The Evolving Postcrisis World

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Abstract

A crisis provides an opportunity to examine how an economy works under pathological conditions. What are the lessons? Markets work well most of the time. That said, the global financial crisis has weakened faith in the market's self-equilibrating qualities. Fiscal policy works well to offset weakening activity. The main focus is now on the timing of exit and unwinding the fiscal debt legacy. Monetary policy also works, and sharp falls in policy interest rates allow financial institutions to restore confidence in their balance sheets. The superior fundamental position of Asian countries made it feasible to push policy in a supportive direction. Globalization might have suffered a setback, but it is minor and temporary. Bagehot’s century-old dictum on how the authorities should handle a banking crisis—"lend freely"—still seems correct. International cooperation, even embryonic policy coordination, took some tentative but important steps forward, largely through the G20.
I. What was Learned

The worst of the global financial crisis is over, but it has left scars, principally in the form of fiscally driven debt increases, balance sheets still needing repair, and high unemployment in the principal crisis countries. There is also the unfinished business from the precrisis period in the form of external imbalances. More positively, the crisis offers lessons about economic policy making. Of course the main lessons are for the developed countries that were at the center of the crisis. But countries all over the world had to cope with the backlash, and in doing so lessons were learned. In addition, the lessons in the crisis countries, learned in an environment of extreme stress, may have relevance for emerging market economies, particularly of the Asia and Pacific region.

While the global financial crisis was unexpected, many of its elements were well covered in economic analysis (although some of it from older, less trodden paths). The core issue was an old-fashioned financial crisis, as Kindleberger (1978), Minsky (2008), and Bagehot (1873) uncovered. Banks found new and innovative ways to make old mistakes: overleverage, borrowing short and lending long, overoptimism about asset values, and lending to people who could not repay. With these mistakes common to the major mature countries (notably the United Kingdom and the United States) the agglomeration of errors was large enough to create substantial collateral damage along the global linkages, via falls in exports and capital flows. That globalized world spreads problems as well as benefits is not news, and increased globalization meant stronger linkages. Yet strong policy response in the Asia and Pacific region offset much of this knock-on effect with perhaps surprising success.

What new lessons were learned, and old lessons confirmed or modified?

(i) **Lesson One.** From the crisis itself, financial markets work less well than we might have hoped (and as many proponents promised). Financial markets did a poor job in their basic functions: price discovery, safe intermediation from savers to investors, and risk mitigation. The efficient markets hypothesis has taken a beating, with its view that all available information was incorporated in the market price. Combined with the view that market participants were rational and that risk could be calibrated in terms of price volatility, the efficient markets hypothesis promised much more than it could deliver. Calculable risk turned out to be, in practice, incalculable uncertainty. Prices moved not on the basis of “news”, but on endogenous responses, as portfolio managers unloaded assets into falling markets. Sharp shifts in risk premia might have been expected, but what was
essentially a freezing of the international money markets was not. There were examples of successful intervention by the authorities in the crisis countries, of restoring liquidity to frozen markets. In the region, there was helpful intervention in foreign exchange markets, particularly in the case of the Republic of Korea (henceforth, Korea), vigorous support for banks that had tapped the international funding markets.

The general lesson we might take from this is that markets work well most of the time and will remain absolutely fundamental to the efficient operation of financial sectors (including for exchange rates). Markets will still do the heavy lifting of allocation of resources and price discovery. That said, the doctrinal (some would say theological) opposition to any intervention in markets has weakened. Governments should be ready not only to be the “lender of last resort”, but also to be the “market maker of last resort” to keep vital financial markets operating. Governments have demonstrated that there are occasions when intervention is helpful, so this should be treated as an analytical issue (to work out the when, how, and how much) rather than a doctrinal matter. This opens up new policy issues, which have the potential to make policy more complex but better.

(ii) **Lesson Two.** Fiscal policy works well to offset weakening activity. There were those who doubted what now seems to be the obvious efficacy of fiscal policy. Some skeptics thought in terms of Ricardian equivalence: that private savers would anticipate later tax increases and raise their savings to offset the stimulus. Others might have thought within the real business cycle framework, where most macro policies are ineffective. Others might have had in mind the Mundell policy assignment rules, where the more flexible exchange rates prevailing in many countries might have suggested that fiscal policy was ineffective, being offset by a rise in interest rates\(^1\) and the exchange rate. Others simply carried the pragmatic operational belief that fiscal policy was so slow to operate that it always arrived on the scene too late.

Whatever the rationale for prior doubt, these arguments have disappeared, with the emerging market economies of the region effectively countering the fall in their exports through fiscal expansion. The main focus is now on the timing of exit and unwinding the fiscal debt legacy. When this return to normality is achieved, it still leaves an unresolved issue for fiscal policy. The accepted precrisis wisdom was that fiscal policy was a weak and uncertain instrument, subject to political manipulation to be seen as an active tool. The automatic stabilizers should be allowed to operate, but beyond this fiscal policy should be constrained by some rule that makes it neutral over the course of the cycle. In some cases (e.g., the 3% deficit limit in Europe’s Stability and Growth Pact), additional constraints have

\(^1\) But this view misunderstood how monetary policy is implemented now, with the authorities setting the short-term policy interest rate.
been seen as necessary. Thus the newly demonstrated efficacy of fiscal policies may need to be kept on a tight rein.

(iii) Lesson Three. Monetary policy also works, and sharp falls in policy interest rates (even if not fully passed on to borrowers) allow financial institutions to restore confidence in their balance sheets quite rapidly and offset the crisis-induced rise in borrowing risk premia. In a number of countries in the region, credit growth has markedly slowed, suggesting that the credit channel is to some degree “pushing on a string” (i.e., is constrained by weak demand for credit), at least until business confidence is stronger. The usual operating channel through short-term interest rates was supplemented by greatly expanded liquidity operations (with most countries widening the range of acceptable collateral and eligible institutions). With the zero-bound (Keynes’ “liquidity trap”) reached in a number of crisis countries, quantitative easing was also tested in several countries outside the region, with much less clear-cut results. Huge increases in the balance sheets of UK and US central banks in particular have raised concerns about inflation and the ability to unwind this stimulus, but these concerns seem exaggerated. Inflation targeting proved to be too narrow a framework and monetary policy must also look at financial stability. Doubts have been expressed whether the current “best-practice” operating system using interest rates as the policy instrument is enough, and whether credit growth needs to play a larger role in the analysis (as it has in the ECB “second pillar”). Asset prices have long been an unresolved aspect of monetary policy, and the lesson now is that “something should be done”, although just what is still unresolved. The problem is that central banks still have just one instrument—the interest rate—that has been assigned to CPI prices, which will often be moving quite differently from asset prices. The answer will be found in the use of macro-prudential controls, but the operational aspects of these have yet to be devised.

(iv) Lesson Four. There is a sharp contrast between the policy reaction to this crisis and the 1997–1998 crisis. This time, most countries reacted by easing both monetary and fiscal policy (the opposite of 1997). Of course the circumstances were different (an external shock mainly impinging on exports, rather than capital flight) but there was still the danger of triggering a similar shock—sharp outflows of capital. Perhaps the lesson here is that the superior fundamental position of Asian countries (strong financial sectors, better institutions, more anchored exchange rates, lower inflation, strong fiscal positions, modest short-term foreign debt, and bigger foreign exchange reserves) made it feasible to push policy in a supportive direction—including some easing of exchange rates—without this triggering a loss of confidence. The capital outflows in Korea (and, outside the

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2 Again, part of the issue is a misunderstanding of how monetary policy works. With policy operating via interest rates rather than via the base money multiplier, excess base money accumulates in the commercial banks’ balance sheets without influencing their behavior much, and can be readily withdrawn by reversing the open market operations that initiated the excess.
region, in Eastern Europe and the Baltic countries) are a reminder, however, that there is a fine line between being able to offer this policy support, and requiring the policy instruments to be tightened to support the exchange rate and price stability, at the cost of lower economic activity.

Related to this, globalization might have suffered a setback, but it is minor and temporary. The crisis has not removed the compelling logic of international specialization, comparative advantage, and the efficiency of outsourcing and a well-constructed international supply chain (Eichengreen 2009). If anything, the crisis has reinforced the case for globalization, with the strong growth of the emerging countries (notably the People’s Republic of China [PRC] and India) providing a timely boost to world demand when Europe and the US suffered a downturn. The initial fall in trade was larger than its counterpart in the Great Depression (Garnaut 2009 updates the famous Kindleberger “spider-web diagram”), yet the ever-diminishing trade spiral so characteristic of the 1930s was avoided. While some trade protection measures were taken by a wide variety of countries, these were relatively minor. Some credit might be taken by the enhanced global dialogue through G20. Nor have tensions with international imbalances altered the case for international capital flows, although the volatility and perverse direction of some flows have highlighted the imperfect institutional frameworks that facilitate these flows.

