactions are modestly costly. This acknowledges that some capital flows are more beneficial than others, and some more risky to the macro-economy than others. With foreign capital sensitive to the size of current account deficits, policy should aim to keep the external deficit within tight bounds and to fund this limited deficit with the safest forms of inflow.

Foreign exchange intervention is somewhere on the Fund's policy list, but with no encouragement and operational advice that makes no sense: that intervention should be in response to short-term volatility and temporary. Instead, the discussion should be how to make it more effective, exploring, in a positive way, possibilities such as Band-Basket-Crawl (BBC) (Williamson 2001) which ignores daily minor volatility but acts to keep the rate from departing far from equilibrium.

The Fund has never resolved what part foreign creditors should play in resolving the debt overhang in crises times. The sovereign debt component – in principle the simplest to resolve – was the subject of a major effort at resolution a decade ago (Kruger 2001), but it was not in the interests of several of the biggest Fund shareholders, so the initiative withered. In any case, this initiative was directed only at sovereign debt, while the main flows in Mexico 1994 and in Asia were private-sector investors. This leaves a huge gap in the Fund's policy response to capital-flow crises[39].

8. The Fund model

The Fund is like a priesthood, where the operational doctrine is handed down from above, often in some detail. Practitioners lower down in the Fund staff are exposed to real-world discussion (e.g. in Article IV consultations) and might put their own nuance and interpretation on this, but they are like parish priests in a universal religion, with the dogma set down, and disciplined, by the senior hierarchy in head-office. The parish priest might offer views on the doctrine, but there are no direct channels through which this will be reflected in thinking at the centre. True, policy-making everywhere tends to be top-down. But the Fund's governance is via an unwieldy Executive Board, with the 24 Executive Directors carrying detailed briefs from the home authorities. For better or for worse, this results in stronger, more detailed and persistent policy-beliefs than are routinely found in domestic policy settings.

Academic influences are strong in the Fund. Particularly at the senior level, staff thinking reflects their strong academic backgrounds, with many more PhDs than would be found in most domestic administrations. There is a huge research output of Staff Discussion Papers and even more academic Working Papers. Thus the textbook view of the world, with its

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[38] An example is the minimum-holding period applied to Bank Indonesia SBI bonds.

[39] For some indications of how far this vexed issue is from resolution, see Ubide (2015).

strengths and weaknesses, has a greater influence than it might have in most domestic environments, where policy-makers tends to be more eclectic.

The academic case for free capital flows is analogous to the case for free trade and comparative advantage in goods and services: capital markets are, in this view, much like markets for goods and services. Free capital flows benefit both provider and recipient, ensuring that capital is allocated to the highest use regardless of geography or saving preferences in individual countries. International flows provide both savers and investors with higher utility than would be available where choices are limited by restrictions on international capital flows[40].

This textbook view is a useful starting point in assessing the role of foreign capital, just as markets are an essential basis for price discovery. Of course models don't pretend to capture the full complexity of the real world. The question is whether this model/mindset provided practical policy guidance.

After around 1980, much of Fund policy advocacy followed directly from the tenet of 'efficient markets'. Free-floating exchange rates, opposition to FX intervention, reliance on higher interest rates to support exchange rates under pressure from flow reversals -- all these elements of policy advice followed directly from a belief that financial markets are 'efficient'. The same view was the basis for institution-building advice: financial deregulation accompanied by the development of vigorous, sophisticated, frictionless financial markets. In this efficient-markets world, there is no need to distinguish between flighty short-term flows and more stable flows such as foreign direct investment (FDI) and loans.

The rise of the 'efficient markets' view may also explain the shift in mindsets (of the Fund, policy-makers and the economics profession) away from the 1944 view that capital controls would be necessary to achieve the desirable outcome of stable parities, to the 1980s view (also widely accepted by these three groups) that free markets would consistently deliver sensible outcomes for exchange rates and output, and any departures from equilibrium outcomes would be temporary and low cost.

In this efficient-markets world, borrowers and lenders are operating with certainty and full information, in a well-functioning institutional structure. Foreign investors make well-considered and informed decisions, which lead foreign capital to make profitable investment decisions which benefit all parties. Prices adjust quickly to new information, moving smoothly to a new stable equilibrium.

