India in the G20: Macroeconomic Policy Coordination, Regulation and Global Governance

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Foreword

Since November 2008 the G20 has – somewhat unexpectedly – assumed a leading role in responding to the current financial crisis and reforming the international financial system. At its April summit in London the G20 proposed a number of measures aimed at securing reforms of the global financial system, strengthening international institutions and preventing protectionism. These issues will dominate the official discussions in the G20 in 2010 and beyond.

The emergence of the G20 as the premier forum for addressing international economic policy issues has in turn meant that India occupies an even more important place on the international stage than it did before the crisis, so it is essential that India plays an active role in the global debate on how to resolve the current crisis and prevent the recurrence of similar crises in the future.

The Centre for Economic Policy Research (CEPR) and the National Council of Applied Economic Research (NCAER) therefore organised a conference, 'India in the G20: Macro policy coordination, financial sector regulation and global reforms' in New Delhi on June 1, 2009. The conference aimed to stimulate a dialogue between European and Indian researchers on these issues, in order to complement and enrich the ongoing discussions among officials in the G20.

The conference was addressed by Vijay Kelkar, Chairman, Thirteenth Finance Commission of India, Montek Ahluwalia, Deputy Chairman, Planning Commission and Dr. Rakesh Mohan, Deputy Governor of Reserve Bank of India, Arvind Virmani, Chief Economic Adviser, Ministry of Finance, Creon Butler, Deputy High Commissioner, British High Commission in India and saw participation by a large number of academics from India and Europe, policy makers, media and other researchers. We are thankful to all the participants who contributed to the proceedings.

We are grateful to the British High Commission in India for their support for the conference and to Simon Cox of The Economist for his chapter introducing this volume. We are grateful to Nav Sandhu at CEPR for her assistance with the conference arrangements, and to Anil Shamdasani at CEPR for his work in preparing this conference report for publication. We also thank Sudesh Bala, PK Joshi and other staff at NCAER for assistance with the organisation of the conference.

Suman Bery
NCAER, New Delhi

Richard Portes
CEPR, London

India and the G20: Enjoy the Silence

Simon Cox
The Economist

India's public and politicians are mostly indifferent to the G20. It could be worse

In March 1966, two months after becoming Prime Minister, Indira Gandhi travelled to the United States on a mission ‘to get both food and foreign exchange without appearing to ask for them,’ as she put it. The US President, Lyndon Johnson, seemed happy to oblige the Prime Minister-and to patronise her. See that ‘no harm comes to this girl’, he said.[1]

In June 2007, three years into his term, Dr Manmohan Singh travelled to Heiligendamm, Germany, to take part in that year's G8 summit. India was one of five emerging economies invited to the seaside resort. But they did not join the group on equal terms. Mr Singh complained that the G8 leaders had released their communiqué the day before they met him. ‘We have come here not as petitioners but as partners,’ he reminded his hosts.

The G8 has been notoriously slow to accommodate emerging economies, such as India. Forty years ago, these countries may have been ‘petitioners’, asking for food and foreign exchange. But they have now become necessary partners in many of the group's endeavours. Its clumsy efforts at ‘outreach’, such as inviting the leaders of five big emerging economies to lunch at its summits, have been inadequate and possibly counter-productive. As Paul Martin, former Prime Minister of Canada, has put it, you cannot tell major powers ‘to 'cool their heels' outside the meeting room while waiting to be called in.’

But while the G8 has fussed over its guest list, the party has moved elsewhere. The financial crisis that seized the world economy in September 2008 wreaked havoc far beyond the boundaries of North America, Western Europe and Japan. When the United States decided to marshal a response, therefore, it invited the G20 not the G8 to Washington. The group was not invented at that November summit--it first met in Berlin in 1999, in the wake of the Asian financial crisis--but the Washington summit changed the G20 out of all recognition.

In place of the finance ministers and central bankers who attended the previous G20 meetings, the summits in Washington and then London gathered presidents, Prime Ministers and kings. The crisis was also a great leveller. The original G20 was meant to include all of the ‘systemically significant’ economies. But the nature of their significance varied. Some members were significant enough to steer the system; others were only significant enough to derail it. Thus despite the equal status accorded to each member, the unspoken assumption was that the G20's richer members would solve the economic problems falling into the group's lap and the remaining

1 *Indira: The Life of Indira Nehru Gandhi*, by Katherine Frank. (Harper Collins, 2001).

'emerging' members would cause them. The financial crisis, originating in the United States, changed that presumption.

For the moment at least, the G20 has quite eclipsed the G8, which is now suffering from an identity crisis. In July 2009, the eight members held a summit in L'Aquila, Italy. They 'reached out' to the usual five big emerging markets. They also invited Egypt and held a working lunch with five international organisations. When the summit lost China's president halfway through because of riots back home, the *New York Times* quipped that the G8 had become the G8+5+1+5-1.

At the G20 summits in Washington and London, Dr Singh finally got his wish: India was welcomed as a partner, not a petitioner. Its views were heard before any communiqués were drafted, and its delegation commanded genuine respect. The Prime Minister, of course, has credentials in economics that none of his peers could match. He was flanked by his 'Sherpa', Montek Singh Ahluwalia, the deputy chairman of India's Planning Commission. Mr Ahluwalia was no stranger to the Bretton Woods institutions, having begun his career at the World Bank and served for three years as director of the IMF's Independent Evaluation Office. And according to one observer[2], no policymaker from a developing country was more effective than Rakesh Mohan, then deputy governor of the Reserve Bank of India (RBI), who co-chaired the G20 working group on financial regulation.

Well served by its delegates, India also derived some 'soft power' from the force of its example. Its cautious central bankers, criticised by many liberal economists before the crisis, seem wise in hindsight. Y.V. Reddy, who headed the RBI until September 2008, has seen his star rise high since his retirement. He remained sceptical of the inflation-targeting orthodoxy that blinded other central banks to the dangers of asset-price bubbles. He policed the entry of foreign banks quite strictly, as well as keeping close tabs on the overseas expeditions of Indian banks. Most famously, the RBI enforced its own *ad hoc* version of 'dynamic provisioning', tightening the leash on banks as credit boomed. In an admiring profile, the *New York Times* anointed Dr Reddy 'exactly the right man in the right job at the right time'.

The Reserve Bank's governor joins India's financial regulator and its finance minister on the new Financial Stability Board (FSB), an international body that has replaced the more exclusive Forum that preceded it. India's full complement of three seats gives it parity with the biggest economies such as the United States. This matters, because according to Mr Ahluwalia, the Board may now supersede the Fund as the principal forum for redesigning international financial regulation.

Now that India has the status it deserves, what is it doing with its new clout? What causes has it sought to advance? In London, India's delegation favoured a 'concerted' effort to fight the global recession with monetary and fiscal stimulus, arguing that

2 Amar Bhattacharya, director of the G24 group of developing countries

3 The Indian government's own contribution to this fiscal effort seemed meagre. Its three stimulus packages announced from December 2008 to February 2009 added up to only about 0.6% of GDP, according to the IMF. But the IMF only counted the discretionary measures taken in response to the crisis, ignoring coincidental swings in the public finances. Indian officials therefore found themselves in the peculiar position of boasting about how badly the budget balance had deteriorated over the previous financial year, thanks to outlays decided before the crisis. The widening deficit imparted an implicit stimulus of 4 percentage points or more to GDP.

'the risks lie in doing too little rather than too much.'[3] It was in favour of trebling the IMF's resources and making a fresh allocation of Special Drawing Rights (SDR). India also supported an increase in IMF 'quotas', the amounts members contribute to the Fund, which also determine their share of votes on its board.[4]

India benefited directly from the promise to increase lending from multilateral development banks, such as the World Bank and the Asian Development Bank, by $100 billion. It is both banks' biggest customer, borrowing $2.9 billion last year from the ADB and $2.2 billion from its Washington sibling.

The London communiqué reflected most of India's concerns. Indeed, at the closing press conference, one Indian journalist noted how closely the communiqué echoed Mr Singh's speech at Number 10, Downing Street, the previous evening. Back home, however, India's policy-makers and opinion-makers showed little enthusiasm, or even interest, in the G20. The response to the summits was surprisingly muted. 'I was struck by the amount of kudos that some of my developed country colleagues were heaping on their members,' says Amar Bhattacharya, director of the G24 group of developing countries, 'but I do not find the same in India.' The meetings were not heavily reported in the press, debated in parliament, or discussed in think tanks. *Businessworld*, an Indian magazine, described the November summit as a 'flight to nowhere'.

This was partly a matter of timing. The Washington event was hosted by a lame-duck American President, shortly after the election to pick his successor. The more consequential London summit came on the eve of India's own month-long general election, which preoccupied India's political class. On a trip to the United States, Suman Bery, director-general of the National Council of Applied Economic Research (NCAER) in Delhi, noted that a 'common refrain was: 'where was India?''

This e-book is the result of one effort to find out where India is. On June 1st, the NCAER and the Centre for Economic Policy Research, based in London, organised a day-long conference in Delhi to discuss 'India in the G20'. The event brought together scholars, officials and economists from India and Europe. It is perhaps telling that the conference was sponsored not by an Indian body, but by the British High Commission in New Delhi. 'There is a set of expectations out there that India has the standing and the credibility to be an important player in the G20,' says Mr Bery. But expectations of India perhaps exceed India's expectations of itself.

According to Mr Bery, India's attitude toward the G20 is analogous to its attitude to the General Agreement on Tariffs and Trade (GATT) 15 years ago. India was a founding member of the GATT. But it was not an active protagonist in the first eight trade rounds. It was interested only in preserving its freedom to shelter domestic industries in the name of self-reliance and import substitution.

After the Uruguay Round, which created the World Trade Organisation (WTO) in 1995, India had two epiphanies. First, it realised that it could no longer insulate itself from the WTO's undertakings by ignoring them. In the second half of the 1990s, it lost a number of disputes at the WTO's tribunal, forcing it to tighten its intellectual

4 The London communiqué endorsed the reforms the IMF proposed in April 2008, which would increase India's quota by 0.5 percentage points to 2.44%. But the summit did not secure agreement for a further rebalancing of quotas to reflect the growing weight of emerging economies in the world economy.

property laws and remove some quotas. Its own exports were rebuffed by stringent health and environmental standards, as well as anti-dumping measures. And then the American company Ricetec had the temerity to patent a variety of *Basmati* rice in the United States. India realised that if it wanted to preserve its 'policy space', it would have to actively defend it.

At about the same time, India also came to a second, more optimistic realisation. Following the success of its outsourcing and offshoring industry, it recognised that it had something to gain from the WTO, especially from the agreement on services. Trade rounds posed an opportunity as well as a threat.

Mr Bery thinks the crisis of the past two years may force India to rethink its position on international finance, much as it rethought its stance on trade 15 years ago. The crisis showed that India could not insulate itself from financial instability in the West, as it had insulated itself from the Asian financial crisis ten years before. India's capital account is by no means open. And yet, even before Lehman Brothers filed for bankruptcy on the morning of September 15th 2008, India's money market registered the shock, with the call rate jumping dramatically. As Ajay Shah of the National Institute of Public Finance and Policy has argued, India's companies are globalising faster than its financial system. When they were shut out of the credit markets in London, they immediately clamoured to raise money at home.

The crisis, then, showed that India cannot fully protect itself from the dangers of global finance by turning its back on them, any more than it can defend its position in trade negotiations by ignoring them. But does the crisis also offer any positive opportunities for India, similar to the gains it now seeks in trade negotiations? Perhaps not immediately. But because crises of this magnitude are mercifully rare, another opportunity to remake the financial system may not arrive for a generation or more. Decisions taken now, as Creon Butler of the British High Commission pointed out at the conference, will matter to India in the future. They will shape the financial world that India will, in the fullness of time, become an important part of.

Viewed over such a horizon, India can harbour some big ambitions. Mumbai, for example, could become a regional financial centre. India's banks, which had 129 branches outside the country in 2008, could become significant exporters of financial services. Could India even internationalise the rupee, Mr Bery asks? The rupee was, after all, once the currency of the British Empire from Aden to Singapore. Why should China entertain such visions and not India?

But others urge circumspection. Although India is the fourth biggest economy in the G20, measured at purchasing-power parity, it is only the 11th biggest, measured at market exchange rates. (It is poised to overtake Russia in tenth place this year, according to the IMF.) It accounts for just 2% of world GDP and a smaller share of world trade. It is also by far the poorest member of the group, with an income per head of about $1000 in 2008, compared with a G20 average of over $23,000.

We shouldn't flatter ourselves too much about what India can do for the international system,' says Vijay Kelkar, chairman of India's 13th Finance Commission and a former executive director of the IMF. 'We are still a price-taker, not a price-maker,' he says. 'Pretending we can influence vastly the [international financial] architecture at this stage is beyond our current capacities.'

The Prime Minister seems to share Mr Kelkar's circumspection. When asked why the London communiqué so closely echoed his Downing Street speech, he answered

with characteristic humility. 'All right thinking men think alike when dealing with global issues of great seriousness'.

This was not false modesty. If India's concerns were reflected in the communiqué it was probably because those sentiments were widely shared. There was nothing in the communiqué India objected to. But nor was there much that wouldn't have appeared without them. India can claim some credit for the promise to review IMF quotas by January 2011, ahead of the traditional schedule, and for the call for new proposals for World Bank reform by April 2010. India also pushed hard for the extra funds pledged to the multilateral development banks (MDBs). But as Dr Bhattacharya has noted, the MDBs were a 'poor cousin' in the G20. They were promised only $100 billion at the London summit, compared with an extra $500 billion for the IMF and another $250 billion of SDRs. 'The balance was out of whack,' Dr Bhattacharya says.

Despite the contribution of India's delegates, the fact remains that its economy was not central to the crisis or to its resolution. It was not a cause of the upheaval. It was not one of its worst victims. And it is not in a particularly strong position to help. Unlike China, it did not contribute to the savings glut that some economists, such as Richard Portes of the CEPR, blame for the crisis. But like China, India escaped the worst effects of the financial meltdown: it was one of only three G20 economies (the others being China and Indonesia) that have kept growing throughout the mayhem. Finally, India is still a big recipient of aid, not a major donor. It will buy some of the notes the IMF is planning to issue. But that is about as far as its financial contribution can go.

The apathy shown by India's public is, then, understandable. The G20 seems remote from their concerns. It is also worth asking whether a broader civic engagement with the G20 is even desirable. The bulk of India's politicians, press and activists have traditionally taken a jaundiced view of the country's foreign economic entanglements. Whenever they have been aroused by such affairs it is usually to condemn them. In 1992, for example, Arthur Dunkel, chairman of the General Agreement on Tariffs and Trade, released his 'Dunkel draft', outlining a possible compromise to save the Uruguay Round of trade talks. The response in India was not apathetic: Mr Dunkel's effigy was burnt on the streets of Indian cities, at the behest of India's Left parties.

This wariness about international economic relations no doubt owes something to India's colonial past. But the distrust also has a lively recent history. Shortly after Indira Gandhi returned from her trip to Washington, DC, in 1966, India devalued the rupee by more than 50%, a move advocated by the World Bank, and endorsed by the government's own economists. To cushion the fall, India expected to receive generous aid from America and other donors. But India showed only a lukewarm commitment to the wider reforms its donors deemed necessary and the aid was slow to arrive. In his memoir, I.G. Patel, an economic diplomat, describes the post-devaluation donor meeting as a 'big disappointment and indeed a betrayal.' Afterwards, 'all hell broke loose,' according to the journalist Inder Malhotra. 'Public opinion was aroused as never before except against the Chinese invasion four years earlier.'

This sense of betrayal coloured India's dealings with the IMF in the early 1980s, as A.K. Bhattacharya of the *Business Standard* describes in this e-book. Pranab Mukherjee, the finance minister, then and now, made a show of taking the Fund's money, but not its advice. The distaste remained in 1991-2, when India turned again to the Fund to

avert a balance-of-payments crisis. The Prime Minister, Narasimha Rao, was accused of mortgaging the country's economic sovereignty to the Bretton Woods sisters. 'If you give alms to somebody it is good, but if you receive alms, it is better to die on that day,' said Atal Behari Vajpayee, who would later serve as Prime Minister, quoting the poet Rahim. 'Ours is an ancient and great country,' he said, 'Who can sell it?'

This hostility is not unique to India, of course. Similar sentiments were expressed later that decade on the streets of Seoul and Jakarta during the Asian financial crisis. But India's attitude to the Bretton Woods institutions has an interesting twist. In India, unlike East Asia, the popular resentment expressed by protesters and politicians is not, on the whole, shared by the officials and technocrats who actually carry out India's business with the World Bank and the IMF.

Indeed, apart from the 'betrayal' of 1966, India has always done remarkably well out of the international financial institutions. Multilateral aid, whereby donor governments pool the resources they provide to poor countries, was practically invented for India's benefit. The Aid India Consortium, which first met in 1958, was a forerunner of the World Bank's IDA, set up two years later to provide cheap loans and grants to the Bank's poorest members. The initials stand for International Development Association, although it is sometimes suggested they should stand for India Development Association. India has received over $35 billion from IDA over the years, far more than the second-biggest recipient, which received about $13 billion.

India has even succeeded in taming the dreaded IMF. In November 1981, it received a bigger loan than any country before it: SDR 5 billion. In return for this generosity, India merely had to implement reforms it had already decided upon as part of its five-year plan. The programme was a successful experiment in 'homegrown conditionality,' argues Dr Kelkar, in a paper written with Praveen Chaudhry and Vikash Yadav. The Fund's board thought the 'Indians had fooled the Fund into providing a very soft and soggy programme,' Dr Ahluwalia recalls.

Moreover, the IMF loan extended to India in 1991 must count as one of the most successful programmes in the Fund's history. After a short, sharp slowdown, India rebounded vigorously. Indeed, the liberalisation measures it undertook in 1991, with IMF backing, set the stage for India's recent return to international prominence.

The Indian public has always assumed that the IMF and the World Bank dictate terms to the government, ramming policies down its throat. But this underestimates India's own officials. Those civil servants sometimes complain that the public does not give them enough credit for holding their own in negotiations with the Bretton Woods institutions. 'It is completely false to think that the Fund was laying down rigid rules that we were forced to adopt,' says Dr Ahluwalia.

This misperception must rankle with the negotiators. But the combination of public resentment and official engagement may be the secret of India's success with the Fund and the Bank. India's officials are credible enough to win generous IMF loans, but its public is hostile enough to deter the IMF from asking too much in return.

In the heated parliamentary exchanges of 1992, Prime Minister Rao made a stout defence of his turn to the Bretton Woods institutions. 'After all, what is the World Bank, what is the IMF?' he said. 'The World Bank belongs to India as much as the United Nations belongs to us.'

India's political class has never succeeded in making this case to India's voters. According to A.K. Bhattacharya, it has never really tried. As he pointed out at the con-

ference, ‘Indian politicians have refused to discuss and explain the relevance, the importance or the place of these bodies in the larger scheme of things to the voters’. Despite India's new stature at the G20, its civil society is for now enjoying its freedom to ignore the Fund, the Bank and the other international financial institutions, a luxury it could not afford when foreign-exchange was scarce and default imminent. Compared to the hostility India used to show, this indifference is, perhaps, something to celebrate.

The Gobal Macroeconomic Crisis and G20 Macroeconomic Policy Coordination

David Vines

University of Oxford, Australian National University and CEPR

1 Introduction

This crisis is a global crisis. In this it differs from the financial crises in Latin America in the 1980s or the crises in Mexico 1995, in East Asia in 1997-98, in Russia in 1998, and in Argentina in 2002. This short paper sketches the global origins of the crisis, describes current policy responses, and suggests what global policy coordination might be necessary.

2 Origins

2.1 Savings-investment imbalance in East Asia

An important cause of the crisis has been the high level of savings relative to investment in East Asia since the crisis of 1997-8.[1] As Figure 1 shows, in East Asia the share of investment in GDP fell by 10 percent at the time of the crisis and had not recovered by the middle of this decade.

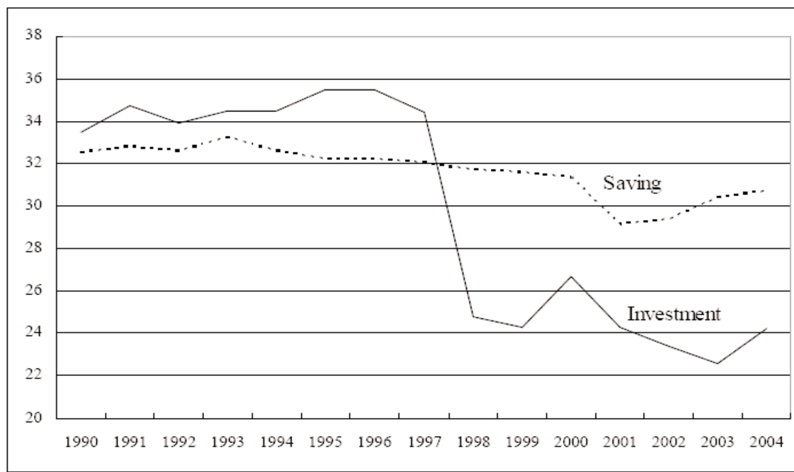
Central to this story is the riskiness associated with investment which was revealed by the crisis, and which dampened investment demand. China is the exception to this story. Investment has *risen* in China, but it has done by less than the savings. As Eichengreen and Park (2006) observe the crucial thing to observe about what has happened in Asia since the crisis is not a savings glut, but a shortfall of investment relative to savings.

There was also a drop in investment in the US following the dot-com crash, so that the global investment shortfall was not just concentrated in East Asia. But it was disproportionately concentrated there. Because of this investment shortfall in East Asia, the real exchange rate of East Asian countries needed to be depreciate relative to the dollar, in order to redistribute demand away from the rest of the world and towards East Asian goods, to make up for the low level of demand at home. Rapid growth of exports is the well-established means by which a country recovers after crisis, facilitated by exchange rate depreciation, and this happened in Asia too. Although the rad-

Author's note: I am grateful to Vijay Joshi, of St John's College Oxford, with whom I have been working on this subject. See Joshi and Vines (2009). Section 6 of this paper draws heavily on that paper.

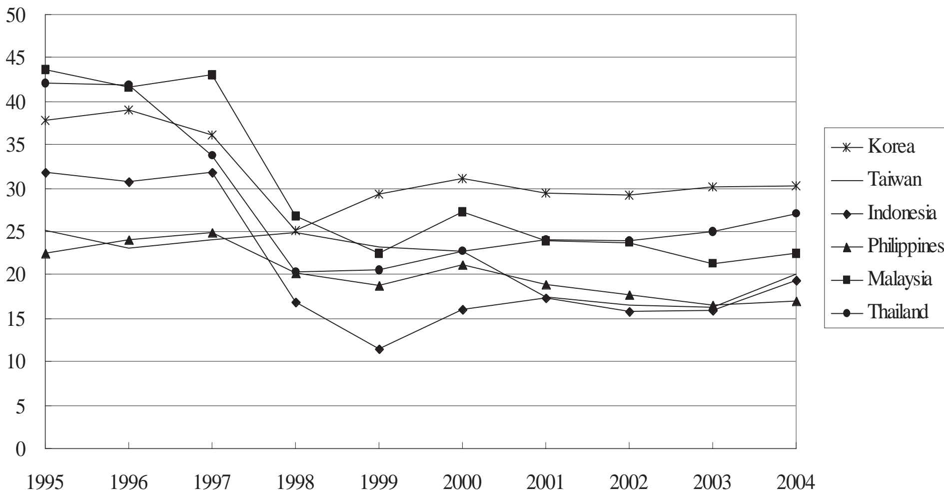
1 This subject is discussed by Bernanke (2005) Wolf (2008).

Figure 1 Saving and investment in emerging Asia (NIEs and ASEAN-4) (as a percentage of GDP), 1990-2004



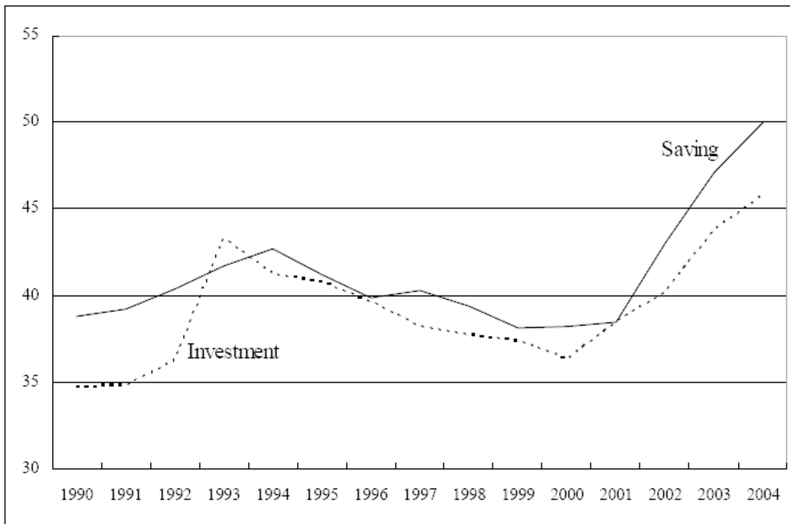
Source: Jong-Wha Lee and Warwick J. McKibbin, KIEP Mid-Term Report – Domestic Investment and External Balances in East Asia, June 2006.