It is clear from the Asian experience that those with the greatest export dependence suffered the largest falls in growth, particularly if exports were concentrated in manufacturing. Should the lesson be drawn that there is virtue (and a more sustainable growth path) via a less export-oriented strategy, through fostering domestic consumption? For some countries (e.g., Indonesia) this domestic orientation seems to have worked well, but to go against comparative advantage and to forego the demonstrated benefits of globalization would seem to be a lesson mislearned.

Lesson Five. Bagehot’s century-old dictum on how the authorities should handle a banking crisis— “lend freely”—still seems correct, but it may not be enough. Some financial institutions in the developed crisis countries were in such bad shape that they needed to be nationalized and reconstructed (using the “good bank/bad bank” model), and in many cases the authorities (and the legal infrastructure) were ill-equipped to do this smoothly. The residual moral hazard problems from these interventions remain to be resolved. Banks in the region generally came through well (although in Indonesia, Bank Century was rescued, triggering unresolved political problems, a reminder that these issues have important political economy facets).
(vi) **Lesson Six.** International cooperation, even embryonic policy coordination, took some tentative but important steps forward, largely (but not solely) through the G20. Fiscal coordination discussion may have made countries bolder and less concerned about spill-over of stimulus effects to other countries. While the coordination of monetary policy may have been more apparent than real, the simultaneous moves probably reinforced confidence that the task was being undertaken at a global level. Major emerging countries (and in all six countries from the region) now have a seat at the G20 table. The challenge is to use this opportunity in the most fruitful way. Partly reflecting the G20 meetings, international financial institutions (IFIs) have accelerated the reform process. The pathetically tardy rebalancing of the International Monetary Fund’s (IMF) governance quotas is being effectively bypassed. Formal membership/voting is still way behind the necessary redress, but has been prodded, with high-level discussions shifted to the G20. More operationally, the Flexible Credit Line seems a big advance on earlier attempts to provide a conditionality—lite lending facility. The political stigma on use of this facility remains, but as several countries have signed up (although not used) the facility, the stigma may be diminished in time.

(vii) **Lastly,** the global financial crisis may mark the end of a *policy making mindset* characterized by strong faith in the market and its self-equilibrating qualities, scepticism about policy interventionism, and a reluctance to undertake any policy that required *discretionary* action. With the ending of the “great moderation” (the decade of seemingly self-generating strong growth and low inflation), there is a need to address once more the old debate on the benefits of active macro policies. Prior to the global financial crisis, fiscal policy had been largely taken off the policy agenda, either for doctrinal reasons, or through lack of confidence that it could be kept well constrained and protected from political misuse. Management-style policy rules (often based on “one-instrument-one objective”) and assignment of instruments were the vogue (the popularity of inflation targeting is one example). Clearly policy activism saved the world from a much more serious decline over the past year. But there are reminders in recent experience that policy activism has its dangers too. We are demonstrably not very good at forecasting nonroutine events. We know too that abnormal settings of the macro instruments designed to cope with the immediate effects of the cycle can sow the seeds of later problems (the low interest rates in the US for 3 years following the Tech-Wreck; Japan’s low interest rates in the late 1980s).

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3 Eight countries moved their interest rate on the same day (10 countries in a 2-day period). See Box VI.A of the Bank for International Settlements *Annual Report* (BIS 2009a, 99).

4 A concerted simultaneous token drawing by all G20 emerging countries would shift the stigma problem in the right direction.
II. The International Environment

What is the “New Normal”? What are the characteristics of the new environment that policy will have to address?

A. Differential Growth Rates

First, the new environment is likely to be a two-speed world, with the countries most affected by the crisis taking some years to get back to their historical potential output path. Partly this reflects the starting point, with high unemployment. Partly it reflects a financial sector that will require years of balance sheet rebuilding before full attention will be given to active credit expansion in support of new activity. Households too will take time to restore their balance sheets and spend confidently. Most fundamentally, the lackluster outlook reflects the sheer size of the debt legacy from the fiscal stimulus. It is not possible to foretell with any accuracy how effectively these countries will cope with these debt legacies. These are essentially political issues: will the taxpayers accept an additional burden to cover the cost of debt servicing and/or debt reduction? If not, will governments reduce their debt through inflation? What seems clear is that it will be much harder to maintain the accustomed rate of growth in these postcrisis countries, and this will affect the global environment for Asian emerging countries. Meanwhile, there is the potential (if deftly managed) for the countries less directly affected by the crisis to return quickly to their normal growth rates, although this will have to occur in a world of slower export growth.

B. Readdressing External Imbalances

The second characteristic is that there will be an imperative to address and reduce over time the external imbalances. While the US has an unsustainable external imbalance, this will dampen confidence and hobble the potential growth rate.5

The starting point should be that international imbalances are not in themselves bad. Thirty years ago Feldstein and Horioka (1980) asked why there was such high correlation between each country’s savings and investment ratios, i.e., why the external imbalances were not larger. Countries such as Australia have run consistently (some would say chronically) large deficits (4–5% of GDP) without serious problems, and Singapore has run a large current account surplus (with a firmly managed exchange rate) for a decade without provoking complaints of mercantilism. So the issue is one of sustainability of the deficit country. What is the deficit used to finance? In the case of the US, the deficit reflected progressively greater household consumption.

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5 For a comprehensive discussion of the issues, see Blanchard and Milesi-Ferretti (2009). See also Prasad (2009a).
These imbalances, of course, predate the crisis, but their nature has changed somewhat. There is now additional pressure on the US to resolve its position. The saving/investment balance is no longer driven by the medium-term rise in consumption (and counterpart fall in household saving). Consumers have restored their saving position to somewhere near its longer-term norm. The driver of the saving/investment imbalance is now the fiscal position, and this will determine the timing of the adjustment. The budget, pressured by 10% unemployment and a wide output gap, is running at over 10% of GDP. Now, following the global financial crisis, the imbalance reflects a large, unsustainable budget deficit because it will drive up government debt to levels funding markets might not accept. The US fiscal prospects are significantly worsened by the additional unresolved issue of funding the retirement and health costs of an aging population. This does not set the exact timetable for correcting the sustainability, but it does set the imperative.

The other prominent indicator of unsustainability is the disconcerting fact that capital is flowing uphill from the emerging countries to the mature countries. It is hard to argue now (as was done by, e.g., Cooper 2007) that this reflects higher returns to capital in the US. This might have been a valid argument prior to the global financial crisis, but it is now apparent that the main use of capital in the US in the period prior to the global financial crisis was to fund lending to people who did not have the capacity to repay. The inflow had not been drawn to the US by the prospect of higher returns but, instead, was an accidental byproduct of external imbalances that had nowhere else to go.

The US external deficit is a good starting place to analyze the adjustment, because this is the correction that has to occur. The solution is clear, at least in principle: the only efficient answer is a significant increase in US net exports. The slack in domestic activity as saving increases will produce some self-correction, but the most effective driver will be a substantial fall in the exchange rate.

Leaving aside the inability to “dial up” the desired exchange rate and the political constraints that require the US authorities to continuously assure the world that they adhere to a strong dollar policy, there is a further constraint. During the transition to a smaller current account deficit, the ongoing imbalance still has to be funded by foreign capital inflows, and the large overhang of short-term foreign investment needs to stay bedded down. Before the crisis, the concern was that foreign funders would reduce their US dollar holdings and that the loss of funding would force a precipitous fall in the dollar, raising inflation fears, forcing higher US interest rates, and slowing growth. This concern did not materialize. At no stage did the US suffer from any capital flight (in fact, it was the opposite). But this concern has not gone away. No matter how desirable an increase in US international competitiveness, the concern about a funding-inhibiting fall in the US dollar remains.

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6 The debt/GDP ratio is expected to reach over 80% of GDP. A different version of unsustainability is offered by Caballero (2009), who sees the trigger of the crisis in the excessive inflows to the US seeking safe assets.
The time profile of the external imbalance reduction sets the schedule for the counterpart change in the US fiscal deficit. The fiscal deficit cannot be unwound until there are alternative sources promoting economic activity: as net exports add to activity, the support through the fiscal deficit can be reduced.

This suggests a rather protracted adjustment for the US. This, in turn, sets the timeline for the rest of world counterpart adjustments, including in Asia. Nevertheless, there will be steady pressures to reduce the imbalances. This pressure impinges on the deficit country (the US) but it is in everyone’s interests that the unsustainable elements in international imbalances are eliminated in good order rather than by prolonged undercapacity growth or by another form of crisis. While the unsustainability may not manifest itself imminently, the necessary adjustments in both deficit and surplus countries are of a structural nature, which always take time to implement. The quicker a start is made, the quicker the two-speed world can give way to a world where countries are growing at their full potential.

C. Revival of Capital Flows

The third element of the environment will be a revival of international capital flows. The starting point is to recall just how large these flows have become. Gross private capital inflows to emerging market economies rose from 4% of their combined gross domestic product (GDP) in 2003 to 10.7% in 2007 (BIS 2009a, 75). Rising even more quickly (but from a lower base) are the reverse flows from emerging countries (see Hill and Jongwanich 2009). The different motivations driving these two-way flows give ample opportunity for policy challenges.

