The Macroeconomic Framework and Financial Sector Development

chapter 2

CONTEXT

India's economy has posted a stellar economic performance in recent years, with high growth, moderate inflation and the absence of major turbulence. This suggests that the overall macroeconomic policy framework has delivered good outcomes despite concerns about its durability and effectiveness. Indeed, this success has fostered an ambitious average growth target of 9 per cent per annum for the five-year period from 2007 until 2012. This rapid sustained growth is expected to be supported by a rising investment rate and greater integration with the world economy.[1]

But past success does not necessarily mean that the existing framework is well suited for achieving this ambitious growth target. The economy now faces major challenges in maintaining high growth and moderate inflation. Volatile capital inflows, while providing capital for investment, are causing complications for domestic macro policies. There are still major infrastructural bottlenecks that could prevent the economy from attaining its full potential. Moreover, the political sustainability of this growth process depends on its being inclusive and remaining non-inflationary.

Given the changes in the structure of the economy and its increasing outward orientation in terms of both trade and financial flows, India has reached a stage in its economic development where the macro policy framework has to be significantly adapted to changing circumstances, both domestic and external. The apparent success of the framework so far, however, suggests that the required changes are evolutionary rather than revolutionary. India's monetary policy framework, for instance, has continuously evolved in response to changing economic, institutional and political imperatives.[2] The economy's recent strong performance provides a good background for intensifying this process and undertaking the substantive macro policy reforms that are needed to respond to the rapid evolution in the domestic economy and in the global financial system.

The recent painful surge in inflation does raise some more basic questions about whether the present monetary policy framework is the right one for effectively stabilizing inflation expectations over a 2–3 year horizon in the face of sharp short-run shocks to prices. Moreover, the policy framework has to be adapted to cope with the practical realities on the ground. For instance, the capital account has already become quite open, both in terms of fewer formal restrictions on these flows and in terms of the sheer volume of flows. It is neither feasible nor desirable to turn back the clock on capital account opening by reintroducing controls or tightening the ones that still exist. The same is true of the rising sophistication and complexity of financial markets, which cannot and should not be unwound. Rather, the Committee's view is that the right approach is to manage the pace and sequencing of further reforms in a way that takes advantage of favourable circumstances and helps manage the inevitable risks during the transition process.

How do macroeconomic policies fit in to the game plan for financial sector reforms? There are deep, two-way links between macroeconomic management and financial sector development. Disciplined and predictable monetary, fiscal and debt management policies constitute the crucial foundation for further progress in financial sector reforms and the effective functioning of financial

markets. At the same time, a well-functioning financial system is essential for macroeconomic stability, and can be particularly helpful in reducing the secondary effects of various shocks that inevitably hit any economy. A well-functioning financial system is also relevant for the implementation of macro policy. In its absence, monetary policy, for instance, has to use considerably less effective instruments to stabilize economic activity and inflation.

This chapter begins by reviewing the current institutional and policy framework for macroeconomic management. The chapter then discusses some short-run challenges posed by the recent volatility of capital inflows for monetary policy and for macro management. It explores how macroeconomic policy choices can influence the medium-term evolution of the financial sector and how that, in turn, can affect macroeconomic outcomes. It also describes a set of desirable outcomes in key dimensions of macro policies, and discusses strategies to make progress towards those outcomes. Specific policy recommendations are listed in the final section of the chapter.

CHALLENGES FROM CAPITAL FLOWS

Cross border capital flows pose profound challenges for macroeconomic management. In the past, the concern of the authorities was to limit capital flight, and India maintained tight capital controls in support of this goal. In recent years, the problem has been the reverse: foreign investors have been flocking in droves to India's doorstep, eager to be a part of India's growth story. In common with other parts of fast-growing Asia, India has experienced unusually large capital movements over the past four years. Over this period, capital inflows have more than quadrupled, although from a relatively low base. In 2006–07, net capital inflows amounted to 45 billion US dollars, a figure equivalent to nearly 5 per cent of India's GDP. These inflows far exceed the current account deficit, which was 10 billion dollars (or 1 per cent of GDP) in 2006–07. Capital inflows continued at a rapid pace during the financial year 2007–08, but have eased off in recent months, partly as a result of increasing turmoil in international financial markets. While the increase in net flows in recent years is itself impressive, the challenges of monetary and exchange rate management are arguably equally related to the increased scale of both gross inflows and outflows.

The challenges these large flows pose to macroeconomic policy have been commented on extensively by academics (both within India and outside), by official bodies (including the government and the RBI), and by distinguished expert Committees, most notably in the Report of the Committee on Fuller Capital Account Convertibility and the HPEC Report on Making Mumbai an International Financial Centre. Despite this large body of detailed and well-informed work, it is useful, for several reasons, to revisit these issues.

First, belief in the Indian growth story has been strong, and so the scale of capital flows to be managed has been larger than previously anticipated. Such flows represent only a minor adjustment in global portfolios in favour of India. This implies that if confidence in India remains strong, the absolute scale of these flows may well pick up again.[3] Indeed, the depth of India's equity markets, improvements in corporate governance, and the internationalization of many Indian firms in terms of trade in goods and services and in financial flows means that cross-border flows are likely to increase in any event. It would therefore be prudent to adapt the financial system to larger inflows than in the past. At the same time, it would also be wise to be prepared for a larger outflow of funds if either domestic or global circumstances were to deteriorate. The fact that India continues to run a current account deficit, albeit a modest one, makes it vulnerable to a sudden stop of inflows, although the level of foreign currency reserves does provide a cushion if this were to happen. The economy's managers therefore need to develop a policy framework that would help deal with both eventualities.

Second, the exigencies of dealing with this large volume of flows have slowed financial sector reforms in the Indian economy. They have also led to an increase in the fiscal burden through the cost of sterilization. There is therefore a need to think through the institutions and markets needed to facilitate a more effective response to what is likely to be a recurrent phenomenon.

Third, the debate surrounding the authorities' response to the 'capital flows problem' has indicated some uncertainty and occasional misunderstanding of what the monetary authorities can and cannot control. Frequent (and often misleading) references to the rather different macro policy choices exercised by China have also permeated the debate. Hence, this chapter engages in a discussion of the Chinese situation to see what lessons should (and should not) be drawn that are relevant for the Indian context.

There are no 'correct' or 'ideal' solutions for managing the integration of a large domestic financial system into the global economy. While the gains are considerable, the penalties for mistakes can be both large and harsh. What is clear is there is a premium on consistency, clarity, credibility and continuity of policies. It is also clear that a whole range of institutional (and even political) factors go to shape each nation's response. These include the nature of the financial system, the independence of the central bank (and its relationship with the Ministry of Finance), the quality of market regulation and even the functioning of the labour market. Thus, developments in the capital market and the possible policy responses must be seen in a much broader context.

Much of the discussion within India about exchange rate policy in the last 3–4 years has been about the desirability of limiting exchange rate appreciation in the face of large capital inflows. More recently, the fickleness of foreign capital has been in evidence, with inflows easing off and the rupee depreciating relative to the US dollar. This episode points to the need for a more flexible framework to cope with volatile capital flows (both inflows and outflows). Nevertheless, with India likely to continue posting higher productivity growth than some of its major trading partners, the underlying pressures for exchange rate appreciation may well return in the near future. The discussion in the next two sections focuses on the scenario associated with an appreciating exchange rate, which was the relevant scenario until very recently, although many of the arguments about exchange rate management are general and symmetric.

Capital inflows and the real exchange rate

A completely open capital account creates familiar and well-known issues for monetary management, usually referred to as the 'impossible trinity'.[4] This refers to the difficulty that an open capital account presents to a monetary authority in reconciling exchange rate stability with interest rate autonomy. As the experience of the oil-exporting countries (or of China) shows, imbalances between the supply and demand for foreign exchange can arise from trade flows just as much as from the capital account, and generate pressures for the nominal exchange rate to appreciate. Thus, exchange rate appreciation, and measures to counter it (such as central bank purchases of foreign exchange), are not phenomena that arise exclusively from an open capital account. What progressive opening of the capital account does is to enhance the scale (and potential volatility) of foreign exchange flows, and to link these flows to domestic monetary conditions, particularly efforts to set domestic interest rates and/growth of domestic credit.

In common with most large emerging markets, India has a long tradition of managing its nominal exchange rate to maintain 'external competitiveness', with generally positive results for growth in exports of goods and services. Stability and predictability of the exchange rate of the rupee, nominally against a basket of currencies but primarily against the US dollar, has been an established

feature of the policy landscape for many years. The link to the dollar over the years can also be seen as representing an informal 'nominal anchor' for the Indian monetary system, necessary in the absence of either fiscal restraint or a formal inflation target.

While in the present decade there has been a boom in exports of business services, the magnitude of the ensuing surpluses did not present major problems for either exchange rate or monetary management. Thus, in the mind of the Indian public and Indian policymakers, pressure on the nominal exchange rate to appreciate, and the perceived resulting threat to competitiveness, have come to be associated with the surge in capital inflows described above. The management problems have been complicated and aggravated by the decline of the dollar against other major currencies, and the tight link to the dollar of the currencies of major Asian competitors for India in third markets, particularly China.

Capital inflows have indeed created difficult challenges for monetary policy. In particular, they have generated pressures for nominal exchange rate appreciation of the rupee against the dollar. In order to counteract this pressure, the central bank has intervened by buying foreign exchange. But too much intervention could lead to excess domestic liquidity, and consequent inflationary pressures. Balancing these two considerations—external competitiveness versus domestic inflation—has become an increasingly complex problem. However, framing the issue in this manner, which has become the norm in the public debate, may in fact be misleading and has generated unrealistic expectations about what policy, and monetary policy in particular, can and should try to achieve. Let us examine both dimensions of the debate about the external value of the rupee.