Figure 2 Investment share in GDP (units percent)



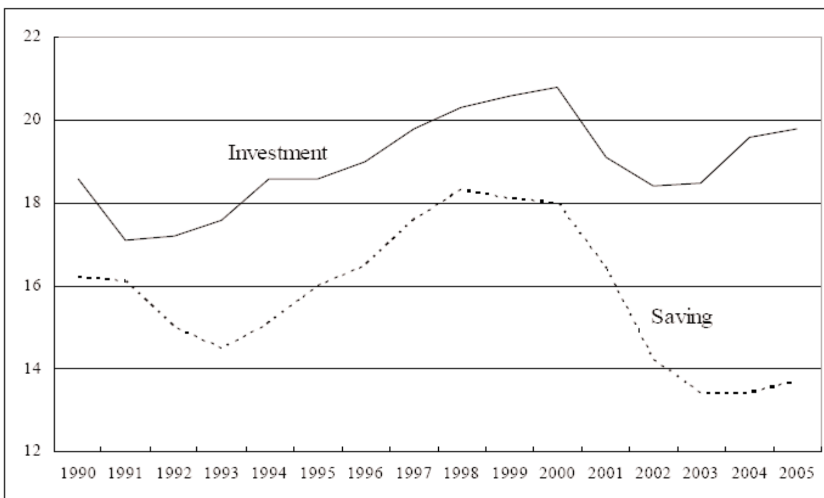
Source: IMF, International Financial Statistics 2005.2, The World Bank, World Development Indicators 1997-2004, The World Bank World Development Report 1995-1996, OECD, and Country Sources (Figure taken from Eichengreen and Park, 2006)

Figure 3. Saving and investment in China (as a percentage of GDP), 1990-2004



Source: Jong-Wha Lee and Warwick J. McKibbin, KIEP Mid-Term Report – Domestic Investment and External Balances in East Asia, June 2006.

Figure 4 Saving and Investment in the United States (as a percentage of GDP), 1990-2005



*Source: J*ong-Wha Lee and Warwick J. McKibbin, KIEP Mid-Term Report – Domestic Investment and External Balances in East Asia, June 2006.

ically depreciated currencies of Thailand, Korea and Indonesia recovered after the crisis, their exchange rates did not recover fully, and so exports replaced the missing domestic demand. China did not devalue at the time of the crisis, but underwent a significant period of deflation, from 1999 until early in the decade, and subsequently pegged its exchange rate to the dollar in the face of its rapid technological advance. So its real exchange rate depreciated too.

Why was this outward-looking growth strategy happen – relying on growth in demand from abroad, and facilitated by depreciated exchange rates – rather than relying on growth in domestic demand? The underlying reason is that domestic demand was growing slowly: investment had collapsed, and savings were high.[2] The reasons for high savings in China include the abolition of the previous system of safety nets, so that high private savings are necessary (i) to provide insurance against the risk of illness, (ii) to pay for old-age out of private savings, a need made more acute by a one-child-family policy, and also, (iii) for families to educate their one child as well as possible. In addition, when real incomes are growing so fast, consumption is unlikely to keep pace with income. There were thus real difficulties in the way of expanding domestic expenditure in the way that a currency appreciation would require. Similar factors were at work in other East Asian countries.

But why was it attractive to pursue the growth of external demand rather than instead to stimulate demand at home.

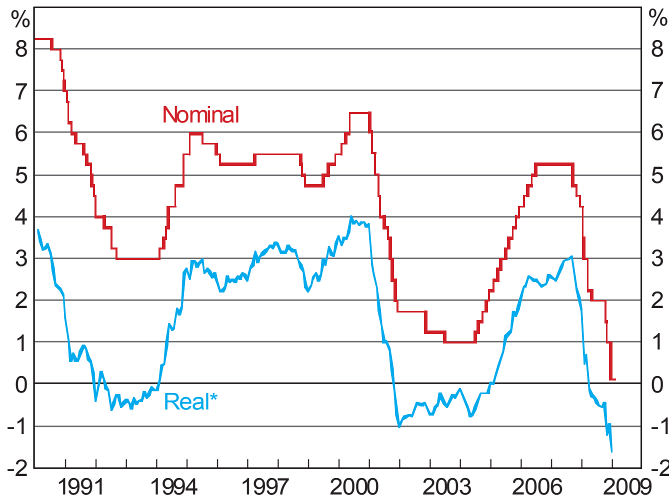
The fundamental reason is that the resulting surpluses were intended for the building up of official reserves in a precautionary manner, to deal with outflows of domestic savings, and 'sudden stops' in capital inflows. This was a public sector strategy of insurance against future crises. This explanation again sees the running of a current account surplus not as an end in itself but instead as the consequence of a desire by policymakers to build up reserves.[3]

A second different, but important, story is the 'Bretton Woods II' argument, provided by Dooley et al. (2003): that several major developing and emerging market countries, in particular China, were deliberately pursuing an export-led growth strategy – and maintaining undervalued exchange rates to facilitate this – in order to absorb surplus labour coming out of agriculture. The strategy of providing export demand for the products of this rapidly increasing labour supply, rather than a strategy of doing this by means of expanding domestic demand, enables one to sell into

2 See Eichengreen and Park (2006) for a detailed discussion of this.

3 An alternative story, in which running a current account surplus was also not an end in itself, but instead the consequence of a desire by those in the private sector in East Asian countries to buy foreign assets, has been put forward by Caballero et al. (2007). These authors posited a 'shortage of reliable and tradeable assets' in the countries with an excess of savings over investment, as a result of undeveloped financial markets. Private investors were, they argued, induced to buy foreign assets – in particular US assets – because of the unparalleled breadth and depth of US financial markets and because of the abundance of appropriate financial instruments there. See also Mendoza et al. (2007). This argument provides a rationale for a transfer of capital from the excess savings countries to the low-savings advanced countries, especially the US. But this interpretation does not fit the patterns of capital flows. It appears that it was attitude to risk after the crisis, rather than inadequacy of financial markets in Asia, which kept investment below savings in Asia. And nobody now believes in the exceptional quality of US private sector financial assets or intermediaries.

Figure 5 US Interest Rates



Note: *Real Fed Funds target calculated using core CPI updated to December 2008.
Source: RBA, US Federal RESERVE

global markets, without having to build the domestic market. And one can achieve faster productivity growth in the traded goods sector – using best-practice global technology, partly introduced through FDI -than one can by growing the supply of non-traded goods for sale to domestic consumers. (This is just the Belassa Samuelson effect.) This reason sees the strategy of growing external demand as being pursued because of the advantages of rapid growth of exports, in itself, rather than because it enables the accumulation of foreign assets.

Both of these strategies have been important.

2.2 Implications for US and global interest rates

These strategies in Asia were important cause of the fall in interest Rates In the US. Between 1998 and 2000 the rise in Asian savings was matched by the dot-com boom. But when US investment fell from 2001 onwards the global IS curve shifted to the left. Output was maintained by means of low interest rates. The 'Greenspan put' was a *response* to the rise in global savings relative to global investment. The alternative to this cut in interest rates – and fiscal expansion- was a large downturn at the end of 2001. Many feared – at the time – that there would be such a downturn. The cut interest rates ensured that demand remained high, accompanied by significant fiscal expansion in the US, the UK, and elsewhere.

But the undervalued exchange rates in East Asia ensured that this demand growth was disproportionately concentrated in the Asian surplus countries -- ensuring that the deficits in the US, the UK, Australia and elsewhere accompanied the lower interest rates in the US and the rest of the world. The result was low global interest rates, *and* appreciated exchange rates of East Asian currencies, together; this led to global

imbalances. Had the dollar fallen in the early part of the decade, in line with the fall in US interest rates, there would have been less need for lower interest rates in the US, as some of the recovery from the dot-com crash would have emerged through an improving US current-account position. But this was prevented by the exchange rate policies of East Asian countries, countries which were prepared to tie their currencies to the to the dollar and to accept the low interest rates which the US was setting. East Asian savings remained high relative to East Asian investment, *even although* global interest rates were so low.

Long-term interest rates fell, at the same time as short term interest rates. An explanation on this additional feature can be found in the expectation, prevalent at the time, that the outcome with low interest rates would continue for a long period of time.

The financial consequences of the resulting global macroeconomic imbalances were that large amounts of East Asian savings, and large holdings of foreign exchange reserves, were deposited in the US by East Asian asset holders. Such increases in East Asian asset holdings provide an additional argument as to why long-term interest rates fell, at the same time as short term interest rates. Asset holders in East Asia wished to hold long-term assets as well as short-term assets, pushing down long-term rates low as a result of the short term macroeconomic outcomes.

2.3 The transmission mechanism in the US

The *financial* consequences of this global fall interest rates was a rise in asset prices.

A very large reduction in long term interest rates – say a halving – will lead to a very large increase – in the limit, say, say a doubling – in the price of existing risk-free long-term assets. Such an increase in prices of these assets, will increase household wealth and will lead to an increase in consumer spending. This is part of the process of transmission of a monetary stimulus.

But what happened in the US was more indirect than this – since the effect of lower interest rates on the price of housing is more complex than the effect of lower interest rates on the price of risk free assets. The increase in the *supply* of mortgages came about through leverage. A lowering of interest rates led to a 'search for yield' – an increase in the demand not just for risk free assets, but also for a wider class of riskier assets yielding a higher return. Leverage was the means of bringing this about – borrowing at low interest rates and investing in high yielding, more risky, assets, in particular in mortgages. The Asian crisis had given a strong warning that excessive leverage could be highly risky. But the growth of algorithmic risk models in finance led investors, and rating agencies, to believe that such risks could be offset by diversification. These models now appear to have been mispecified, and applied to too-short periods of data.

As the supply of mortgages rose, reducing their price, households increased their demand for them, enabling households to spend more on housing, and pushing up the price of housing. But the demanders of mortgages are collateral constrained – what can be borrowed for investment in housing depends on the prices of houses which depends on what could be borrowed. (Miller and Stiglitz, 2008). The rise of house prices was thus gradual.

The reason that low interest rates was able to have such a large effect on the price

of more risky assets, both housing and other assets, was the extent of the financial deregulation which has happened in the past ten years, coupled with misleading algorithmic analysis suggesting that the resulting risks could be diversified and therefore reduced. This analysis encouraged a very great increase in leveraging which enabled a very large rise in house prices, and in the prices of other assets, at a time of very low interest rates. Investors were able to magnify yield, at the expense of incurring greater risk, believing that this risk was controlled. The principal risk to which investors were exposed was the risk of higher interest rates.

The effect of this rise in the price of a houses, and other assets, was to cause a very large increase in the level of financial wealth of households in the US and elsewhere, including the UK. This increase in financial wealth acted as a crucial part of the transmission mechanism, from monetary easing to increased consumer expenditure. Such a large monetary easing was, in turn, required because of the savings-investment imbalance, principally in East Asia.

Financial globalisation meant that investment in US mortgages was taken up by banks and financial institutions not just in the US but in Europe. Thus countries beyond the US were exposed to the risk of these assets falling in value.

3 The crisis

3.1 Onset of the crisis

As Figure 5 shows, interest rates in the US rose very steeply between 2004 and 2006, in response both to the recovery in investment shown in Figure 4, to the fiscal expansion which partly followed from the war in Iraq, and to the increasing inflationary pressure from rising global commodity prices. House prices stopped rising in the US in 2005.

As interest rates came to rise this caused the cost of investment in housing to rise relative to the returns, to the point where such investment remained profitable only because prices were continuing to rise. When this increase in prices ceased, this made it impossible for mortgages to be repaid, or refinanced, and the price of houses began to fall.

The expansion of leverage in the supply of mortgages, described above, meant that this downturn in house prices was greatly magnified throughout the financial system. When house prices stopped rising this reduced the public's demand for new mortgages – and made it difficult for existing mortgages to be refinanced, or for houses to be sold so that they could be repaid. This depressed the price of mortgage backed securities. But this initial effect on the price was magnified through a multiplier effect, as falling asset prices depressed the value of assets held by highly leveraged institutions, depressing their balance sheets and forcing them to reduce their demand for these assets, leading to further asset price declines, further contraction of balance sheets, further asset price demands. (Krugman, 2008). Financial markets seized up, leading in the end to the collapse of Lehman Brothers.

This collapse in financial markets is leading to a very large increase in household savings. The figures are large. For example, during the boom, the UK saw a rise in financial wealth of approximately100 percent of GDP, in large part due to a rise in

house prices. A fall in house prices of say 30% requires a very large increase in savings for this wealth to be recaptured. This increase in private sector savings has caused the financial crisis to became a demand contraction.

3.2 International transmission

The international transmission of this shock has proceeded through two means. The first is the Keynesian transmission of demand, through reduction in demand for exports. Countries such as Germany and Japan, and China, highly reliant on export demand, have seen foreign demand for their exports collapse. The collapse of the global financial system has caused a disproportionately large effect on trade finance so making this collapse in exports particularly large.

Second there has been an international propagation of financial shocks through an 'international finance multiplier' (Krugman, 2008). A fall in asset values in one country has depressed the balance sheets of highly leveraged institutions there, depressing the demand for financial assets in other countries, reducing asset prices in those countries, leading to falls in demand for assets in yet further countries, and so on.

4 Short-term global policy responses

What we require in the short run, globally, is a recovery in aggregate demand.

The policy response to this crisis has had four components.

(ii) Lowering of interest rates, to almost zero in the US and in the UK, and to very low levels in Europe and elsewhere.

(ii) Quantatitative easing. This is an increase in the demand for long-term government paper, and private sector bonds, by the central bank, so as to ensure that long-term interest rates fall in line with short-term interest rates. Such quantitative easing has been necessary because the expectations channel has not been strong enough to ensure that long-term interest rates fall sufficiently. (Some reasons for this are discussed below.)

(iii) Recapitalising the financial system. The above discussion of financial collapse shows that recapitalisation of the financial system is necessary in order to avoid reduction of lending by financial institutions with damaged balance sheets. This process is underway in the US, but there may still be much more to do.

(iv) Fiscal expansion. The IMF have called for a very large global fiscal injection. Spilimbergo, et al (2008). This has happened in the US, Japan, UK, Germany, Australia, and elsewhere in the OECD, and also particularly in China.

Global recovery will require that the reductions in interest rates, and the fiscal injections, are large enough to counteract the increase in private sector savings. Also, lower interest rates must help to discourage savings, and encourage people to borrow and stimulate investment. For the increase in borrowing and investment it is essential that the financial system be repaired enough to prevent the blockages from continuing.

In the short run there is a need to run large fiscal deficits, to replace private sector consumption, as described above. The other side of this coin is that there is a need

for a supply of public-sector assets, to replace the wealth in private sector portfolios which has fallen in value with the collapse in house prices, and, subsequently with the collapse in equity values. Since lowering of interest rates to zero has led to insufficient increases in private sector demand, the public sector must go into deficit. It must supply these assets, precisely because the private sector wishes to save and in the short run is unwilling to invest.

There has been a significant issue here to do with the need for international cooperation. In each country there are costs of financial restructuring and bank bailouts, and costs of fiscal stimulus, in that these will generate an obligation to raise taxes in the future. Given that expansion by any one government creates spillovers to other countries, each government would prefer a recovery to come from fiscal injections elsewhere in the world. This explains why we saw such a large emphasis on the need for co-operation in the run up to the taps G20 summit in London in Early April. Notwithstanding this, a number of observers, e.g. Martin Wolf of the *Financial Times*, believe that the injections have been inadequate, for reasons which are significantly to do with this problem of cooperation.

There are also G20 cooperation problems in the longer term, to which we now turn.

5 Resolving global imbalances in the longer term

Global imbalances are an outcome of the asymmetric savings-investment gap, world wide, which has caused the crisis; resolution of the crisis will require that this asymmetric savings-investment gap, and these global imbalances, are resolved. This will require a disproportionate expansion of demand in the surplus countries, coupled with a devaluation the real exchange rate of the deficit countries. That is, we require not just an outcome in which there are low interest rates world wide, at the short end and the long end, and, to assist with this, financial sector bailouts and fiscal expansion, world wide. We also require a disproportionate expansion of demand in the surplus countries and also an appreciation of the exchange rates in these countries.

One risk is that there is insufficient recovery of domestic demand in the surplus countries, which up until now have been reliant upon growing exports, such as Germany, Japan, and countries in East Asia, including China. It has sometimes appeared that these countries have been waiting for demand to pick up elsewhere, or seeking to promote recovery by devaluing their own currencies. Even if not this, it also appears possible that these countries will resist currency appreciation as recovery comes. If this happens then there is a risk of setting off the imbalances described in Section 1, all over again.

A converse risk is that there is excessive reliance on recovery of domestic demand in deficit countries, in particular the US and the UK. That would support a global recovery which relies upon a continuing expansion of demand in the US, the UK, and other deficit countries. That too would be part of an outcome which set the whole process off all over again.

The UK has already devalued significantly, and its recovery will be assisted by a depreciated real exchange rate. Because the UK is a small economy the effect of sterling depreciation in causing an appreciation of the currencies of other economies will

be small, and thus not particularly significant.[4] But of course this cannot be achieved for all deficit countries. In particular it cannot be achieved by the US – without there being significant appreciation against another major region of the world.

China appears to be moving in the required direction. There are however very real difficulties in the expansion of domestic demand sufficiently, for all the size of the fiscal injection. At present savings in China are high, not just for the reasons described above, but also because of the high level of profits, both in the old state enterprises, and in the rapidly growing private sector. Profits are not being distributed to the household sector, but are instead are being used to fund investment. The current expansion in domestic demand is still composed of large increases in investment, partly funded by retained earnings, which increases productive capacity at the same time as it increases demand. This does not resolve the imbalance between domestic demand and domestic supply. This resolution requires that consumption grow, which requires a steady increase in real income, which in turn involves competitive pressure on firms to either lower prices or redistribute profits to the household sector.

And an appreciation of the exchange rate also will be difficult. Estimates widely suggest that the Chinese currency is 30 or 40 percent undervalued. This cannot be corrected, in a large immediate movement, without bankrupting firms geared towards producing output for export. What is required is a gradual appreciation of the real exchange rate, at a rate of 4 or 5 percent per annum for say 10 years, over which time the current overvaluation of the exchange rate would be removed and adjustment made for ongoing subsequent increases in Chinese competitiveness, as compared with that in the US and other advanced countries. But such a gradual appreciation offers opportunities for speculative benefit, creating the possibility of large capital inflow in search of capital gains. These could bring the appreciation forward, creating the possibility of a currency crisis in which the renminbi appreciated greatly. Any attempt to moderate such capital inflow by setting lower interest rates within China would be vulnerable to the possibility that this would stimulate a too great growth in domestic demand, in the form of investment. Making a successful move in the required direction of currency appreciation seems to necessitate sufficient restrictions on capital movements as to prevent the capital inflow from destabilising the process. It is possible that liberalising financial system within China, in such a way as to encourage an increase in holdings of foreign financial assets by Chinese residents, might create a counterbalancing capital outflow which could dampen any capital inflow. Movements of the currencies of other Asian countries will become much erasier oif the Chinese currency appreciates.

If currencies of East Asia do not appreciate, but financial market pressure forces the dollar to devalue, then the world faces significant regional tensions. It is only possible for the dollar to devalue, and at the same time for currencies in East Asia not appreciate, if there is significant appreciation of the euro. This will make recovery in Europe difficult.

Within Europe there are also significant internal imbalances. Germany has been running a growth strategy based on an improvement of competitiveness with respect to the remainder of the EMU region, relying on the fact that Portugal Greece and

4 This is not true of Ireland.

Spain significantly uncompetitive. These countries are unable to carry out as large fiscal expansion, since, with disproportionately large falls in output tax revenues have collapsed, and budget deficits are so large that further expansion is deemed irresponsible. As a result of expansion within the European zone depends upon expansion of domestic demand within Germany, or the attainment of a more competitive position of the euro region as a whole. But, if as described above, global pressures cause the European currency to appreciate, then the latter strategy becomes unavailable. If this is true then a recovery of growth in Europe depends fundamentally upon expansion of demand in Germany, either expansion of private demand, or if that is not possible, and further fiscal expansion.

6 Resolving fiscal imbalances in the longer term

When the recovery comes the fiscal positions will come under strain. The fiscal time profile in different regions that deals with these strains in the different regions must be constructed in such a way as to be consistent with a resolution of global imbalances.

As the recovery comes, investment by the private sector will increase, offsetting the increase in private sector savings, and some parts of the private sector will wish to borrow, taking advantage of the low interest rates. The value of the wealth of the private sector will have recovered, and the private sector will have begun to rebuild its savings. Spending will increase. At this point the large fiscal deficit risks becoming excessive – with public spending too high and taxes too low. There will have been very large increases in public debt. Private sector spending will recover so much that interest rates will need to rise, to prevent this increase in public debt causing such an increased in consumption that it causes excess demand and inflation.

What will be needed to prevent a large rise in real interest rates, in due course, is both a return of growth – and so growing tax yields – and the ability to raise taxes, so that the supply of public-sector debt ceases to increase rapidly, and in due course that the stock of public debt begins to fall. There is a difficult middle way to be achieved here. In the short run, as described in Section 3 above, the public sector must supply enough assets, precisely because the private sector wishes to save and in the short run is unwilling to invest. But in the long run as growth returns in the position is reversed. The supply of public-sector assets must be reduced – ie budget deficit must be curtailed -- and, more than this, the stock public-sector assets must be reduced by a string of public-sector budget surpluses, so as to make room for assets issued by the private sector as the private sector borrows and issues equity.

Discussions of the budgetary position in the US, the UK and elsewhere make it clear how costly, and politically difficult, it will be to raise taxes in the required way. Such higher taxes will not just be difficult to raise, but will also constrain the possibility of profits, and investment and growth. Many in private financial markets thus fear that taxes will not be increased in the future – that political institutions may not be strong enough to ensure this when we reach the longer run. This fear of high interest rates in the future, is in danger of causing high long-term interest rates to rise in the present. 'Once bond yields go above a certain level – [perhaps] about 6 per cent – it becomes difficult to justify buying stocks. They could reach this level when the

Treasury bond market finally chokes on the huge new issuance governments are trying to push down its throat to fund the deficit.' (Arthurs, 2009). Such a rise of long-term interest rates in the present may serve to check, or even to prevent, the effectiveness of the policy response in Section 3.

This discussion suggests a time inconsistency – or contradiction – in the strategy described in Section 3. It is critical that fiscal institutions remain sufficiently strong that this time inconsistency can be resolved. Governments now need to be able to promise that they are committed to raising taxes enough in the future. If they cannot do this, that will make the recovery all the more difficult.

The risk of this time inconsistency is larger if there is a fear that central banks may be prevailed upon to renege on their commitment to fighting inflation in the future, as the recovery gets under way. If, in the future, higher taxes come constrain the possibility of profits and growth, it might be argued that it is desirable to inflate the public debt away, so as to remove the resulting tax burden, and so as to enable higher profits and growth. If the inflation targeting framework is not strong enough to prevent this happening, then long term interest rates will rise in the short-run, not because of a fear of higher real interest rates in the future, but because of a fear of higher nominal interest rates in the future, as inflation sets in. Fear of future inflation will hider the recovery in the short-term. And the value of public-sector debt will fall in the short run, limiting its ability to replace the wealth which had been held in the form of housing, thereby constraining the willingness of the private sector to spend.[5]

This discussion of public debt has so far been conducted at the world level, without an analysis of global imbalances. We now turn to the role of global imbalances in acting as a brake upon global recovery, and the policy implications of this. One important implication, which we will discuss, is that the level of public debt, and the fiscal pressure coming from flow budget deficits, must be designed in such a way as to ensure appropriate external outcomes for countries.

We have discussed how fiscal time profiles must be consistent with allowing for private sector recovery. They must also be consistent with resolving global imbalances. The fiscal discipline necessary in the deficit countries – in particular in the US and the UK – must be far greater than the fiscal discipline in the surplus countries. A fiscal position which remains disproportionately loose in surplus countries will be enable exchange rates to be appreciated there, and it will be possible for this appreciation to be assisted by rising interest rates in these countries; the expectation that this will be so will enable long-term interest rates to rise earlier there providing further assistance in helping their currencies to appreciate. Such monetary policy action will certainly help prevent them from depreciating in the pursuit of recovery.

Conversely, if fiscal pressures are resisted in the deficit countries then, providing that monetary policy remains committed to inflation targeting, the fact of lower interest rates will help with currency depreciation – enabling depreciation of their

5 Some, e.g. Woodford, have argued that the there is a reason for promising higher inflation in the future – namely that this will act against deflation now. The risk of deflation seems to be passing. But even if it were not, the fear of higher inflation in the future, in order to give rise to expectations of inflation in such a way as to keep present inflation from falling, is likely to have a significant effect on dampening demand, even if it does act so as to lessen inflationary threats. Such a strategy therefore does seem risky. Japan and Allsopp.

countries – in particular ensuring that the depreciation of dollar happens and that of the pound sterling is not reversed.