As was widely expected, private capital flows to emerging countries fell dramatically during the global financial crisis to around a quarter of the 2007 level (see CGFS 2009). Flows to the Asian region fell less (to around 40% of the earlier peak level) and are expected to be around 60% of that level this year. This revival, in itself, should be a helpful environment. But there are two policy issues, one for the longer term and the other more immediately relevant.

First, the global financial crisis has demonstrated (once again) that emerging countries can receive excessive capital inflows, leaving them with overvalued exchange rates and vulnerable to reversals (“sudden stops”); see Grenville (2010) and Ostrey et al. (2010). This time round, it was not the countries of the region that suffered (perhaps with the exception of Korea). It was, instead, Eastern Europe and the Baltic states, and the resultant problems are still being worked through. But this is a reminder of the dangers.

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7 Korea seems to have been an exception. There were sharp reversals of capital that pushed down the exchange rate by 50%. There was a substantial outflow of private portfolio equity capital in 2008 with full reversion in 2009 (a turnaround amounting to $70 billion). But Indonesia experienced a similar portfolio outflow and reversion without this causing a similar degree of angst. Perhaps the greater vulnerability in Korea was the large US dollar funding position of Korean banks, which had a maturity mismatch between their US dollar funding for long-term export credits, matched by short-term funding in the US financial markets that dried up in September 2008. Korea's
The conservative attitude of the 1997-crisis-scarred countries of Asia may be well founded.

The more likely source of disruption in the near future may come from a second issue: the composition of the renewed flows, with too much short-term volatile capital. (For an excellent analysis very relevant to the issues in this section, see Ito et al. 2009).

Throughout these variations in flow, foreign direct investment seems to be the most stable (see Figure 2.3.3 of the Asian Development Outlook Update 2009 [ADB 2009]). While exchange rates and interest differentials may play some role in foreign direct investment (FDI) flows, FDIs are principally determined by complex inter-relationships with international trade, whereby investment and funding is supporting the supply chains that have been set up over the past decade or two. These flows are responding to commercial relationships and deeper structural comparative advantage rather than current interest differentials and exchange rate expectations.

Banking flows were the main source of volatility in the 1997 crisis, and demonstrated their volatility again in 2008 in Korea and Malaysia. This type of flow, however, seems likely to play a smaller role in the immediate future. Large international banks will be more inward looking and focused on their own domestic territory (encouraged by their regulators).

But if the banking flows seem likely to be limited, much larger portfolio flows seem to be in prospect, both equity and those flows that are responding to interest differentials. These interest-sensitive flows are not all pure carry trade, in the sense that they are leveraged, beginning with borrowing in a low-interest rate country. But for investors and fund managers in the low-interest rate countries, even a nonleveraged investment will have the same motivation, driven by the interest differential between the funding country and the target country.

The global financial crisis has expanded the environment for these interest-sensitive flows. Japan is no longer the only large country with systemically low interest rates. Low interest rates in Europe, UK, and US give investors in these countries the same motivation. Interest rates are likely to rise in Asia, as growth resumes (and in any case the return of government bonds in, say, Indonesia or the Philippines already offer a large interest differential). At the same time the US dollar seems likely to remain weak, especially vis-à-vis Asia and Latin America where exchange rates will tend to strengthen as productivity rises. This combination of continuing interest differentials and sustained

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8 Including FDI-related hedging, which will not show in the FDI figures.
strong exchange rates in the high-interest countries provides the environment to promote a rapid expansion of interest-sensitive flows.

These interest-sensitive flows behave somewhat differently from most other capital flows. Characteristically, carry-trade-type flows are responding more to the low profit opportunities in the funding country and are motivated by the now well-documented failure of uncovered interest parity (UPI). The carry trade will be driven by simple sharp-pencil calculations of interest differentials and exchange rate expectations, reassessed continuously and reversed quickly if expectations change. The carry-trade’s major characteristic is its volatility. These inflows may appreciate exchange rates well beyond the equilibrium level. When the inevitable correction comes, the depreciation is likely to be sharper and overshoot the equilibrium in a downward direction.

The downside for the recipient country is:

(i) The carry-trade inflows tend to be invested in areas susceptible to asset price increase, fueling asset bubbles.

(ii) These low-interest rate funding opportunities undercut the intent of domestic monetary policy, which sees a need for sustaining higher interest rates to restrain economic activity to an appropriate level.

(iii) These flows are likely to reverse at an inconvenient moment in the business cycle.

(iv) The profile of the exchange rate—generally overvalued, with occasional sharp overshooting depreciations—gives volatile and confusing price signals to the internationally traded sector, adding to investment uncertainty.

(v) Domestic businesses that borrowed in overseas currencies are generally exposed to a serious exchange rate risk, which result in systemic (i.e., across the whole business sector) balance sheet damage when the periodic sharp exchange rate reversal occurs.

The policy issue is whether these short-term flows are a help or a hindrance. The strong efficient markets hypothesis basis of much academic work gives a clear answer to this: these flows are part of the equilibrating process and so policy should not interfere.

The textbook version sees the exchange rate in the target country experiencing a once-off appreciation, then steadily depreciating, with the exchange rate movement continuously offsetting the interest differential. The uncomfortable reality is different: the exchange rate appreciates gradually over time until uncertainty about overvaluation creates a knife-edge equilibrium that can be disturbed by a small random event, setting off a sharp overdepreciation. For discussion of the failure of UIP, see Engel (1996).

McCauley (2008) identifies a number of these break points, where a sharp fall in the exchange rate has been associated with a large interest differential.
This view is endorsed by the financial markets, where unfettered flows maximize profit opportunities. However UIP clearly does not hold, so the presumption that the flows are pushing the exchange rate along an equilibrium path does not hold either. The broad impression of unhelpful pro-cyclical portfolio flows is seen in the experience of Indonesia and Korea in the last quarter of 2008. It receives more rigorous backing from Chai-Anant and Ho (2008). If equity flows are largely pro-cyclical and market-following; and the carry-trade flows are characteristically forcing the exchange rate to an overvalued level, with occasional sharp falls with overshooting undervaluations, it is hard to judge these flows as beneficial.

Thus the policy issue that will be addressed in the exchange rate section below is whether policy should take action to put “sand in the wheels” of these short-term capital flows.

III. Policy Instruments

This, then, is the task ahead for policy: to rein in the external imbalance as promptly as possible, with the speed and extent largely dictated by the US adjustment profile, without sacrificing the ongoing benefits of continued globalization, or bringing any of the relevant countries significantly below their potential growth rates. Meanwhile, the revival of interest-sensitive capital flows will make the task of maintaining stable and growth-supportive exchange rates much harder. We now examine the policy instruments available to address this: fiscal policy, monetary and financial stability policy, and exchange rate and external policies.

A. Fiscal Policy

Now that fiscal policy has proven its efficacy in both developed and emerging countries, there are two challenges: (i) to find the right timing for the exit from stimulus; and (ii) to reestablish the “normal-times” rules to protect fiscal policy from political abuse. We also need to ask what fiscal policy can do for the external imbalances.

Corden (2009) and Skidelsky (2009) make the general case for maintaining fiscal stimulus until the output gap is closed. They have in mind the developed world, but the argument applies to emerging countries as well. For them, the reining-in point is determined by dangers of running the economy too strongly and triggering inflation. Meanwhile, the fiscal

11 Chai-Anant and Ho (2008, 22) note that while currency returns tend to show little detectable influence over net equity purchases, net purchases do have some explanatory power over near-term exchange rate changes. However, they note that foreign investors sometimes acting as contrarian in episodes of heightened market volatility is suggestive of the potential benefit of allowing more different types of investors to participate in the local equity market. The divergence of views lessens the likelihood of a “one-sided” market.
debt legacy is accumulating. This seems a serious constraint in the major developed countries (see Reinhart and Rogoff 2010), but not for the emerging countries of the region (except India, where the deficit is running at 10% of GDP and government debt is 80% of GDP; and perhaps the Philippines). Thus there is the potential to lean further and longer on the fiscal stimulus, and if in the process this pushes current accounts in the deficit direction, this is to be welcomed. This seems particularly relevant for the PRC, whose massive expansion (though the budget and also through quantitative credit controls) has been so important for the region (indeed, for the world). Fiscal expansion addresses the external surpluses in the most direct and desirable way, by increasing imports rather than constraining exports.

That said, the emphasis is on “leaning.” Emerging Asia’s generally conservative fiscal positions over the past decade have helped buy immunity from the global financial crisis, and so should not be given up lightly. A renewed longer-term commitment to some version of the cyclically neutral budget might be helpful, not least by allowing the current fiscal expansion to be maintained for longer. In the meantime, the best antidote to market concerns about debt overhang is to articulate a plan (including some broad timetable) for winding back any excess government debt.