What matters for external competitiveness is of course the real effective exchange rate (REER) rather than the nominal dollar-rupee exchange rate per se.[5] And the factors that drive the REER go beyond just capital flows. The primary factor tends to be differentials in productivity growth between a country and its main trading partners, and between the traded goods sector in a country (e.g., manufacturing, IT services) and the non-traded goods sector (haircuts). This is because more productive manufacturing workers in a country will earn more, and push up the price of housing or haircuts, thus causing the real exchange rate to appreciate. In the short to medium term, the exchange rate can also be influenced by conditions of domestic aggregate demand and supply, and, of course, the net capital inflows into a country.

In India, a confluence of forces has in recent years put enormous pressure on the real effective exchange rate to appreciate. Relative productivity growth of the traded goods sector has been higher than in most industrial countries that constitute final markets for India's exports, as well as relative to the domestic non-traded goods sector.[6] Aggregate demand has been higher than supply, in part due to the large government budget deficit (centre and states together). And foreign investors have been pouring money into India.

Even if it were granted that the real exchange rate is appreciating too quickly, it does not necessarily follow that the most efficient response is to attempt to restrain the nominal exchange rate through sterilized intervention. Indeed, as noted below, if the real appreciation is an equilibrium phenomenon, attempting to resist it through sterilized intervention can lead to an outcome of higher inflation, higher debt and a more repressed financial system than the alternative of allowing the nominal exchange rate to take on some of the burden of adjustment.

Countering real appreciation pressures

How can the economy possibly counter these pressures for real appreciation? The answer to this question follows directly from the causes listed above. Three strategies could be employed to prevent real appreciation. One is a non-starter for obvious reasons—to slow productivity growth. The second, tackling

the fiscal deficit more aggressively or restraining private consumption will help rectify the demand-supply imbalance. And the third, limiting net inflows could help slow appreciation pressures.

Let us examine the last two more carefully. There is evidence that increased fiscal discipline may help offset some of the expansionary effects of capital inflows by reducing aggregate demand.[7] At a minimum, it is important to avoid fiscal deficits that add to demand when the economy is already booming, in part due to surges in inflows.[8]

Turning to net inflows, one way to limit them is through capital controls. Capital controls always appear attractive in theory, but there is little evidence that they work over sustained periods of time in an economy as open as India's—we will have more to say on this shortly. Indeed, trying to manage inflows using controls could simply spark more speculative inflows in search of quick returns associated with eventual currency appreciation. The same is true of the circumstance when controls on outflows are used as a tool to try and limit exchange rate depreciation. Over time, as de facto financial openness of the economy increases with greater integration into international capital markets, controls on capital flows may end up becoming not just ineffectual but counterproductive.

When inflows surge again, as they inevitably will at some stage, perhaps more useful than preventing foreign capital from coming in is to encourage domestic capital to flow out. One method is to encourage Indian corporations to take over foreign firms. It is dangerous, however, to force the pace of this process since takeovers have a checkered history, with losses for the acquirer more likely on average than gains. A second is to encourage domestic individuals to invest abroad. Indian investors have the opportunity to maintain assets abroad, but have not taken advantage of it to diversify their savings thus far, perhaps because of the strength of the performance of the Indian market, and perhaps because of their unfamiliarity with the channels of investing abroad. We need to make it much easier for the individual to invest in foreign assets. But perhaps the greatest opportunity lies in Indian institutions like pension funds and provident funds, as well as insurance companies. They could benefit tremendously from foreign diversification, and should be encouraged to place a fraction of their assets in well-diversified foreign equity and bond portfolios.

Notwithstanding any such steps, given India's stage of growth and productivity performance, as well as its robust domestic demand, it is likely that there will continue to be strong underlying pressures for appreciation, and they will be difficult to resist for anything more than a short period. In the short run also, appreciation pressures will be exacerbated by the need for industrial countries like the United States to increase exports to reduce their current account deficits and boost growth, which implies their currencies will have to depreciate.

Real exchange appreciation is not all bad. It makes foreign goods cheaper and thereby raises the standard of living of the average citizen—indeed, a significant portion of the rise in Russia's per capita GDP over the last few years has been through real exchange rate appreciation. It reduces the real value of the foreign currency debt of companies that have raised money in international markets.

The implications for employment growth in the tradables sector are also not as clear-cut as might seem to be at first glance. For firms that specialize in processing of imports and re-exports of finished products, the fall in import costs would offset much of the decline in export revenues (if these firms cannot change their prices in foreign markets). For a growing country, the lower cost of investment stemming from cheaper capital goods imports can also help. Similarly, if real exchange rate appreciation is a consequence of productivity growth, then the loss in external competitiveness through the price channel may be offset by the increase in productivity. Indeed, a steadily appreciating real exchange rate puts pressure on the export sector to improve productivity even while

allowing the country to become richer in real terms.

It is also not a good idea to hold down the real exchange rate to make the country's export sector artificially competitive. An undervalued exchange rate is a subsidy to the export sector and the rest of the world that comes from taxing the rest of the domestic economy, something a poor country can ill afford. Moreover, it can lead to inefficient patterns of investment that are not based on comparative advantage, that reduce the country's overall productivity growth, and that can create serious problems when the real exchange rate returns to equilibrium. For an economy that has a low stock of physical capital and where the investment to GDP ratio is nearly 35 per cent, the cost of such distortions is likely to be very large in terms of long-term growth and economic welfare.

To summarize, it is hard to counteract pressures for a rising real exchange rate, especially if the pressures are driven by long-term fundamentals. It is also probably not necessary to counteract such appreciation, for it is a natural consequence of growing richer. At the same time, our intent is not to minimize the danger of a real exchange rate appreciating excessively, beyond what is warranted by fundamentals. An overvalued exchange rate can be very detrimental to export competitiveness and can affect job growth in exporting and export-competing industries. It is an important factor in slowing the growth of countries. We should guard against it happening, but it is not representative of India's situation today.

Should nominal exchange rate appreciation be resisted?

The question is what to do if there is a renewed tendency for excessive real appreciation, fuelled by strong capital inflows? Appreciation of the real effective exchange rate has two components—an increase in domestic inflation relative to inflation in trading partner countries and an appreciation of the nominal exchange rate. Can monetary policy play a role by attempting to peg the nominal exchange rate?

The answer typically is no. History has shown that strong pressures for real appreciation cannot be bottled up for long by pegging the nominal exchange rate. If the nominal exchange rate is prevented from rising, the real exchange rate will rise through greater inflation, and the economy will both have high inflation and be uncompetitive. Put differently, a strategy for boosting competitiveness by holding down the nominal exchange rate can be successful only if there is no underlying pressure for the real exchange rate to rise.

Also, the channel through which real exchange appreciation takes place has important effects—especially in terms of income distribution. A nominal exchange rate appreciation can help hold down inflation and reduce the prices of imported (or tradable) goods, including food and oil. By contrast, an increase in domestic inflation has far greater adverse consequences for the poor since the prices of tradable goods such as food and energy tend to rise fast and these constitute a substantial fraction of the consumption baskets of the poor.

Some argue that inflation is not a natural consequence of the central bank purchasing foreign exchange to keep the rupee from rising. It can issue market stabilization bonds to soak up the liquidity from capital inflows and prevent inflation from taking off. However, this 'sterilization' strategy has its limitations. The interest rate that has to be paid on these sterilization instruments increases as the market absorbs more and more of these instruments, and ultimately adds to the budget deficit. Sterilized intervention also frustrates the two natural forces for slowing inflows that would normally function, namely nominal exchange rate appreciation and a decline in domestic interest rates. Instead, it acts as a stimulus to further flows by widening the differential between foreign and local interest rates while creating expectations of additional returns once the postponed nominal appreciation finally occurs.

Sterilization also hampers financial reforms if the government relies on public sector banks to hold large stocks of sterilization bonds. In India, market stabilization bonds constitute the primary sterilization tool. A substantial expansion of this stock, which would be required to avoid nominal exchange rate appreciation if strong capital inflows were to resume, would have fiscal costs as well as broader costs by affecting financial reforms.

A more basic question is whether sterilized intervention is effective, at least in the short run, in limiting the nominal exchange rate appreciation that could otherwise result from a surge in capital inflows. There is no evidence that other East Asian economies that have been experiencing large and persistent capital inflows have been able to significantly influence the level or changes in the exchange rate, especially beyond very short horizons.[9] But there is some evidence that sterilized intervention modestly reduces exchange rate volatility, which suggests that the role of intervention should be limited, if at all, to marginal smoothing out of trend changes in the exchange rate.

In summary, this Committee believes that it is neither possible, nor advisable to manage the external value of the rupee through persistent nominal exchange rate intervention. Clearly, steps to curb domestic demand or expand supply can help slow the rise of the rupee, as can steps to encourage domestic savings to be invested abroad. These should be implemented. But perhaps the best antidote to pressures for the exchange rate to rise is to increase the flexibility of the economy to adapt to it and for firms to hedge the risk (see next section). This is cold comfort for those who believe the government can always do something, and is anathema to those who believe India can still adhere to the old ways it followed when the economy was closed and India unattractive, but it may be the right answer today.

Sometimes, adaptation is best achieved when firms realize they have no alternative. For instance, exporting firms will have an incentive to achieve productivity gains by boosting their efficiency. These adjustments are much more likely to take place in an environment where manufacturers anticipate exchange rate appreciation and prepare for it. If manufacturers believe that the central bank (or fiscal authorities) will protect them from appreciation or that the government will offer sops to deal with the effects of appreciation, they will have no incentive to prepare for it in advance. When the inevitable—exchange rate appreciation—then happens, they will be caught off guard and not be able to respond effectively.

Of course, not all exporters can adapt easily, especially the small- and medium-sized ones. The medium-term answer is to help them do so, by providing them more flexible labour laws, better finance, and managerial support services. In the short run, however, there should be a two-pronged approach. Employees of ailing firms could be supported directly by whatever safety nets the government deems appropriate (though in a poor country like India, it is not clear that the support can be substantial), while viable firms can be helped to adapt. Though the consequences are not pleasant, the economic pain would be worse, though possibly more widely spread, if the macroeconomic framework was held hostage by a small segment of the export sector.