This could easily go wrong. In the absence of fiscal discipline in the US, global markets might come to fear that US interest rates will rise – either to control inflation, or as a result of the US attempting to inflate its way out of the crisis, which would lead to subsequent rises. Fears of this could both cause longer term interest rates in the US to rise. Many G20 policymakers appear to worry about the possibility of capital being pulled into the government bond markets in the US – and not just in the US but also in other developed countries that are running large fiscal deficits. This could then cause the dollar, and currencies of other deficit countries, to rise. That will put at risk the correction of global imbalances discussed in the previous section.

7 G20 cooperation and global policy surveillance

The global crisis that we have had could have been averted only by a different way of managing macroeconomic policy internationally.

A new system is needed which induces nations to manage their macroeconomies in ways that do not produce external imbalances and inappropriate exchange rates, do not produce financial boom and bust, and do not produce inappropriate fiscal outcomes.

Advanced G20 economies

Amongst advanced G20 countries, it is necessary that nations use three policy instruments (monetary policy, regulatory supervision, and fiscal policy) in appropriate ways.

Interest rates need to continue to manage aggregate demand with the aim of keeping inflation low and, after recovery from the present crisis, keeping unemployment at sustainable levels. Exchange rates will continue to float. A country with excessive inflation will raise interest rates and the expectation is that this will allow the exchange rate to appreciate. Countries in which demand is too low will, as before, lower interest rates and allow exchange rates to depreciate.

Countries will also need to regulate their financial systems so as to limit speculative risk taking. This involves a limit to borrowing and to the leverage of financial institutions. It involves an increase in financial regulation which would limit the allowable increases in balance sheets of systemically important financial intermediaries. Such limits will need to be tied to the fiscal capacities of host governments – in order to prevent the excessively large fiscal burdens which have had to be assumed in Iceland, Ireland and the UK. It is necessary that this constraint limits the ability of financial institutions to leverage and to expand demand, and will reduce the fragility of the financial system.

Finally, countries will need to keep fiscal policies sufficiently in line that interest rates do not need to be set in such a way as either to impede recovery from the present recession or to induce inappropriate exchange rate movements over the medium term.

This virtuous policy trio of policies will not be self-enforcing, as this decade's experience has so clearly demonstrated. It will need to have the IMF enforcing all ele-

ments. This will require clear identification of cross border transmission of shocks from country to country and much clearer identification of the risks involved. The IMF's *World Economic Outlook* and *Global Financial Stability Report* are the natural vehicles for this analysis, coordinated with the IMF's programme of multilateral surveillance. But this has so far been of limited effectiveness.

Making multilateral surveillance more effective in this way will imply a loss of policy sovereignty. Far more effective global governance of the IMF will be required for this to be possible, and effective. One proposal would put the responsibility for the delivery of improved policies more firmly in the hands of the management of the IMF. At present, the Executive Board of the Fund involves itself in day-to-day reviews of Article IV reports. Stepping back from this activity would enable the global surveillance process to carry out the tasks just described. Evolution in this direction could strengthen the accountability of the Managing Director and his Deputies. In one version of this type of arrangement, all of the Managing Director, the Deputy Managing Directors, and Department Directors, would report on a regular basis to the Board, but Executive Directors would be more removed from many of the day-to-day decisions of the institution, including those about surveillance. One might object that agreement on surveillance will be difficult to achieve. It will make inroads into national sovereignty. But the current system, without effective surveillance, will continue to make boom-bust outcomes likely. That too would be very costly, as we have seen recently.

But this is not enough; changes need to be made in the way in which macroeconomic polices are managed in emerging market economies.

Emerging market economies

A central feature a system which will guard against the difficulties which have been described above needs to be one in which emerging market economies countries do not pursue inappropriate exchange rates. Such a system would be part of what is required to induce emerging market economies to pursue macroeconomic policies which do not adversely affect the rest of the world. For example, an excess of Chinese savings over its investment, without an exchange rate that supported a trade surplus, would have produced a recession in China, perhaps triggering a domestic demand-expanding policy response in China. In these circumstance, policy in the US, without a huge trade deficit, would have been more moderate and would not have included such low interest rates.

This system would need the IMF to determine the appropriate exchange rate values for countries – 'fundamental equilibrium exchange rates'. The IMF would then be given the power to require countries not to intervene in such a way as to steer their exchange rates away from these fundamental values.

It is difficult to specify equilibrium exchange rates. There are a number of ways of doing this which give different answers – the IMF has three different methods. (IMF, 2007). As a result this requirement by the Fund could only be activated if a currency was judged to be a significant distance from its fundamental equilibrium level. This would not involve an attempt by the IMF to impose, or fix, exchange rates. Rather it would involve a requirement that countries not intervene in an attempt to maintain exchange rates well away from their fundamental equilibrium values.

The international financial system will also need to provide credible insurance to

emerging countries that forego reserve accumulation. As Portes(2009) has suggested, this could involve central bank swap lines and more ambitious 'reserve pooling' arrangements. But importantly, beyond this, it should involve a new system of the provision of international reserves for emerging market economies. Such a scheme would be one in which in which the IMF issued SDRs to emerging market countries, and was also given the power to make emergency issues of SDRs to fight crises, making the IMF a 'lender of first resort' (Cohen and Portes, 2006). That would make it unnecessary for countries to seek to run current account surpluses to accumulate foreign reserves for insurance reasons, and would remove the key reason underlying the current savings investment imbalances in emerging market economies, with which we began our discussion. This would go well beyond recent issues of SDRs, following the G20 summit meeting. An additional advantage of such a scheme is that the US would be less tempted to overspend, since it would lose the 'exorbitant privilege' of issuing the world's reserves.

These two changes to the international monetary system also imply a loss of sovereignty, in two ways. They would limit the ability of countries, including emerging market economies, to set their exchange rates in ways which harm the rest of the world. It would also limit the ability of countries that issue reserves, in particular the US, to run excessive deficits. But there is the possibility of making them mutually reinforcing in emerging market economies. It would be possible to link access to SDR financing to countries which were not intervening in such a way as to cause their exchange rates to be greatly undervalued – so as to make the provision of this financial insurance an alternative to running large current account surpluses.

It will be impossible to get agreement on a major role for the IMF in influencing the policies of emerging market economies unless further changes are made to the governance of the IMF, so that the Fund inspires trust and confidence in these countries. That in turn will need changes in the IMF's distribution of power, and voting structure, so as to reflect the changing realities of the world balance of economic power. The ad hoc provision of increased quota shares to China, Korea, Mexico, and Turkey in 2006 under the Fund's Medium-Term Strategy was a first step toward realigning voting power in the Fund with emerging markets' growing share of the world economy; further steps will inevitably require decisions to reduce the shares of others.

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Synchronization of Recessions in Major Developed and Emerging Economies

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1 Introduction

With the U.S. economy experiencing its worst post-war recession beginning December 2007, the global economy has been in the throes of the most synchronized recession on record. The breadth and depth of this remarkably concerted global recession is a reflection of increased globalization and strong global interdependence amongst economies, in terms of both their financial interconnections and trade linkages. The trade linkages, in fact, have greatly amplified the transmission of the global recession to the export-oriented economies due to declines in consumer demand the world over, but especially in major developed economies such as the U.S. and Japan. The simultaneity of the worldwide downturns due to the trade linkages has been further exacerbated by the financial market crisis that not only led to a severe abatement of trade flows but also resulted in major financial imbalances. The upshot is that the economies of virtually all major developed countries have shrunk rapidly, along with many export-dependent developing economies.

This includes China, which is experiencing its worst downturn in nearly two decades, with over 20 million migrant workers reportedly having lost jobs by late 2008. India too has experienced a sharp slowdown in the midst of the severe global recession. It is noteworthy, however, that both China and India have not experienced a recession, but a milder counterpart called a slowdown, meaning a downshift in the pace of positive growth in economic activity. A recession, on the other hand, would be more severe, involving a vicious cycle of pronounced, pervasive and persistent cascading declines in output, income, employment and sales, which both countries escaped.

Before the spread of the global recession, the belief was that while the U.S. economy would go into recession, the rest of the world – especially Europe, China and India – would decouple and escape relatively unscathed. Historically, however, even a slowdown in U.S. economic growth has significantly damaged growth in European exports. In fact, this time around, there were actual declines in consumer demand, especially in major developed economies like the U.S. and Japan, and the ripple effects spread the world over. This was further compounded by the global financial turmoil. Additionally, oil prices skyrocketed in the middle of 2008 and the resultant jump in headline inflation misled a number of central bankers into raising interest rates at a time when the economic conditions were already contractionary. For instance, in Europe, the European Central Bank raised interest rates in July – at a time

when every significant Eurozone economy was already in recession. The tightening of monetary policy in China and India also took its toll in the form of significant slowdowns in economic growth.

Thus, the decoupling hypothesis was clearly demolished, resulting in an unusually synchronized global recession. While the onset of the recession in the U.S. was in December 2007, the recession intensified significantly in the U.S. in the second half of 2008. The subsequent financial market mayhem worsened the economy's outlook further, triggering dramatic cutbacks in U.S. consumer spending. This virus spread across the global economy, aggravated further by the untimely contractionary monetary policies in many economies. While the cyclical coupling of international industrial growth due to trade was not a new phenomenon, the spike in global commodity prices in the first half of 2008 hurt consumer spending worldwide while also triggering rate hikes in many economies including the Eurozone, China and India, whose lagged effects further damaged growth later in the year. Meanwhile, the popularity of cross-border financial investment – especially between Europe and North America – meant that the U.S. credit crisis spread like wildfire in western countries. The credit crisis also resulted in a sudden evaporation of trade finance, as it became virtually impossible to obtain letters of credit, which are the lifeblood of international trade, especially for developing economies. No wonder this was the perfect storm, resulting in the most synchronized global recession on record.

This paper is organised as follows. Section 2 discusses various ways to measure the synchronization of recessions and applies these to the current global recession. Section 3 examines the nexus between trade and the global crisis. Section 4 focuses on the role of financial integration in the global recession. Section 5 comments on the timing of stabilization policy in the current global recession, and the ensuing section concludes the paper.

2 Synchronization of recessions: measures

The severity of a recession is measured in terms of its diffusion, depth and duration. In the context of international recessions, diffusion is the extent to which the recession has spread to different economies. Diffusion of a recession thus refers to how concerted the global recession is. We therefore analyse the diffusion or synchronization of a global recession.

- The synchronization of a global recession can be gauged by the following:
- Clustering of start of recession dates
- Proportion of economies in expansion
- Diffusion Index of the coincident indexes[1] of various countries

Clustering of start dates of recessions

The Economic Cycle Research Institute (ECRI) has tracked 19 countries over a long

1 A coincident index for a particular economy comprises variables that collectively represent the current state of the economy. It indicates whether the economy is currently expanding or is in a recession.

period of time. These include the following: U.S., Canada, Mexico, Germany, France, U.K., Italy, Spain, Switzerland, Sweden, Austria, Japan, China, India, Korea, Australia, Taiwan, New Zealand and South Africa. It has also recently added Brazil to its list.

ECRI has now established the recession start dates for almost all the economies it tracks that are currently in recession. Table 1 on Business Cycle Chronologies provides recession dates for the countries covered by ECRI, using the same approach used by the National Bureau of Economic Research to determine the official U.S. recession dates. This dating reveals an interesting sequence. Italy led the way, entering recession in August 2007, followed by New Zealand in November and the U.S. in December 2007. In February 2008, Japan, Taiwan, France and Spain fell simultaneously into recession, followed by Germany and Sweden in April, U.K. in May, Korea in July, and Brazil in September 2008.

The dates for the onset of the current recession in various economies imply that the vast majority of economies went into recession before last fall's market mayhem. These dates also highlight the reality that the global contraction is highly concerted and that the decoupling hypothesis is misguided.

To represent the closeness of the start of recession dates in a graphical manner, we examine ECRI's 20-Country Composite Coincident Index, shown in Figure 1. Although only the main economies are shown in the figure (for the sake of clarity), it clearly reflects how closely the recessions are clustered in this global downturn, as compared to the one in the early part of this decade.

Proportion of economies in expansion

The number of economies in expansion as a proportion of the total number of economies tracked is another measure of the diffusion of a global recession. In a widespread global recession, the size of the decline in the proportion of economies in business cycle expansions measures this extent of diffusion.

Using this measure, Figure 2 shows that the proportion of economies (tracked by ECRI) in expansion has plunged to its lowest reading on record. This therefore demonstrates that the current recession is very widespread.

Diffusion Index of the coincident indexes of various countries

The Diffusion Index of ECRI's coincident indexes for various economies measures the proportion of the coincident indexes that are higher than they were three months ago.

The top portion of Figure 3 shows the proportion of the coincident indexes for the Group of Seven (G7) economies (U.S., Japan, Germany, France, U.K., Italy, Canada) that were higher at each point in time than they were three months earlier. The G7 diffusion index touched zero in late summer, 2008 meaning that every one of the seven economies was contracting. Thus the recessions in the major developed countries are as concerted as they were in the mid 1970s and early 1980s.

The bottom line in Figure 3 shows the 19-country coincident index diffusion index, which is the proportion of the coincident indexes for all 19 economies monitored by ECRI that were higher at each point in time than they were three months earlier. This diffusion index paints a slightly different picture and shows that it is at its worst reading in the current recession. Nevertheless, it is not as low as the G7 diffusion index, possibly due to the positive impact of economies with higher trend

rates of growth such as China and India.

All in all, the three measures of diffusion of a global recession convey that the current global recession is the most concerted at least in the last three decades or so.

We now examine how and why this happened given the increased trade and financial interdependencies across the globe.

3 Trade and the global crisis

The world's economies have become increasingly interdependent since the early 1990s, with greater openness in the flows of services, capital and trade – especially in merchandise – from one country to another. For instance, in recent years, global merchandise exports have accounted for over 20% of world gross domestic products (GDP), compared with about 8% in 1913 and less than 15% as recently as 1990. Furthermore, the emergence of China and India has advanced the integration of the global economy.

Figures 4a through 4c show exports as a percentage of GDP in major economies. While the proportions vary country to country, it is clear that the importance of exports as a percentage of GDP increased sharply in the early 1990s in almost every country. This is consistent with the intensification of globalization.

In the Asia-Pacific region (Figure 4a), exports as a percentage of GDP in Taiwan advanced to almost 70% from 40% in 1990, while in Korea it tripled to over 60% from 20% in 1993. Exports as a percentage of GDP in China more than doubled to 33% from 15% in 1990, while it tripled to 21% from 7% in 1990 in India. In Japan, it doubled to about 16% from 8% in 1990.

In Europe (Figure 4b), exports as a percentage of GDP in Germany doubled to 50% from 24% in 1991, while increasing to about 30% from less than 20% in the U.K., France and Italy.

In North America (Figure 4c), the proportion of exports over GDP increased from 25% to almost 45% in the 1990s before slipping back in Canada. While tripling to 30% from 10% in Mexico, it rose to 12% from 8% in 1990 in the U.S.

These enhanced trade linkages served as a more efficient mechanism for the transmission of business cycles across the globe. With many countries in simultaneous recessions, the hit to exports has been dramatic. Figure 5 presents the performance of total export growth for the 30 member economies of the Organization of Economic Cooperation and Development (OECD). Shaded areas represent global recessions, which correspond roughly to cyclical downturns in ECRI's 19-Country Coincident Index.

It is clear from the figure that in the world recessions of 1973-75, 1980-82 and 2001, export growth plunged well below zero, as the actual level of exports declined. However, the severity and rapidity of the current drop in world exports is unprecedented. As of January 2009, this measure had deteriorated to levels far below those seen in previous world recessions.

Clearly, trade is increasingly serving as a primary method of international transmission of business cycles. We now analyse this mechanism for the spread of the global recession.

The Bullwhip Effect

The underlying transmission from trade linkages to the spread of the global recession and increase in its intensity as witnessed today can be explained with the help of a very simple story uncovered more than 50 years ago in a study of the shoe, leather and hides sequence by Ruth Mack (1956), a business cycle researcher at the NBER. The mechanism holds just as well today as it did half a century ago.

When Mack did her study, shoes were expensive products that consumers replaced only in good economic times. But if they felt financially insecure, they got their shoes repaired and postponed the purchase, meaning that shoe demand was moderately cyclical. Shoemakers caught with excess inventories of shoes and shoe leather when consumer demand growth started to slow would cut back on production and on orders for leather, meaning that a *slowdown* in shoe demand would translate to an actual decline in the demand for leather, which is made from cattle hides. In turn, this would trigger a sharp plunge in the demand for hides.

Mack's study showed how small shifts in demand growth at the consumer level were amplified into big swings in demand as orders moved up the supply chain away from the consumer. This magnification of even small shifts in consumer demand growth up the supply chain is called the *Bullwhip Effect*, because a little flick of the wrist produces a big arc at the end of a bullwhip. In fact, scientists have shown that the ‘crack’ of a real bullwhip is the sound of its tip breaking the sound barrier while travelling at over 1,500 km/hour!

Applying this sequence in the current scenario to China, one can say that its role as the ‘world's factory floor’ implies that even a relatively modest downturn in consumer demand in the developed economies can potentially trigger a significant industrial downturn in China. Because consumer demand in the developed economies has just seen its first serious downturn since China's emergence on the global economic stage, it has triggered a major industrial downturn in China.

Matters are even worse news for suppliers further up the supply chain from China – not only neighbouring economies that supply components for assembly in China, but also the suppliers of commodities, such as Australia, Canada and the oil-producing economies. Because the supply of commodities does not adjust quickly enough to the sort of plunge in commodity demand suggested by the Bullwhip Effect, we always see a dive in commodity prices during global industrial downturns. The unusually large decline in U.S. consumer demand this time has also led, via the Bullwhip effect, to a plunge in German and Canadian exports.

In sum, the Bullwhip Effect amplifies downturns in consumer demand because even a small slowdown in consumer demand growth results in an unexpected inventory buildup escalating up the supply chain. The upshot is a much larger plunge in global industrial growth and an even more vicious nosedive in commodity prices. In practice, even the best supply chain management systems in use today cannot cope with the Bullwhip Effect, because they lack the advance warning of turns in the cycle that only good leading indicators of consumer demand can provide.

When demand drops, manufacturers cut production as they race to slash inventories, but once the inventories are sufficiently reduced, production rises closer to the level of consumer demand. Furthermore, when the rate of decline in consumer demand eases, the supply chain is once again caught by surprise, and has to readjust. In other words, a slower decline in consumer demand typically translates to a rise in

commodity prices and industrial growth. This reversal of the Bullwhip Effect accounts for some of the 'green shoots' seen around the world in recent months.

Figure 6 helps us to understand Mack's study in the real economy and shows why the global industrial sector was so hard hit by the Bullwhip effect. The top line depicts growth in U.S. consumer spending on goods, and the second line is growth in the Global Industrial Production Index for the 30 OECD member economies plus Brazil, Russia, India and China, while the third graph represents the growth rate of the aggregate exports of capital goods for the U.S., Germany and Japan.

It is evident that small shifts in spending growth cause larger swings in global industrial growth, which in turn lead to greater declines in demand growth for capital goods. For instance, in the 2001 recession, growth in consumer spending fell but stayed mostly positive, i.e. consumer spending continued to advance, but at a slower pace. However, global industrial growth went into a more pronounced downswing, turning clearly negative. Finally, export growth for capital goods plunged sharply to almost -20%.

In the current global recession, both consumer spending growth and global industrial production growth dived deep into negative territory, causing capital goods export growth to plummet below -65%. Thus, the economic and financial crisis that struck the U.S. economy, along with the Bullwhip effect, have brought on a sharp global industrial downturn.

We now elaborate on the financial linkages.

4 Financial integration and the global recession

Increased cross-border financial flows and financial innovation, coupled with the reduction or elimination of capital controls, have resulted in a highly integrated world economy. These dynamics have served as catalysts for the broad transmission of business cycles beyond national borders. It is notable that the U.S. financial crisis, triggered by the plunge in the value of securitized subprime mortgages and exacerbated by the onset of recession in late 2007, reverberated around the world because these financial instruments were owned by investors globally. In this context, it is also noteworthy that in the fourth quarter of 2008, foreign entities owned almost nine times the amount of U.S. credit market instruments as they did in 1990.

International financial institutions were among the hardest hit. In the U.S. and Europe, a number of banks needed capital infusions to stay afloat. Iceland, where the banking system collapsed as its three largest banks failed, became the first developed country in decades to seek IMF support. In a recent report, the IMF estimated the deterioration of U.S. originated credit assets to be 2.2 trillion dollars.

The crux of the problem was that financial institutions around the world, but especially in the western economies, had purchased these U.S. credit assets, especially U.S. mortgage backed securities (MBS) whose value plummeted when U.S. home prices turned down on a sustained basis for the first time since the Great Depression – an eventuality that the MBS originators had not considered. As these 'toxic assets' mushroomed on banks' balance sheets, they eviscerated their capital base, along with their ability to lend. With suspicions about the solvency of most major banks mounting rapidly, interbank lending ground to a halt, and letters of credit, which are used in

the vast majority of transactions involving developing countries, became virtually impossible to obtain. In this fashion, while the collapse of demand in developed economies spread in an amplified fashion through international supply chains, engulfing developing countries, even south-south trade involving just developing countries ground to a virtual halt due to the dearth of letters of credit.

The ensuing global credit crunch also crimped lending to emerging economies and increased the cost of trade finance. This rise most definitely had a heavy impact on emerging economies. No wonder there was such a concerted and sudden plunge in global economic activity.

The extent of global financial integration and the resulting herd behaviour can also be gleaned from the high correlation between U.S. stock prices against not only European stock prices, but also those of Asia.

Figure 7 shows scatter plots of the monthly S&P 500 index of U.S. stock prices against British, German, Hong Kong and Indian stock prices. The S&P 500 index has a 99% correlation with British stock prices over the period 1987 to 2001. Over the 2002-08 time period, the same stock price indexes have a 97% correlation. Furthermore, the U.S. stock price index exhibited a 97% correlation with German stock prices from 1987 to 2001 and a 94% correlation over the 2002-08 period.

In Asia, S&P 500 has a correlation of 85% with Hong Kong's Hang Seng index of stock prices from 1987 to 2001, despite the hit taken by the Hang Seng index from the Asian crisis of 1997. During the 2002-08 period, these indexes exhibited an 88% correlation. With India, S&P 500 has a 66% correlation with the Bombay Sensex. In the period 2002-08, once India became a popular destination for portfolio investment, the correlation with the S&P 500 rose to 86%.

The corollary of the above analysis is that international diversification provides very little protection in international recessions even when they are not as global as the current one. The exception would be investment in a country that is outside the economic mainstream, as India was until the beginning of this century.

5 The timing of policy

The timing of stabilization policy in the current global recession has been a major issue. The problem really was that although pre-emptive monetary and fiscal policy actions were possible and timely action based in part on reliable leading indexes could have been taken, policy measures took effect too late to head off a recession.

While many central banks acted aggressively to combat the financial crisis, key central banks – including the Fed and the European Central Bank (ECB) – were slow to recognize the recession risk, focusing much more on inflation concerns. This is a failure of the timing of policy.

It is well known that monetary policy acts with long and variable lags on the economy. It therefore behooves central banks to act early to head off recession. Because recession kills inflation – every time – the approach of recession should have dispelled inflation concerns. However, in the face of recession, the major central banks were more preoccupied with inflation.

Specifically, though ECRI's 19-Country Long Leading Index turned down in August 2007, long before the global recession began in July 2008 (Banerji, Layton and

Achuthan, 2008), the major central banks were slow to recognize the threat. Perhaps the most egregious was the ECB, which was still hiking rates in July 2008, even though, as we now know, all of the major Eurozone economies plunged into recession between August 2007 (Italy) and April 2008 (Germany). Since those recessions would have killed inflation in any case, the ECB's actions in hiking interest rates during recession were scarcely well advised. Clearly, they were not being guided by reliable leading indicators of recession.

The Fed's awareness of recession risks was not much better. By June 2008, based on widespread comments from Fed governors, the Fed Funds futures markets were factoring in about 100 basis points of rate hikes in 2008 – in other words, based on the best indications available from policy makers, the markets had reason to believe that the Fed funds rate would be boosted from 2% to 3% during the second half of 2008 – even though the economy was in recession.

Evidently, policy makers were unaware of the recession risk. The excuse some use is that it was the unforeseeable September 2008 failure of Lehman Brothers that precipitated the recession – before that, GDP was still rising, despite a slight dip in the last quarter of 2007. Part of the problem here is economists' undue reliance on GDP not only to recognize recessions but also to define recessions (Layton and Banerji, 2003) – a mistaken perspective that may have contributed to past policy errors as well.

Be that as it may, it is a little-known fact that the U.S. recession was *already deepening* when Lehman Brothers collapsed. For evidence, it is worth looking at two key coincident indicators that are used officially to define recessions. First, in August 2008, U.S. industrial production experienced its biggest one-month decline in three years; the plunge passed unnoticed because the data was released on September 15, on a day when the news of the Lehman failure virtually swamped all other news. Second, payroll job losses, which (based on data available at the time) averaged a mild 75,000 a month in the first half of 2008, accelerated during the summer, increasing sharply in September to 321,000 jobs (the initial release showed over 400,000 jobs lost). The point that is often missed by those blaming their lack of prescience on the Lehman debacle is that the September jobs data was collected, as usual, in the week that includes the 12th of the month, i.e., the week *before* the Leman failure.