B. Monetary and Financial Stability Policy

Many of the Asian countries have an explicit or de facto inflation targeting orientation to their monetary policy (Ho 2008). While a framework that emphasizes inflation control still seems to be a valid and appropriate approach, there is a growing consensus that this is incomplete, on two grounds. It does not take account of the role central banks must play in maintaining financial stability. And the role of asset prices, always unsettled or ambiguous in monetary policy, now takes on a higher profile because the US housing bubble played an important role in the precrisis boom and subsequent bust.

As originally developed, inflation targeting was a rather narrowly mechanistic approach to policy embodying the one-instrument-one-objective approach, motivated more by managerial than analytic considerations. In practice it has evolved in a more flexible way, best characterized as a “forward looking” Taylor Rule taking account not only of CPI inflation predictions, but the expected output gap as well. Setting the inflation priority above other objectives helps central banks in the political economy task of “taking away the punch bowl when the party is getting to be fun.” There is some danger that if a crisis like this one seriously weakens the exchange rate, the central bank will feel obliged to raise interest rates to constrain exchange-rate-induced inflation, even if this harms activity. If central banks have some flexibility about how quickly they needed to get inflation back on target, there is usually room to allow the exchange rate to fall without the necessity of an interest rate response (e.g., Indonesia in the fourth quarter of 2008). In addition,

12 See also Filardo and Genberg (2009), who, in examining 12 Asian countries, find that half are explicit inflation targeters.
the pass-through from exchange rates to CPI has lessened for most countries, reducing the need for interest rates to respond to exchange rate falls. For some countries, there is also the extra instrument of foreign exchange intervention. In short, inflation targeting is a framework that has shown itself to be flexible enough to be added to, rather than abandoned.

The immediate issue is how quickly to shift interest rates up from the “emergency” settings of the global financial crisis. If countries were guided solely by some version of the Taylor Rule, then interest rates would stay low for some time yet. Also pushing in the same direction is the near-universal concern about an overly appreciated exchange rate (not so much “fear of floating” but “fear of floating upward”). When the Taylor Rule is indicating the need for higher rates, it would be a mistake to resist this for exchange rate reasons. In discussing exchange rates (below), we suggest that if countries are attracting excessive capital flows, this might be more appropriately addressed by measures that impinge directly on those elements of capital flow considered least beneficial. There is a further argument for being ready to shift rates up. Where lending rates have fallen to abnormally low levels, there is a danger that longer-term investment decisions will be distorted. This is, after all, one of the channels of transmission. But if it means that projects are undertaken that will be unviable in normal times, then there will be a price to pay for these low rates (e.g., the low policy rates after the US Tech-Wreck).

Three supplementary areas require comment: using credit growth as an indicator, asset prices, and financial stability. For completeness, the experience of the developed countries with quantitative easing is also described, as it opens up another dimension for monetary policy that might be relevant to the emerging market countries in the future.

1. Credit as an Indicator

Some critics have pointed to the fast growth of credit in the developed crisis countries as a harbinger of the crisis, which should have warned the monetary authorities of impending trouble. The implication is that the inflation targeting framework failed because it does not focus on credit growth. To respond, more precision is needed in this criticism. If the argument is that credit growth would have helped to identify inflationary pressures, then the inflation targeting framework can easily accommodate this: it is a purely empirical matter, and if credit growth is a useful indicator, then it should be used. If, on the other hand, the argument is that interest rates are an inadequate target instrument and credit needs to be controlled directly, then this idea has to be rejected, at least as the principal instrument of monetary policy. It would imply imposing controls over just one part of the financial system (in practice this means just the banks), and competitive neutrality would be lost. If, as the third possibility, the growth of credit was an indicator of impending financial stability problems, then this needs to be addressed by measures supplementing the inflation targeting framework (see “financial stability” below).

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13 This, of course, excludes the PRC where quantitative control over credit may be more important than interest rates.
Since the crisis, credit is again the focus in some countries, but now because it is growing so slowly rather than too quickly. Indonesia, Philippines, and Thailand seem to be in this category, with credit growth slowing in India as well. Some doubt that monetary policy, operating through interest rates, is a sufficient stimulus to have significant impact, particularly as the fall in policy interest rates has not generally been fully passed on in lending rates. The counter argument is that most of this weakness in credit growth is on the demand side, where firms are growing slowly, consolidating, running down inventories, and reducing leverage (Potchamanwong 2009). In any case it is inconsistent to argue that credit margins were too thin in the lead-up to the global financial crisis, and at the same time criticize banks for widening them now. Accepting that monetary policy may at times be “pushing a string”, there seems no alternative mode of operation that does not create the likelihood of bad-debt problems later.

When countries introduce macro-prudential cyclical adjustments of capital and liquidity ratios, this will add another dimension to policy. But these variable ratios will be designed to retain adequate prudential buffers, even at the low point of the cycle. Taking the existing reserve ratios and modify them in an attempt to promote credit growth (as Indonesia is contemplating at present) seems the wrong way to go.

The PRC, with its more direct control over credit expansion, is in a different category. The rapid growth of credit suggests overly expansionary policies, especially with housing asset prices rising sharply (see next section). Reflecting this, the PRC has recently taken steps to rein in credit growth.

2. Asset Prices

Before discussing what monetary policy might do when confronted by asset price increases, there are two prior issues. First, can asset price bubbles be identified \textit{ex ante}? Second, are all asset price bubbles harmful?

Some argue that it is not possible to identify asset price bubbles in advance (Greenspan 1999). This seems a purely practical issue. Policymakers can use whatever imperfect metrics exist—asset price inflation, P/E ratios, Tobin Q analysis, historical price norms—and use the same skills of judgment that they bring to bear in routine monetary policy, to decide whether they are confronting an asset bubble. They may make mistakes of judgment (as they will from time to time with the Taylor Rule inputs to CPI inflation) and may miss some asset bubbles. But principled ignorance is not an excuse for ignoring impending bubbles.

That said, before vigorous policy action is taken on asset prices, it is worth considering whether some bubbles are more damaging than others (Mishkin 2009). There are two important distinctions here, although in practice they will not be precisely identified. One is whether the asset bubble is leveraged, which passes the shock to the financial system
and thus makes it more serious. The second is the type of asset: investors generally understand that equity prices are volatile and a pure equity bubble (e.g., the 1999–2001 tech boom in the US) is less likely to cause systemic problems. Housing foreclosure, on the other hand, causes social disruption.

Supposing a bubble can be identified and seems potentially quite harmful, what then? If interest rates are already set appropriately to support the strongest level of activity consistent with the CPI inflation target, then to tighten policy to address pressure on asset prices will clearly have some cost in terms of foregone output. At the same time, a minor tweak of interest rates is unlikely to do much to slow down an asset price bubble, where prices will be rising much faster than the nominal interest setting. There is probably enough flexibility or ambiguity in the policy setting to lean against an exuberant asset market which, while not immediately inflationary, will cause some pressures later on. That said, the choice of “lean or clean” (White 2009) is intrinsically unsatisfactory: “leaning” is unlikely to constrain an asset bubble and “cleaning” is messy. The better answer is to look for additional instruments to restrain asset prices, in the form of micro instruments such as capital ratios, loan-to-valuation ratios, or even credit growth limits (Posen 2009). A capital gains tax is another possibility. Where these micro instruments have been given to a separate prudential supervisory authority, this authority must be explicitly given the task of using these instruments to restrain asset prices; or (a better option) be required to take instructions from the central bank (which has more knowledge of the macro environment to be able to judge the needs).

Just as the inflation targeting framework has evolved from the original narrow version, monetary policy is evolving to accept some responsibility to constrain asset bubbles. A number of countries have already used additional instruments—PRC; Korea; Singapore; and Taipei China have all recently responded to the need to restrain property purchases. The old one-goal-one instrument world is evolving into something more complex and nuanced and this is to be applauded.

3. Financial Stability

The “Great Moderation” of the 1990s lulled central banks everywhere into a false sense of security. It was thought that the combination of liquidity facilities, deposit insurance, and, in the extreme, lender of last resort would do the job when/if they were needed. Even where the micro tasks of prudential supervision had been shifted to a stand-alone supervisor, central banks still had responsibility for systemic stability (and of course the lender of last resort remained with the central banks, as the prudential supervisor had no balance sheet to fund the lender of last resort).14

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14 The global financial crisis has demonstrated (particularly in the UK) the ambiguity of this separation: coordination of central bank and financial stability actions has been problematic.
The global financial crisis demonstrated just how challenging is the obligation of ensuring financial sector stability. Meeting this challenge will require changes in:

(i) the political economy of prudential regulation

(ii) the rules and practices of regulation and

(iii) the structure of the financial sector

A principal deficiency was in the \textit{political economy of regulation}. As demonstrated particularly in the US, prudential regulators did not have the authority, coordination, and backing to carry out the difficult and unpopular task of restraining the development of a financial sector that has strong profit motives combined with the moral hazard risks of lender of last resort and too-big-to-fail. It is difficult to take unpopular action against low-probability (tail) risks. It has proven too difficult to act in a timely way against the commercial pressures of a stridently self-confident financial sector. Just as monetary policy needed a powerful institutional arrangement to “take away the punch bowl when the party is getting to be fun” (in the form of central bank independence and the inflation targeting framework), the prudential authorities now need the same backing and institutional strength. This is not yet available in most regimes (Bank Century in Indonesia illustrates the problems).