Let us summarize our analysis. The Committee does not suggest a real exchange rate appreciation is always a good thing. But to the extent it is an equilibrium phenomenon (and the rebalancing of world investment portfolios towards India can be part of the fundamentals driving the equilibrium), currency intervention can, at best, smooth short-term movement. Indeed, if the appreciation pressure is strong, intervention may just bottle up the volatility, only to unleash it when intervention stops. The Committee does not believe that tried and tested methods of exchange intervention can help preserve India's competitiveness in today's more open economy. While the implications for competitiveness and inflation are obviously very different in an environment with a depreciating exchange rate, the

Lessons from China[10]

Many analysts have argued that China is a counter-example to the proposition that productivity growth will unavoidably lead to real exchange rate appreciation. They note that China has kept the real exchange rate undervalued for a prolonged period by tightly managing the nominal exchange rate relative to the US dollar and has done so without major inflationary consequences. With CPI inflation now surging past 6 per cent and reserve money growth in excess of 30 per cent, the latter proposition is less tenable now. Moreover, the mix of policies that has maintained this configuration includes extensive financial repression along with a relatively closed capital account. Financial repression has kept the costs of sterilized intervention low by inducing state-owned banks to absorb large quantities of sterilization bonds at low interest rates.

This set of policies has led to substantially unbalanced growth, driven largely by investment. Not only has financial repression kept the price of capital cheap in the form of low interest rates, but energy and land have also been subsidized to encourage more investment. As a consequence, more than half of nominal GDP growth in recent years (almost two-thirds of growth in some years) has been accounted for by investment growth, with consumption growth accounting for a significantly smaller fraction. This has had serious environmental consequences and greatly limited employment growth. It has also reduced the welfare consequences of growth; moreover, excessive investment has created huge risks for the future.

A different facet of financial repression, which has been necessary to keep the price of capital cheap for firms, has been the ceiling on deposit rates. This has led to negative real rates of return for Chinese households, which save nearly one-quarter of their disposable income and put most of it into bank deposits. Over the last year, the negative real interest rates have led to some money flowing out of bank deposits and into the stock market, creating a huge bubble that is likely to end very messily.

Another complication is that the leakiness of capital controls has increased over time, thereby constraining the independence of monetary policy, which has become increasingly beholden to the exchange rate objective. Indeed, the massive accumulation of foreign exchange reserves since the beginning of this decade is an indication of the amount of capital that has managed to find its way into China despite the efforts of the authorities to control inflows (capital inflows through official and unofficial channels account for about two-fifths of the reserve accumulation since 2000).

In an economy with real GDP growth of over 10 per cent and rising inflation, negative real interest rates clearly do not constitute an appropriate monetary policy stance. But the increasingly open capital account has constrained the central bank's ability to aggressively raise policy interest rates to control credit expansion and investment growth. If it tried to do so, even more capital would flow into the economy to take advantage of the higher interest rates, especially since interest rates in the US have been falling due to recent actions by the Federal Reserve. This would flood the economy with more money and complicate domestic macroeconomic management even more.

These constraints on using interest rates to meet domestic objectives have also meant that banking reforms, which the government has declared to be a major priority, have been held back. After all, it is difficult to get the banks to function as efficient financial intermediaries if they do not have price signals (policy interest rate changes) to respond to but simply continue to take their marching orders from the government.

Finally, commentators in India have not adequately recognized the unnaturally low level of Chinese consumption (unnatural for a country of its per capita GDP) which has helped keep demand-supply imbalances in check and thus prevented some of the pressures on the real exchange rate that are seen in India. If India is to emulate China in exchange rate management, as some suggest, one should ask whether India is also ready for policies such as the constraints on financial development, reductions in social expenditures on health and education, and the one-child policy that are prime factors driving high savings and low consumption.

There are many useful lessons to be learnt from the Chinese growth experience—the emphasis on fiscal discipline, the reduction in trade barriers as part of the WTO accession commitments, the focus on building physical infrastructure etc. It is equally important that India's policymakers see the risks and welfare costs that China's growth model has generated, and not just the positive outcomes to date. Besides, India is simply too far along in the process of financial sector development and capital account liberalization, relative to China, to return to a regime of financial repression and/or capital controls, or to severely constrain consumption.

basic points about the futility of orienting macroeconomic policy towards exchange rate management over long horizons are essentially the same.

IMPLICATIONS FOR MANAGEMENT OF MONETARY POLICY

Options for the monetary policy framework

Despite the challenges laid out in the previous section, monetary policy has in the past managed to strike a balance between managing inflation and stabilizing the nominal exchange rate. This balance has become increasingly difficult to maintain, resulting in a series of spurts of exchange rate volatility as the RBI tries to hold the line on the nominal exchange rate until a particular level becomes difficult to sustain, either because inflationary pressures mount or sterilization operations become costly and harder to manage. Moreover, the recent surge in inflation has highlighted the difficulties the current monetary policy framework faces in serving as a credible anchor for stabilizing inflation expectations over the medium term in response to sharp short-run price shocks. Such demands on monetary policy in India are going to grow over time and it is important that the framework be upgraded to make monetary policy more effective and independent.

What are the options? One is to try and manage the exchange rate more aggressively.

Indeed, the Committee on Fuller Capital Account Convertibility had recommended that the real exchange rate should be maintained within a band. Many observers in fact argue that this should be a central objective of monetary policy so that loss of competitiveness through real exchange rate appreciation can be avoided. As the discussion in the previous section makes clear, this Committee feels that this is not a viable option—even if desirable, it is simply not possible to use monetary tools (other than through demand management) to control the real exchange rate.

Another option would be to continue with the mixed approach, hitherto used with a reasonable degree of effectiveness by the RBI. This approach is based on a medium-term objective for inflation but involves active management of the exchange rate at certain times. It has a certain degree of appeal since it gives policymakers some flexibility in their responses to pressures on the exchange rate or on inflation at different times.

This approach also has its drawbacks. The mix of inflation and exchange rate objectives generates uncertainty of its own and, in contrast to a framework with a single well-defined objective, does not serve as a firm and predictable anchor for inflation expectations. Thus, it can in fact be counterproductive by generating unpredictability of policies and, consequently, unpredictability in market participants' responses to policy actions.[11] It could therefore constrain rather than increase the room for aggressive policy responses to shocks. By contrast, a more predictable and transparent policy framework can in fact generate more room for policymakers to respond to large shocks because the market would better understand the objectives of monetary policy. Besides, as the preceding discussion suggests, exchange rate management (other than to reduce day-to-day volatility) is unlikely to be effective and will be increasingly costly.[12]

What is the way forward? This Committee feels that monetary policy should be reoriented towards focusing on a single objective, and there are good reasons why this objective should be price stability (defined as low and stable inflation). An exchange rate objective would limit policy options for domestic macroeconomic management and is not compatible with an increasingly open capital account.

Is a low inflation objective too limiting?

The Committee's recommendation of a single objective for monetary policy may at first glance seem divorced from the reality of the public pressures that a central bank faces. After all, it seems reasonable for a central bank to be concerned not just about inflation, but also about overall macroeconomic stability, high employment and output growth, and financial sector development. Especially in a developing economy like India, surely the central bank needs to worry as much about growth as it does about inflation. The Committee fully agrees with this proposition—but the issue is how best monetary policy can contribute to non-inflationary and stable growth.

The argument against the emphasis on an inflation objective is based on a deep fallacy that there is a systematic trade-off between growth and inflation. There is a great deal of evidence, both from individual country experiences and cross-country studies, and not just in industrial countries, that a central bank that is focused on price stability can be most effective at delivering good monetary and macro outcomes.[13] Low and stable inflation has large macroeconomic benefits—it would stabilize GDP growth, help households and firms make long-term plans with confidence, increase investment, and thereby allow monetary policy to make its best possible contribution to long-term employment and output growth. It would also have financial market benefits—for instance, by enabling the development of a long-maturity bond market, which would assist in infrastructure financing and public debt management.

Another fallacy is that the process of switching to an objective of price stability entails a loss in output growth. This is true

in countries where an inflation target has been used as a device to bring down inflation from a high level and to build credibility for a central bank that has lacked inflation-fighting credentials. One of the earliest inflation targeters—New Zealand—suffered this problem. Inflation targeting was introduced in early 1988 in an attempt to bring inflation down from around 15 per cent in the mid-1980s. Inflation was brought down to 2 per cent by 1991, although with an adverse impact on growth and employment during that period.[14] Output losses were also experienced at the time of introduction of inflation targeting in some Latin American economies. But in every one of these cases, inflation targeting was seen as a solution to high inflation and lack of central bank credibility. However, there is no reason why, if inflation is low and the central bank has a reasonable degree of credibility, switching to a focus on price stability rather than multiple objectives should have output costs.

A third fallacy is that making low and stable inflation the objective of monetary policy creates an anti-growth bias, wherein inflationary pressures would be dealt with swiftly and decisively, but disinflationary growth slowdowns would not be resisted as aggressively. In fact, there is no reason why there should be an asymmetric approach to inflation versus disinflation. If the inflation objective is specified as a range, the norm is to treat the floor of the target range as seriously as the ceiling.

Put differently, if growth falters, it is also likely to bring inflation down below the floor of the inflation objective, allowing the central bank to ease. Indeed, if the public's expectations of future inflation are firmly fixed, as would be the case if the central bank has a transparent policy objective, a cut in short-term interest rates will not be accompanied by a rise in inflationary expectations and, thus, long-term interest rates. The central bank then can bring all interest rates down by cutting the short-term interest rate, and can thus stimulate growth. In this case again, the ability of the central bank to move aggressively with its policy instrument to maintain price stability (and thus growth), rather than being hamstrung by an exchange rate objective, is crucial. Indeed, this is demonstrably the way that central banks with inflation objectives have responded to growth slowdowns.