This model fails in two broad areas:

- Financial markets operate quite differently;

[40] The Committee on Global Financial Systems (a BIS committee) (2009) provides a summary of the empirical experience on the impact of capital flows and economic growth, revisiting this issue in 2021. This CGFS report concludes: "over the last decade, research has found clear evidence of the benefits of capital inflow of all types', but the evidence is largely from micro studies of individual firms (showing increases in credit, investment and exports), which may well benefit while the impact on other players and the overall economy of sudden stops or the policies required to safeguard the macro-economy are adverse.

- There are substantial externalities, not taken into account by individual market decision-makers.

In the real world, investors have very imperfect knowledge (especially in these emerging economies – illustrated by the dramatic changes in assessments by the credit rating agencies after the 1997 Asian crisis), confidence and expectations are volatile, leading to correlated errors and simultaneous changes in risk perception. The result is contagion and herding. Markets in developing countries are shallow and tiny relative to the global markets supplying the capital. There are few stabilizing arbitrageurs or market-making institution. Overshooting is routine; multiple equilibria are not uncommon. Cross-currency transactions, intrinsic to capital flows, insert an extra element of risk: volatile exchange rates. Hedging just shifts risk, rarely shifting it to a party holding an offsetting position, more often to someone more ignorant of the risks. Participants in these markets are often subject to principal/agent problems, are constrained in their portfolio decisions, and work within undeveloped institutional and prudential frameworks.

Mark-to-market, credit rating agencies, and customer withdrawal from managed portfolios force short-term decisions which bias and distort markets. Financial transactions often have the extra risk of a time element not present in spot markets, where the transaction is not quickly finalized by repayment of a loan, withdrawing managed funds, or settling a futures contract.

The result is surges and reversals, momentum trading, irrational portfolio decisions, and bank-run phenomena. The price discovery process, adequate under normal circumstances, can have wide fluctuations and sustained mis-pricing in uncertain times.

Specific elements of the textbook model have been central in the policy debate, but fit imperfectly with this reality:

- The Impossible Trinity. While-ever the emerging economies were only loosely integrated with global financial markets, they had more opportunity to make ad-hoc but satisfactory compromises between the three objectives. While the predominant inflow was FDI (which is illiquid and not very interest-sensitive), the IT did not impinge strongly. Then, as financial integration increased and interest-sensitive liquid portfolio flows increased, even countries choosing just two corners of the triangle (say, open capital markets and independent monetary policy) could no longer assume that the remaining corner – the exchange rate – would reflect underlying fundamentals. Instead, capital flows driven by time-varying risk perceptions (Rey 2013) can produce the sort of extreme exchange rates seen in the Asian crisis.
- The Mundell policy assignment. In this assignment, fiscal policy is powerful when exchange rates are fixed while monetary policy (interest rates) is powerful when the exchange rate is floating. This unambiguous result is fuzzed by the evolving degree of global financial integration of emerging economies.
- Dornbusch ‘overshooting’. A Dornbusch-style exchange-rate equilibrium, with the exchange rate temporarily over-valued in order to balance an above-global interest rate, is intrinsically unstable without a firmly-anchored longer-term exchange rate[41].

[41] The closest we might have seen to a sustained operation of the Dornbusch mechanism might be with the ‘carry-trade’ flows of the 2000s, especially between Japan and the New Zealand dollar, where the inflows bid

In addition to these market imperfections, externalities are substantial. These undermine the idea that if individuals assess their risk correctly, markets will get the optimal collective answer. Borrowers rarely take account of the damage their individual actions can do to the macro-economy – rational individual decisions can, in aggregation, cause a financial crisis. Even under non-crisis circumstances, macro-policy may be distorted in response to individual financial decisions (see Korinek 2020). The real-sector counterpart of financial-market imperfection is serious disruption and 'lost decades', which fall on the whole community rather than the original decision-makers[42].