The demonstrated weaknesses of monetary policy in handling asset price bubbles and financial stability will require central banks to become more involved in prudential supervision (where they are not already). This will require macro-prudential instruments and regulation, focusing on capital requirements, liquidity reserves, and constraints on asset-funding (loan/valuation ratios). A clear liquidity ratio requirement was one of the missing elements of the Basel framework. Putting an effective liquidity requirement in place is all the more important now that just about every central bank has given generalized liquidity assistance to its banks: this has created a moral hazard problem, and a significant liquidity requirement is needed to prevent banks from simply assuming that “next time” their liquidity position will be bailed out again by the central bank. These prudential requirements need to be made flexible over the course of the cycle, to reduce the procyclical nature of current supervision. All this is under discussion in the BIS forums and Financial Stability Board with its newly expanded membership (see BIS 2009b). Given the slow and complex nature of these discussions (Basel II took almost 10 years to implement), individual countries should not wait to implement sensible and straightforward changes that could be tweaked if later international uniformity is required.\footnote{On the issue of international uniformity of regulation, it might be worth noting that, with the possible exception of Singapore and Hong Kong, China the emerging countries of the region do not have banks whose overseas operations are so large that international coordination of crisis management is important.} The global financial crisis has revealed serious deficiencies: to wait a decade to respond seems unacceptably lethargic.
Perhaps more important, the *structure* of the financial sector needs to be re-examined. The UK and the US financial systems were vulnerable because the various entities were too conglomerated and interconnected, so the old problem of “too big to fail” spread over most of the financial sector, in the form of “too complex to fail” and “too inter-connected to fail (see King 2009, Grenville 2009b).

Although Asian financial sectors are currently not as complex as those in the UK and the US, they are moving inexorably in this direction. It would be easier to divert this process now rather than unwind it later. Emerging countries have the opportunity to benefit from the structural deficiencies revealed elsewhere during the global financial crisis. But there will be great pressure to continue down the path of mimicking these overly complex and conglomerated structures. The wider membership of groups such as the Financial Stability Board provides the forum for exploring different structures, but it will be hard for the emerging countries, as new members of this “club”, to make their voices heard.

The better model for a financial sector is one made up of functional groupings of more specialized entities, with the “safe core” being relatively simple banks (Glass-Steagall-type banks, providing deposit and payments services, simple lending and basic trade-facilitation services, not trading on own account or providing investment banking services such as underwriting). These banks would be separated from specialized institutions such as insurance and funds management, which require their own specialized supervision and regulation. Other financial services would be provided within a “buyer beware” framework of regulated business conduct, with this caveat explicitly (and prominently) promulgated. Greatly simplifying financial institutions (“deconglomerating” them) would not only make them easier to understand and regulate, but simpler to manage.

Just as important as the lender of last resort facility is the “market-maker of last resort”. During the global financial crisis, even the most essential markets such as the New York money market dried up, leaving a fatal gap in the system. The general lesson for emerging market economies is that the authorities should be ready to keep vital markets (foreign exchange; money market; bank liquidity and interbank; government bond, export cover) operating. There needs to be detailed operational crisis management protocols with simulation exercises to prepare the participants for the day when things go wrong.

There has been a vigorous debate about too-big-to-fail and the moral hazard that goes with it. The restructuring suggested here confines too-big-to-fail to a smaller segment of the financial sector (although still large). Within this sector, intrusive supervision is part of the answer, and crisis management protocols covering the liquidation or nationalization of failing institutions address moral hazard by assuring that both management and shareholders bear the brunt of failure.
4. The Zero Bound

The GFC has provided substantial practical experience with monetary policy operating at the “zero bound”: essentially Keynes’ liquidity trap. Does monetary policy run out of puff when interest rates reach zero? None of this has immediate relevance for the countries of this region, so it will be dealt with briefly here. The first (and obvious) point is that, contrary to much of the popular commentary, monetary policy still has power even when the interest rate is at zero. It is as if the accelerator is flat to the floor (rather than nonoperative), so it cannot accelerate further, it is essentially still doing a lot, and will go on being effective (lesson three, above).

In addition, monetary policy has other aspects that can be brought into play, generally called quantitative easing. With the policy interest rate at zero, the central bank is no longer constrained to limit the amount of base money in order to keep the policy interest rate at its desired setting, but can carry out open market operations that have the effect of increasing the amount of base money, even substantially. In itself, this increase in base money probably has little or no direct effect in stimulating activity, because the excess base money accumulates in the balance sheets of the banks, which are already making all the loans they regard as bankable. But the other leg of the open-market transaction may have some effect. If the open market operation buys government bonds, it might lower the longer term bond rate. The Japanese experience in 2001–2004 (Spiegel 2006) suggests that this effect is small, as does the current UK experience, although the more recent experience (Gagnon 2009) claims to find a bit more effect. In any case it is not clear that this effect is passed through to commercial lending rates. Other open market operations might, however, be quite powerful: for example, when the authorities buy assets that the market is currently undervaluing because of nonspecific concerns (Akerlof’s lemons). Thus the US Fed’s purchase of $800 billion of private paper, including subprime, may be having more impact in reanimating this market. For completeness we should also note that the central bank could implement the famous Friedman “helicopter drop” of currency, but this would be fiscal policy (i.e., the same as the government sending cheques to the population), which is a legitimate measure, but not monetary policy.

C. Exchange Rates and External Policy

1. Exchange Rates

In sharp contrast to the 1997 experience, exchange rates played very little role in the global financial crisis. Within the region, exchange rates were well-behaved in most countries, with Korea (and perhaps Indonesia) being the exceptions. This is surprising,

16 The textbook credit multiplier process has not been relevant in practical monetary policy for more than two decades, although the academic literature is only slowly catching up.
given the ubiquitous and dramatic fall in exports and the drastic shrinkage in capital inflows.

With the current degree of globalization and financial market interconnections, the key policy insight is that the exchange rate is largely an *endogenous variable*, reflecting the outcome of monetary and fiscal policy settings and the economy’s behavioral parameters. The exchange rate should not be seen as a separate independent policy instrument.\(^\text{17}\)

That said, exchange rates are clearly not always well behaved, and the global financial crisis experience with markets (lesson one, above) might make countries more ready to intervene when the market takes the rate away from what seems a sensible equilibrium level. The last year has provided some positive evidence of the effectiveness of foreign exchange intervention, and this may be part of the explanation for the surprising stability of most exchange rates in the region.

The policy issue is to find the right balance between allowing flexibility of the exchange rate to absorb shocks and accommodate the evolving fundamentals, while at the same time dampening the excessive swings that an uncertain and imperfect market can deliver. All this has to be done within the necessarily limited operational capacity of the authorities.

The unhelpful debate about “corner solutions” is now, thankfully, over (see Ghosh and Ostry 2009). Almost all of the countries of the region are operating successful “middle-ground” exchange rate regimes, relying on the markets to provide feedback on where the equilibrium rate might be, while at the same time resisting wide fluctuations where possible. The issue is how to determine a sensible equilibrium range: how wide and with what center?\(^\text{18}\) The conceptual mindset is clear enough: the policymakers are trying to

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\(^\text{17}\) The Impossible Trinity (see Aizenman et al. 2009) may be an unhelpful framework for thinking about the policy issues surrounding the exchange rate as it seems to offer a more active policy role for exchange rate policy than is available in practice. It focuses excessively on the effect of interest-sensitive capital flows on exchange rates, and thus misses other important influences. It is confusingly unclear on just what is meant by exchange rate fixity or stability, without enough regard for whether this stability represents an equilibrium exchange rate or not (if the managed rate is, in fact, the equilibrium rate, it is perfectly possible to have independent monetary policy and an open capital account while fixing the exchange rate). On the other hand a floating rate does not necessarily mean monetary independence. Kim and Yang (2009) show that the “floaters” tend to mimic US monetary policy because of “fear of floating” (or more precisely fear of overappreciation).

The more realistic framework is to see the exchange rate as a largely endogenous variable. Why, then, would a country do anything other than have a free float to keep the exchange rate at its FEER equilibrium (which would resolve the Impossible Trinity without any downside)? The answer, for most countries, is two-fold. First, that the free market is far from perfect at price discovery and delivering an outcome over time that represents the FEER equilibrium. Second, that foreign capital flows can be irrational, excessive, volatile, and disruptive.