Focusing on low and stable inflation does not mean that short-term fluctuations in output and employment growth will be ignored in monetary policy formulation. This objective provides a framework for thinking about how other macro developments affect inflation and, therefore, how monetary policy should react to those developments. This means that a slowdown in growth would, through its implications for inflation, cause the central bank to loosen monetary policy in order to prevent inflation from falling below the objective. Thus, an inflation objective is quite consistent with using monetary policy as a tool to stabilize the business cycle.

Moreover, an inflation objective can increase the independence and effectiveness of monetary policy by setting more realistic expectations about what monetary policy can and cannot achieve. When households, firms and financial market participants clearly understand the central bank's intentions about its medium-term objective, then the central bank in fact has more flexibility in responding to shocks in the short run without losing control of inflationary (or deflationary) expectations. Finally, transparency about the monetary policy process allows financial market participants to plan for the already high volatility they need to deal with without it being augmented by policy volatility.

In short, a predictable and transparent monetary policy that has a clearly-defined primary objective may be the best contribution that monetary policy can make to macroeconomic and financial stability and, therefore, to long-term growth. By contrast, trying to do too much with one instrument is a recipe for ineffectiveness, especially in difficult times. Stabilizing the domestic business cycle, which would be a corollary of an inflation objective, would be a better use of monetary policy than attempts to manage the exchange rate. Moreover, the notion that monetary policy can itself raise long-term growth through activist policies has been

shown to be demonstrably false—in fact, faith in that belief led to stagflationary episodes (economic stagnation coupled with high inflation) in the US in the 1970s and 1980s.

Let us now turn to the importance of monetary policy for financial markets. Transparency and predictability of monetary policy are essential ingredients for achieving liquid financial markets, reducing fragility of financial firms and stabilizing capital flows. A stable macroeconomic environment not only helps make cross-border capital flows more stable by giving domestic and foreign investors more confidence in a country's fundamentals, but it also helps in dealing with the vagaries of those flows.

In the absence of a clearly-defined monetary framework, the effectiveness of the monetary transmission mechanism may also be reduced. Since long-term interest rates are more important than short-term rates for aggregate demand management, there is a temptation to manage different points of the yield curve for government debt (the return on debt instruments at different maturities) rather than just setting the short-term policy rate, as is typical in most mature economies. This has three deleterious effects. It hampers the development of the government bond market. It stymies the development of a corporate bond market since a market-determined yield curve is needed to serve as a benchmark for pricing corporate bonds. It also limits the information and market feedback from the yield curve about inflation expectations and the market's assessment of monetary policy actions.

Changes needed to the current framework

What modifications to the present monetary policy framework are needed to enhance its effectiveness? In answering this important question, it is necessary for the Committee to establish some general principles, rather than delve deeply into specific aspects of the monetary framework. This is not to say that the details are unimportant or easy to grapple with, but they can best be examined in detail separately once the principles are established. For instance, in India there are intense debates even about the right index of inflation (WPI or CPI) that the RBI should focus on. These are important practical issues. But to let debates about such details shift the focus away from the broader questions about the right framework that are this Committee's mandate would be to allow the tail to wag the dog.

The RBI already has a medium-term inflation objective, and its actions and statements are consistent with that being a key objective of monetary policy. But making that *the* primary objective of the RBI and indicating this clearly to markets, both through communications and actions, may provide important additional benefits in terms of anchoring inflation expectations and the macroeconomic stability that would follow from that. Indeed, what is needed is not so much a drastic change in operational approach but rather a change in strategic focus.

Some changes in the operational approach would also be useful to make the transmission of monetary policy more effective. The use of multiple tools other than the interest rate in attempting to meet multiple objectives can generate distortions in the financial and corporate sectors. Varying the CRR affects only banks while their competitors like non-banking finance companies (NBFCs) and money market funds are left unhindered. Lack of predictability of regulations and ceilings on external commercial borrowings (ECB) makes it hard for corporations to plan borrowing, and even service old loans that need to be refinanced, creating added uncertainty and risk, which adds to their costs. These costs need to be factored into the broader assessment of monetary management. The Committee recognizes that it may not be practical to do away with multiple monetary policy tools immediately. Given the adverse implications of the use of tools such as the CRR for financial sector reforms, there should be a definite and short time line for modifying the strategy

for monetary policy implementation, in tandem with other reforms to the framework. Moreover, developments in the economy, including the declining importance of agriculture and the rising importance of interest-sensitive sectors such as consumer durables and housing, should make it easier to use interest rates as the tool for managing aggregate demand.

There are undoubtedly difficult constraints on the effective operation of monetary policy in India. These include a variety of real rigidities, such as a labour market that is not fully flexible on account of restrictive regulations, a higher education system that is not meeting demand, a moribund system of corporate restructuring, and an economy that is still based to a considerable extent on primary industries, including agriculture. These structural factors put an even greater burden on monetary policy to deliver macroeconomic stability based on a clear objective.

Waiting for rigidities in the economy to disappear fully before improving the monetary framework could in fact be counterproductive. The interaction of these rigidities with a monetary policy framework that does not firmly and credibly anchor inflation expectations could exacerbate the adverse effects of shocks to the economy. Similarly, while large budget deficits undoubtedly constrain the room for monetary policy actions as well as its effectiveness, the right implication is that a well-focused and predictable monetary policy is all the more important for macroeconomic stability.

A related argument has been made that, given the weaknesses in the monetary transmission mechanism, focusing on an inflation objective would be a strategy doomed to failure. The corollary is that the nominal exchange rate could serve as a more stable nominal anchor. As already discussed earlier in this chapter, there are good reasons why an exchange rate target is neither desirable nor feasible without adding distortions to the economy. Many of the financial sector reforms discussed in this chapter will make the monetary policy transmission mechanism work much better. But these reforms, in turn, can work better if monetary policy is based on a stable domestic anchor. Thus, a move towards an inflation objective and financial sector reforms need to be pushed forward in tandem and can, together, deliver good macroeconomic outcomes in terms of both growth and stability.

Some have argued that available indicators of inflation are subject to huge measurement error and are therefore unreliable. There is no doubt that ongoing attempts to improve the quality and timeliness of data are a high priority for effective macro management. Pending improvements in the quality of inflation data more, rather than less, transparency on the part of the RBI in laying out its inflation objectives, and how it views the incoming data is called for.

The RBI is already transparent in the sense that it puts out regular monetary policy reports and its senior officials frequently make speeches about their macroeconomic assessments and policy intentions. But a clearly-specified monetary policy framework would greatly enhance the benefits of such open communications. In short, improving both the clarity of objectives and the clarity of communications about these objectives would help to make monetary policy more effective.[15]

Some observers argue that there is a strong political consensus in favour of low inflation in India, and therefore it is not necessary to enshrine it in an objective. The Committee agrees that inflation is politically very sensitive, but would argue this is all the more reason to make it the overriding focus of the RBI. The problem is political attention focuses on inflation only when it is high—when, given the lags in monetary policy transmission, it is already too late to do anything about it. The time to focus policy on curbing inflation is when inflation is anticipated to rise. But if at that time the central bank is being held to other objectives, it will not act in time. The consequence then is that politicians lose faith in the ability of the RBI to exercise control, and attempt to implement short-sighted, distortionary actions to control inflation. This is to

the detriment of overall macroeconomic management.

Instead, the Committee believes the government should invoke the political consensus against inflation in giving the RBI its mandate, in setting the medium-term inflation objective, and in providing support in the form of more disciplined fiscal policies that keep budget deficits in check. Finally, the Committee wishes to emphasize that it is key that the RBI should have operational independence—i.e., the freedom to take monetary policy actions to attain its medium-term objective. The government should not, through its control of certain interest-setting entities, work at cross-purposes. While typically the RBI and the Finance Ministry have reached a reasonable accommodation on their respective roles, this should not be left to the personalities heading these organizations. Clearly, tradition plays a large role in determining, and strengthening, the accommodation, and we would urge that this tradition be reinforced over time through clarifying statements by all concerned.

How Transparent is the RBI?

In an extensive cross-country study, Dincer and Eichengreen (2007) construct a composite measure of central bank transparency that incorporates indices of transparency on five dimensions—political (openness about policy objectives); economic (economic information, including data and models, used in monetary policy formulation); procedural (clarity about operational rules and procedures); policy (prompt disclosures of policy decisions and explanations thereof); and operational (concerns the implementation and evaluation of policy actions). Their index is based on 15 elements and the scale goes from zero to 15 (Saudi Arabia gets a score of zero and, at the other end, New Zealand, Sweden and the UK get scores of 12 or higher). They report that their composite measure of central bank transparency is positively associated with lower output and inflation volatility, and reduced inflation persistence.

How does the RBI stack up? India gets a rather measly score of 2. More importantly, India's score remains unchanged from 1998 to 2005. The average for Asian central banks goes from 3.0 to 5.1 over this period (from 4.6 to 6.6 for selected East Asian countries including Japan). The Dincer-Eichengreen index involves a judgemental (but careful) assessment of the various elements that go into the construction of the index, so it should not be taken too literally. But it does point to some concerns about monetary policy transparency in India.

In response to such concerns, a number of improvements were introduced in 2004–05 and the volumes of material (both spoken and written) emanating from the RBI since then are evidence of a concerted effort to increase transparency. Indeed, a recent IMF (2007) study notes that the RBI's communications strategy has improved in a number of areas.

There are still residual concerns about the RBI's transparency, however, especially when compared to international best practices in some dimensions. The Dincer-Eichengreen index provides a useful benchmark for evaluating the current level of transparency and how it can be enhanced to improve communications with the markets and the overall effectiveness of monetary policy.