In other words, the recession began to intensify before the Lehman failure, which certainly hurt the financial system dramatically, but is no excuse for the fact that policy makers were largely unaware of a deepening recession before that shock. Yet, leading indexes with a good *real-time* track record of recession forecasting (The Economist, 2005), such as ECRI's Weekly Leading Index (WLI), had long been pointing unambiguously to recession.

In fact, the WLI turned down in early June 2007, and by December 2007, when the recession began, WLI growth had dropped to its worst reading since the 2001 recession. Yet, even in December 2007, when the financial markets were expecting at least a 50-basis point rate cut, the Fed surprised the markets with a 25-basis point cut – before belatedly slashing rates in January 2008. By mid-2008, as we noted, the Fed had moved once again to a hawkish stance, seemingly oblivious to a deepening recession. In sum, the Fed's actions were belatedly aggressive, as it tried to make up for lost time.

Imagine a heavy Roman stone pillar that is just beginning to tip. At that moment, it does not take much force to right the column. However, time is truly of the essence

– once the column is leaning at a 45-degrre angle, even a strong upward push is unlikely to prevent the column from crashing down. The economy has somewhat analogous nonlinear dynamics – in the sense that policy delays can be enormously costly, as it is almost impossible to make up for lost time. The consequence is that policy makers have had to throw almost unimaginable sums of money at the economy just to stave off its total collapse – a costly delay indeed.

6 Conclusions

The main conclusions of this paper are as follows:

- The global economy is caught in the most synchronized recession on record in the post-war period.
- The sheer extent to which international recessions are in synchronization has added to the severity of the current recession in the U.S. and other economies.
- The breadth and depth of this remarkably concerted global recession is a reflection of increased globalization and strong global interdependence amongst economies, in terms of both their financial interconnections and trade linkages.
- Although pre-emptive stabilization policy actions were possible and timely action based in part on reliable leading indexes could have been taken, policy measures took effect too late to head off a recession.

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Table 1

		AMERICA				EUROPE							
Period	Peak or Trough	US	Canada	Mexico	Brazil	Germany	France	UK	Italy	Spain	Switzerland	Sweden	Austria
1948-1950	P	11/48											
	T	10/49											
1951-1952	P												
	T							8/52					
1953-1955	P	7/53	5/53										
	T	5/54	6/54										
1956-1959	P	8/57	10/56				11/57						
	T	4/58	2/58				4/59						
1960-1961	P	4/60											
	T	2/61											
1962-1966	P					3/66			1/64				
	T								3/65				
1967-1968	P												
	T					5/67							
1969-1973	P	12/69							10/70			10/70	
	T	11/70							8/71			11/71	
1973-1975	P	11/73				8/73	7/74	9/74	4/74		4/74	7/75	8/74
	T	3/75				7/75	6/75	8/75	4/75				6/75
1976-1978	P												
	T										3/76	11/77	
1979-1980	P	1/80				1/80	8/79	6/79	5/80	3/80		2/80	2/80
	T	7/80					6/80						
1981-1983	P	7/81	4/81	3/82			4/82				9/81		
	T	11/82	11/82	7/83	12/83	10/82		5/81	5/83		11/82	6/83	1/83
1984-1986	P			10/85									
	T			11/86			12/84			5/84			
1986-1989	P				2/87								
	T				7/87								

Table 1 (contd)

Period	Peak or Trough	AMERICA US	Canada	Mexico	Brazil	EUROPE Germany	France	UK	Italy	Spain	Switzerland	Sweden	Austria
1989-1991	P	7/90	3/90		8/89	1/91		5/90		11/91	3/90	6/90	
	T	3/91											
1992-1994	P			10/92			2/92		2/92				4/92
	T		3/92	10/93	3/92	4/94	8/93	3/92	10/93	12/93	9/93	7/93	6/93
1994-1997	P			11/94	3/95						12/94		5/95
	T			7/95	9/95						9/96		3/96
1997-1999	P				10/97								
	T				4/99								
1999-2001	P	3/01		8/00	2/01	1/01					3/01		1/01
	T	11/01			12/01								12/01
2002-2003	P				10/02		8/02						
	T			8/03	6/03	8/03	5/03				3/03		
2004-2008	P	12/07	1/08	4/08	9/08	4/08	2/08	5/08	8/07	2/08		4/08	
	T												

Table 1 (contd)

		ASIA PACIFIC							AFRICA	MIDDLE EAST
Period	Peak or trough	Japan	China	India	Korea	Australia	Taiwan	New Zealand	South Africa	Jordan
1948-1950	P									
	T									
1951-1952	P					6/51				
	T					9/52				
1953-1955	P	1/53				12/55				
	T	12/54								
1956-1959	P									
	T					8/56				
1960-1961	P					12/60				
	T					9/61				
1962-1966	P			11/64				6/66		
	T			11/65						
1967-1968	P			4/66						
	T			4/67				3/68		
1969-1973	P			6/72						
	T			5/73						
1973-1975	P	11/73		11/73		6/74	12/73	4/74		
	T	2/75		2/75		1/75	1/75	3/75		
1976-1978	P							3/77	6/76	
	T							3/78	11/77	
1979-1980	P			4/79	3/79					
	T			3/80	10/80					
1981-1983	P					6/82		4/82	11/81	
	T					5/83		5/83	1/83	
1984-1986	P							11/84	6/84	
	T							3/86	2/86	

Table 1 (contd)

Period	Peak or trough	ASIA PACIFIC							AFRICA	MIDDLE EAST
		Japan	China	India	Korea	Australia	Taiwan	New Zealand	South Africa	Jordan
1986-1989	P		8/88					9/86	2/89	11/87
	T		12/89							
1990-1991	P			3/91		6/90				
	T			9/91		12/91		6/91		2/91
1992-1994	P	4/92								
	T	2/94							8/92	
1994-1997	P			5/96						11/95
	T			11/96						
1997-1999	P	3/97			8/97			10/97	4/97	
	T	7/99			7/98			5/98	11/98	
2000-2003	P	8/00			12/02		8/00			
	T	4/03			9/03		9/01			
2004-2008	P	2/08			7/08		7/08	11/07		
	T									

Figure 1 ECRI 20-country coincident index

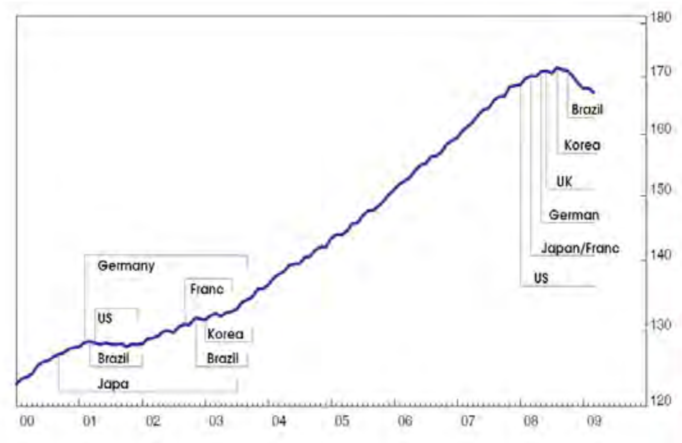


Figure 2 Proportion of 19 economies in expansion

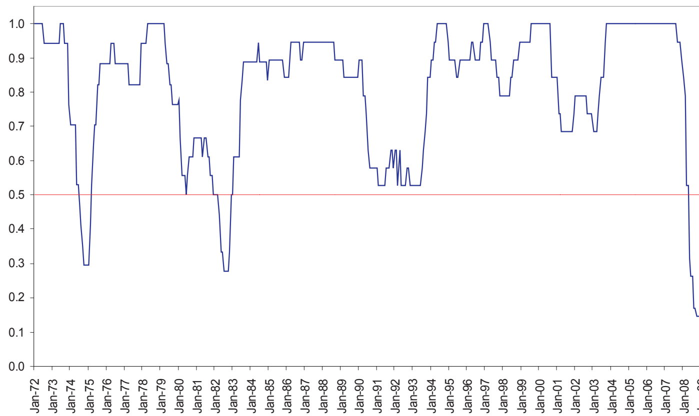


Figure 3 Diffusion index of international coincident indexes

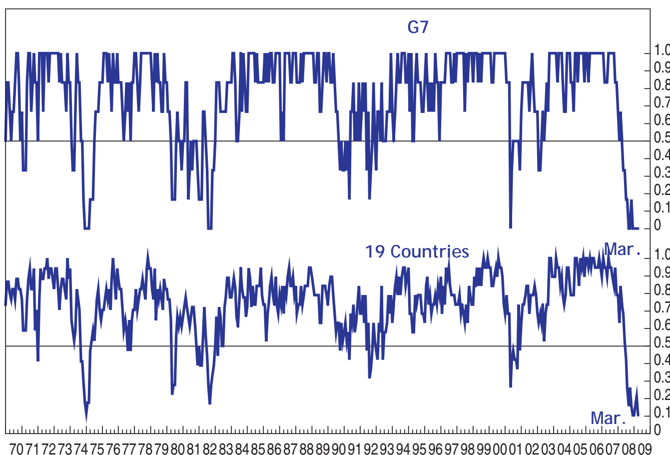


Figure 4a Exports as a percentage of GDP in Asia-Pacific

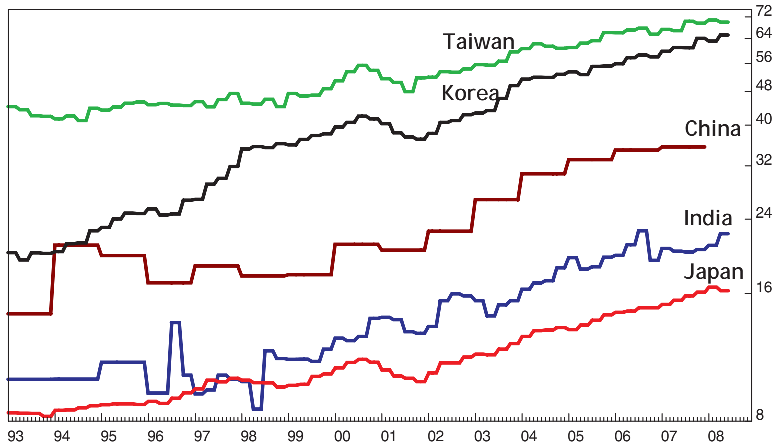


Figure 4b Exports as a percentage of GDP in Europe

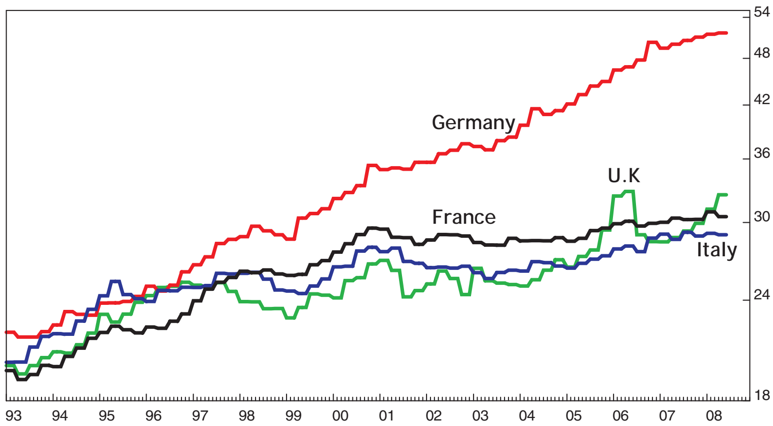


Figure 4c Exports as a percentage of GDP in North America

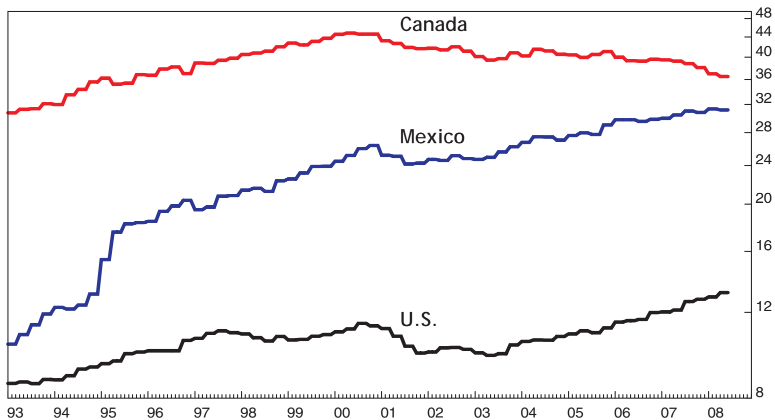
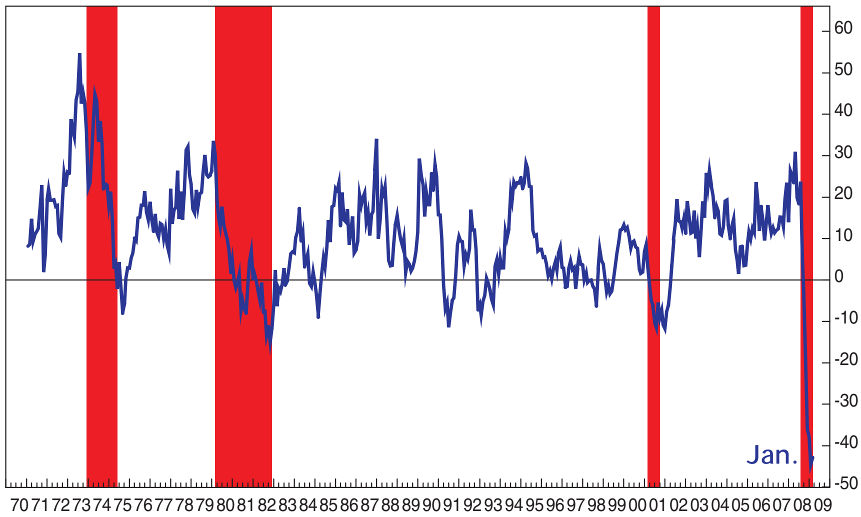


Figure 5 Global exports of goods, growth rate (%)



Note: Shaded areas represent global recessions

Figure 6 Bullwhip Effect

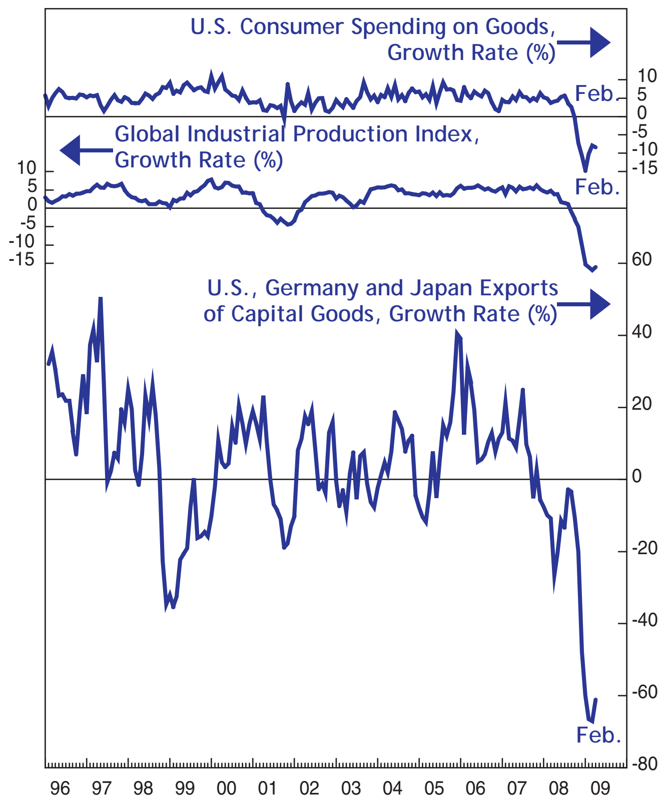
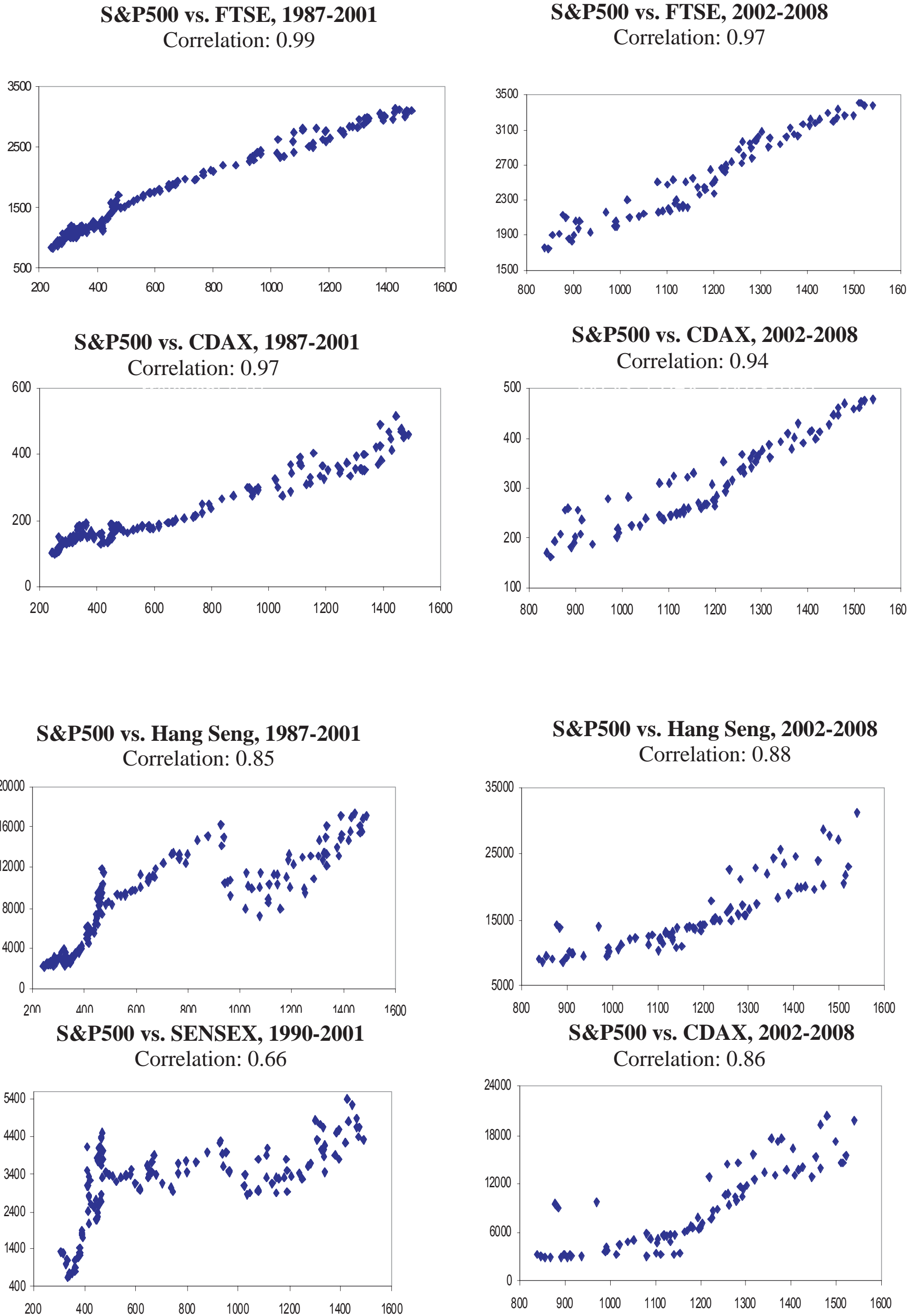


Figure 7 US stock prices vs. UK, Germany, Hong Kong and India stock prices



Indian Perspectives on IFI Reforms
(with special emphasis on the International Monetary Fund)

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Business Standard

In many ways, the quality of India's engagement with international financial institutions is best summed up by the manner in which Pranab Mukherjee referred to the International Monetary Fund (IMF) in two of the three Indian Budgets he had presented as the finance minister in Indira Gandhi's government way back in 1982 and 1984. It is not merely coincidental that the finance minister who had articulated India's approach to the IMF more than a quarter century ago has come back to occupy the august position of the finance minister in the recently formed government of Manmohan Singh late last month. The fact is – and this is something that quite a few policy-makers in the government would privately agree – the approach of India's political establishment to economic reforms and economic policy-making may have undergone major changes in the last few decades, but its terms of engagement with international financial institutions, particularly with the IMF, continue to be influenced to a large extent by the mindset that prevailed in the 1980s. But there has been a significant change. And that change is noticeable in the Indian government's official positions on various issues pertaining to reforms in the governance structure of international financial institutions. This paper seeks to bring out this basic dichotomy in the way the political establishment in India continues to engage with international financial institutions and how the Indian government's official views on reforms in the governance structure of these bodies have made a big difference to the way India has begun to see itself and its role in the global financial community.

Engaging with the IMF and the World Bank

What did Pranab Mukherjee say on the IMF in his Budget speech in 1982? In a tone that was markedly defensive, Mr Mukherjee explained why the Indian government had negotiated a line of credit for SDR 5 billion from the IMF under its Extended Fund Facility. To understand the nuances of the speech, it is important to recognise the context in which the statement was made. Just before the IMF loan was sanctioned, the government came under attack from opposition political parties, particularly those belonging to the Left, and even from within the ruling Congress. The broad thrust of the attack was that the Congress government had mortgaged its economic sovereignty to the IMF to get the loan and the fear was that a foreign institution would dictate its economic policies. Not surprisingly, Mr Mukherjee argued that the IMF Loan was required 'to avoid disruption of the Indian economy for want of essential imports and to gain time for readjustment to the new situation.' Another tenor

of the argument was that the country needed the IMF loan because a sharp increase in international prices of crude oil and petroleum products had aggravated its balance of payments situation. There was also an assurance that the adjustment programme to be implemented with the help of the IMF loan would be based on the government's strategy of planned development aimed at enabling the government 'to implement our own policies which have been sanctioned and approved by our people and Parliament.'

Implicit in such arguments and assurances from the then finance minister are two important terms of engagement with the IMF: One, any loan from the IMF could be obtained only when there was a serious balance of payments crisis engulfing the economy with no other option available. Two, the adjustment policies that would be framed to tide over the crisis could not be seen as having been influenced or sanctioned by the IMF. Instead, they had to be blessed with the prior approval and sanction of the Indian people and Parliament. For a country that had gained independence from foreign rule only 35 years ago, preserving economic sovereignty was still a highly emotive issue that no political party could possibly ignore. No government could afford to be seen as having allowed its policies to be dictated by the guidelines laid down by an institution outside the Indian Parliament. Nothing else could have mattered, not even the argument that the IMF and the World Bank were after all institutions that had India among their founding members.

Two years later, Mr Mukherjee again referred to the EFF loan from the IMF in his Budget speech for 1984-85. This time the defensive tone was replaced by one of triumph. 'Our strategy for bringing the balance of payments under control, after the sharp deterioration that occurred in 1979-80, has paid rich dividends,' announced Mr Mukherjee. So, what did the government do? In view of the improvement in the balance of payments situation, the government voluntarily decided not to avail of the remaining tranche of SDR 1.1 billion out of its total EFF loan. Mr Mukherjee referred to Indira Gandhi's statement in December 1981, which had reiterated that by drawing the IMF loan India was not accepting any programme that was 'incompatible with our policy, declared and accepted by Parliament.' Mr Mukherjee also pointed out how the economy had emerged stronger as a result of the adjustment efforts mounted by the government. 'None of the direct consequences that we were being warned about has occurred. We have not cut subsidies. We have not cut wages. We have not compromised on planning. We have not been trapped in a debt crisis. We have not faltered in our commitment to anti-poverty programmes or the welfare of our people. We entered into this loan arrangement with our eyes open. We have come out of it with our heads high,' he thundered. For the IMF, he had reserved special compliments and words of praise for the 'goodwill and mutual understanding' that marked the relationship between the Indian government and the Fund during the entire period of the EFF arrangement. He expressed the hope that the loan amount foregone by India would help the IMF provide greater assistance to other developing countries.

The political perspective on IFIs

Several pointers to India's approach to the IMF are evident here. One, foregoing the IMF loan is celebrated by the Government as a kind of political victory over its opponents. To make that point even more sharply, the Government even advised the IMF to use the returned tranche of the loan to provide greater assistance to other more needy developing countries. Indeed, a day after this statement by Pranab Mukherjee, political debate in the country had centred round the manner in which the Congress converted a political hot potato like the IMF loan into a masterstroke of political victory. Two, there is further reiteration of the government's resolve that it would not agree to changing its policies at the instance of some external agency. India may be a member of the IMF. But its advice or policy directives are not welcome, unless of course these are seen as the Indian people's own advice and are approved by the Indian Parliament. Three, the consequences that the government claimed it had avoided in spite of having accepted the IMF loan are a strange mix of policy responses. Not cutting subsidies or the wage bill is seen as proof of the government not having fallen prey to the alleged negative consequences of the IMF loan. That there is no compromise on planning or its anti-poverty programmes is also seen as a major victory. In other words, there was a clear hint that IMF loans could have forced the government cut subsidies, wage bills, planning and its anti-poverty programmes. But that none of this actually happened was cited as proof of the fact that India emerged out of the loan with its head held high. More importantly, that feat was possible because it had entered into the IMF loan arrangement with its eyes wide open.