\(^\text{18}\) Thus the policy issues are operational ones. What level of reserves are the authorities prepared to accumulate and use in intervention? How will they intervene, i.e., let the market shift the exchange rate a fair way from equilibrium before intervening? (As the authorities do not know exactly where the equilibrium exchange rate is, it may be better to let the rate move until they are fairly sure it is out of kilter. How much harm does unnecessary volatility do? How much harm does more persistent misalignment do? These operational issues are the important ones and the Impossible Trinity sheds no light on them. The stability trade-off is also rather different. Allowing a reasonably wide range of movement before intervention allows the authorities to benefit from market feedback on where the
mimic the equilibrium exchange rate that a well-functioning market would produce. The theoretical attraction of a free-market floating solution was that a well-functioning market promised to deliver this, and would guard against policymakers attempting to impose their mistaken preconceptions or their mercantilist export-oriented priors on this. This approach fails only because the market has shown itself unable to provide this price discovery in a form that is consistent and stable over time. But the key point is that any intervention should be trying to mimic a well-functioning market, not override it to produce a nonequilibrium exchange rate.

India; Indonesia; Korea; Taipei, China; Thailand; and Philippines allow a significant degree of movement against the US dollar (each of these countries has demonstrated a range of over 30% during the past 5 years) but in all cases have also used significant intervention. Singapore has a high degree of managed stability, using the exchange rate as the operating instrument for monetary policy, which allows the exchange rate to act as an important cyclical stabilizer. Malaysia has a rather similar high degree of managed stability, achieved by significant intervention. In both countries there is a large current account surplus. Hong Kong, China demonstrates the fixed nominal exchange rate option (with a strong rationale in the unique political position).

The Indonesian and Korean experience provide an interesting contrast. The rupiah came under strong downward pressure at the peak of the crisis in response to foreign capital outflows from equities and bonds. After initially supporting the rate with intervention, the authorities then let the rupiah fall quickly by around 30%. The rupiah recovered all the lost ground within a couple of months and this looks to have been an admirable example of a balance between allowing the market to operate and using reserves to constrain overshooting. Korea, with apparently rather similar circumstances, saw its exchange rate fall by 50% with only an incomplete subsequent recovery. The key difference seems to have been the reliance of the Korean banks on foreign funding, although it might be worth noting that Korea went into the crisis with its real exchange rate higher than before the 1997 crisis (unlike the other Asian crisis countries).

Thailand also offers an interesting experience. Prior to the global financial crisis, the baht had been under upward pressure from capital inflows (and Thailand had experimented with inflow-discouraging unremunerated reserve requirements [URRs] in December 2006) but the crisis reversed these pressures, and the authorities allowed the baht to depreciate, offering some resistance through intervention. This seems to be another exchange rate should be. Too much of this feedback opens the possibility of destabilizing momentum developing. Too little creates the danger that the FEER might change over time without the authorities realizing that they are supporting the wrong rate.

Professor Harry Johnson, vigorous advocate of free floating, reflected the original (hopelessly unrealistic) promise of floating rates: “A freely flexible exchange rate would tend to remain constant so long as underlying economic conditions (including government policies) remain constant; random deviations from the equilibrium level would be limited by the activities of private speculators” (Johnson 1969, 17).

Korea drew not only in its own reserves, but also the swap facilities offered by PRC, Japan, and US.

In neither case has this caused comment within the context of the PRC overvaluation debate.
example of a successful restraining response. Now, with capital flows returning, the baht has reverted to its precrisis level and the prior overappreciation problems may return. India, too, had seen the impact of very large capital inflows (especially FDI) in 2007, with the rupee appreciating. This gave room for some helpful weakening during the crisis (when the capital inflow slowed sharply) without pressure on inflation.

Looking forward, with the “corner solutions” debate now behind us and the recognition that the foreign exchange market is not always well behaved, we might hope for a more vigorous and open debate about where the equilibrium exchange rate is in each country. It is hard to argue that the exchange rate falls in Indonesia or Korea in 2008 were part of an efficient exchange rate path, that they performed a shock-absorber role, or that they did not present a major distraction from good policy making.

Cline and Williamson (2010) have recently revised and updated their estimates of fundamental equilibrium exchange rate (FEER)22 (see a summary in Table 1) and the IMF’s Consultative Group on Exchange Rates is regularly assessing each country’s rate against a three-way equilibrium calculations. So far this latter work has been in the context of identifying cases where a country might have allowed or encouraged its rate to depart from equilibrium (i.e., it is designed to identify manipulation). For this analysis to be useful in the current context, the calculations need to be made public and be seen as identifying opportunities for useful intervention to shift the rate toward the equilibrium.23 Certainly, identifying the equilibrium exchange rate (even in the form of a range that is sufficiently narrow to be operationally useful) is difficult, but detailed analysis of the influence of the fundamentals can take policymakers a long way. Cline and Williamson (2010), at least, are in no doubt as to what should happen: the remaining overvaluation of the dollar would be completely eliminated if the five East Asian economies with seriously undervalued exchange rates were to appreciate to FEER-consistent levels: the PRC (whose effective depreciation has increased and needs the most effective and bilateral appreciation, the latter at 41% in the main estimate); Hong Kong, China (32%); Malaysia (31%); Taipei, China (29%); and Singapore (25%).

22 A fundamental equilibrium exchange rate is defined as an exchange rate that is expected to be indefinitely sustainable on the basis of existing policies. It should therefore be one that is expected to generate a current account surplus or deficit that matches the country’s underlying capital flow over the cycle, assuming that the country is pursuing internal balance as well as it can and that it is not restricting trade for balance of-payments reasons (Cline and Williamson 2010).

23 The recent Korean Article IV discussion illustrates the pervasive anti-intervention mindset of the IMF. The Consultative Group on Exchange Rates estimates indicate that the won is undervalued (as usual, the extent of this is fuzzy and understated in the discussion), and Cline and Williamson’s estimates show the same result. Instead of providing a powerful endorsement of Korea’s substantial intervention to support the won in 2008, which pushed the exchange rate in the right direction (i.e., toward equilibrium), the Korean discussion is almost apologetic for its intervention, with the ameliorating factor being that they have not intervened in 2009. “Prior to 2009, intervention was confined to smoothing operations. So far in 2009, the authorities abstained completely from exchange market intervention, as evidenced by the won’s volatility and appreciation since early March” (IMF 2009, 19). This no-intervention mindset is endorsed by the IMF staff: “Foreign exchange intervention in the spot market should remain confined to smoothing operations” (IMF 2009, 4). The successful intervention to support the won goes unremarked.
Table 1: Fundamental Equilibrium Exchange Rates

<table>
<thead>
<tr>
<th>Country</th>
<th>Indonesia</th>
<th>Korea</th>
<th>Thailand</th>
<th>Malaysia</th>
<th>Singapore</th>
<th>Philippines</th>
<th>India</th>
<th>Taipei, China</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusted 2008 FEER</td>
<td>7977</td>
<td>865</td>
<td>28.1</td>
<td>2.51</td>
<td>1.0</td>
<td>36.1</td>
<td>39.3</td>
<td>24.9</td>
</tr>
<tr>
<td>March 2009</td>
<td>9707</td>
<td>1197</td>
<td>29.5</td>
<td>2.63</td>
<td>1.15</td>
<td>40</td>
<td>44.8</td>
<td>25.2</td>
</tr>
<tr>
<td>Actual March 2009</td>
<td>11922</td>
<td>1450</td>
<td>35.7</td>
<td>3.67</td>
<td>1.53</td>
<td>48.5</td>
<td>51.1</td>
<td>34.3</td>
</tr>
<tr>
<td>FEER Dec 2009</td>
<td>9884</td>
<td>1201</td>
<td>29.7</td>
<td>2.62</td>
<td>1.13</td>
<td>40</td>
<td>47</td>
<td>24.9</td>
</tr>
<tr>
<td>Actual Dec 2009</td>
<td>9395</td>
<td>1164</td>
<td>33.3</td>
<td>3.42</td>
<td>1.4</td>
<td>46</td>
<td>47</td>
<td>32</td>
</tr>
</tbody>
</table>

With some idea of the equilibrium in mind, there are variations in strategy. Williamson’s “band/basket/crawl” fits neatly here, as does the different and more market-based approach of the reference rate model (both described in Williamson 2008), which suggests that countries should agree on a reference rate band and refrain from intervention within the band, but should have the option of intervening in a stabilizing direction if the exchange rate is outside the band. Probably superior to both is a more discretionary approach that does not require the defense of a specific band (always a perilous policy). Its main operating guide is the presumption that the further the actual rate is from the equilibrium, the more sure the authorities can be that their intervention is in the right direction and is beneficial compared with the “no action” alternative. Nowhere in this range of strategies would one find the IMF’s usual recommendation for “smoothing only”, nor for its close relation “leaning against the wind.”