What are the specific dimensions in which monetary policy transparency could be improved? One is related to operational procedures and the other relates to the communications strategy. The use of multiple tools have generated market uncertainty about the RBI's intentions. The RBI should refrain from using the CRR or SLR as a standard tool of monetary policy. More regular policy meetings on a pre-announced schedule would also be helpful in giving markets more direction at predictable intervals.

As for communications, a key step would be to make the main policy documents and statements put out by the RBI (especially the Quarterly Review) much shorter and more focused. In addition, the RBI could provide more information to the public about its fore-casting and simulation models, which could in fact be useful for the central bank in getting feedback from the academic and market communities that could help improve the models.

CAPITAL ACCOUNT LIBERALIZATION

Capital account liberalization (CAL) can play a useful role in financial reforms. Opening up to foreign banks and other financial firms and to foreign direct investment in the financial sector has many potential benefits. These benefits include the introduction of financial innovations and sophisticated financial instruments by foreign financial firms, added depth in domestic financial markets due to foreign inflows, and more efficiency in the domestic banking sector through increased competition. The HPEC Committee on Making Mumbai an International Financial Centre lays out the reasons why an open capital account is necessary for Mumbai to compete with other aspiring international financial centres and also to minimize incentives to import financial intermediation services from abroad.

The academic literature indicates, however, that precipitous opening of the capital account before the domestic financial sector has reached a certain level of maturity and the appropriate regulatory expertise is in place could spell trouble. How can the process of CAL in India be fine-tuned to balance these benefits and risks?

In the case of India, this debate may already be irrelevant to a large extent. The official channels for bringing capital into or taking capital out of the country have been opened up quite significantly over the last decade. Recent steps taken by the RBI to liberalize outflows of capital are welcome as they will give domestic investors more opportunities for international portfolio

diversification and increase competition for the domestic pool of funds. Moreover, as noted earlier, channels for unofficial capital flows have expanded in tandem with rising trade flows and the rising sophistication of investors.

This inevitable de facto opening of the capital account, which is a common phenomenon in virtually every emerging market (including China) as financial globalization continues apace, makes capital controls an increasingly ineffective tool in managing capital flows and exchange rate volatility. The notion of waiting for all of the preconditions to be put in place before allowing further CAL is also a distraction as it ignores the practical realities on the ground and could give policymakers false comfort that they can control capital flows in order to give themselves more room to manage domestic policies.

How should policymakers approach further CAL? The alternatives are clear. One is to manage the process of further capital account opening in a manner that maximizes its direct and indirect benefits. The second is to try and resist de facto openness using capital controls. Evidence from other countries that have imposed capital controls shows that they tend not to be effective beyond short horizons, if at all, and can create multiple distortions in an economy. For instance, limiting external borrowing tends to disproportionately hurt smaller firms that may find it difficult to raise capital from abroad through other means.[16] Moreover, capital tends to find ways around controls, which inevitably results in a cat-and-mouse game as country authorities and investors try to stay a step ahead of each other. This game is detrimental to the efficiency and the stability of the financial system.

Ostensibly temporary and targeted controls are tempting but are typically not very effective; they even have the potential to backfire by creating uncertainty in market participants' minds about the authorities' policy intentions and possible future actions. When the Thai government imposed a modest unremunerated reserve requirement

The State of the Academic Debate on Capital Account Liberalization

There has been a long, contentious and still-unresolved debate about the costs and benefits of capital account liberalization (CAL). Kose et al. (2006) survey the vast literature on CAL and conclude that it is difficult to find per-suasive evidence that financial integration boosts growth, once other factors that affect growth—financial development, good macroeconomic policies, quality of corporate governance—are controlled for. Prasad, Rajan and Subramanian (2007) report an even more surprising finding—developing/emerging market economies that are less reliant on foreign capital have on average grown faster over the last three decades. This is consistent with work by other authors that a higher share of domestic financing in total investment is positively related to growth outcomes (Aizenman, Pinto and Radziwill, 2007).

Why does CAL not have strong positive effects on growth? PRS note some channels through which CAL could hurt growth. Surges in inflows could lead to exchange rate overvaluation that hurt the external competitiveness of the manufacturing sector. Authors such as Bhalla (2007) and Rodrik (2008) go even further in suggesting that a policy of undervaluing the currency could be good for growth. Rodrik (2007) argues that the constraint on growth may not be related to domestic savings but to investment. That is, domestic financial systems may simply not be up to intermediating finance from savings into productive investment. Indeed, Prasad, Rajan and Subramanian find that countries with weak financial sectors are the ones where foreign capital has its most harmful effects on growth. Moreover, Henry (2007) argues that CAL should, even in theory, have only temporary effects on output growth. Of course, these 'temporary' effects could last for many years. Gourinchas and Jeanne (2006) contend that the welfare gains from additional financing provided by foreign capital are likely to be small since, ultimately, even a relatively poor economy can eventually attain the optimal level of capital through domestic savings.

The other presumed benefit of financial integration is that it should allow for more efficient sharing of risk among countries. The basic logic is that open capital accounts allow individuals to acquire financial assets in other countries, enabling them to achieve better diversification of their portfolios. In this manner, they can make national consumption much less volatile than national income.

Industrial countries have in fact achieved substantial risk sharing through international financial markets. Unfortunately, Kose, Prasad and Terrones (2007) find that emerging markets experienced a deterioration in risk sharing during the period 1985–2004. Interestingly, FDI and portfolio equity flows facilitate more efficient risk sharing by emerging markets, while debt flows work against it. Thus, the predominance of debt in total inflows of emerging markets during the 1980s and 1990s drives these results.

So why should a developing/emerging market country expose itself to the risks of CAL if the benefits are ephemeral? Kose et al. argue that the real benefits of financial integration are not related to financing, but the 'collateral benefits' that come with openness to foreign capital. These collateral benefits, which should increase total factor productivity growth, include financial development, efficiency gains through increased competition, incentives for better corporate governance, discipline on macro policies, etc. Mishkin (2006), for instance, provides a detailed account of how financial integration can boost domestic financial development. The evidence for such collateral benefits of financial openness is mounting but is not yet conclusive. Indeed, Eichengreen (2007) and Rodrik and Subramanian (2008) express scepticism about the size and even about the very existence of these benefits.

What about the risks? The composition of gross private inflows into emerging markets has been shifting over time, to the point where FDI and portfolio equity flows now exceed debt flows. FDI and portfolio equity flows are likely to bring with them more of the indirect benefits of financial integration and also enable more efficient risk sharing. Moreover, even inflows in the form of debt are now increasingly denominated in domestic currencies, which is far less risky for recipient countries.

Given these developments, Prasad and Rajan (2008) conclude that it makes more sense for emerging markets to actively manage the process of CAL rather than attempt to resist financial integration. With expanding trade flows, the rising sophistication of international investors, and the sheer volume of financial flows, capital controls are growing increasingly impotent since they can easily be evaded. Hence, trying to use capital controls as a policy tool to fend off financial integration is likely to prove futile, deprive the economy of many of the indirect benefits of financial integration, and impose costs on the economy through various distortions created by capital controls and the measures taken by individuals and corporates to evade them. A well-articulated programme of CAL can provide a context for a broader set of macroeconomic reforms. But hurtling towards CAL without undertaking other necessary reforms in tandem is also not a good idea.

on portfolio inflows in December 2007, domestic stock markets fell precipitously and the government was forced to retract the measure. The rollback of CAL is rarely a viable option, either economically or politically.

There is another cost of ad hoc capital controls such as the actions on limiting external commercial borrowings. It creates uncertainties about the overall macroeconomic policy environment, making it harder for corporations to plan, which can serve as a deterrent for domestic investment.

In short, the option of trying to use capital controls to restrict inflows and/or outflows may leave policymakers in the worst of all worlds—the complications of domestic macroeconomic management related to de facto capital account openness, distortionary costs of capital controls, and few of the indirect benefits of financial globalization.

Before going further, it makes sense to see where India stands in the comparative picture on openness. The picture on how open India's capital account is relative to other major East Asian economies is mixed (see Appendix 2.1). In terms of Foreign Institutional Investors' (FIIs) investment in equity, India is largely in line with other countries, both in terms of caps on individual investors and in terms of an aggregate cap. The restrictions on FII participation in the corporate and government debt markets, and domestic financial institutions investing in securities in overseas markets, are generally more restrictive in India than in other countries. India also has more restrictions on FDI than most other countries including China. India has liberalized to a considerable extent outflows by corporates for mergers and acquisitions overseas, and has also liberalized outflows by individuals.

The right approach to further capital account opening at this stage may be to see how best it can serve as an adjunct to other reforms, especially those related to the financial sector. One concrete measure would be to eliminate restrictions on foreign institutional investors' participation in corporate and government bond markets. This could help improve market liquidity and pricing, and introduce more market discipline on government borrowing. It would provide more funding for government-aided infrastructure projects. It could also more directly assist financial sector reforms by offsetting some of the loss of debt financing that would occur if the statutory liquidity ratio was no longer used as a regular instrument for government deficit financing. As discussed further in Chapter 4, banks should be required to own government securities only as a prudential measure, and not to fund the government deficit.

There is a legitimate concern that opening these channels could induce more inflows. But, given that foreign investors who want to bring money in can easily find ways to do so, it is more likely that this will lead to a shift in the markets that inflows go to. That is, some foreign investors may see government or corporate bonds as providing a less risky instrument than equity holdings to participate in the India growth story. This may even help take some of the froth off equity markets as debt markets get built up.

There is also little justification for maintaining restrictions on foreign direct investment. These flows tend to bring with them the greatest indirect benefits of financial integration, including spillovers of technological and managerial expertise. Concerns about national security and about the lack of transparency of certain investors such as sovereign wealth funds are legitimate. But these concerns should not be used as a cloak to block FDI in sectors where the real concern may be those of incumbents who are wary of increased competition due to foreign investment.