Note that in either of the references to the IMF loan no attempt was made to disabuse the Indian Parliament or the people of the prevalent and widely misunderstood notion that any engagement with multilateral financial institutions results in the member country losing its freedom to frame its own economic policies or compromising on its economic sovereignty. No attempt was made to effectively communicate to the people and the opposition political parties that the IMF's policies, if adopted after necessary internal consultations on their desirability in a certain context, can be sound and effective in helping an economy recover from a parlous balance of payments situation. No attempt was made to tell the Indian Parliament that indeed there were consultations between the Indian government and the IMF authorities to decide on a course of policy actions to help the country. The nature of the arguments put forward by the then finance minister betrayed a patent lack of courage on the part of the government to tell the Indian Parliament that engaging with the IMF or agreeing to a set of policy prescriptions recommended by the multilateral financial institution was not going to undermine the country's independence or sovereignty.

Less than a decade later, when the Indian government with V.P. Singh as its prime minister and Madhu Dandavate as the finance minister went to the IMF to seek a loan under the Fund's modified Compensatory and Contingency Financing Facility, the secrecy surrounding the entire exercise and the government's defensive approach to the entire issue showed that nothing much had changed since the 1980s. The fact that the government had already obtained some financing from the Fund through the Gold tranche, even before getting the loan under CCFF, was also kept a closely guarded secret. It became known only when the next government was formed in 1991 and a disclosure was made in the government's Economic Survey that year. The

same government, headed by PV Narasimha Rao who was assisted by Manmohan Singh as his Finance Minister, took a stand-by loan of about $330 million from the IMF. Once again charges were levelled against the government for having compromised the nation's economic sovereignty and for having framed economic policies under pressure from the IMF. Talks for structural adjustment loans from the World Bank also did not make much headway as a controversy erupted over the alleged leakage of some World Bank documents that contained suggestions for economic policy changes to be implemented by the Indian government after receiving the funds. But the fact that Parliamentary proceedings could be disrupted following the disclosure of those loan conditions established how sensitive the relations between India and international financial institutions have continued to remain over several decades.

More things change, they remain the same

The Indian economy has become much stronger since the 1990s with no need for it to even consider seeking recourse to funds from the IMF or any structural adjustment loans from the World Bank. Economic reforms in the last couple of decades have made the Indian economy more open and less constrained by discretionary and non-transparent economic policies. But the mindset of its political leaders on international financial institutions has not changed. The World Bank and the IMF are still not institutions that have unreserved acceptance in the entire political spectrum. Indeed, there are influential groups of opinion makers and think tanks in the country, which continue to view economic policy prescriptions from international financial institutions with caution and even suspicion. Five years ago, the deputy chairman of the Planning Commission, Montek Singh Ahluwalia, had to reconstitute a few of the consultative committees he had set up to advise him on policy matters simply because they had members who had affiliations with the World Bank. These members were Indian citizens, but their affiliations with the World Bank became a major political controversy, ignited and fuelled as it was by the Left political parties, which gave the government of Manmohan Singh crucial support in Parliament for its survival. It will, however, be wrong and naive to conclude that the stigma of political untouchables that the World Bank and the IMF suffer from while operating in India is only because of opposition from the Left political parties. There are strong forces within the Congress, which have serious reservations about any public affiliation with the World Bank or the IMF in any political forum. The Left parties no longer support the new government that has just been formed at the Centre. Nor is the government of the United Progressive Alliance, now in its second five-year tenure, dependent on the Left for its survival. But if informed reports and opinion in the government are to be believed, Prime Minister Manmohan Singh was persuaded not to man a key ministerial portfolio with a candidate who was seen to be too close to the World Bank. Even if this is not true, the fact that political circles were agog with such talks shows that the quality of India's engagement with international financial institutions, at a political level, has seen no substantial change over the last few decades. In other words, the political establishment is still wary about its relationship and interaction with the World Bank and the IMF.

Lack of openness and clarity

If the nature of India's engagement with international financial institutions has not been subjected to its fair share of debate and discussion in the media and in public seminars, it is largely because of the way the political establishment has perceived the World Bank and the IMF. India has been a regular recipient of loans from the World Bank and has obtained funds from the IMF under the latter's different financing facilities. But India's political leaders have found it difficult to defend this engagement. In fact, they have viewed these two multilateral financial institutions more as a political liability. It has thus been left to only the civil servants in the finance ministry to do the talking as far as relations with the World Bank and the IMF are concerned. In sharp contrast, political leaders have come out in the open on the Indian government's engagements with other multilateral trade institutions – the General Agreement on Trade and Tariffs and the World Trade Organisation since its inception in 1995. Finance ministers have rarely come out with public statements on India's positions on World Bank and the IMF or on the proposed changes in their governance structure. In sharp contrast, commerce ministers representing different political parties have consistently come out in the open on the way India has been leading or contributing to global conferences on trade negotiations.

It could be argued that India's decision to join the WTO in 1995 had also become a political controversy, but in spite of that the political leadership refused to get overwhelmed by such opposition. This is indeed a bit of a puzzle. The Left parties' opposition to the proposals for a new trade body had become so vicious that on the streets of many Indian cities they burnt effigies of GATT Director General Arthur Dunkel, the man who had made the first big move to make WTO a reality. Manmohan Singh, who was then the finance minister, had a tough time in persuading the opposition parties to agree to the WTO framework. But in spite of that the political leadership never shied away from the issues that WTO raised. In subsequent rounds of trade talks under the WTO framework, the political leadership had no reservations about making clear their stance on critical issues. Even if it meant walking out of a trade round, as it happened in Cancun in 2003, the political leadership took that initiative in consultation with all stakeholders including industry, trade and of course the civil service. As a consequence, there has always been greater clarity on the Indian perspective on various important trade-related issues being handled under the auspices of WTO. Largely because of this openness, think tanks and non-governmental organisations (NGOs) have also contributed in good measure to the discussion and evolution of key issues under the WTO domain.

One reason why such openness and clarity in debates are absent when it comes to India's engagement with issues pertaining to the World Bank and the IMF is perhaps the fact that the WTO was born at a time when economic reforms had already grown roots in India and the world had seen the reunion of Germany and the disintegration of the Soviet Union. WTO, thus, did not carry the kind of legacy issues that the World Bank and the IMF obviously had to contend with, having come into existence at a time when the economic ideological debates were still polarised across the world. Thus, India's engagement with the WTO appeared far less controversial from an ideological perspective than while dealing with the World Bank or the IMF.

The second reason for such varied reaction could lie in the nature of issues that are

dealt with by the WTO on the one hand and by the multilateral financial institutions on the other. Trade issues have a much greater direct impact on people than any change in financial policies that global financial institutions like the World Bank and the IMF can bring about. Trade has a certain immediacy, which financial sector reforms do not have. In the long run, reforms in international financial institutions and the role each country plays in those initiatives may have a larger and more durable impact. But it is the short-term impact of trade that ensures greater and more direct involvement of the political leadership in India. An additional factor is the large population in India that is dependent on agriculture as its main source of livelihood. No political leader can afford to ignore the interests of these farmers, which are directly impacted by trade policy changes.

There is a third reason as well that explains why the Indian government's response to initiatives on reforms in international financial institutions has so far largely remained confined within the official files in North Block, where the Indian Finance Ministry is headquartered. It must be conceded that the awareness of India's political leadership on the rapid changes in the global financial architecture is fairly limited. Barring the present Prime Minister and the Finance Minister, no other political leader in the Indian establishment is seriously engaged with the need for India to reserve for itself a position in the global financial world that is commensurate with its share in the world economy. Rarely have such issues become a subject of debate in the Indian Parliament. The only occasions when the Indian Parliament has indeed discussed the World Bank and the IMF are when controversies arise over funding by these multilateral financial institutions and the conditionality that may have been imposed on the release of loans. In such a situation, even the civil service is not encouraged to discuss in public issues such as reforms in the governance structure of the IMF or the World Bank. The reality is that even the World Bank appears to have accepted the terms of engagement that the Indian political leadership has imposed on its relationship with the multilateral financial institutions. The World Bank lending norms have been suitably changed to ensure that no direct lending to states in India takes place. Even the states that receive focussed attention from the World Bank receive the broad concurrence of the Indian government.

Institutionally also, the existing organisational structure to deal with issues pertaining to multilateral financial institutions could do with some improvement. The Fund-Bank Division in the Finance Ministry may be administratively responsible for formulating the Indian government's stance on issues pertaining to reforms in the governance structure for the World Bank and the IMF. But the Finance Ministry is not the only organ in the Indian government that is responsible for finalising official views on such issues. The perspectives of the international relations division in the External Affairs Ministry and then the Prime Minister's Office also offer critical inputs for the Indian government's final policy response. A more formal arrangement involving the Ministries for Finance and External Affairs and the Prime Minister's Office could be a more effective alternative to formulate the government's views on its engagement with international financial institutions.

Contours of the Indian Government's official stance on IFIs

In spite of these basic handicaps at the political level to a more fruitful and effective engagement between the Indian government and the international financial institutions, there are, however, enough indications of how this interaction at the officials level has been quite substantive and meaningful. For instance, the proposed reforms of the IMF, on which a broad agreement was hammered out at the April summit of G20 in London, have sufficiently exercised the minds of various Indian government functionaries. This is a refreshing development since, with the sole exception of Prime Minister Manmohan Singh, no other Indian political leader has made any significant contribution to the debate over changes in the governance structure for the IMF. But official representatives at different forums of the International Monetary Fund have made the Indian government's stance on such issues quite clear in unambiguous terms. It will, therefore, be interesting to see how the Indian political establishment has by and large persisted with its publicly expressed reservations about the multilateral financial institutions and yet has allowed the Indian civil servants and other government functionaries to articulate the government's positions on key governance reform issues at various official platforms, without the burden of any political baggage. As far as reforms in international financial institutions are concerned, there seems to be a clear distinction between the views that the political establishment would propagate to score points in domestic politics and the approach the civil servants and government officials would be allowed to adopt at international negotiating tables. This distinction has become more pronounced as the Indian economy has grown in size and its influence in global bodies has seen a significant rise.

Surveillance

Almost two years ago, for instance, the Indian government articulated its clear views on the question of making IMF surveillance more relevant and effective. It endorsed the broad objectives of reshaping the surveillance mechanism subject to three conditions. One, the proposed changes in the surveillance mechanism must receive the widest possible support. Two, the changes should not result in the introduction of new obligations for member countries. And three, there should be no move towards a compliance-based approach to surveillance. But on the crucial question of IMF surveillance over its members' exchange arrangements, the Indian stance suggested that it did not encourage a situation in which domestic policies were in any way undermined by the multilateral body's policy prescriptions. 'The adoption of new principles (on surveillance over the members' exchange arrangements) that are being currently debated must be limited to the subject matter of surveillance over exchange rates. We would be uneasy to see the insertion of any new principles that qualify domestic policies with peripheral consequences on exchange rate management,' the Indian representative at the IMF's May 2007 meeting stated.

The problem here seems to be stemming from the IMF's jurisdiction in guiding exchange rate policies of its member countries. The Indian government's argument is that while the Fund may suggest points for consideration relating to what might be seen as sound monetary, fiscal or financial sector policies, these cannot be made part

of the new principles of surveillance over exchange rates. The question of the soundness of the IMF's advice and the need to keep such advice internal, particularly for emerging economies, were also raised by the Indian representatives: 'The fact (is) that alternative approaches produce widely divergent estimates of exchange rate misalignment. It would, (therefore), not be appropriate to anchor policy advice on such exchange rate assessments. Moreover, given the sensitivity of exchange rates for emerging markets, it would be desirable in the spirit of the Fund's role as a confidential advisor to keep the exchange rate assessment internal.' The Indian government has therefore called for a policy apparatus from IMF that is specially modified to suit the requirements of the developing or the emerging economies. Thus, the Indian government has favoured an improved focus for surveillance with greater prioritisation. At the same time, it has argued for an improved methodology to assess the effectiveness of such surveillance. Consistently, the Indian government has laid stress on the need for strengthening the methodological aspects of IMF surveillance. An alternative suggestion made by the Indian representative has been to prioritise surveillance objectives through triennial surveillance reviews. The Indian Government has also endorsed the IMF's emphasis on bilateral surveillance consistently.

In April 2009, a few days after the conclusion of the G20 London Summit, the Indian position on IMF's surveillance was further reiterated with a slight change in its emphasis. It endorsed the increased relevance and importance of stronger surveillance by the IMF in view of the ongoing global financial sector turmoil. But implicit in that suggestion was a clear hint that there was now the need for greater focus on 'systemically important countries'. What this meant was that the developed countries, which usually were not subjected to any surveillance by the IMF, too needed to be brought under a regular review. 'The more systemically important the country, the greater should be the rigour of surveillance,' the Indian representative at the IMF's April 2009 meeting said. At this stage, the Indian stance on surveillance methodology underwent a marginal change. It began talking about a gap between multilateral and bilateral surveillance and pressed for the need to bridge that gap.

While India maintained its position that reforms in IMF's surveillance should not result in greater obligations for developing countries, the post-G20 London Summit scenario has seen a further refinement in India's position on surveillance. Recognising that the current crisis has pushed macro-financial sector issues to the centre stage in IMF surveillance, the Indian authorities have been arguing for an integration of macroeconomic and financial sector surveillance. This, it has been argued, could be achieved by making the IMF's financial sector assessment programme more focused and by integrating that programme with bilateral surveillance. Once again, there is a renewed emphasis on the role of national governments in such surveillance. 'National authorities are closer to the terrain realities of their financial sectors and self-assessment of regulatory frameworks based on internationally agreed methodologies should be a priority. As we have learnt, prescription of standards for the financial sector in itself cannot prevent crises. There is a need for ongoing review of the standards by international bodies and greater national commitment for implementation,' the Indian representative stated at the IMF April 2009 meeting.

Three points emerge from the Indian approach to surveillance. One, there appears to be some connect between the general perceptions of the Indian political establishment on IMF-related issues and the stance taken by the Indian government officials

on surveillance. There are reservations about subjugating domestic policy making to international supervision or guidance. Suggestions and advice are welcome. But these will have to be modified and made acceptable to the member countries. Two, the Indian Government stance has generally endorsed the widespread criticism that the IMF mechanism treats different member countries with different economic and financial parameters with the same yardstick. There is a clear disapproval of the 'one-size-fits-all' policy and the Indian articulation on IMF surveillance has made no secret of that. Three, there is a growing recognition that the IMF can no longer restrict itself to the narrow field of exchange rate management and only try to tackle the member-countries exchange rate-related problems. There has been a demand for increasing the scope of the IMF mandate in view of the current global financial sector crisis and the Indian government has clearly underlined the need for the widening of its focus. Such modifications in the scope of the IMF's functioning are perhaps as crucial and important as the other issues of reforms in the governance structure of the multilateral financial institutions.

Quotas, resources and governance

On the more substantive reforms issue of increasing the IMF's resources, quotas and voting shares of its member countries, the Indian perspective has shown far greater clarity than on most other issues pertaining to international financial institutions. Almost in sync with the Singapore Resolution's recommendation for a realignment of the quota formula in tune with the current global reality, the Indian Government outlined its position quite categorically at IMF's May 2007 meeting. The new quota formula, according to this publicly stated position, was to have achieved two results. One the new formula should rebalance quota shares in keeping with the economic changes that have taken place globally. Two, the quota shares of low-income countries should be protected to the fullest extent possible. The Indian suggestion, therefore, has been that the member-countries' gross domestic product (GDP) under the new formula should be calculated entirely on the purchasing power parity (PPP) basis. Alternative ideas of a blended GDP – a mix of GDP calculated at the market exchange rates and on PPP basis – have been opposed by the Indian government. India's stance on this issue has indeed been very categorical. Referring to some alternative proposals that seek to introduce new factors to determine the quota realignment formula, the Indian representative stated: 'However, we are dismayed that...some proposals are being made that detract from the spirit and purpose of the reform process. It is being proposed that the reform objectives could be met in a number of ways. In our view, the promise of a number of ways is a teasing illusion. There is only one way and that is to construct a formula that realigns actual quotas in line with the current global economic realities.'

This position was further strengthened at the April 2009 meeting of the IMF. The Indian Government representative reiterated that the proposed realignment in the quotas for members, in line with their relative share in the world economy, should be expedited and completed by 2011 as indicated at the G20 meeting. Furthermore, he issued another warning on how the immediate goal of revising the quotas could be undermined if the IMF was keen on securing alternate resources through borrowing.

The Indian stance did not oppose such borrowing to meet an immediate requirement because the quota review process could take some time. But the significant point was India's clear articulation that such efforts should be seen only as a 'bridging mechanism until the quota review is complete.'

Nine specific points made by India in this regard deserve a special mention here, not just because each of them defines India's position on IMF reforms with a clarity that was not in evidence earlier, but also because they are articulated after the G20 London Summit, where the broad contours of the IMF quota review had been endorsed with full backing from India's Prime Minister Manmohan Singh.

- One, the Fund's borrowings should not be viewed as a substitute for a substantial quota increase.
- Two, an appropriate mix should be maintained between the quota resources and borrowings of the Fund.
- Three, IMF's borrowings should be based broadly on present quota shares, preferably within a multilateral framework like a modified New Arrangement for Borrowing.
- Four, with a view to providing greater flexibility for member countries to contribute to the Fund's resources, various modalities should be explored including note purchase mechanisms.
- Five, resources lent to the IMF should be treated as part of the country's international reserves.
- Six, the Indian government is committed to participate in the increase in IMF's resources through a quota review and an enhancement in the Fund's resources. The extent of its participation would be outlined once the IMF finalises the modalities for raising the resources.
- Seven, the Indian government favoured a front-loaded allocation of SDRs worth $250 billion to the IMF's existing quota size, so that developing countries could benefit from the additional liquidity of about $100 billion.
- Eight, India also endorsed the IMF's proposal to use the additional income from proceeds of the agreed sale of its gold reserves for meeting the borrowing requirements of low-income countries.
- And nine, India has taken an unequivocal stance on demanding an open and merit-based process to be followed for selecting the senior management of the IMF. This merit-based process should ignore considerations of nationality and geographical preferences. That India has also taken a firm position on this issue must be viewed in the context of similar demands made by other countries and groups of countries. The UN Commission has already called for an open democratic process for selection of heads for the IMF and the World Bank. The BRIC countries and G-24, both of which include India as an important member, have also independently issued communiqués to demand that the selection of the IMF head should be independent of national or regional consideration. Even the UK Prime Minister Gordon Brown came out with a statement that 'the next head of the World Bank need not be an American and the next head of the IMF need not be a European.'

Rising influence in a global community

As pointed out earlier, the enunciation of India's position became even more clear as India as an emerging economy began playing a bigger role in various international groups of nations. It is true that there was not much dissemination of the Indian positions in the media or through public seminars. In sharp contrast, India's stance on various WTO-related international trade issues enjoyed greater visibility and prominence in public forums. But this reticence has once again a lot to do with the political leadership's refusal to overcome its inhibitions over dealing with issues concerning the IMF and the World Bank. The fact is that over the last few years, India has played an increasingly important role in influencing the opinion of various national groups on important issues pertaining to reforms of international financial institutions.

For instance, India's rights for a higher share in the quota and voting rights in the IMF was endorsed by the United Kingdom and Australia. At the G20 meeting in London in April 2009, India's voice was heard and its point of view on the crucial question of doubling the IMF's usable resources from $250 billion to $500 billion was duly recognised. It was India and the European Union countries that had strongly pitched for an increase in the IMF's resources, a demand that is likely to be more than met after the London Summit. The proposal to augment the IMF's resources by selling its gold had also received full support from the BRIC countries and India played a leading role in calling for a speeding up of the process. The demand was significant because a few developed member countries had opposed the proposal. In other words, India is now closely allied with most of the developing emerging economies in demanding swifter reforms in the governance structure of international financial institutions. In turn, developed member countries such as the UK and Australia have endorsed India's case for a higher quota and voting right in the IMF.

However, it will be naïve to believe that India has emerged as a major force among the developing emerging economies as far as influencing reforms in the IMF is concerned. These are early days yet. India appears to getting used to the idea of occupying important positions in bodies such as G20 and contributing meaningfully to the international debate over reforms of international financial institutions. China, for instance, enjoys a much bigger clout in these international forums and has a larger say in formulation of policies in the international financial institutions. India, too, is aware of the implications of the IMF governance reforms, particularly for China. If the new quotas are fixed in relation to the member countries' GDP calculated on the purchasing power parity basis, the rise in China's quota and corresponding voting rights would be much more than India's for obvious reasons. While the reality of China's larger economy with a higher share in the global GDP cannot be wished away, policy-makers in the Indian government may well examine the implications of the new power equations under the new governance structure for the international financial institutions. Needless to point out that the US will continue to maintain its effective veto power (all decisions in the IMF board have to be ratified with a minimum vote of 85 per cent) as its quota/voting rights would not go below 17 per cent even under the new arrangement.

The road ahead

Given the divide between the views of India's political establishment and the official government stance on the country's engagement with international financial institutions, what kind of reforms the Indian government should press for? There is now increasing unanimity among Indian policy makers on the need for the IMF to play the role of an economic security council. As argued by Vijay Kelkar, former executive director on the board of the IMF, the rapid pace of globalisation has thrown fresh challenges to international financial institutions. And the IMF must be tasked with the responsibility of managing the new wave of globalisation to ensure stable growth and at the same time provide economic security to all by mitigating risks and even sharing them if the situation demands. The Fund, therefore, should not restrict itself to just overseeing the member-countries' financial health, but also become the lender of the last resort by offering them macro-economic support and assistance. There are no second thoughts on the need for increasing the IMF's resource base. The Fund has to act as a countervailing force to the few countries, which have dominated the global capital markets. In times of crisis, a small number of players have the potential of destabilising other economies also. It is the IMF with its enhanced resource base and as the lender of the last resort should provide an equilibrium in the global financial markets. While enhancing the member countries' quotas in sync with their GDP calculated on the basis of purchasing power parity will be a good beginning as far as governance structure reforms are concerned, there is need to press ahead with more radical reforms. For instance, why not create a more independent board at the IMF? As Vijay Kelkar wondered, will ensuring that each member of the IMF Board is elected solve the problem? A board composed of only elected members will certainly be different in character than one at present, which has only members nominated by various member countries, depending on their quota strength. Finally, the political establishment's lack of meaningful engagement with the international financial institutions is a cause for concern. If these institutions have to make an impact on developing emerging economies, where the political acceptability of these bodies is a question mark, new institutional mechanisms have to be created by which the functioning of the IMF and the World could be subjected to a review by the national parliaments of the member countries. There might be stiff opposition to the idea of making the IMF and the World Bank's activities accountable to national parliaments of the member countries, but in the long run there is no escape from facilitating a meaningful engagement between the political establishments of the member countries and the international financial institutions. This engagement has to become meaningful and effective and one way of ensuring it would be is to enforce parliamentary supervision of the various activities of the Fund and the Bank. How and in what form can this take shape is of course a subject matter for a new debate on further reforms in the governance structure of international financial institutions.

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The Pending Challenges in Global Financial Regulation Reform: Liquidity Insurance for Systemic Crises

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1 Introduction

The financial crisis started in the summer of 2007 has its roots in a big collective mistake: the under-estimation of systemic risk. This mistake has two important dimensions. A first dimension is the absence of a macroprudential view in the design and practice of financial regulation and economic policy (especially monetary policy, but possibly also the fiscal and exchange rate policies that helped sustain global imbalances). A second dimension is the excessively optimistic judgment of the process of securitization and the supposed virtues of the originate-to-distribute (OTD) model of banking.

This second dimension of the mistake was partly sustained by the lack of data and historical experience with the OTD model, as well as by the general acceptance of naïve extrapolations of financial theory, regarding the virtues of diversification and greater market completeness. Potential asymmetric information and agency problems were overlooked, ignoring many of the insights provided by the academic corporate finance and banking literatures over the last thirty years.

The risks associated with in the OTD model of banking, including the risks due to maturity mismatch, were not essentially different in nature to those present in the traditional domestically-oriented banking systems of the old days. However, due to the effective lack of transparency of the OTD model, its greater complexity and interconnectedness, and the lack of prudence resulting from both ignorance and negligence, these risks were both less well understood and much more dangerous.

A truth evidenced by the crisis (but denied by many before its outburst) is that short-term wholesale liabilities constitute, in practice, a less stable source of funds for banks than retail deposits. This lower stability comes partly from the fact that banks' non-deposit short-term debt lacks an arrangement similar to deposit insurance. Deposit insurance protects the financial system against traditional deposit runs by reassuring the depositors about the value of their deposits when there are rumors about the likely insolvency of their banks. Short-term wholesale creditors did not get similar reassurances until very late in this crisis.

The news about the US housing losses around the summer of 2007 and the perception that these losses could spread in an unpredictable way throughout a system

1 This paper is based on joint work with Enrico Perotti, from University of Amsterdam.

of interconnected global banks produced a modern form of global bank panic among money market investors. For the banks that relied on international money markets for their funding, liquidity problems become immediately obvious. Many other banks suffered second round effects, after being hit by direct losses, fire sales, asset price declines, higher margin calls, and costly deleveraging processes, all of which were part of intertwined downward spirals observed during the buildup of this great crisis (Brunnermeier, 2009).