Here are some tentative conclusions from the post-1997 experience that might guide the authorities in their analysis of the equilibrium:

(i) There was an obvious overshoot in the real effective exchange rate (REER) for all three crisis countries in 1997 (see Figure 1). All three have come back to within 20% of the precrisis level (probably artificially boosted by the large [abnormal] capital inflows in the precrisis period). If we take this into account informally and see Korea as heading for some further appreciation (as both the Cline and Williamson and IMF calculations of the FEER imply), the current REER for each country might be seen as not much more than 10% different from the pre-crisis levels. It is worth noting that the precrisis levels were associated with substantial current account deficits (especially in Thailand’s case), whereas all three countries are currently running surpluses. Depending on the exact parameters, all three countries appear to have been able to accommodate a Williamson-style band/basket/crawl with a plus/minus 10% range, with any readings outside that range being outliers at least potentially susceptible to intervention (although this is not to argue that the edges of the band could or should have been defended).
(ii) That said, all these countries (and the others shown in Figures 6–8) showed quite substantial sustained shifts in REER over time. So the equilibrium calculation should have the capacity to adapt to a changing fundamental equilibrium rate over time. Recalling the Japanese experience of a very substantial real appreciation in the early 1970s, this sort of major structural adjustment may become more relevant over time. It is surprising, in this context, that the REER have not demonstrated some Stolper/Samuelson productivity effects over time.

(iii) Time and greater financial depth have not freed these countries from exchange rate volatility. Despite running current account surpluses, avoiding obvious overvaluation, and having quite large foreign exchange reserves and healthy financial sectors, both Indonesia and Korea experienced large depreciations during the crisis (in Korea’s case, the fall in 2008 was of similar magnitude to that in 1997).

(iv) Korea probably has the most internationally integrated financial sector among the crisis countries, and that may explain the greater range of exchange rate movement. The recent depreciation episodes in both Indonesia and Korea can be clearly associated with capital flow or foreign debt issues. But Singapore and Hong Kong, China, the most financially integrated of all, have both kept quite stable REER.

(v) Also worth noting is that Korea, unlike the other two crisis countries, went into the crisis period with its exchange rate stronger than before the 1997 crisis. If it is true that “the higher they are, the harder they fall”, then more vigorous intervention to hold down the won before the crisis might have lessened the fall during the crisis. It is a reminder of why countries have some preference for maintaining an undervalued exchange rate.
Figure 1: REER for Indonesia, Korea, and Thailand

We have nothing to add to the much-discussed case for a renminbi (RMB) appreciation (Blanchard and Milesi-Ferretti 2009). Given the level of foreign exchange reserves, capital “flowing uphill” and the sheer size of the current account surplus (at least before the crisis temporarily reduced it), the case seems a strong one. At the same time, it is hard to see that the exchange rate, in itself, as the answer or even the key element in addressing the US imbalance (McKinnon and Schnabl 2009). More fundamental changes (e.g., allowing greater outward capital flows from the PRC) and reducing the numerous distortions to production and demand seem more important. That said, untying the exchange rate from the depreciating US dollar would seem to be a first step in ensuring that the exchange rate distortion is not increasing over time. This USD/RMB link has undone much of the very substantial progress that was made in appreciating the REER in the years leading up to the crisis (see Figure 3). If a stable anchor is needed, a currency basket provides a better basis.

24 Blanchard and Milesi-Ferretti (2009, 11) seem to capture the imbalances issue: “But ‘one-size-fits-all’ explanations (US fiscal profligacy, US consumer profligacy, the saving glut in emerging Asia, undervaluation of the RMB, Bretton Woods II) just miss the essential complexity of what has happened since the mid-1990s.”
25 Prasad (2009b) sets out the unusual features that suggest the PRC has some rebalancing ahead of it.
26 For other discussion, see Bergsten (2009).
Having looked at the policy importance of identifying an equilibrium range for the exchange rate, we turn in the next two sections to discuss how policy might respond to a disequilibrium exchange rate. If the disequilibrium is caused by volatile capital flows, this might be addressed at source by constraining the flows. This is examined in Section
(iii) below. If this is not the case or not feasible, the disequilibrium might be addressed through intervention, discussed in the next section.

2. Foreign Exchange Reserves

Operationally, the constraint on intervention is reserves. What do countries need in the way of foreign exchange reserves?

For some countries (the PRC comes to mind), reserves are a byproduct of other policy settings rather than an objective in themselves. But for others, reserve-holding reflects a balancing of costs versus benefits, with some notion of what is an optimal level. None of the conventional rules seems very helpful:

(i) The traditional months of imports cover may have made some sense when the main action in the balance of payments was in the current account. But when it is in the capital account, months of imports do not have much relevance.

(ii) Perhaps as an acknowledgment of this, the Guidotti/Greenspan Rule (Greenspan 1999) suggests that countries should hold reserves equal to the foreign debt maturing over the next year. This might make sense for countries with large longer-term foreign debt that needs to be rolled over periodically. The Rule warns of any impending peak in rollover. As well, the debt falling due over the next year could be funded if the rollover possibilities dry up for a year (although this is an arbitrary period). But for countries with significant short-term private foreign borrowing, the idea that the authorities should put aside an equal amount, so that they are ready to bail out the private sector’s short-term borrowing, raises moral hazard and equity issues and a deeper question of what benefit is being derived from the short-term borrowing (see below for more). In any case, most commercial borrowing, even longer than a year, has contractual clauses that could trigger earlier repayment in a crisis, and it is these possibilities that need to be weighed.

(iii) To scale the reserves against some broad money variable (Obstfeld et al. 2009 and 2008) seems to imply that the incipient problem is a generalized flight by residents from the domestic currency. In practice intervention would not be the appropriate response: this is a clear case for higher domestic interest rates and, if necessary, credit controls.

27 Countries have other possibilities with the same effect. Using the Fed’s swap facility was one example. Borrowing the intervention funds is another. Issuing foreign exchange-denominated government debt gives the market the opportunity to square its position (Brazil had implemented this approach from time to time), with much the same effect as intervention.
Perhaps the answer is to have a range of these sorts of measures, but also to think through the detail (who is vulnerable to a “sudden stop”? Who has mismatched currency borrowing?), relying on more detailed stress testing of the portfolio flows that are more susceptible to reversal, using data on commercial foreign borrowing, and foreign holdings of equities and bonds.

Recent experience in Indonesia and Korea adds another dimension to the use of reserves for intervention. In both cases, the starting level of reserves, while lower than for many others in the region, was comfortable in terms of the usual criteria. But as soon as these reserves began to be used, financial markets focused on the fall in the reserves rather than the absolute level, and drew a line in the sand ($50 billion for Indonesia, $200 billion for Korea) that came to be seen as a minimum level of reserves, not to be breached. But if these comfortable levels are seen by the market as minimal, how can reserves serve as a buffer through intervention? Swap lines with other central banks seem to have been more effective in combating adverse market sentiment and government backing for bank foreign borrowing (as was carried out in Australia) seems the most effective of all. It also strengthens the case for a much more effective Chiang Mai Initiative (more below).

3. Policy on Capital Flows

In discussing capital flows (above), the case was made that short-term carry-trade-style inflows are volatile and disruptive. Intervention (as discussed above) might be part of the answer. But a more direct policy response, tackling the problem at source, would be to follow the recent Brazilian example of imposing a tax on portfolio inflows, or some variant on this, such as the unremunerated reserve requirement (effectively a tax) made famous by Chile but used by many other countries before Chile adopted it in 1991. This seems to put the policy response close to the distortion, by imposing a once-off tax that impinges more strongly on short-term flows than on longer-term flows, and serves to offset the interest rate gap that is fostering these unhelpful flows.

Of course this has been tried with mixed results. The Thai URR of 2006 was greeted with such annoyance and derision by financial markets that it was watered down and then withdrawn in 2008. But the problem is not the URR: it is the markets. Understandably from their self-interested viewpoint, market players dislike any tax. What is needed is some analysis and positive backing from the IMF (not the critical commentary that was provided on the Brazilian tax). There needs to be a change in mindset at the IMF. It might also be helpful if the regional bodies (ASEAN, East Asia Forum, ADB) endorsed such actions in principle, and discussed when their use would be appropriate.

It may be that a more effective response is in terms of a normal withholding tax on interest income. Historic accident has often resulted in tax being levied by the investor’s

28 The three swap facilities (from the Fed, PRC, and Japan), amounting to $90 billion, seem to have impressed the Korean foreign exchange markets. For some general discussion, see Obstfeld et al. (2009). For the Fed announcement, see Board of Governors of the Federal Reserve System (2008).
country rather than at source-of-income, with the result that no tax is paid in the country receiving the capital inflow. Where the investor uses a tax haven, this results in a clear economic distortion. In equity terms, there seems to be a good case for tax at source-of-income: the investor is getting the benefit of the governmental infrastructure that makes this income possible, and so should pay something for its provision. Where treaties permit, a significant tax on foreign interest earnings seems both equitable and helpful in the face of excessive inflows.

One issue requiring more analytic work is the apparent difference between capital flows in Indonesia, on one hand and, say, Korea on the other. The equity market data suggests that in Indonesia, where foreigners own around 70% of equity capitalization, there was little capital flight from equities (see Bank Indonesia 2009). In contrast, foreigners retreated from the government bond and SBI markets. In Korea foreigners seem to have retreated from all financial markets, and the reversal of banking flows was particularly disruptive. It would be useful to have a clear understanding of the reasons for these differences. It is possible that the brief closure of the Jakarta Stock Exchange marked a watershed for foreign equity holders: when the market reopened, they may have reasoned that they had already taken the “price hit” and might as well stay. If this explanation is true, it is a reminder that allowing markets to adjust quickly to shocks (“not leaning against the wind” or “smoothing”) will often be the best policy.