Regulation and controls are to be found everywhere in economics. It would be an aberration if some constraints were not needed to ensure that the balance of benefits from capital flows was positive. Larry Summers' analogy with the 747 aircraft – safer but when accidents occur, they are more newsworthy – is not an argument for regulation-free capital flows. The 747 is safe because its design and operation are subject to extensive regulation and it operates within a specified environment consistent with its design.

There was certainly plenty of evidence that the text-book model didn't mimic the real-world. There was little empirical evidence that flows were beneficial. The minimal evidence was ambiguous, dependent on time, place and circumstance[43]. Capital was often 'flowing the wrong way' – uphill, from emerging economies to mature developed economies. Flows were strongly pro-cyclical (Kaminsky et al. 2004), rather than consumption-smoothing as in the standard textbook model.

These imperfections should not come as a surprise. In addition to the series of crises discussed above, there was the long history of 'manias, crashes and panics'. 'The madness of crowds' had been noted well over a century ago.

Many economists were sceptical of the smooth operation of markets – Kindleberger (1978) recorded the dangers of capital flows in his narrative of crashes and panics. An early example more specifically relevant to capital flows was Tobin's 1978 proposal 'to throw some sand in the wheels of our excessively efficient international money markets' via a small transaction tax on currency exchanges. This would discourage short-term capital flows without much affecting longer-term flows such as FDI and loans. It is worth noting just how fundamentally different this mind-set is: rather than advocating further institutional development to increase integration and capital flows, Tobin was suggesting consciously reducing the ease of foreign transactions, discriminating between types of flows, favouring longer-term 'sticky' flows. He was ready to go without the benefit of short-term flows because of the risk they posed.

Cynicism about free capital movements was common enough, particularly among policy-makers in the emerging economies: see 'Good-bye financial repression, hello financial crash' (Diaz-Alejandro 1985). Bhagwati (1978), Stiglitz (2000) and Rodrik (1998) specifically

up the kiwi for a period, followed by a sharp reappraisal, taking the kiwi down again, to begin the same cycle again.

[42] The authoritative Basel Committee on Banking Supervision (2010) assesses that the cost of a banking crisis is 63% of GDP.

[43] In assessing the very extensive work of the Fund staff in the years leading up to the IV, the IEO (2015) noted: 'Notwithstanding these efforts, the empirical literature has been unable to establish a robust positive relationship between capital account liberalization and growth.'

refuted the idea that capital flows were analogous to trade flows, thus denying the presumption of mutual benefit associated with international trade. Blanchard (2016) argued that, in responding to spillovers of interest rates from the developed countries, the optimal policy was capital controls rather than international coordination.
Williamson (2008) addressed the excessive fluctuations of exchange rates with his 'Band-Basket-Crawl' (BBC) proposal for an intermediate managed regime, which would limit the extent of exchange-rate fluctuations, centred around a slowly moving real effective rate[44].

Successive generations of models attempted to respond to the arrival of inconvenient empirical reality, incompatible with earlier models. First- generation models described recipient-country policy mistakes coming home to roost. Second-generation models recognized that policy trade-offs could make a fixed rate unsustainable, with self-fulfilling risk re-assessments, analogous to bank runs. Third generation models explored the interaction of currency and banking crises (as in Thailand), with liquidity triggers and balance sheet effects (see Dornbusch 2003). All these models illustrate the same issue -- the simple view on the benefits of capital flows are just that – too simple.

Eichengreen and Haussman (1999) recognised the special role of foreign-currency borrowing in the Asian crisis, with borrowers bankrupted when the exchange rate fell sharply. They noted that emerging economies often found it difficult to borrow in their own currency – a problem they dubbed 'original sin'[45]. But even when countries could issue their own debt, the current account deficit still left one party to the capital flow with a currency mismatch and thus susceptible to 'bank-run' sudden outflow incentives.