The presumption that money markets without explicit government support were a good source of market discipline for banks and would always remain liquid for sufficiently solvent institutions was fundamentally wrong. The recognition of this in the current crisis came probably too late, after Lehman Brothers went bankrupt, and pushed governments into an ad hoc extension of guarantees and the rescue of many institutions that, by then, were badly damaged. The massive rescue plans caused concern and scandal on ample groups of the public opinion, hostile to the idea of using tax-payers money to assist the institutions blamed for the crisis. Partly in response to this, the day-to-day management of the crisis then became accompanied by the plan to seriously and urgently reconsider the regulation of the entire financial system.

In addition to the short-term need to calm the public with the announcement of a new financial architecture, the current re-regulatory efforts aim to correct some of the weaknesses and excesses perceived as causes of the crisis so as to, hopefully, minimize the risk and severity of any future financial crisis.

In the remaining sections of this short paper I will first provide a brief overview of the main challenges in the current re-regulatory process (Section 2) and then focus on a more detailed discussion of issues regarding the regulatory treatment of liquidity risk and the institutions required to deal with it in a systemic crisis (Sections 3-6). For the longer second part I will extensively build on a regulatory proposal that Enrico Perotti (from University of Amsterdam) and I launched last February.[2]

2 Overview of the challenges in financial regulation reform

There are at least two political-economy reasons to believe that the current process of financial regulation reform constitutes a good window of opportunity to effectively improve the safety and soundness of the global financial system. The first reason is that the costs of doing it wrongly are still fresh in the memory of the policy makers, practitioners, and the general public. The second reason is that the financial industry is in its weakest position in decades to influence the process in its own advantage. There is, however, a risk of over-reacting. The public demands exemplary punishment for those who led to the crisis and politicians want to find agents and institutions, other than themselves, to whom to blame for the crisis. In this context, without much time for deep economic analysis, some aspects of the re-regulatory process may respond to a 'killing the messenger" logic, disorderly touching on every aspect that seems to have played a role in originating or amplifying the current crisis (hedge funds, rating agencies, credit risk derivatives, short-selling, globalization, etc.).

A balanced assessment of the alternatives for regulatory and supervisory reform

2 See Perotti and Suarez (2009).

should take into account that there is room for self-correction in the system. Private losses have been important, data has accumulated, tail risk can be re-estimated and re-priced, rating agencies have a lot of reputation to regain, supervisors will probably enforce with greater care some of the already existing regulations…

The balanced assessment of the alternatives should also consider the risk of creating new regulatory arbitrage opportunities, as some of the old ones are dismantled. The financial sector is particularly sharp at finding ways around any regulation, so future regulations should not presume that enforcement is guaranteed and, while devoting resources to the effective enforcement of the rules, should also try to make the system more resilient to the innovations and shadow system developments that might circumvent the new rules and put the system at risk of the next crisis.

The specific challenges and alternatives for the design of the new financial architecture are manifold and providing a systematic review of them will exceed the scope of this short paper. Some recent reports provide excellent summaries of the underlying trade-offs and the main alternatives (e.g. Brunnermeier et al., 2009, and The de Larosière Group, 2009).

A good grasp of the dimension and richness of the topics under consideration can be obtained by looking at the structure of the Final Report produced by the G20 Working Group 1, 'Enhancing Sound Regulation and Strengthening Transparency.' The report starts providing a long list of the weaknesses identified in the financial system:

a. Weaknesses in underwriting standards
b. Lack of oversight of systemic risks
c. Lack of oversight of unregulated pools of capital
d. Weak performance by credit rating agencies
e. Procyclical tendencies fed by regulatory and accounting frameworks
f. Shortcomings in risk management practices
g. Outpacing of risk management by financial innovation
h. Weaknesses in disclosure
i. Weaknesses in resolution procedures
j. Lack of transparency in various over-the-counter (OTC) markets

The report also motivates and describes up to 25 recommendations to the leaders of the G20. In the Appendix, I provide my personal summary of these recommendations (R1 to R25), numbered and grouped by theme as in the original report.

As one can appreciate in the original document and in my summary of its recommendations, the emphasis on the need for a macroprudential approach to financial system stability is very clear but, perhaps paradoxically, the issues of liquidity risk and crisis management occupy relatively little space in the discussion and recommendations.

Issues regarding the regulatory treatment of the systemic implications of liquidity risk will be the focus of the discussion in the remaining sections. I will describe with some detail the policy proposal on these issues that Enrico Perotti and I recently launched. The proposal is consistent with the goals expressed in recommendations

R1 (focus on systemic stability) and R16 (liquidity) in the report mentioned above, although we defend an alternative different to the liquidity buffers mentioned in R16. Our proposal can also be interpreted as a step forward in terms of the developments encouraged by recommendations R3 (macroprudential tools) and R12 (mitigation of procyclicality).

3 The case for liquidity charges and pre-packaged assistance

Our proposal is to establish a liquidity and capital insurance arrangement that would compactly solve some of the problems associated with the excessive reliance of banks on short-term wholesale funding, the political resistance to assist banks during a systemic crisis, and the coordination problems associated with the rescue of international mega-banks.

Our proposal is to establish a mandatory liquidity charge that would be paid continuously during good times to a supervisor who, in exchange, would provide emergency liquidity (and perhaps capital) during systemic crisis. This charge should work like a Pigouvian tax on pollution, discouraging bank strategies that create systemic risk for everyone (‘financial pollution’). For this purpose, the charge should be proportional to banks' short-term liabilities, increasing in the maturity mismatch between assets and liabilities, and levied on all potential beneficiaries of safety net guarantees. Its aim will be to make short and long term bank debt financing more comparable in cost, inducing a lower reliance on the former. Importantly, retail deposits would be exempted from the charge (and excluded from short-term funding in the measure of mismatch) since their own (and separately priced) insurance already seems to make them sufficiently stable during crisis.

The main goal of the liquidity charges would be to realign funding incentives among the beneficiaries of the safety net. Reducing the reliance on short term market funding would reduce the spreading of panic in a confidence crisis and ultimately systemic risk. We think that the lower cost of short term funding partly reflects the fact that short-term lenders bear little risk, partly because they are able to shift it away to other stakeholders (equityholders, other banks, and taxpayers) when they dismantle their positions at the first sight of trouble. Thus, the charges would make banks internalize the damage caused to others when things go awry.

Revenues accruing from these charges would go into a fund, say an Emergency Liquidity Insurance Fund (ELIF), that would have legal autonomy, pre-packaged access to central bank liquidity, and the backing of government funds, if required. The relevant macroprudential supervisor (e.g. the Financial Stability Board worldwide or the planned European Systemic Risk Council at the EU level) would trigger the extension of assistance from the ELIF as soon as systemic problems were detected. Specifically, ELIF would provide liquidity support, guarantees on uninsured wholesale funding and, perhaps, some prearranged capital injections. Assistance may be accompanied by specific constraints on management, such as restrictions on executive compensation, dividends or other decisions with prudential implications. Critically, no assistance would be provided to institutions that suffer problems of an idiosyncratic, isolated nature.

Given this aspect of the arrangement, the liquidity charge would work as an insur-

ance premium: a pre-payment for the contingent support that banks and assimilated institutions eventually receive during those episodes of systemic distress. We think that the charges and the existence of an ELIF would make emergency intervention politically more acceptable, especially after the public concern raised by current rescues.[3]

4 Advantages relative to other proposals

We think that flat liquidity requirements or higher capital requirements do not constitute the best possible solutions for the management of the systemic component of liquidity risk. A plain liquidity requirement may be a too rigid imposition for banks, impeding them to optimize on a smoother basis. Essentially, that type of requirement imposes a 'price' of zero for increasing maturity mismatch if the relevant measure of liquidity remains above the required minimum and a price of infinity for increasing it if liquidity falls below that minimum. Additionally, in order to guarantee sufficient liquidity in the (hopefully) unlikely event of a crisis, the liquidity requirement would probably have to be large, forcing the financial system to hold possibly excessive liquidity in normal times.

With capital requirements the story is similar. For them to provide effective protection against liquidity problems (if at all), bank capital would need to be really large during normal times. This has obvious direct costs and several more subtle disadvantages. The latter include that shareholders tend to see bank capital as an asset to which they are fully entitled. So banks with plenty of capital on their books may be subject to pressure from their shareholders to 'lever it up,' not necessarily through leverage (which might be constrained by capital requirements) but through riskier investment strategies. Another disadvantage is that shareholders' claims on bank capital are a source of trouble in bank interventions since, at least under current bankruptcy and supervisory intervention procedures, seizing or intervening a bank ahead of formal default tend to be seen as a violation of private property rights.

In contrast to these alternatives, our insurance scheme arranges for the availability of sufficient liquidity (and, perhaps, capital) in systemic crises only and is intended to penalize systemic risk creation in a continuous manner, especially in normal times (using charges per unit of wholesale short-term funding that, as already mentioned, would increase with maturity mismatch).

An advantage of the proposed form of the liquidity charge is that maturity mismatch is relatively easy to compute. Systemic risk -namely the simultaneous realization of correlated tail risk- is hard to estimate, as extreme co-movements are rarely observed, and may be triggered by a different asset class each time. But liquidity runs play an important role in the escalating phase of all systemic crises and have a clearly negative amplifying effect. So liquidity mismatch can be considered a 'proxy' of potential systemic risk. In this sense, liquidity charges would discourage the creation of systemic risk associated with short term funding.

3 Related cases for insurance arrangements have being made by Acharya et al. (2009) and Kashyap, Rajan, and Stein (2008), among others.

To eliminate the incentives to excessively rely on short term maturity funding when the term structure of interest rates is characterized by a high positive slope (which tends to occur during good economic times), the liquidity charge might be increasing in the slope of the short end of the yield curve (say, up to one year). With this feature, the charge would be naturally countercyclical, leaning against the wind when liquidity is abundant and short-term rates are very low. In addition, if necessary, an explicitly countercyclical proportionality factor might also be introduced.

The liquidity charge that we propose would probably make it more expensive for banks to rapidly expand their lending above their deposit base, but it would certainly not block it.[4] We would expect banks to react to them by using a greater fraction of long term funding, which might advantageously imply greater monitoring from the corresponding creditors. Finally, with better incentives and counting on the contingent assistance of the ELIF in case of a systemic crisis, we think that the residual short-term creditors would be less prone to panic.[5] In each of these dimensions, our solution would imply a significant correction of problems that have contributed to the severity of the current crisis.

5 Implementation and institutional details

We coincide with most existing proposals on regulatory reform in that properly defining the perimeter of the markets and institutions subject to prudential regulation and supervision will be key to the achievement of a truly more stable financial system. Some clear lessons from the crisis are that the old distinction between commercial and investment banks was obsolete, that the existence of opportunities for regulatory arbitrage encouraged the creation of a dangerous uncontrolled shadow banking system, and that the connections between elements of that system (such as special purpose vehicles), the hedge funds, and the systemically important institutions were instrumental to the spread and amplification of the crisis.

Future regulation and supervision will hope to cover all institutions that either for their size or for their interconnectedness are systemically important (and, thus, likely receivers of assistance in a crisis), irrespectively of whether they fit into the traditional definition of a bank or not. In this sense, our arrangement should be applied to all of them.

Skeptics may fear that the liquidity charges that we propose will encourage the system to shift activities that make heavy use of short term funding into yet another

4 Financial intermediation theory shows that there circumstances in which funding long term assets with short-term liabilities is conducive to an efficient allocation of resources (Diamond and Dybvig, 1983) and in which short-term funding can play a disciplinary role (Calomiris and Kahn, 1991, Diamond and Rajan, 2001).

5 Recently, Gorton (2009) has argued that some features of the securitization process prior to the crisis might have responded to the increasing demand for high-rated assets that can be used as 'collateral.' In fact, quantitatively important markets such as the repo market, the markets for credit default swaps (CDS), and other derivatives markets use collateral (and margin calls) to deal with counterparty risk. In Gorton's interpretation, the shadow banking system might have played a fundamentally justified role in the provision of collateral but caused large losses in the crisis because it was unprotected against panics-very much like the traditional banking system prior to the introduction of deposit insurance.

shadow banking sector. This is a serious risk not only for our proposal, but for essentially all re-regulatory proposals: as soon as a shadow system is regulated, the roots of another are possibly established. However, the shift of some short-term funded activities to the shadow banking system is not likely to be sizeable or to imply a big danger for the regulated sector if regulators and supervisors stick to the principle that the unregulated agents should enjoy very limited (or otherwise strongly penalized) recourse to the regulated ones.

Accordingly, for deals between the regulated and the unregulated sectors, our proposed scheme should assign charges increasing in the unregulated borrowers' own mismatch, if it were at all verifiable. Otherwise, any potentially mismatched asset funding should be fully charged. For instance, bank credit lines to institutions such as hedge funds might be treated as non-contingent commitments and fully charged.

The international implementation of our liquidity insurance arrangement is another complex but important challenge. Ideally, in order to properly deal with banks that have a significant presence in several jurisdictions, an international ELIF should be created. This ELIF might operate in coordination or under the management of the relevant international macroprudential supervisor. Countries should choose to participate by requiring either all their regulated institutions, or at least the largest or systemically relevant ones, to join an international ELIF, pay its liquidity charges, accept its supervision, and count on its support in a systemic crisis.

The establishment of an international ELIF may sort out commitment problems. Countries that do not join should not benefit ex post. The scheme would constitute an explicit coordination device for the rescue of large international banks, preventing the issue of burden sharing to be left for difficult ex post negotiations. In this sense, the liquidity charges, accepted as insurance premia during normal times, would provide a mutually agreed metric for systemic risk and would offer an objective basis for burden sharing in crisis times. We think that it would be reasonable to accept that, in case of need, countries will contribute to funding the ELIF in proportion to the share of each national banking sector in the liquidity charges paid during the pre-crisis period, rather than on the basis of costly and time-consuming ex post negotiations or some politically debatable country quotas.

6 Conclusions

The process of reform of the regulation and supervision of the global financial system motivated by the current crisis has many important and challenging dimensions. This short paper describes a mechanism that Enrico Perotti and I have proposed as a response to a number of the key challenges related to the treatment of systemic liquidity risk in a global economy. In particular, our mechanism addresses (i) the regulatory treatment of liquidity risk (and its contribution to systemic risk), (ii) the establishment of some form of prepackaged assistance to banks during systemic crises (that helps prevent or attenuate these crises in the same form as deposit insurance prevented retail panics in the old days), and (iii) the improvement of coordination in the management of crises involving internationally operating mega-banks.

As argued in previous sections, the liquidity charges imposed by our Emergency Liquidity Insurance Fund would discourage the forms of short term funding that cre-

ate and amplify systemic risk. The arrangement would also provide some prepayment of intervention costs (making early intervention politically more acceptable). In its international implementation, it would constitute a starting step to ensure public assistance to international mega-banks with cost sharing based on ex ante rules rather than negotiations or politically debatable country quotas.

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Appendix

Summary of the Recommendations included in the Final Report of the G20 Working Group 1 'Enhancing Sound Regulation and Strengthening Transparency'

This is a summary based on a subjective interpretation of the original wording of the recommendations in the above-mentioned report. The 25 recommendations are numbered and grouped by themes as in the original document.

System-wide Approach to Financial Regulation

R1. Give an explicit financial system stability mandate to the relevant authorities.

R2. Ensure coordination between authorities at domestic level.

R3. Search for and establish suitable macroprudential tools to address systemic vulnerabilities, considering the possible use of: (a) simpler leverage measures and better measures of balance sheet exposures, (b) cyclically-adjusted capital requirements, (c) new loan-loss provisioning standards, (d) longer data bases, (e) a stronger focus on loan-to-value ratios for mortgages.

R4. Create an international table to coordinate authorities across jurisdictions.

Scope of Regulation

R5-R8. Create an expanded, more focused, and dynamically flexible perimeter of regulation and oversight.

Oversight of Credit Rating Agencies

R9. Make credit rating agencies subject to registration, a harmonized code of conduct, and oversight.

Private Pools of Capital

R10. Make private pools of capital (including hedge funds) subject to registration and appropriate disclosure requirements.

Transparent Assessment of Regulatory Regimes

R11. Adhere to the Financial Sector Assessment Program (FSAP), publish its conclusions, and include sections on macroprudential oversight and compensation schemes.

Procyclicality

R12. Develop and implement supervisory and regulatory approaches to mitigate procyclicality in the financial system by promoting the build-up of capital buffers during economic expansions and by dampening the adverse interaction between fair valuation, leverage and maturity mismatches in times of stress.

R13. Strengthen the accounting recognition of loan loss provisions and correct the adverse dynamics associated with fair value accounting, including improvements to valuations when data or modelling is weak.

Capital

R14. Encourage the build-up of capital buffers and their effective use in bad times.

R15. Support the progressive adoption of Basel II, which will be improved on an ongoing basis.

Liquidity

R16. Promote stronger liquidity buffers at banks. Develop tools for assessing the resilience of banks' liquidity cushions and for constraining any weakening in liquidity maturity profiles, diversity of funding sources, and stress testing practices.

Infrastructure for OTC Derivatives

R17. Strengthen the infrastructure for OTC derivatives markets, encouraging standardization and clearing through a central counterparty.

R18. Make central counterparties subject to transparent and effective oversight.

Compensation Schemes and Risk Management

R19. Compensation frameworks at large financial institutions should be consistent with their long-term goals and with prudent risk-taking.

R20. Financial institutions should stick to the sound practice principles on compensation established by the Financial Stability Forum (FSF); variable components should vary symmetrically with performance.

R21. Prudential supervisors should oversight compensation schemes.

Transparency

R22. Reduce the complexity of accounting standards for financial instruments and facilitate the assessment of financial statements by their users.

R23. Facilitate the global convergence towards a single set of high-quality accounting standards.

Enforcement

R24. Make the effective enforcement of regulation a priority for all financial regulators.

Technical Assistance and Capacity Building in Emerging Market Economies

R25. Commit to assist other national authorities, especially from emerging market economies, in order to enhance their capacity to strengthen their regulatory frameworks.

The Financial Crisis: Policy Challenges for Emerging Markets and Developing Countries

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1 Introduction

The global nature of this crisis has made it clear that while financially integrated markets have benefits, they also have risks – with significant consequences for the real economy.

Globally, there is a need for financial sector reform. For advanced countries, this crisis has had a severe impact on the real economy as well as the financial sector, and has led to extensive government intervention – all of which will shape the future financial landscape and actions. Emerging markets and developing countries face some of the same reality – despite many being innocent bystanders – and must also cope with the added burden of significant short- and medium-term challenges, including in developing their financial systems.

This crisis is still evolving and policy must ensure that regulation and markets continue to operate as complements. In emerging markets and developing countries, policy-makers must also consider the compatibility of proposed reforms with development targets and their level of institutional development.

This paper briefly outlines the causes of the crisis and discusses the general lessons for policy before focusing on the specific challenges facing emerging markets and developing countries.

2 Causes of the crisis

This crisis has several interconnected causes. It is helpful to separate them into four causal factors familiar to recent financial crises (such as in Norway in 1987, Sweden in 1991, and Japan in 1992); and four causal factors that are less familiar and have made this crisis unique in its breadth and depth.

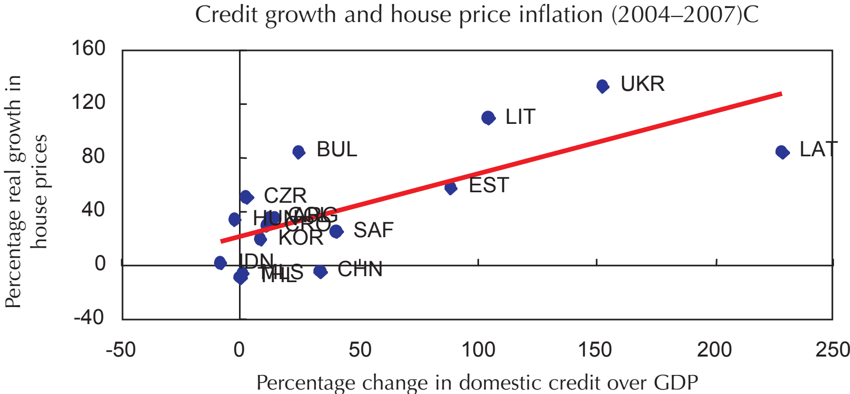
Familiar factors

Rising asset prices

As with the other major crises, house prices rose sharply leading up to this crisis – par-

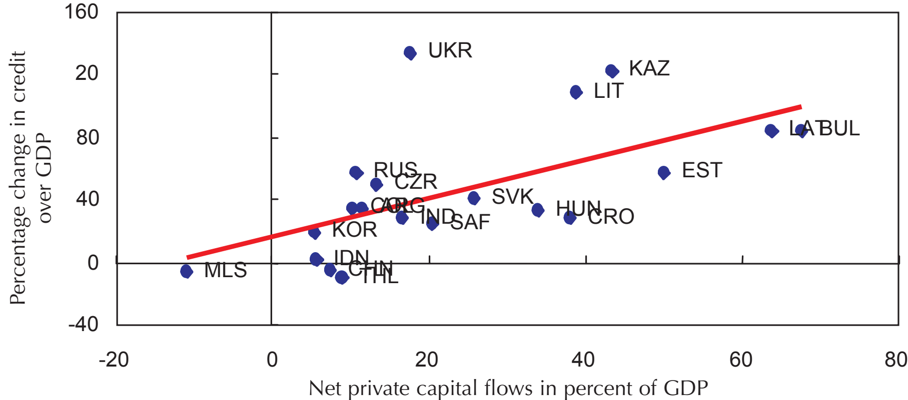
1 The paper draws on joint work with other colleagues at the IMF. The views expressed do not necessarily represent those of the IMF or IMF policy. I would like to thank Zeynep Elif Aksoy for help with the data.

Figure 1 Credit and leverage growth fuelled housing price



Source: OECD and IFS

Figure 2 International financial integration fuelled emerging market's booms



Source: OECD and IFS

ticularly in the US and other advanced countries such as the UK and Iceland. In the US, house prices rose more than 30 percent from 2004, peaking six quarters prior to the beginning of the crisis. In emerging markets and other countries similar price increases were observed, often associated with a rapid growth in credit, resulting in an escalation of household leverage (see Figure 1).

The credit boom

Facilitating these rising asset prices was a boom in credit. In the US, financing to households rose rapidly after 2000 – driven largely by mortgages outstanding, historically low interest rates and financial innovation. Despite low interest rates, debt servicing relative to disposable income reached record highs.

Credit booms often coincide with large cyclical fluctuations in economic activity –

with real output, consumption, and investment rising above trend during the build up phase of a boom and falling below trend in the unwinding phase (Mendoza and Terrones, 2008). For many emerging market economies, these credit booms had a clear relationship with increases in capital inflows (see Figure 2).

Credit booms also drive increases in house prices and exchange rates – as seen in the US and Eastern Europe respectively – both of which eventually reversed and were a catalyst for this crisis. As well, credit booms lead to increased leverage of borrowers and lenders and a decline in lending standards – which is now all too obvious to point out, particularly in the case of subprime mortgages in the US.

In this way, while it is the case that only a minority of credit booms lead to a financial crisis, they do increase the likelihood of one. Further, the longer the boom persists, the greater the probability (Barajas et al., 2009).

Marginal loans and systemic risk

The boom in asset prices and household credit and the marked decline in lending standards were associated with the creation of marginal assets whose viability relied on continually favourable economic conditions.

As with the subprime market in the US, several eastern European countries had their own form of vulnerability to a downturn. Similar to the 1997/8 South East Asian crisis, large fractions of eastern European domestic credit – including to households – were denominated in foreign currency (this time, euros, Swiss francs, and yen). While lower interest rates relative to local currency made these loans more affordable, borrowers' ability to service these loans and their creditworthiness depended on continued exchange rate stability.

Favourable conditions also spurred large-scale derivative markets such as collateralised debt obligations, with pay-offs that depended in complex ways on underlying asset prices. The pricing of these instruments was often dependent on increasing house prices that in turn would facilitate the refinancing of underlying mortgages.

Regulation and supervision

Throughout this period, the regulatory approach to – and prudential oversight of – financial innovation was simply not up to speed. As in the past – but this time in the advanced countries – a significant part of the financial sector operated outside of the banking regulations. This 'shadow banking system', while providing important avenues for intermediation, grew without sufficient oversight, creating enormous systemic risks.