One could also debate the necessity for restrictions on external commercial borrowings. On the one hand, there is an element of risk in a regime where the exchange rate is not freely floating in allowing corporations to take on exchange rate mismatches between earnings and obligations. Foreign lenders are also not subject to the same impediments that domestic banks are subject to, which may partly explain the lower cost of foreign funds and their higher attractiveness. At the

same time, lower cost foreign funds can help bear some of the funding risk our banks are unwilling to undertake, as well as create needed competitive pressure on our banks. Moreover, leaving the equity channel open for foreign equity/mutual fund inflows while closing the debt channel simply creates all kinds of arbitrage as entities bring in equity capital and on-lend it to domestic firms. Ultimately the domestic firms get debt, but with an added costly layer of intermediation. It is debatable whether the risks are any lower.

This Committee would advocate a steady liberalization of constraints on external commercial borrowing (with a time path laid out in terms of permissible quantities), with hard-to-monitor stipulations about end-use being done away with. It would advocate more freedom for small firms to use this channel, especially in export-oriented sectors. Since small firms are by necessity riskier, they are more likely to find interest rate ceilings (or ceilings on spreads) on foreign borrowings a constraint. Over time, interest rate spreads should also be liberalized.

As the capital account becomes more open, other elements of financial regulation need attention. For instance, a priority is to foster the development of currency derivatives markets. Currency derivatives are important for firms and households to deal with exchange rate volatility, which may increase temporarily as monetary policy focuses on stabilizing prices. Manufacturers in traded goods industries, in particular, need to be able to hedge against short-run fluctuations in exchange rates in order to maintain their competitiveness and margins. Access to these hedging instruments would alleviate some of the pressures on monetary policy to manage the exchange rate. It is encouraging that currency futures trading in India was sanctioned and began in August 2008. The Committee notes that foreign investors can play a useful role in developing products to be traded on these markets and adding depth to these markets. In this context, the Committee would encourage the RBI to rapidly eliminate the remaining restrictions (which include prohibitions against foreign institutional investors, against non-resident Indians, against products other than futures, against underlying trades other than on the rupee–US dollar rate, and against positions greater than US$5 million).

We also need to make it easier for our individuals and institutions to invest abroad. For individuals, the primary task may be to simplify procedures, and liberalize the kinds of assets and managers that can be invested in. For our institutions like pension funds, we have to convince various constituencies that a portfolio diversified across the world is safer than a portfolio concentrated only in India, and has better risk properties (for one, it retains value when the Indian economy suffers a downturn). Regulatory authorities then have to allow institutional portfolios to become broadly and internationally diversified.

At the end of this chapter, we summarize these and a list of other concrete steps towards further CAL that could be implemented in relatively short order and that would serve as a useful complement to a broader set of macro and financial sector reforms. The recommendations on CAL are in fact similar to those of the Committee on Fuller Capital Account Convertibility although this Committee recognizes that changes in international capital markets as well as changes in India's macroeconomic environment have led to much greater de facto financial openness. Hence, the timetable laid out in that earlier report and its emphasis on certain preconditions being met before removing certain capital controls may now be less relevant. Another key difference is that this Committee would like to emphasize the inconsistency between CAL and tight management of the exchange rate.

FISCAL POLICY

Fiscal policy is a key component of the reform process. It ties together all of the elements of macroeconomic policy discussed so far. With a more flexible exchange rate and a

more open capital account, fiscal policy has a crucial role to play as a short-term demand management tool. Fiscal discipline is essential to manage pressures generated by capital inflows and also to reduce financial repression. Well-managed fiscal policy is also necessary to free up monetary policy to focus on its key objective of price stability. Indeed, the effectiveness, independence, and credibility of monetary policy can be severely compromised by high budget deficits.

A high fiscal deficit also creates pressures to hide it by burying it in public sector firms (for example, the enormous oil subsidy) or in disguised and less efficient forms (when a government guarantees returns in an infrastructure project, it is essentially bearing all the risk associated with borrowing even if the project is ostensibly private sector financed). Indeed, rather than disguising more of the deficit, the government should achieve more of its public objectives by explicitly paying for them rather than by imposing an implicit tax. For instance, it should attempt to achieve priority sector objectives and universal service objectives through explicit and targeted fiscal transfers rather than routing these objectives implicitly through the banking system and hindering its efficiency.

Although India has a history of chronically large fiscal deficits, the situation had been improving until recently. The Fiscal Responsibility and Budget Management Act of 2003 was beginning to show results, with a declining central government deficit and prospects for further reductions in the deficit over the medium term. However, there are a number of concerns about the medium-term outlook for the fiscal position. First, it remains to be seen to what extent the decline in the central government deficit is merely cyclical and mainly a result of strong economic growth in recent years, or the result of a structural and longer-term trend decline in deficits. Second, there are a number of disguised or off-budget obligations of the government that could swell the deficit and public debt if properly recognized as fiscal obligations of the government. Indeed, by some counts there has been little improvement in the central government deficit when these obligations are added back. Third, the burgeoning impact of the recent waiver of farm loans and the full cost of implementing the 6th Pay Commission report could derail any recent progress that has been made on reducing the deficit. These factors have been compounded by the surge in oil prices that has resulted in a massive increase in fuel subsidies.

These issues are of serious concern to the Committee since any halting or reversal of progress on reducing the public sector borrowing requirement would hamper financial reforms and the effectiveness of monetary policy. The Committee would like to emphasize that it will be difficult to make significant headway on financial sector and monetary policy reforms if India's fiscal house is not in order.

In particular, the burden of high levels of public deficit financing has serious consequences for macroeconomic development and for the financial system. Issuance of public debt crowds out financing for private investment. If banks are seen as a continued source of cheap debt financing through the statutory liquidity ratio, it can also have long-term economic costs by holding back efficient financial intermediation. A roadmap for eliminating such elements of financial repression thus needs to go hand in hand with the restoration of fiscal health.

This is also a good time to carefully think about changing the structure of public debt management, particularly in a way that minimizes financial repression and generates a vibrant government bond market. The Ministry of Finance has announced that an independent Debt Management Office (DMO) will be set up. This provides an opportunity to think about and incorporate best practices in this field. The structure of public debt management should also be designed while keeping in mind the broader implications for financial market development.

CONNECTIONS AND TIMING

One of the key themes of this chapter is that there are inextricable linkages among various macroeconomic reforms and reforms to the financial sector. Fortunately, a combination of favourable circumstances makes this a propitious time to move forward aggressively on multiple fronts.

On monetary policy, the heightened focus on inflation management makes this an opportune time for a transition to a new framework that shifts from multiple objectives to a sharper focus on the objective of price stability (low and stable inflation). As discussed earlier in the report, no big discontinuity in the RBI's operational procedures is required. What is essential, however, is a change in strategic focus and some modifications to operational procedures. Indeed, focusing on an inflation objective, moving away from exchange rate management and clarifying the roles of different tools in the monetary policy toolkit could have the beneficial effects of reducing incentives for speculative capital inflows and improving the effectiveness of the transmission mechanism.

The fiscal deficit had been shrinking, in part because of improvements in fiscal management, and in part because the surging economy had resulted in a cyclical reduction in the deficit. Some of this progress has been reversed recently, but there is still room for optimism that progress towards the FRBM targets will be restored. But this will require some political will and tough choices will have to be made. An improving fiscal position would provide an opportunity to reduce the pre-emption associated with financing of the deficit and to rethink the structure of public debt management. Reducing the financing needs of the government would create more space for monetary policy and reduce the risks of CAL. It would also create more room for private debt issuance. As noted above, however, it may be premature to declare victory on the fiscal front.

Well-managed CAL can serve as a useful component of the overall financial sector reform process. For instance, given latent demand among foreign institutional investors for government debt, this may be a good time to consider liberalization on this front. This would add depth to this market and improve incentives for fiscal discipline. A resumption of large inflows would also make it possible to opportunistically liberalize capital outflows, but this should be done as part of a broader CAL programme rather than just as a short-term attempt to manage exchange rate pressures. To make liberalization of outflows serve its purposes, however, it will be necessary to reduce regulatory restrictions on vehicles that allow households to efficiently diversify their portfolios internationally.

The principal elements of this framework—strengthening fiscal, financial, and monetary institutions—would reinforce each other. In sum, a programme of reform on all three fronts, while seemingly more ambitious, may in fact be easier than a programme of reform in just any one dimension.

POLICY RECOMMENDATIONS

Based on the analysis in the chapter, the Committee proposes the steps below as a means to upgrade the policy framework to meet the challenges that lie ahead. The Committee emphasizes that these recommended reforms should be seen as a package. Implementing them partially would make the individual reforms far less effective; indeed, the Committee cautions that implementing the recommendations selectively could in some cases be counterproductive. For instance, liberalizing external commercial borrowings by corporates without allowing for greater exchange rate flexibility would increase incentives for borrowing via foreign currency-denominated debt, which could be risky.

The Committee views proper sequencing of the recommended reforms as important but, rather than lay out a specific and rigid timeline, prefers to take a more practical approach of indicating which reforms could be undertaken in the short run (the next

1–2 years) and which ones should be seen as longer-term objectives (over a 3–5 year horizon).

Monetary policy

1. Move towards establishing RBI's primary objective as the maintenance of low and stable inflation. Implicit in this objective will be to maintain growth consistent with the economy's potential and to ensure financial sector stability. The objective could be translated quantitatively into a number, a number that can be brought down over time, or a range that will be achieved over a medium-term horizon (say, two years). This will have to be done with the full support of the government, which would simultaneously commit to maintain fiscal discipline (i.e., stick to the FRBM deficit reduction path) and not hold the central bank accountable for either the level or volatility of the nominal exchange rate.