Rey (2013) took the focus of flows away from the 'pull' factors and issues in the recipient countries which had dominated the debate (such as interest differentials), to observe that the surges and retreats were associated with shifts in global volatility (a proxy for shifting global risk assessment). If the causes were on the foreign supply side ('push factors'), the solution was no longer simply a case of the recipient 'putting its house in order' (involving tighter macro-policy). This shift from focus on domestic policy mistakes (and the need for domestic adjustment), to recognition that the initiating factor was often overseas, was a substantial step

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[44] This has never gained much traction (see Fischer's criticism (2002)). Indonesia was, in theory, on a BBC-style path before the 1997 crisis, but the widening of the band was taking place so slowly that when the crisis arrived there was not room to maintain this policy in the face of very large outflow.
Worth noting here is that Williamson's 'Washington Consensus' looked favourably on FDI and longer-term capital, but didn't included open-capital markets: 'there is relatively little support for the notion that liberalization of international capital flows is a priority objective' (Williamson 2004).

[45] In the years that followed the crisis, a surprising number of these countries succeeded in borrowing in domestic currency, or more commonly, issued local-currency government bonds which were take up eagerly by foreign investors. This, however, just changed the nature of the problem without doing much to solve the basic issue: a country running a current account deficit creates financial instruments which put one party – either the borrower or the investor – in a currency other than their own (currency mismatch), and therefore susceptible to exchange rate risk which creates the incentive for sudden capital outflow when exchange rate concerns arise. Persuading the foreigners to hold domestic-currency debt means that the domestic borrower is protected from the exchange-rate impact, but the mismatch is shifted to the foreigner, who will exit the investment immediately in times of uncertainty if they are able. Dollar-denominated loans may actually be less liquid and more stable than foreign portfolio investment in local-currency bonds.

forward. But it could be taken one step further. If the problem was external, shouldn't altering this external influence (through CFM, for example) be high on the policy agenda? [46]

Other experiences and 'models' might have led to some recognition that viable alternatives exist. China has grown quickly for decades with constraining capital controls and heavy management of financial prices.

What should be noted in this recitation of alternative models and viewpoints is that each of these identified a flaw in the core 'free-market' model, and often pointed to a suggested solution. A judicious incorporation of more of these ideas into the Fund mindset would have been beneficial.

It would be unfair to the intelligent, highly educated staff of the Fund to suggest that they were blinkered by an academic model which was such a poor fit for the real world. Of course they knew that the real world was more complex. But if not blinkered, they were to a greater or lesser degree constrained. They worked within an institution with a well-developed strongly-articulated centralized view of the world, subject to outside vested interests (see next section). They were required to enunciate and defend a model that many of them would have known was misleading in its simplicity.

This left the Fund with inadequate tools for providing operational advice, pre-crisis, to supplement the generic hand-wringing warning of risks, which the Fund gave so often that it lost its impact. The practical compromise was to enunciate Fund doctrine, but not object too much when countries did something else – like imposing discrete capital controls and intervening in foreign-exchange markets.

This might have been a workable compromise, but it left the recipient countries still constrained by the residual stigma and without operational guidance for managing excessive inflows or for responding to an unfolding crisis. In particular, there was no 'Plan B', to cover the eventuality when the Fund's policy-responses were inadequate or inappropriate.

9. Other influences on Fund policy

The other important formative influence on Fund policy has been the views of the big-country members, via their dominant voices in the Board. This, in turn, reflects political pressures and vested interests, particularly from the financial sector. Politics was hugely important in the original Bretton Woods settlement, but the initial doctrines were much more influenced by the uniformly unhappy real-world experience of the inter-war years. It was, at the same time, consistent with the prevailing academic mindset – that governments had an active role to play in the economy, and intervention to stabilize prices (in this case the exchange rate) was routine.

By the 1970s, this was changing, again with a close coincidence of mindsets between the real-world policy-makers, the vested interests (mainly the financial sectors of the big economies) and the academic world. This morphed into the era of Reagan/Thatcher economics which gave a smaller role for government intervention and greater role for the

[46] Blanchard (2016) sees capital control as superior to FX intervention in response to 'spillover' from AE to EEs.

market. There was a close coincidence between the academic view and that of financial markets as Fund doctrine elided from the fixed-parities of Bretton Woods to the floating rates of the free-market period.