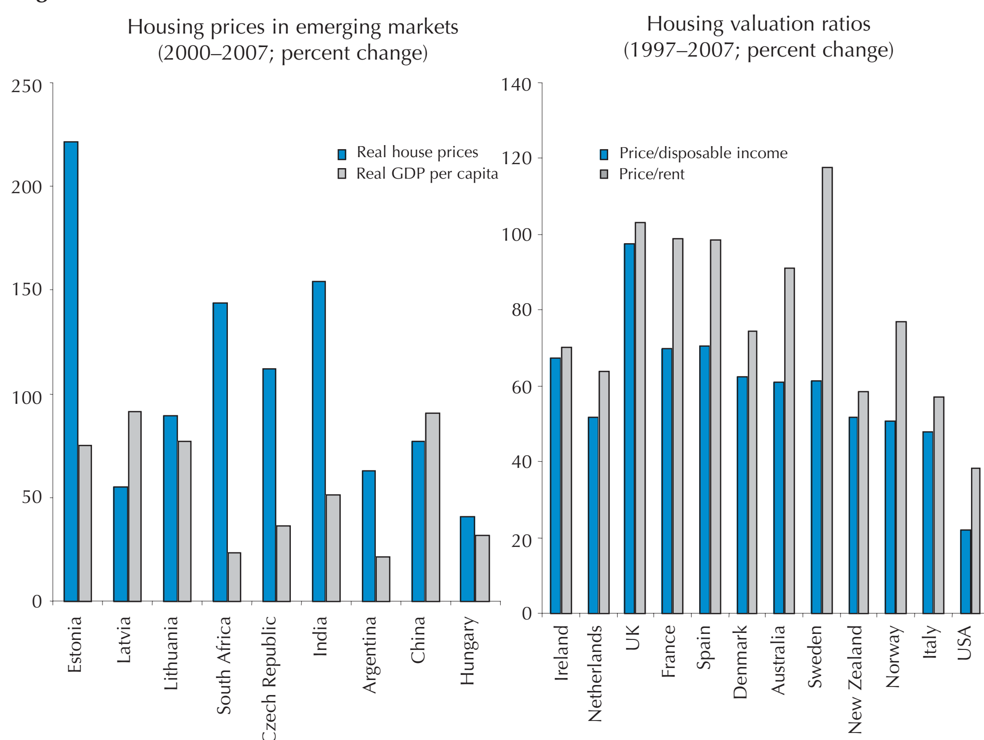
As in previous crises, the focus of authorities remained primarily on the liquidity and insolvency of individual institutions rather than on the resilience of the whole financial system. A key challenge for policy-makers is to take what we know now and design a system that would have made it possible to know all this before the crisis.

Less familiar factors

Households

In contrast to previous crises, the current crisis largely originates from over-extended households – particularly as a result of subprime mortgage loans. Household defaults

Figure 3



Source: OECD, IFS

complicate efforts to mitigate the crisis. Unlike in the corporate sector, there are limited established best practices for how to deal with large scale defaults, moral hazard problems and equity and distribution issues involving households.

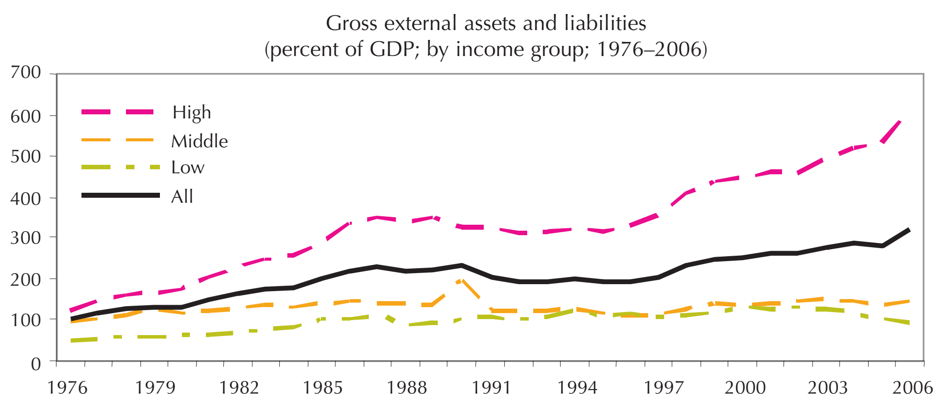
In the US, a vicious cycle of rising foreclosures, falling home values and disappearing securitisation markets quickly developed. The reduced ability to refinance mortgages left vulnerable borrowers with higher monthly payments, while the increase in default rates and foreclosures in turn placed a further downward pressure on house prices.

For the first time since the Depression, US house prices were declining nationally and many households faced substantial negative equity and incentives to 'walk away' from their mortgages.

In several emerging markets, household credit also expanded rapidly in the run up to the crisis, leading to sharp increases in leverage and vulnerabilities (see Figure 3). As real estate prices fell, the quality of loan portfolios declined putting financial intermediaries at risk – especially in markets where values grew rapidly.

The direct involvement of so many homeowners makes this crisis far more complicated than its predecessors. It is unclear how to deal with the added complexity of sharply lower house prices, but what is clear is that it will make the recovery period much longer.

Figure 4 International financial integration increased sharply in last few years



Source: Lane and Milesi-Ferretti (2006).

The increased interconnectedness of financial markets

Financial integration has increased dramatically over the past decade bringing greater international risk sharing, competition and efficiency – but also a higher risk of transmitting financial shocks across borders.

Financial integration is not in itself a major cause of the crisis, but it has made this crisis global. In any event, since the origins of the crisis lie in the US, there would have been widespread repercussions simply because of the size of the US economy: US financial assets represent about 31% of global financial assets and the US dollar's share of reserve currency assets is about 62%. But the greater interconnectedness of financial markets has significantly increased the global severity of this crisis (see Figure 4).

A major reason for the rapid spread of this crisis is that many mortgage-backed securities and other US-originated instruments were held widely in other advanced economies and by governments – through foreign exchange reserves and Sovereign Wealth Funds – in several emerging markets. From these direct exposures and associated funding problems, spillovers quickly arose. Emerging markets – especially those that had relied heavily on external financing, and (paradoxically) those with more liquid markets – were affected through pressures on their capital account and bank funding.

Opaque and complex financial instruments

Securitisation has also burgeoned in the last decade, with more than 70% of non-conforming mortgages in the US being securitised by 2007, up from less than 35% in 2000 (Ashcraft and Schuermann, 2008).

This expansion of the originate-and-distribute model exacerbated agency problems; risk assignments became murkier and incentives for due diligence worsened, leading to insufficient monitoring of loan originators and an emphasis on boosting volumes to generate fees (Gorton, 2008).

The resulting opaqueness of balance sheets made it difficult to separate healthy and unhealthy institutions. This uncertainty contributed to the freezing of the inter-

bank markets and forced further sales of securities to raise funds, turning a liquidity crisis into a solvency crisis.

High leverage of financial institutions

Historically high leverage has limited the system's ability to absorb even small shocks and led to the rapid decline in confidence and increase in counterparty risk early on in the crisis (Brunnermeier, 2009).

Historically high loan-to-income values in the US left households highly exposed and forced some high loan-to-value mortgage holders into negative equity. In advanced countries' financial sectors, high leverage meant that initial liquidity worries quickly deteriorated into serious solvency concerns. While initial recapitalisations were relatively large and rapid (often involving Sovereign Wealth Funds), these were limited to only a few banks and often fell short of losses.

This also meant that firms in emerging markets faced much higher borrowing costs, few opportunities to issue equity, and few alternative sources of financing. While official financing filled some of the gaps, emerging markets had to make rapid adjustments, with a severe impact on their real economies.

3 Policy implications: national and global

With the causes outlined, we turn to the short-run agenda and the direct lessons from this crisis. The large government interventions raise many complex issues regarding exit. While these interventions have generally had the desired effect of restoring stability, by their nature they distort the sector and this should be of acute concern to policy-makers in the short run. In terms of structural reforms, a number of areas are being investigated. First, this crisis has exposed weaknesses in national financial architectures – particularly with the treatment of systemically important financial institutions, the assessment of risks, and the framework for resolving financial distress. But fiscal and monetary policies have also come into question. The crisis has also highlighted how the international financial architecture has failed to keep up with the rapid pace of integration.

While interventions were needed, governments need to plan for an exit

The scale of the policies implemented to counter the global recession has been substantial – amounting to double digit percentages of GDP for many advanced countries. On top of more accommodating monetary and fiscal measures, these policies include liquidity provision, support for short-term wholesale funding markets, guarantees of liabilities, purchasing of illiquid assets and capital injections to banks.

It is generally agreed that while serious risks remain and these may provide a justification for continued policy intervention, the distortions resulting from these interventions should be removed as quickly as possible as economic and financial conditions allow.

The perverse long-term consequences of state-owned banks are well-documented and, while most countries are likely to avoid the worst effects, distortions are likely. Policy measures aimed at encouraging banks to lend, for example, have often had a

bias toward local lending, putting international operations at a disadvantage.

Policy interventions have also affected international capital flows and financial intermediation. When a country such as Ireland issues guarantees on deposits and other liabilities, this has quickly had beggar-thy-neighbour effects, forcing other countries to adopt similar measures. Many emerging markets, unable to match such guarantees, have suffered from capital outflows as depositors and other creditors seek the safer havens.

If the unwinding of interventions is not coordinated internationally, it can aggravate still weak confidence, create new distortions, and can potentially be anti-competitive. Government unwinding therefore needs to be coordinated as well.

In the medium and longer term, the main policy lesson to emerge from the crisis is that prevention is better than cure – and improved regulation should act as a first line of defence so as to avoid these interventions. This will require better fiscal policy, monetary policy, national regulation and supervision and an improved international financial architecture.

Fiscal policy

Separate from direct interventions such as bank recapitalisation, this crisis highlights two important lessons for fiscal policy. First is that budget deficits were not reduced sufficiently during boom years when revenues were high – a policy which in some countries limits the fiscal space available to fight the crisis.

Second is the structure of taxation. In most countries, the tax system is biased toward debt financing through deductibility of interest payments. This skew in favour of higher leverage increased the vulnerability of the private sector to shocks and should be reduced.

Monetary policy

The role of the asset prices in the crisis re-opened the debate over the question 'Should monetary policy be used to dampen asset price booms?'.

First it is important to note that not all booms are alike. What matters is not so much the asset price boom in itself, but who holds the assets and the risk, how the boom is financed, and how an eventual bust might affect financial institutions.

It is clear that the mandate of monetary policy should include macro-financial stability, not just price stability. In this sense, this crisis challenges the 'Greenspan doctrine' that bubbles are hard to predict and monetary policy is too blunt an instrument to deal with them.

In future, monetary policy should take into account bubbles, and in particular the combination of asset bubbles with leverage. Asset price booms involving financial intermediaries and leveraged financing clearly require a policy response, since they imply risks for the supply of credit to the wider economy. Other booms, for example the dotcom bubble, can be left to run their course. It is the connection of bubbles with leverage and the potential fallout from the bursting of the bubble that should concern policy-makers.

Financial architecture

The cost of combating the global recession – the interest rate changes, enormous fiscal deficits and government interventions in the financial sector make a clear case for regulatory measures offering the first line of defence against systemic bank distress. The failure of this first line of defence has been a key contributor to the financial crisis. In many ways, private market discipline failed, while public surveillance failed to fully expose the extent of vulnerabilities and to act decisively.

At the same time, any regulatory redesign should first take account of, and seek to avoid, the possible adverse impacts of regulation on innovation and efficiency. Regulation can be intrusive and inefficient. It tends to lag behind financial innovation and is vulnerable to industry capture and political influence – particularly in emerging markets and developing countries.

Further, it is crucial to recognise that early warnings are less about 'calling' crises – a near impossible task – and more about identifying risks and underlying vulnerabilities that may trigger loss in confidence and propagate a crisis.

Furthermore, as the interconnected causes of this crisis make clear, a regulatory framework needs to recognise the complexities and be compatible with the incentives of private individuals in a way that complements market discipline.

For example, regulation should look to provide incentives for the private sector to take into account the risk their own activities may cause to the system as a whole – particularly for rating agencies and for subsidiaries of multinational financial institutions operating in emerging markets and developing countries. Resolution frameworks, meanwhile, need to allow for the failure of individual institutions to ensure that market discipline is effective in preventing this outcome.

Beyond incentives, the sheer scale of this crisis makes the case for a wider informational and possibly regulatory perimeter whose remit needs to stretch across borders and industries. Regulators must be able to proactively monitor all financial activities – not simply those within the financial sector – that pose systemic risks. This requires greater monitoring of various types of institutions, not just banks, as to their capital, liquidity and risk management. All with an increased focus on their potential to create systemic risk.

Further, regulatory approaches need to dampen the procyclical nature of financial markets and ensure better information disclosure and corporate governance to facilitate improved market discipline.

To achieve all this, it is perhaps obvious – but nevertheless necessary – to point out that authorities will require more resources and more power.

International financial architecture

As recognised by the various G20 Summits, the real economic costs of this crisis highlight the need for cooperation and action on an international scale as well. The organisation of regulation and supervision needs greater coordination across countries in both the design of regulation and the monitoring of systemic risk. The collapses of Lehman Brothers and the Icelandic banks have shown that one country, acting on its own, cannot deal with large, complex and globally active financial institutions.

This includes a need for better risks assessments and better ways to deal with finan-

cial distress. The overarching challenge is to convince country authorities to take actions to deal with vulnerabilities, particularly during good times.

First, better risk assessment. International coordination is needed for identifying and reducing vulnerabilities and risks. Only by working across borders – supported by significant information sharing – can one hope to 'connect the dots' between financial institutions, markets, and countries. To enhance their awareness of risks, policy-makers need to balance voluntary assessments with mandatory compliance. Multilateral and bilateral assessments could be used more systematically to examine macro-prudential risks and the progress on multilaterally agreed policies.

Regardless how the framework adapts, more analysis is needed on the linkages between financial sector and macroeconomic performance to make risk assessment more effective.

Second, obtaining more accurate and timely information. Better information requires enhancing the accessibility of existing data, developing new sources, and promoting transparency and disclosure more generally.

In addition, data needs to cover non-bank financial institutions, such as insurance companies, and allow a better understanding of how credit risk is transferred. Better information is needed on the financial operations of large non-financial corporations that have significant links in national economies and potentially across borders.

Third, better cross-border crisis management arrangements. International coordination is needed for resolving financial distress. While there is uncertainty over the role of global imbalances, what is certain is that gross capital flows between countries can cause severe problems when there is no robust regulatory regime to manage these in times of crisis. A universal approach is needed.

Such a 'fail proof' system requires clear and binding rules on burden sharing for weak or failed cross-border financial institutions. The first best solution – a global financial regulator – is unlikely to materialise soon. But a new charter for internationally active banks, greater harmonisation of rules and practices, and enhanced coordination are all possibilities, especially for closely integrated financial systems.

Fourth, better liquidity provision to both financial institutions and countries. Policy-makers must aim to prevent spillovers becoming solvency issues by expanding the role of lenders of last resort – particularly for cross-border banks.

Many international factors act as an obstacle but the expansion of Special Drawing Rights, agreed in principle in the G20 meeting in April, represents a positive step.

Fifth, governance changes are needed. To make this all possible, changes to the international financial governance and representations underway in both rule-making and decision-making bodies – such as the G20 and IMF – will help in a number of general areas for improvement.

4 Specific challenges for emerging markets and developing countries

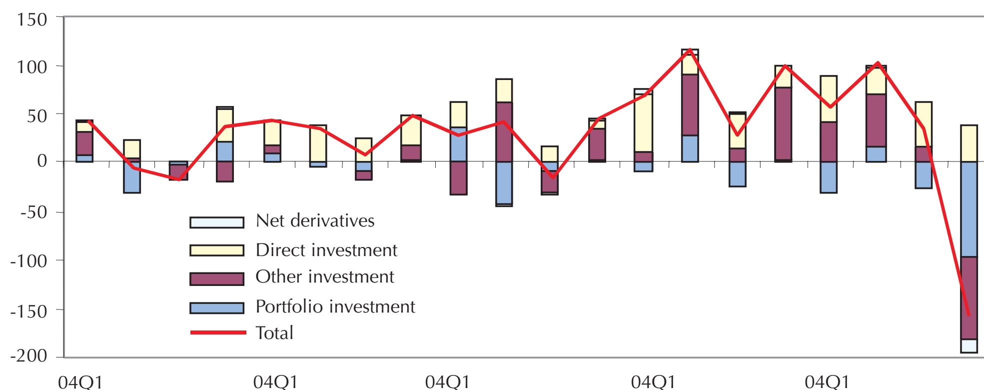
We now turn to how this crisis has affected emerging markets and developing countries. While many countries are better positioned than in the past to deal with these challenges, they are still faced with a number of short- and medium-term challenges for financial sector development.

I will begin by focusing on the short term and then consider longer-term reform and development challenges.

Short-term policy challenges

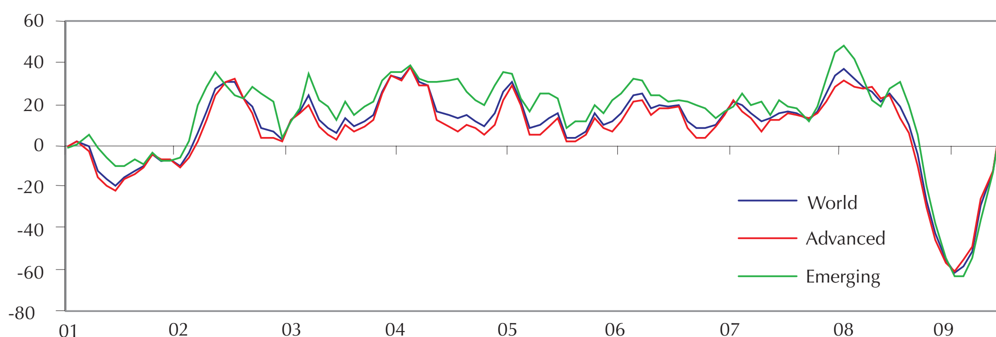
Many emerging markets and developing countries experienced two shocks early in the crisis. First, a 'sudden stop' of capital inflows driven by global deleveraging (which led to the unwinding of positions). Second, a collapse in export demand as a result of the global downturn (see Figures 5 and 6).

Figure 5 Net flows to emerging economies (billions of US dollars)



Source: BPTS, Datastream and IMF staff estimates.

Figure 6 Merchandise exports (percent change; 3m; SAAR)



Source: IFS, Global Data Source and IMF.

In these circumstances, greater official financing became a crucial ingredient. With considerably lower inflows and sometimes even outflows of private capital, countries need official external financing to expand their 'policy space'. Funds made available to emerging markets and developing countries allowed them to pursue such supportive macroeconomic policies – including policies to protect the poor and other vulnerable groups.

For their short-term external financing needs, some countries applied for swap facilities from major advanced economy central banks. International financial institutions such as the IMF – through its new and existing instruments – provided another source, both through direct balance-of-payments support and as a contingency through credit lines.

Further, expansionary fiscal policy can be deployed to support economic activity. Depending on fiscal constraints, many countries not only allow automatic stabilisers to operate, but can also increase discretionary spending.

Conventional fiscal multipliers may well be relatively small in emerging markets and developing countries, and the impact of fiscal stimulus on activity is more uncertain. This calls for less conventional measures such as providing credit guarantees. For countries in severe crisis, fiscal support is best geared towards maintaining financial sector confidence and solvency.

Even more so than with advanced countries, however, it is critical that governments must have a credible exit strategy. Fiscal expansion will often require a credible exit strategy that places government finances on a long-term sustainable footing. Not only will this help contain the costs of financing the short-term stimulus, but it will also strengthen investor confidence and help facilitate the resumption of capital inflows in the recovery phase.

The basic path of monetary policy has been towards easing – except where the loss of confidence in the currency precludes it.

Global deflationary pressures and widening interest differentials compared to advanced countries allow much room for lower interest rates, and where interest rates are reaching zero, quantitative measures can also be required.

A key question is how much to depreciate – if at all – and countries needed to weigh up their options. Those with floating exchange rates considered the impact of a depreciation on their competitiveness compared with its impact on their balance of payments. Countries with pegged exchange rates faced the same question, but must also consider their long-term exchange rate strategy – which may require use of reserves to maintain the peg.

In some cases, foreign exchange reserves were used to substitute for foreign credit lines to banks, enabling them to maintain domestic lending operations. For those with pegged exchange rates, there was scope to be more flexible, while still ensuring the maintenance of a credible anchor for monetary policy.

Governments had to prepare for financial turmoil and insolvencies.

Many countries needed to provide an adequate framework to facilitate rapid debt workouts, particularly as debt restructuring reduces the fallout from exchange rate

depreciation on unhedged balance sheets, thereby giving greater flexibility to monetary policy. Limiting risks of bank runs and adopting mechanisms to mitigate the risk of systemic solvency problems has also been essential.

Medium-term policy challenges

As well as policies to mitigate the short-term consequences, countries must also consider longer-term measures to prevent future crises and continue their development strategies.

The integration of emerging markets and developing countries into the global financial system has happened very rapidly: many now developed countries took more than 50 years after World War II to completely open up and even today do not have the same degree of foreign bank presence and offshore equity trading as some emerging markets.

This rapid and comprehensive financial integration should ideally be met very quickly by a broad range of policy adjustments. Developing countries, however, often lack the financial and human resources to respond quickly on a broad front, and so unorthodox policy approaches may have a better chance of succeeding.

As many developed countries have shown historically, government has a limited yet crucial role in ensuring financial development, especially during the intermediate and most vulnerable stage of internationalisation. A crucial challenge is that government credibly and legitimately enforces the necessary policies – a challenge that continues to stifle development strategies.

With this in mind, it is possible to outline some medium-term challenges for emerging markets and developing countries.

Countries need to adjust to large and volatile international financial integration.

Emerging markets have experienced an extensive internationalisation of their financial sector in recent years: gross capital flows have surged and cross-border entry has become more common, with foreign banks holding market shares of more than 50% in many emerging markets.

Many issues regarding cross-border financial services provision do not have clearly defined best practises, however, and even when these do exist, implementation has been complex.

This financial crisis has provided a stark example of the lack of clarity over the responsibility and liability for deposits of foreign banks' subsidiaries and branches. This uncertainty has led to the common practice of establishing subsidiaries instead of branches. The creation of subsidiaries generates costs, however, as international banks tie up capital inefficiently.

The large foreign presence in banking and capital markets – both foreigners operating in the local market cross-border financial services provision, and local institutions using off-shore markets – make all these issues even more important for emerging markets and developing countries, and their need to adjust more acute.

Countries must consider the broader financial sector development strategy and the role of government.

Financial integration can have negative as well as positive impacts. The large presence of foreign banks, for example, can hinder local information generation and availability, which in turn can reduce the quality of oversight. It can also mean that local supervisors have less access to information and know less about the state of the local economy.

Market discipline may work poorly as well. When the local operation represents only a small part of the foreign financial institution's overall balance sheet and income, local market discipline may be more limited.

The ideal policy and regulatory responses are not clear. Some countries have proposed and implemented corporate governance requirements for subsidiaries to avoid problems in these firms' home markets affecting local markets. Others have suggested that subsidiaries of foreign banks be listed in the local markets to assure some price discovery. While these and other proposals can have benefits, they can also generate costs that are passed on to consumers.

The integration of capital markets can also have adverse developmental effects. While large foreign ownership in the local market and significant trading and capital raising at off-shore centres such as New York and London has brought many benefits, it can also make development strategies more difficult.

Some nascent capital markets have suffered from internationalisation through declines in local liquidity. In Latin America, for example, the pull of cross-listing and trading from New York has been very strong. This can affect local capital market development in a narrow sense, since declines in local liquidity make it more difficult for the remaining smaller firms to trade and raise new capital; and in a broader sense, since there are fewer local financial services such as investment banking, accounting services and trading systems.

As with banking, solutions to the development of capital markets are also complex. This is partly because one has to take into account size, location and other aspects of the market. Smaller markets with close geographic or time-zone proximity to large markets may be better off fully integrating, for example, whereas larger markets further removed from financial centres may be able to pursue a more differentiated strategy.

Although the reduced degree of sovereignty is part of globalisation and has many benefits – not least as a disciplining factor for poor governance – adjustments in both the banking sector and capital markets necessarily include a role for government. In many now developed economies the state has historically played a large role in financial intermediation.

As an example of the need for intervention, countries with a large foreign banking presence may find that multinational financial institutions will not internalise the effects they have on the local financial markets and economy compared to a smaller domestic institution.

It should be noted, however, that intervention can be difficult to implement in a transparent way given the weakness of domestic institutions.

The application and adaptation of international standards.

International standards have a natural bias towards the circumstances of currently developed countries, including a more liberal institutional environment, and those countries' regulatory structures.

Further, standards are often too sophisticated and can assume too much in terms of the supporting institutional infrastructure. In time, developing countries will overcome these problems but in the meantime, inefficiencies from using the wrong 'standards' and new risks may arise.

Better prioritisation of the standards more relevant for the circumstances of developing countries is needed. Probably the elements common to many of the standards – regulatory governance, governance, transparency – would be key to adopt and implement first. Little formal analysis exists, however, to guide policy makers.

A broader issue is how to adapt standards over time to countries' circumstances. To date, developing countries have had a small stake in the global standard setting bodies. It is not just the relevance of standards to developing countries' circumstances, but also their legitimacy that matters.

In all countries, governments and politicians struggle to make the case for adopting better international practices and the large gap between local and international rules makes this even more difficult for emerging markets and developing countries. It would therefore be helpful to have some over-representation in standard setting bodies to tilt the bargaining positions more towards emerging markets and developing countries.

The process of standards setting, the adaptation of standards to different circumstances, compliance, the importance of regional and global trade agreements and the legitimacy of the global financial system are deep and complex issues on which further analysis is required to assure that the needs of all countries are appropriately met (see Claessens and Underhill, 2005).

Throughout, it is important to point out that a key component of financial sector reform is legitimacy and credibility, but in these countries this is made more difficult by a number of factors.