4. International Cooperation

This discussion of exchange rates and reserves raises question of regional cooperation in both areas. Both have been well explored elsewhere (Grenville 2009a and 2009c). While progress has been made on reserve pooling through the multilateral Chiang Mai agreement (to come into effect in March), individual countries will still want to hold enough reserves to do the sort of routine interventions discussed above. And, as noted by Eichengreen (2009), while there is a requirement for an IMF program for drawings in excess of the country’s own contribution, the effective drawings on the Chiang Mai Initiative (CMI) are very limited. Perhaps this requirement reflects a misunderstanding of the circumstances in which support may be needed. At least judged by recent experience, the need for funding did not reflect any deficiencies in domestic policies that needed the sort of advice-laden intrusive program characteristic of the IMF. There was no need, this time round, to link the funding with an IMF program. Moreover, the IMF itself seems more than ready to lend in these circumstances through the Flexible Credit Line, so why would regional partners go on being so reluctant? To come through this crisis with no drawings on the CMI (while at the same time there was some use of the Fed’s swap facility) suggests that a stronger sense of regional opportunities and solidarity is needed.

The Asian Bond Funds and Asian Bond Market Initiative reflect another underdeveloped opportunity to weld the financial systems of the region together more closely, but once again it will require more dynamism and drive than had been shown recently. While it
is true that the ultimate aim will be to develop a deep and dynamic commercial bond market, the basic building block of this is a strong government bond market, with enough depth to absorb change in foreign demand and assure the participants of a good degree of liquidity. If the PRC’s need for an alternative reserve currency to its huge US dollar holdings could be linked with this need to develop the regional local currency bond markets, there would be benefit to all parties. The Asian Bond Funds 1 and 2 began with quite modest aims that were quickly achieved. Now the need is to move these to a higher stage (especially Bond Fund 2, in local currencies). This requires rather more imagination than has been shown so far.

One area should be of particular interest to countries of the region working together: expanding intraregional capital flows (Hill and Jongwanich 2009). Just suppose, as a thought exercise, that the PRC’s current account surplus was balanced by capital outflow from state commercial and private sectors in the form of FDI or longer-term portfolio investments, perhaps concentrated in the emerging countries of the region. Not only would the RMB exchange rate setting be less vulnerable to criticism, but the uphill flow of capital—from the PRC to the US—would be addressed. Turning this thought exercise into reality would take a substantial institution building effort, particularly in the financial sectors throughout the region.29

The development of the international architecture, particularly the expanded role of the G20, is one of the silver linings of the global financial crisis. This is a major opportunity for countries of the region. First, marshal the collective voices of the region. Second, identify and develop the issues that should be pursued together. One possible path is for the six countries of the region that are members of G20 to form a caucus to coordinate their voices at G20. This could be combined with more inclusive regional groupings (the East Asia Forum suggests itself, because it also includes these six G20 countries) so that the wide membership is included, directly or indirectly, in the G20 process (Grenville and Thirlwell 2009). High on the list of issues that might be pursued in G20 is the reform of governance in international financial institutions (IFIs).

International policy coordination is another area of potential. At some stage in the future, the moment will come for a wider discussion of international imbalances, which will include the benefits from a degree of coordination in the exchange rate adjustments involved. Whatever is agreed on at a global level, the need for regional coordination will be even greater. Individual countries in the region need to maintain competitive relations with the PRC, to ensure the smooth continuation of the complex supply chains that have grown.30

29 But developing the financial sector, too, makes sense in terms of norms. It seems that the financial sectors in the UK and the US have overexpanded in the past decade and should contract, while the opposite is called for in countries like Indonesia, for example, where the financial sector seems particularly underdeveloped.

30 This seems a much more fruitful endeavor than attempting to develop a regional currency.
Of course, servicing these international forums takes human resources—the very same scarce resources currently involved in high-level domestic policy making. The membership of G20 will put huge additional demands on these resources. But smooth-functioning cooperation within the region would allow issues common to most of the countries to be analyzed collectively, which would avoid overlap and gain economies of scale, while at the same time fostering the idea that issues of common interest in the region can be effectively pursued with a single voice in international forums.

IV. Conclusion: Macro Policies versus Structural Reform

A crisis gives the opportunity to examine how the economy works under pathological conditions (a “stress test”), and a political economy opportunity to push through reforms in response (“It would be a shame to waste a good crisis”).

There is some danger of overreacting to the apparent lessons of the present crisis. Having seen how effective fiscal and monetary policies have been in averting or reducing the potentially disastrous effects of the financial collapse in the crisis countries, the power of the traditional macro instruments might be exaggerated. In practice these instruments are greatly constrained, and if pushed too far or too often, they leave behind their own problems. In the case of fiscal policy, the debt legacy is the main constraint. In the case of monetary policy, a sustained low interest rate gives a wrong signal on the price of capital.31

If there are lessons on how effective macro instruments are during a crisis, there are lessons, too, on how modest is their capacity to alter outcomes during normal times. The earlier consensus—that fiscal policy should be close to neutral over the course of the cycle, with the main action being with the automatic stabilizers—still makes good sense as a starting point. Reloading the fiscal cannon so that it is ready for the next crisis also seems sensible. Monetary policy, too, is an instrument that in normal times will be constrained by adverse side effects32 if it is asked to carry the weight of strongly constraining exuberant activity or asset price bubbles.

Given the limited capabilities of the conventional macro instruments, policy might be taken in two directions. First, remembering the swift development of effective ad hoc micro policies in the emergency of the crisis, policymakers should intensify their search for new instruments. This includes, most importantly, the efforts to turn prudential supervisory policies from their current pro-cyclical nature, to take on a significant countercyclical role, which will require a big change of mindset in the prudential agencies; and political

31 Compare this to the post-tech-wreck interest setting in the US, and the “search for yield” (i.e., acceptance of greatly increased risk) during the years leading up to the global financial crisis.

32 Notably, in attracting excessive capital inflow.
support to allow them to counter pressures from the self-interested free marketeers of the financial sector.

Second, one powerful reason why the region fared better this time than in 1997 was that the economic structure was more robust and the macro parameters (current accounts, foreign debt, budgets) were in better shape. There was “policy space” for the macro instruments to be used. It was not so much that the macro instruments were misused or misunderstood in 1997 (although that may be true). The structure then was not sound enough to allow their use. Looking forward, policy should aim to strengthen this structure still further, looking to remove the impediments to growth (unhelpful legislation, price relativities off-kilter, inadequate legal backing for economic transactions, ill-defined property rights, rent-seeking behavior in the private and public sector, and lethargic government administration). And there is little doubt that there are elements at present that are out of balance, such as capital flowing uphill and the PRC’s astonishing investment rate.33

Seen in this context, external imbalances may not be amenable to strong correction through macro policy settings. Fiscal and monetary policies are assigned elsewhere and the exchange rate is largely endogenous. Much of the task has to be left to the structural ideas explored in earlier Asian Development Outlooks: freeing up product markets so that no artificial advantage is given to exports; removing controls and subsidies to get relative prices right; shifting factor shares toward households to increase consumption; more comprehensive social security protection to reduce households’ saving propensities. A crisis might provide the opportunity for such reforms (as Malaysia has used the opportunity to liberalize its investment rules). The main challenge is to grind down these imbalances while continuing to foster the clearly beneficial effects of globalization. The region has benefited, perhaps more than any other, from the advance of globalization in recent decades.

We have identified areas where markets sometimes perform indifferently, and have suggested that intervention should be included in the policymakers toolkit. The crisis has demonstrated the market at its weakest. But there is also a long history of ill-advised interventions. The inhibitions about discretionary policy are fading, but the rationale for these original constraints (that policy measures will be overused, and that policy will always operate under conditions of uncertainty, with unintended consequences) remains. The key to understanding successful intervention is to see it as mimicking a well-functioning market, not producing some artificially distorted result.

33 For a discussion of the PRC imbalances, see Yu (2009).
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About the Paper
Stephen Grenville examines the policy lessons for Asia from the global financial crisis. A crisis provides an opportunity to examine how an economy works under pathological conditions. Among the lessons from the crisis are that markets work well most of the time, but fiscal policy is needed to offset weakening activity. Monetary policy also works, and sharp falls in policy interest rates allow financial institutions to restore confidence in their balance sheets. The superior fundamental position of Asian countries made it feasible to push policy in a supportive direction.

About the Asian Development Bank
ADB’s vision is an Asia and Pacific region free of poverty. Its mission is to help its developing member countries substantially reduce poverty and improve the quality of life of their people. Despite the region’s many successes, it remains home to two-thirds of the world’s poor: 1.8 billion people who live on less than $2 a day, with 903 million struggling on less than $1.25 a day. ADB is committed to reducing poverty through inclusive economic growth, environmentally sustainable growth, and regional integration.

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