All this suited Wall Street, eager to find new outlets for lending in emerging economies. Citibank, the leading US bank, added its own self-serving voice to the risk assessment: that sovereign countries did not go broke. Left unsaid was the belief that the Fund would help to bail-out creditors. The absence of clear rescheduling or restructuring procedures probably suited Wall Street. At the official level, the US made a point of including 'no CFM' in trade and investment agreements (see Pasini 2011) and gave strong support to the strengthening of the OECD Codes.

10. Conclusion: today's challenges

The Fund's debatable role in the 2010 Greek debt crisis illustrates that the deficiencies recorded here have not been overcome[47]. But for many emerging economies, the challenge of flighty foreign capital has changed, as they have become more adept at handling the excessive and volatile flows. Bank supervision and capitalization have improved. As financial markets in emerging economies have matured, they have become less susceptible to the sorts of problems that occurred in 1997. Exchange rates are flexible: floating, but with intervention when needed. Foreign exchange reserves are far bigger and policy makers have quietly ignored the Fund's advice on intervention. They are active in steering exchange rates (and sometimes bond yields) back towards equilibrium, ready to lean against extreme market movements. Crises will still occur, but they are more clearly associated with poor domestic policies (e.g. Argentina, Turkey).

The likelihood of a repeat of the 1997 crisis in S-E Asia is low. Thus, is all good now? While the nature of the challenge has changed, the need for active CFM has not.

Volatile components of the push-flows are larger, particularly with the current global search-for-yield. The prospect of 'secular stagnation' suggests an exacerbation of the imbalances between the still-attractive growth prospects in emerging economies and the narrow opportunities in advanced economies. Historically low global interest rates, set in the 'push' countries (overwhelmingly the US), impinge everywhere, even where it may not be appropriate. Quantitative easing, particularly as practised by USA since 2008, has promoted volatile international capital flows. All countries are now much more sensitive to US Fed policies, so the likelihood of more 'taper tantrums' is high. Helen Rey's (2013) powerful argument that the Impossible Trinity trilemma is actually a dilemma strengthens the case for capital-flow management. The 'pipes' of international finance (Mark Carney 2019) are bigger, carrying larger flows. International financial markets have expanded and have

[47] European discussion (particularly in the BIS) seems to have moved further towards recognition of the problem of excessive and volatile capital flows to emerging economies (see CGFS 2021, Robert Triffin Institute 2019). The CGFS Report 'finds that global factors have played a significant role in driving capital flows to EMEs… Sudden stops are typically triggered by exogenous global shocks… structural improvements have not insulated them from sudden stops … even for EMEs with strong structural policies and sound fundamentals, there are circumstances in which additional policy tools, particularly macroprudential measures, occasional foreign exchange intervention and liquidity provision mechanisms, can help mitigate capital flow-related risks'. But note the absence of a mention for CFM.

undergone more layering and complexity, as demonstrated by the market disturbances in March 2020.

After the 2008 global crisis, the composition of inflows to emerging economies changed. Bank loans fell away, to be replaced by portfolio flows, often more volatile and pro-cyclical because they are actively managed, responding daily to changing investor sentiment. Volatile capital inflows are not necessarily going to cause a financial crisis, but require other policies to be adjusted sub-optimally (slower growth; large holdings of low-return foreign exchange reserves) in order to reduce risks.

What might change so that the Fund could play a more useful role in the evolving narrative of capital flows? CFM needs to be taken out of the bottom of the policy toolbox, to become a first-line response to excessive short-term inflows, with the residual stigma clearly removed. Rather than the long list of cautions about using CFM, the Fund should provide specific operational guidance and encouragement. Tobin's idea of a comprehensive transaction tax on all FX transactions may be impracticable, but the broad notion of 'sand in the wheels', aimed at specific short-term flows, is not. This would prioritize the distinction, largely ignored by Fund analysis, that some flows (FDI) are beneficial while others (flighty portfolio flows) have net negative benefit, even when the recipient country can avoid an economy-wide crisis.

Would such restrictions mean that capital flows were smaller than they would otherwise be? The answer to that must be: 'let's hope so'. The undifferentiated encouragement of all type if international capital flow has ignored the evidence that some flows, especially the short-term volatile flows, are not worth the cost.

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