   The inflation objective would initially have to be set on the basis of a widely-recognized indicator such as the WPI or CPI, notwithstanding the conceptual and practical problems with targeting these measures of inflation. Measurement issues will need to be tackled as a priority and, over the initial medium-term horizon, the RBI will have to be transparent about what its headline objective implies for inflation based on other price indexes.
2. The government would make the RBI accountable for the medium-term inflation objective, with the terms of this accountability initially being laid out in an exchange of letters between the Government of India and the RBI.
3. The RBI should be given full operational independence to achieve the inflation objective. It would be useful to enshrine this operational independence and the inflation objective in legislation, but also strengthen it through clarifying public statements on the respective roles of the RBI and the government.
4. The RBI would progressively reduce its intervention in the foreign exchange market.
5. The RBI should make its operational framework clear, and supplement this with more frequent and concise statements about its assessments of macroeconomic developments, the balance of risks in the economy, and projections for output growth and inflation.
6. The RBI's Monetary Policy Committee should take a more active role in guiding monetary policy actions. This Committee should meet more regularly; its recommendations and policy judgements should be made public with minimal delays.
7. The RBI should develop a model for forecasting inflation and make the details of the model public. The model will require refinement as techniques and data improve; feedback from analysts and academics will facilitate this process. It will have to be made clear (and the public and market participants will quickly learn) that the model is intended to guide monetary policy decisions but not in a slavish manner or in a manner that precludes a healthy dose of judgement.

Timing: Steps 1, 2 and 4 could be implemented in the short term. Legislation (step 3) could take longer to formulate and pass, but it is important that the other steps be implemented and tied to a clear public understanding between the government and the RBI. Steps 5–7 should be implemented soon, especially since they are refinements (although fairly substantive ones) to current practices.

Capital account

1. Remove restrictions on outflows by corporates and individuals. There are already few restrictions on these outflows, but formal removal of controls, easing of procedures and elimination of the need for permissions, as well as a strong push to encourage outward flows would send a strong signal that the government is committing to increased financial integration and the policies that are needed to support it. Easing of restrictions on vehicles such as mutual funds and domestic fund managers (see Chapter 5), that individuals could use for international portfolio diversification, would be an important ancillary reform.
2. The registration requirements on foreign investors should be simplified. One

transparent approach would be to end the foreign institutional investor (FII) framework for investment in equities and, instead, allow foreign investors (including NRIs) to have direct depository accounts. The distinctions between FIIs, NRIs and other investors could also be eliminated, with the intent being to eliminate any privileges or costs they may experience with respect to domestic investors.

3. Remove the ceilings on foreign portfolio investment in all companies, with a narrow exception for national security considerations—treat foreign investors just like local shareholders.
4. Remove restrictions on capital inflows based on end-uses of funds. These do not serve much purpose anyway, since they are difficult to monitor.
5. Remove restrictions on inward FDI, with a narrow exception for national security considerations.
6. Liberalize, then eliminate, restrictions on foreign investors' participation in rupee-denominated debt, including corporate and government debt.
7. Remove regulations that hinder international diversification by domestic institutional investors. Insurance companies, as well as government pension and provident funds should especially be encouraged to diversify their holdings by investing abroad.
8. Reduce restrictions on borrowing by domestic firms and banks, whether this borrowing occurs offshore or onshore, in Indian rupees or foreign currencies. For instance, the ceiling on corporate external commercial borrowing could be steadily raised for the next few years until eliminated. If there is excess demand during the transitional phase to removal of restrictions, borrowing rights could be auctioned.[17] Stability concerns raised by exchange mismatches between bank assets and liabilities should be addressed by supervisory and prudential measures.

Timing: The first four steps would essentially formalize existing de facto arrangements and remove impediments that serve no substantive purpose in terms of economic efficiency or macro management. These changes could be implemented relatively quickly. Steps 5–6 could be implemented over the short term, in tandem with other reforms including improvements in the structure of public debt management. Step 7 could be implemented over 2–3 years. This lag is to allow for adequate regulatory capacity to be built up, and to allow for public debt management to be improved and for foreign investors to be allowed to participate in domestic debt markets so that there are no major implications for financing of the public debt. As noted earlier, step 8 should be tied in with other reforms and not undertaken in isolation from reforms to the monetary policy framework described under Monetary Policy above.

Fiscal policy

1. Continue to reduce levels of consolidated government deficit and public debt (ratios to GDP); resume progress towards targets specified under the Fiscal Responsibility and Budget Management Bill. Amend the FRBM Act so as to bring the off-balance-sheet borrowing by the government integrally into calculations of the government budget deficit and public debt.
2. Reduce the Statutory Liquidity Ratio to a level consistent with prudential needs; switch to direct bond financing of new deficits. Similarly, regulators of pension funds and insurance companies should set regulations on fund portfolio holdings so as to maximize the welfare of beneficiaries, and not so as to mobilize the purchase of government bonds.
3. Transition away from providing sops for exporters in response to currency appreciation. While many of the recent sops are in the process of being removed, it is important to curtail expectations of similar sops being offered in the future in the event of currency appreciation.

Timing: The time horizon for some of these measures could be in the range of 1–2 years, but it is essential to start laying the foundation for some of these changes much sooner.

Other reforms

1. Remove the remaining restrictions on the currency futures market in the short

term (prohibitions against foreign institutional investors, against non-resident Indians, against products other than futures, against underlying trades other than the rupee–US dollar rate, and against positions greater than US$5 million). Permitting onshore currency derivatives markets with no restrictions on participation is an important measure that includes elements of financial market regulation as well as capital account liberalization. These markets could be developed fairly quickly as the technical infrastructure for trading of these derivatives could be built up soon on the backbone of the existing securities trading infrastructure.

2. Improve the structure of public debt management to increase depth and transparency of this market.

The Committee is pleased to note that the RBI is working on the first item and the Finance Ministry has announced that it is setting up a public debt management office. These measures are long overdue and should be implemented soon.

The set of reforms listed here has not touched upon broader issues, some of which were discussed in the main text of the chapter—easing of labour market regulations, increasing investment in physical infrastructure and education, reducing red tape, improving data collection, etc. Action on all of these fronts will ultimately determine India's growth trajectory. But the specific steps listed above will make a major contribution to achieving the desired trajectory and could generate momentum for broader reforms.

ANNEXURE 2.1: A COMPARISON OF CAPITAL CONTROLS IN SELECTED ASIAN ECONOMIES

INDIA	
Investment Restrictions	
FII in:	**Ratio of 70:30 for Equity and Debt respectively**
Stock Market	1. Each FII (investing on its own) or sub-account cannot hold more than 10 per cent of the paid-up capital of a company. A sub-account under the foreign corporate/individual category cannot hold more than 5 per cent of the paid-up capital of the company. 2. The maximum permissible investment in the shares of a company, jointly by all FIIs together is 24 per cent of the paid-up capital of that company. 3. This limit of 24 per cent can be raised to 30 per cent, 40 per cent, 49 per cent or up to the FDI limits specified for that particular sector, subject to approval from the shareholders and RBI.
Government Debt	Effective 31March 2007, the cumulative debt investment limits for the FIIs/sub-accounts in government securities and treasury bills is US$3.2 billion (previously US$2 billion).
Corporate Debt	The cumulative debt investment limits for the FII/sub-accounts in corporate debt is US$1.5 billion. Investments in IPDI and Upper Tier II instruments raised in Indian rupees, are subject to a separate ceiling of US$500 million.
FII/FDI in:	
Banking	The total foreign ownership in a private sector bank cannot exceed 74 per cent of the paid-up capital and shares held by FIIs under the portfolio investment schemes through stock exchanges cannot exceed 49 per cent of the paid-up capital. In case of public sector banks the foreign ownership limit is 20 per cent. Single investor cap is 10 per cent and RBI approval required for acquisition or transfer of shares to the equivalent of 5 per cent or more of its total paid up capital.
Insurance	Cap of 26 per cent
Domestic FI Investing in Foreign Securities:	
Insurance	Cannot invest in securities in offshore markets.
Pensions	N.A.
Mutual Funds/Investment Firms and Collective Investment Funds	Mutual Funds in India with at least 10 years of operation may invest in overseas securities such as global depository receipts by Indian companies, equity of overseas companies and foreign debt securities in countries with fully convertible currencies, within an overall limit of US$3 billion.
Outward Direct Investment by Domestic Corporations	Indian corporations can invest in joint ventures/subsidiaries or acquire foreign companies overseas up to 200 per cent of their net worth through the automatic route. They can invest 200 per cent of their GDR and ADR issues for these investments. ECB credits/borrowings can be used to fund these investments. Share swap transactions require prior approval of the Foreign Investment Promotion Board (FIPB). Any Indian company that has issued ADRs or GDRs may acquire shares of foreign companies engaged in the same area of core activity up to 10 times their annual exports. Resident employees of a foreign company's office, branch or subsidiary in India in which the foreign company holds not less than 51 per cent equity, either directly or indirectly, may invest under an employee stock option plan without limit, subject to certain conditions.
Borrowing Restrictions	
External Commercial Borrowings	The maximum amount of ECB credit that a corporation can engage in under the automatic route is the equivalent of US$500 million in a financial year. All corporations registered under the Companies Act (except banks, financial institutions, housing finance companies and non-bank financial companies) may borrow abroad up to the equivalent of US$20 million for loans of a minimum three years' average maturity and up to US$500 million for loans of more than five years' average maturity under the automatic route without RBI approval. Borrowing with an average maturity of three to five years is subject to a maximum spread of 200 basis points over the six-month LIBOR of the currency in which the loans are raised or the applicable benchmark(s), and borrowing with more than five years' average maturity is subject to a maximum spread of 350 basis points.