First, some of these countries have a large institutional hurdle to overcome to reach international standards. Second are the constraints of existing policies, such as pegged exchange rates, and circumstances, such as large debts. Finally, there are political economy constraints. These run deeper than simple lack of capacity and low pay of supervisors, they relate to the lack of political will, lack of accountability, and plain corruption. Overlooking these issues is dangerous. Granting too much power to banking supervisors in an environment with limited accountability, for example, risks only misuse.

The answer may be two fold.

I now sketch out a possible framework for addressing these challenges. First, emerging markets and developing countries could give more reliance to market-based approaches in regulation and supervision, especially in developing countries. Second, they can impose some constraints and adopt a less than fully liberalised environment.

First, we should not underestimate the importance of private approaches to regulation and supervision. The general legal literature stresses that private enforcement is most likely to be the most important and the most effective mechanism – particularly in countries with severe weaknesses in public law and public enforcement (Berglof and Claessens, 2006). In any case, improving public enforcement will take time. Balancing public enforcement with reliance on private enforcement mechanisms will be more efficient.

Second, at the same time, a fully liberalised approach may not be the best. Claessens and Perotti (2007) argue that financial sector development will sometimes require quantity constraints on private sector actions. This may mean limiting, at least initially, the type of activities financial institutions can engage in to restrain risk. For example, banks may not be allowed to invest in real estate or undertake sophisticated financial transactions.

This can mean limiting the degree of competition in some segments, both across institutions and markets (or geographically). This can insulate nascent financial markets from the potential for opportunistic abuse by insiders. This 'quantity regulation' offers greater resistance to manipulation than more sophisticated regulatory approaches, particularly in institutional environments where quality of information is poor and political economy factors are inhibiting.

Neither private sector monitoring nor quantity restraint approaches, however, are fully compatible with international standards. Relying more on private sector monitoring could mean that countries do not comply fully with some international standards. Similarly, the 'quantity regulation' approach could mean the country maintains some barriers on capital account movements or restricts competition geographically for example.

While this may be an attractive approach, countries considering this route should therefore be wary of the negative signals this may send to the international community and the subsequent impact on development.

5 Conclusions

The recent global financial crisis has exposed weaknesses in economic policy and financial architectures on a national and international scale. As outlined here, the policy and reform agenda is large and much remains to be done.

The main lesson to emerge is that prevention is better than cure. While interventions have been effective at maintaining short term stability, policy-makers must remain vigilant of the need to balance regulation with the role of self-governing markets and to establish a sustainable and effective financial architecture. Globally, there is a need for a wider regulatory perimeter and greater cooperation.

Emerging markets and developing countries still face specific challenges in developing their own financial sectors and a credible and legitimate regulatory environment, and need more voice in international financial reforms, policy decisions and actions to help overcome these challenges.

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Global Financial Architecture: Past and Present Arguments, Advice, Action

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Introduction

As our hopes for substantial reform now rest on the G20 it is sobering to remember that a G20 plus (G22, 1998) was set up after the East Asian crisis also. A large number of reform proposals were floated then for the Global Financial Architecture (GFA) but only one was implemented-a dilution of the collective action clause in international debt contracts so as to allow restructuring of debt even if a minority of creditors were unwilling.

In contrast, despite the damage they had suffered in the crisis, Asian countries were willing reformers. They wanted to do whatever was necessary to participate fully in globalization, which had given them real gains. But while willing to adopt the best standards in transparency and in legal and regulatory reform, they wanted more transparency for others also in the global financial system. In view of the role of lax developed country regulation in the current crisis, the paragraph below is interesting:

> Recipient countries, however, would like similar requirements imposed on hedge funds, and stricter surveillance not only for emerging markets, but also for developed countries and offshore financial centers. Large investors should make their movements public. Korean President Kim Dae-jung (2000) proposed that a hedge fund monitoring channel be established at an appropriate multilateral institution, since ready exchange of information on the investment activities of highly leveraged financial institutions (including investment banks) would contribute to the stability of international financial markets. Current scrutiny and surveillance are not adequate because regulatory structures have lagged behind the increasing sophistication of financial instruments. Regulators have to find innovative ways to make institutions and markets reveal more information (Goyal 2002, pp. 187)

Implementing Kim Dae-jung's request would have saved the world, and financial entities, much damage. Many of the latter would still be around. Tirole (2002) remarked that if the many potential crises solutions, such as bail-in, standstill, that impose minimal costs, have never been applied it must be for deeper political reasons. These have to be countered for reform to be possible.

In the absence of meaningful reform in the GFA, and given dangers from volatile and poorly regulated capital flows, Asian countries were forced to go in for self-insurance through reserve accumulation, and for mutual aid through central bank swap

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arrangements and reserve pooling such as the Chang Mai initiative. These policies have helped them survive the current crisis without major damage to their currencies or financial sectors. So global imbalances are a direct result of the failure of reform.

Causes of the current crisis

But there is a view that blames the crisis on these global imbalances, despite clear evidence of the overwhelming role played by lax regulation and excessive leverage.

Global imbalances

Portes (2009) writes that huge cross-border financial flows due to major saving-investment imbalances put stresses on financial intermediation that even sophisticated markets could not cope with. Caballero and Krishnamurthy (2009) argue that the large demand for safe US securities-treasuries-to park reserves in, forced US financial institutions to leverage and increase their holdings of risky assets. In effect they held the toxic waste generated to satisfy world demand for riskless assets. The argument is incomplete however because there is no regulatory threshold on the leverage ratio. Without that it is not possible to discriminate between the hypothesis that an unregulated bubble developed, and that of financial stretch to absorb riskless assets. Moreover, the reason central banks buy dollar securities is that US financial markets are so deep and liquid that their purchases do not disturb markets. There were no signs of stretch in US government securities markets themselves[1]. They absorbed inflows many magnitudes higher than reserves as funds returned to the US, after the Lehman Brothers crash.

Numbers (some of them reported in Goyal 2009), help to put these arguments in perspective. Notional amounts outstanding in derivatives grew from $100 trillion in 2002 to $516 in April 2007 (BIS, 2008). Since 2000 the market for mortgage-backed securities exceeded that for US treasury notes and bonds. The 33 percent compound annual rate of growth in derivatives occurred just over the period regulations were relaxed for investment banks. In 2004 the US securities regulator (SEC), relaxed the net capital rule or ceiling of twelve times capital on borrowing for investment banks. They were allowed to use their own models to determine risk. As a result leverage shot up; when Lehman Brothers was allowed to fail its leverage was 30:1 compared to 15:1 for a commercial bank.

Compared to this growth in derivatives, both the net ownership of US assets by foreigners and reserves were trivial. The former grew by about $1.5 trillion in the period. Asian reserves were less than $3 trillion, while the US current account deficit grew from $200 to $700 billion. These numbers should not disturb a well-regulated, deep and liquid financial system.

1 Imbalances were widely expected to create a currency crisis-but the crisis originated in US subprime loans. So the need to prove that the cause of the crisis was actually as predicted may be a motivator of this research.

Asian oversaving

Among other causes of the crisis, US monetary accommodation that kept short rates very low for extended periods is said to have encouraged excessive risk-taking[2]. But the US monetary establishment again seeks to deflect responsibility to Asia. Bernanke (2005) made a famous assertion that Asian over-saving kept long rates low, not US monetary policy. But Taylor (2009) points out that this cannot be correct. Global savings were actually at a historical low in this period, so high savings could not be responsible for low global interest rates. US dissaving overcompensated for Asian saving. The volatility of capital flows indicates they were investment not savings driven. Fall in US household's saving was due to tax incentives and wealth effects from the real estate bubble the regulatory regime encouraged.

US broad money supply growth averaged about $15 trillion with an annual growth rate of about 6 percent, nowhere near the growth in derivatives. Private foreign inflows to emerging markets fell in the period following the East Asian crisis, but more than doubled to an annual average of about $ 200 billion over 2003-06. They peaked at 617.5 billion in 2007[3]. US policy interest rates had been held at 1 percent over June 2003 to June 2004, and were raised after that. So if low US interest rates were driving the flows they should have been highest in 2003-04 not in 2007, when the federal fund rate peaked at 5.25 percent. Modern financial systems have the ability to endogenously create liquidity in response to profit opportunities.

Even if the reserve imbalances were the tail wagging the dog, they were required as self-insurance in response to the excess leverage and resulting capital inflow volatility. It follows the ultimate causal factor was the excess leverage. The tail is weak in real terms also. The 2009 World Development Report (World Bank) shows Asian relative per capita incomes. Compared to US GDP per capita of USD 46,850, Chinese was 2360 and Indian 950. Growth rates may be high but they are from a very low base. It is unseemly for an elephant to seek to pass responsibility to an ant.

Contrasting positions: the Chimerica Debate

Since the US and China are the countries with the largest imbalances, there is a long running debate between them. Each emphasizes different factors as responsible for imbalances. The US points to the Chinese exchange rate peg to the dollar, while China points to large US fiscal deficits, and more recently to the dollar's position as the international reserve currency.

Exchange rates

The US is keen to force more flexibility in the Chinese exchange rate regime. Appreciation of the Chinese currency is seen as essential for correction of current

2 Monetary policy is a blunt instrument to act against an asset bubble, and the direct instrument of prudential regulation is available. Taylor (2009) argues that US policy rates were cut in 2003 more than required by the prevailing inflation and output slack, in order to compensate for the bursting tech bubble. But this stoked a real estate bubble. Handling bubbles through monetary policy alone can be dangerous.

3 Private Capital Flows include direct investment, portfolio investment, and other long- and short-term investment flows. The figures are calculated from data available at *http://www.imf.org/external/pubs/ft/weo/2009/01/pdf/tables.pdf*

account imbalances. And if imbalances are responsible for the collapse of the global financial system it follows they must be corrected. But many European countries did not run a capital account deficit (Mohan, 2009). Since the Chinese currency was fixed to the dollar, as the dollar depreciated against the Euro, so did the Renminbi. So if exchange rates drive the current account, imbalances with China should have been largest for Europe.

Extreme views would force an appreciation of Asian exchange rates relative to the dollar large enough to compensate for lower Asian wages (Woolfolk 2004). But there are limits to the appreciation of exchange rates in populous countries. Appreciation requires a rise in real wages, which cannot occur unless surplus labour is absorbed or average productivity rises. Without that wages and prices could be bid down to convert a nominal depreciation into a real depreciation. It follows exchange rates cannot bear the entire burden of adjustment. Part of the adjustment has to come from rising domestic absorption in Asia and reducing fiscal deficits and consumer demand in the US.

Even so, Asia's keenness to modernize and develop deeper financial markets is pushing it towards more flexible exchange rate regimes. And the severe blow to export demand will push these countries to turn more to stimulating domestic demand. As the Indian case has shown, some flexibility of exchange rates develops markets, and is feasible even without full currency convertibility. But a full float has to await fully developed markets and reforms in the GFA to mitigate excessive volatility of capital flows. Even a full float, however, will not produce sufficient real appreciation to compensate for lower Asian wages.

Therefore adjustment has to be gradual. During this period an attack on the dollar is not certain but it is possible. A unique Nash equilibrium requires a collective action failure where all Asian countries sell their reserves. This is unlikely. Goyal (2005) shows there are multiple Nash equilibria with attack and hold both as possible outcomes. A coordination failure could result in an attack on the dollar. Since the probability of an attack rises under faster dollar depreciation, the current strengthening of the dollar makes an attack less likely. The US rapid policy action and deep tax base are all strengthening the dollar compared to the Euro, once regarded as a possible rival, and there is no other immediate rival for the dollar. European countries are themselves in a bad shape. While the crisis requires an immediate fiscal-monetary stimulus, in which the US has led the way, focusing on imbalances would demand a long-term contraction in countries with large deficits.

The international reserve currency

The Iraq War has contributed to rising US fiscal deficits. Since the USD is the reserve currency, whenever the US has been subject to macroeconomic shocks, the world has been forced to share the costs of adjustment. Thus large US deficits during the Vietnam War led to dollars held abroad exceeding gold stocks. Fear of an attack on the dollar led to Nixon's unilateral abrogation of gold standard. The world's willingness to hold dollars has encouraged the US to live beyond its means, stoking future crises.

A solution would be to develop an international reserve currency. But China's raising of this issue is regarded as threatening. If investment in US securities indeed generates toxic wastes, why are they so unwilling to give it up? Their revealed preference

implies a net gain for the US from the dollar as the reserve currency[4].

The US needs capital now, but in the long run, encouraging genuine reform of the financial system and the development of an international reserve currency should be in its enlightened self-interest. The first would reduce the need for reserve accumulation for self-insurance, the second ensure reserves are not all held in dollar securities and the US can move to a current account surplus since it no longer has to supply the world with dollars.

Such a change could only occur in the very long term after supporting market and payment institutions are developed. For example, for Central Banks to be willing to hold the SDR, markets with liquidity rivaling the dollar must be created in SDR denominated assets, and the IMF must be empowered to maintain liquidity in SDRs, without waiting for permission from 85 percent of its members, thus becoming a true International Lender of Last Resort (ILOLR). But given that markets are currently locked into the dollar, which has a first mover advantage, it will require sustained effort and be a long time before such rival depth is created. But a beginning can be made by holding some reserves in SDRs, which are safer since they are based on a weighted average of currencies.

China has begun moving from long-term to short-term US securities to safeguard the value of its holdings against future US inflation raising long rates. It has also begun bilateral deals with its trading partners to use the Renminbi rather than the dollar. Therefore the US should also initiate proactive adjustment to reduce its double deficit vulnerabilities and reassure its investors, while maintaining dialogue to ensure adjustment remains gradual.

Motivated misperceptions

It is unclear whether these contrasting positions are due to *cognitive dissonance* or to a *bargaining* stance. *Blaming* the other can arise from either. It is easier to force the one whose guilt is established to take remedial action, helping a bargaining position. But since people tend to see their own losses and the gains others have made, they do not easily accept blame. These psychological traps have vitiated any progress on resolving global imbalances. China and the US have long indulged in a mutual blame game. The US debate focused on competition for its industry more than on benefits from cheap imports; China neglected the demand US deficits created for its exports (Goyal 2005).

Reasoned analysis can help mitigate cognitive dissonance; but it has a chance only if bargaining power is even. The absence of the latter created political blocks so serious reforms in the GFA were not undertaken after the Asian crisis. Since rational creditors would have gained from changes in the GFA that could have reduced the probability of a crisis they should have been willing to adopt them. But cognitive dissonance made them more concerned about the loss itself than the reduction in its probability, so that they did not minimize the expected value of crises losses. Moreover, the higher bargaining clout of investing nations meant policy makers followed cred-

4 One of Hillary Clinton's first acts as a newly appointed secretary of state was to visit to China in 2009. There was no mention of the Chinese exchange rate, but a request for the Chinese to continue to hold 'secure' US treasuries.

itors' preferences and pushed to protect them in the event of a crisis rather than to reducing the probability of crisis (Goyal, 2002).

Dissolving the political blocks

Financial markets are subject to boom and bust cycles, but a pro-market stance enhanced this procyclicality. The system of bonuses, accounting, funding, securitization and risk management based on market prices all encouraged risk-taking. Why was there such extreme cognitive dissonance about potential risk? Partly it was an extreme swing away from government intervention and towards markets. Warning voices were shot down. Regulators were regarded as people who do not understand markets and tend to blindly forbid activities. Everyone bought into wrong, market based models for risk assessment and diversification. Partly it was that the US comparative advantage was largely in finance and US greater power, forced support for finance driven growth. US business profits coming from the financial sector rose from less than 16 percent over 1973-85 to reach 30 percent in the 90s and peak at 41 percent in the 2000s (Johnson, 2009).

Therefore current US initiatives in energy, education, infrastructure promise well for a more sustainable growth path. The previous US administration had a reputation for not listening to disinterested domestic advisors or to foreign opinion. The current administration wants to lead by listening. More balanced global power so that financial interests are not predominant will also insure listening. Balance of power prevents extreme views from dominating. More attention paid to a diversity of views would be good for the international financial system. It could even benefit creditors. For example, Indian financial regulation had many anti-cyclical features that the US would have done well to emulate.

Even so, a reaction against markets should be avoided now. Progress has to be spiral; circular swings are not progress. Regulation should remove the features that encourage pro-cyclicality of markets while preserving their energy and innovation. There is no shortage of reform ideas, but a better power balance, with a broader representation of interests, will aid implementation.

Emerging market economies (EMEs) have also suffered from the export slowdown and capital outflows post crisis and are keen to see the global revival essential for mutual prosperity. Self-insurance has not been complete; it can be done more efficiently. Reforms of the GFA and deepening of domestic financial markets would reduce the costs of global integration for EMEs. These costs include sudden stops in inflows and widening of spreads on foreign currency loans. Lane (2009) makes the point that developing domestic markets for laying-off currency risk can encourage international loans in domestic currency, decreasing the impact of currency fluctuation on balance sheets of and credit availability for domestic firms.

While blame and pushing leads to resistance, real dialogue is possible to discover robust solutions. Communication and explicit coordination is necessary also to preempt the scenario where one country sells its dollar reserves because it fears the other might do so. Thus discussion can also mitigate fear or tendency to expect the worst, which can worsen biases and prevent a reasoned approach to an acceptable solution. Discussion becomes necessary to resolve issues, as bargaining power becomes more even. Moreover, reforms in standards and tax regimes have to be at a global level. An individual country tightening on its own would be subject to capital flight. Therefore

discussion needs to be institutionalized in permanent expansion of the G7.

Global governance and reform

But just forming the G20 is not enough. More even power has to percolate through the system. There have to be real changes in the governance of the IMF and other international institutions, away from the current Western dominance in a structure frozen as it was set post-World War II. The membership of the Bank of International Settlement (BIS), and the Financial Stability Board (FSB), has been made more representative but pressure has to be kept up for more inclusive global governance more generally. The G20 has come up with a comprehensive list of reforms. But most of these rely on the IMF-WB to oversee or implement. Therefore reform of those institutions must come first. Otherwise the list will remain the wish list produced after the East Asian crisis, as financial interests regroup and persuade. Even now the US has not been able to restructure banks and penalize managements, which is essential for effective resolution of a financial crisis.

Suggestions made to reform the International Monetary Fund (IMF) after the Asian crisis are still pending. Creditor interests wanted it to focus narrowly on providing IIOLR services with strict pre-conditionality. This would require giving the IMF power to create resources much as a central bank can, but with backing from world governments. Debtor countries, however, suffering from incorrect advice and delayed funding, wanted an expanded scope to be accompanied by change in the governance structure to reflect current world economic strengths. Moreover, they wanted quicker response and more sensitivity to the needs of poor debtor countries, where financial interests may not have a large stake. They favoured ex-post conditionality: rewarding countries following better policy with better terms to create ownership of reform and incentives to implement them. Criticism of IMF functioning led to a demand for the creation of an Asian Monetary Fund, which was shot down on the grounds that it would lead to a dilution of conditionality.

But stonewalling of reform after the East Asian crisis resulted in many emerging market initiatives that have improved the bargaining power of this block, as has the post-crisis weakness of mature economies. It is beginning to be recognized that credible insurance mechanisms are required for countries to reduce reserve accumulation. Suggested reform of the IMF now favours a flexible and fast-disbursing facility with little or no conditionality for countries adversely affected by global shocks. Since March 2009 the IMF has made a new flexible credit line (FCL) available, without strings attached, to countries with a track record of sound macroeconomic policies and institutions. This is turning out to be popular.

The IMF has been talking of moving to true multilateralism, rather than just giving a larger share in governance to emerging market powers. But to move from the G7 to G150 is a sure recipe for paralysis of an institution, or to allow continued domination of the small group currently in power. Moreover, expansion of its resources to service its new facilities will require large contributions from the reserve holding countries-and power must have some relationship to ability to bear responsibility, with balancing of bilateral positions from adequate representation of different regions, and financial interests with broader tax payer and consumer interests.

India and the G20

What is India's potential position and contribution in this debate? India has a flexible exchange rate, and while intervention has resulted in reserve accumulation, the latter has clearly been driven by volatile inflows since the country normally has a current account deficit.

It has been only indirectly affected by the crisis through fall in trade, inflows to stock markets, and foreign financing for firms. Its cautious stand on inflows, with a preference for equity over debt inflows, has helped to limit the impact of the crisis. Its conservative regulatory stance has also paid off. It has benefited, however, from the liberalization process and market development and is committed to it.

Its stance is agreement with the emphasis on stronger regulation, eliminating tax havens, maintaining trade, transparency, global standards, and funds for emerging markets to fight a crisis not of their making, reached at the G20 meets.

From the EME perspective, areas of special concern are making the globe safer for EMEs to engage with; GFA reforms to reduce inflow volatility; alternatives for self-insurance; for example, an emerging market fund to stabilize EM bond price or spread index; funds for infrastructure spending in EMEs to help revive global demand, and contribute to development.

The G20 (2009) report on regulation has come out with 25 recommendations concerning a national focus on financial stability, oversight of all systematically important institutions, countercyclical macro prudential norms, comprehensive international standards to be applied consistent with the national context, and micro-conduct regulation to improve incentives for financial stability. While the relevant national authorities are to implement, the monitoring responsibility is largely on the IMF-WB, except the last category.

Therefore a possible concern is whether implementation and monitoring would be effective without governance changes. Another is the continuing Chimerica stalemate on global imbalances. Since India is not directly involved it could work towards resolutions that improve global stability such as more exchange rate flexibility for China and a long-term reduction in twin deficits for the US. The Indian example demonstrates some flexibility in exchange rates and gradual capital account convertibility is compatible with export growth and market development.

Pressures for asymmetric adjustment have to be resisted, however. After the East Asian crisis EMEs reformed, but developed countries did not. Nor was the GFA modified. Today there are pressures for EMEs to allow currency appreciation to correct global imbalances, and to stimulate domestic demand, while developed countries are to be excused from reducing deficits since they have to fight the crisis. Unless their massive liquidity expansion is withdrawn in sync with revival it could flood EME markets where green shoots are appearing. There are suggestions for the WTO to be brought in to force a revaluation for countries with a balance of payment surplus, but not for those with a deficit due to currencies strengthened from volatile inflows.

After the 70's collapse of the Bretton Woods agreement on fixed exchange rates, countries are free to follow what exchange rate regime they choose; there is no enforceable agreement with the IMF. There are suggestions that the WTO's enforcement mechanism could be used to force a revaluation. The argument is there are trade and distributional implications of undervalued exchange rates, which are equivalent

to export subsidies and tariffs, making the issue relevant for the WTO. The IMF would continue to assess whether or not an exchange rate is undervalued. But bringing in the WTO seriously reduces flexibility. Change at the WTO tends to get mired in endless negotiations.

There is asymmetry again since there is no mention of WTO action against overvalued exchange rates, due to large temporary foreign inflows. If the WTO is to take action against undervaluation it must also be authorized to take action against overvaluation. But this would require regulatory action against volatile flows. The WTO has is work cut out in fighting against protectionism in a recession; that is what it should focus on.

EMEs need to manage their exchange rates. They cannot go for full floats since their narrow markets would otherwise be subject to excess volatility aggravated by capital movements. Moreover, the real exchange rate has to be relatively depreciated to the extent the average real wage is lower in an EME.

Participating in regional initiatives will be useful to maintain global power on an even keel; the many Asian groupings can help ensure that more reforms are actually implemented this time around.

The G20 recognizes that while global standards are important they must be sensitive to context. Capacity building is especially important for EMEs. This and GFA are preconditions for full reform in EMEs. But market deepening is in India's own interest, and some opening can aid this. Markets for long-term finance, such as a vibrant corporate bond market are required for its massive planned infrastructure expansion. Inducement to hedge from two-way movements in the exchange rate, and markets for hedging currency risks, can save firms the blows their balance sheets have received form the depreciation when an appreciation was widely expected.

But more opening has to be calibrated and is conditional on GFA, better macroeconomic variables and market institutions. So India must maintain reserves as self-insurance against volatile inflows, and place restrictions on debt compared to equity inflows and on full CAC until a satisfactory new GFA is in place and its institutions have matured.

Conclusion

The current crisis has had a major global impact and so may lead to genuine reform of the global financial architecture. But memory is short and inertia sets in once a crisis is past. The G20 must maintain pressure for reform even if the crisis is resolved. It has a major role to institutionalize a more even global power balance, between countries, regions, finance and the average citizen even while improving the effectiveness of global institutions and coordination. Then there is a chance for real dialogue to resolve outstanding issues.

Global imbalances were not responsible for the current crisis. Despite being the only warning flags commented on prior to the crisis they did not cause it. Even so a resolution of imbalances will aid world financial stability, but to have a chance of working it must be gradual, symmetric, and fair.

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The G20 has assumed a leading role in responding to the current financial crisis and reforming the international financial system. The emergence of the G20 as the premier forum for the discussion of these issues means that India occupies an even more important place on the international stage than it did before the crisis. It is essential that India plays an active role in the global debate on how to resolve the current crisis and prevent the recurrence of similar crises in the future.

CEPR and NCAER therefore organised a conference on "India in the G20: Macro policy coordination, financial sector regulation and global reforms" in New Delhi on June 1, 2009. The conference aimed to stimulate a dialogue between European and Indian researchers on these issues, in order to complement and enrich the ongoing discussions among officials in the G20.

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