Borrowing Overseas by Banks/ FIs	External Commercial Borrowing is subject to the policy framed by the RBI in consultation with the MOF. Authorized Dealers (ADs) may avail themselves of foreign currency borrowing not exceeding 25 per cent of their unimpaired Tier-I capital or the equivalent of US$10 million, whichever is higher. Banks are allowed to raise capital using two foreign exchange instruments. First, banks may augment their capital funds through the issue of IPDI in foreign currency up to 49 per cent of the eligible amount (i.e., 15 per cent of Tier-I capital) without seeking the prior approval of the RBI, subject to compliance with certain specified conditions. Second, banks may augment their capital funds through the issue of Upper Tier II instruments in foreign currency up to 25 per cent of their unimpaired Tier-I capital without seeking the prior approval of the RBI, subject to compliance with certain specified conditions. Capital funds raised through the issue of these two instruments in foreign currency are in addition to the existing limit for foreign currency borrowing by ADs.
Imports and Exports	
Commercial Credits	Trade credits up to one year for non-capital goods and less than three years for capital goods are available up to US$20 million for an import transaction; ADs are permitted to guarantee such trade credits. Trade credits (buyer credits, supplier credits) exceeding US$20 million for financing imports of goods and services for a period less than three years are considered by the RBI, subject to certain conditions.
Documentation Requirements for Release of Foreign Exchange for Imports	Documentary evidence is required for foreign exchange payments for imports exceeding the equivalent of US$100,000.
Export Proceeds—Surrender Requirements	Effective 30 November 2006, exporters are permitted to retain up to 100 per cent (previously 50 per cent) of foreign exchange receipts in foreign currency accounts with banks in India. Effective 28 February 2007, ADs may extend the period of realization of export proceeds beyond six months from the date of export, up to a period of six months at a time, irrespective of the invoice value of the export, subject to conditions.
CHINA	
Investment Restrictions	
FII in:	**Restrictions on Investment in 'A' Shares, but no Restrictions on Investment in 'B' Shares**
Stock Market	Qualified Foreign Institutional Investor (QFII) may invest in A shares, subject to the following limitations (in addition to the criteria of investee's net worth, track record, assets etc): 1. Ownership of any Chinese company listed on the Shanghai or Shenzhen stock exchange by a QFII may not exceed 10 per cent. 2. Total shares owned by QFIIs in a single Chinese company may not exceed 20 per cent. 3. QFIIs are restricted or prohibited from investing in some industries or businesses (e.g., medicine manufacturing, mining, telecommunication, etc.).
Government Debt	QFIIs may invest in treasury bonds listed on domestic securities exchange.
Corporate Debt	QFIIs may invest in convertible bonds and corporate bonds listed on domestic securities exchange.
FII/FDI in:	
Banking	CBRC approval is required. Aggregate cap of 25 per cent with ceiling of 20 per cent for single foreign investors.
Insurance	Cap of 50 per cent.
Domestic FI Investing in Foreign Securities:	
Insurance	Approved Insurance companies may invest in shares in offshore markets within the permitted limit, but may not exceed 10 per cent of the investment limit permitted by the SAFE.
Pensions	N.A.
Mutual Funds/Investment Firms and Collective Investment Funds	Effective 15 April 2006, on approval, qualified fund management firms and other securities management companies may, within a certain limit, combine foreign exchange funds owned by domestic institutions and individuals and use the funds overseas for portfolio investments, including for stocks.
Outward Direct Investment by Domestic Corporations	Effective 1 July 2006, the limit on the amount of foreign exchange used in Chinese enterprises' direct investments abroad has been abolished, allowing domestic investors to purchase foreign currency to participate in direct investments abroad.

Borrowing Restrictions	
External Commercial Borrowings	One-year or longer international commercial borrowing by Chinese institutions must be approved in advance. Financial Institutions with an approval to engage in foreign borrowing may conduct short-term foreign borrowing with maturities of one year or less within the balance approved by the SAFE. Specific transaction-based approval is not required. All foreign borrowing must be registered with the SAFE.
Borrowing Overseas by Banks/ FIs	The regulations governing ECB-corporates above apply. Domestic banks that are funded abroad may not convert proceeds from debt contracted abroad into renminbi and are not allowed to purchase foreign exchange to service these debts.
Imports and Exports	
Commercial Credits	The regulations governing ECB above apply.
Documentation Requirements for Release of Foreign Exchange for Imports	In order to purchase foreign exchange or make payments from a foreign exchange account, importers must provide the import contract, the exchange control declaration related to the import payment in foreign exchange, the customs declaration (required for payment-on-delivery settlement), the invoice and the import bill of lading. Collections and LCs do not require customs declaration, and cash-on-delivery payments do not require bills of lading.
Export Proceeds—Surrender Requirements	Domestic institutions may establish current account foreign exchange accounts with proof of a business licence (or organization registration) and an institution identification number and may retain foreign exchange revenue resulting from 80 per cent of the previous year's current account foreign exchange revenue minus 50 per cent of current account foreign expenditure. Domestic institutions that in the previous accounting year had no current account foreign exchange revenue may retain an initial limit of foreign exchange revenue of US$500,000 when establishing accounts.
THAILAND	
Investment Restrictions	
FII in:	
Stock Market	The combined shareholdings of an individual and related family members may not exceed 5 per cent of a bank's total amount of shares sold and 10 per cent of that of finance companies and credit companies.
	Foreign equity participation is limited to 25 per cent of the total amount of shares sold in locally incorporated banks, finance companies, credit finance companies and asset management companies.
	Foreign investors are allowed to hold more than 49 per cent of the total shares sold in local financial institutions for up to 10 years, after which the amount of shares will be grandfathered, and the non-residents will not be allowed to purchase new shares until the percentage of shares held by them is brought down to 49 per cent. Foreign equity participation is limited to 49 per cent for other Thai corporations. Holdings exceeding this limit are subject to the approval of the BOT.
Corporate Debt	Effective 4 December 2006 investments of more than B 50 million a consolidated entity in short-term debt and related products (not exceeding six months) issued by local financial institutions in the primary market without underlying transactions are not allowed. Effective 15 November 2006, local financial institutions may not issue or sell bills of exchange in baht for any maturity to non-residents.
FII/FDI in:	Foreign capital may be brought into the country without restriction, but proceeds must be surrendered to authorized financial institutions or deposited in foreign currency accounts with authorized financial institutions in Thailand within seven days of receipt.
Banking	Same as applied to FIIs above. Foreign investors may be allowed, on a case-by-case basis, to hold up to 100 per cent of shares sold in commercial banks for a period of 10 years, which will be grandfathered. However, after the 10-year period, they will not be allowed to purchase additional shares unless their holding is less than 49 per cent of the total amount of shares sold.
Domestic FI Investing in Foreign Securities:	
Insurance	Effective 15 January 2007 insurance companies are allowed to invest in securities issued abroad by Thai juridical persons without limit and in foreign securities issued by non-residents up to US$50 million but not exceeding the limit set by their regulator, without BOT approval.
Pensions	Same as above for insurance. The ceiling on investment in stocks is 25 per cent of the portfolio, and that on any single stock is 5 per cent of the portfolio.

Mutual Funds/Investment Firms and Collective Investment Funds	Same as above for Insurance.
Outward Direct Investment by Domestic Corporations	Investments exceeding US$10 million (or the equivalent) a year require BOT approval. Effective 15 January 2007, residents may invest up to US$20 million a person a year in their parent companies abroad (owning at least 10 per cent of the resident companies) and US$50 million a person a year in their affiliated companies abroad (owned at least 10 per cent by the resident) without approval from the BOT.
Borrowing Restrictions	
External Commercial Borrowings	A limit of B 50 million applies on the amount that non-residents may lend to domestic financial institutions. This limit applies to loans granted by non-residents without underlying transactions, with maturities not exceeding—effective 24 December 2006—six months (previously, three months). The non-resident's head office, branches, representative offices and affiliated companies are counted as one entity.
Borrowing Overseas by Banks/FIs	The limit that non-residents may lend to domestic financial institutions is B 50 million or its equivalent. Effective 24 December 2006, this limit applies to loans granted by non-residents without underlying transactions with maturities of less than or equal to six months (previously three months).
Imports and Exports	
Documentation requirements for release of foreign exchange for imports	No documentation requirements.
Export proceeds—Surrender requirements	Foreign exchange proceeds must be surrendered to authorized financial institutions within seven days of receipt. Effective 15 January 2007, foreign exchange earners are allowed to deposit foreign exchange proceeds in their foreign currency accounts up to US$50,000 for a natural person and US$2 million for a juridical person even if no future obligation on foreign exchange can be documented.
KOREA	
Investment Restrictions	
FII in:	
Stock Market	Foreign investors are allowed to freely purchase shares issued by Korean companies. However, purchase of shares of unlisted or non-registered corporations requires notification to a foreign exchange bank. Acquisitions of shares exceeding certain ratios of designated public sector utilities in the process of privatization are limited by the relevant laws.
FII/FDI in:	
Banking	Non-residents may acquire 10 per cent of stocks without restrictions; acquisition exceeding 10 per cent requires approval of the FSC.
Domestic FI Investing in Foreign Securities:	
Insurance	The sum of the assets of an insurance company denominated in foreign currency must not exceed 30 per cent of its total assets.
Pensions	There are no restrictions on the compositions of foreign currency assets imposed by the relevant laws. For example, according to the National Pension Fund (NPF) Act, there is no limitation on the composition of the NPF's foreign currency assets. Instead, this is ruled by internal asset management guidelines.
Mutual Funds/Investment Firms and Collective Investment Funds	According to the Indirect Investment Asset Management Business Act, there are no limitations on the compositions of investment firms and collective investment funds.
Outward Direct Investment by Domestic Corporations	Residents are free to invest abroad on notification to the designated foreign exchange bank. However, investments in financial institutions or insurance companies require notification to and acceptance by the MOFE. Investment by individuals is also limited to 30 per cent of annual sales revenue. Effective 2 March 2006, the limit on investment by individual was abolished.
Borrowing Restrictions	
External Commercial Borrowings	Financial credits up to the equivalent of US$30 million require notification to foreign exchange banks. Other credits exceeding US$30 million require notification to the MOFE.
Borrowing Overseas by Banks/FIs	Foreign exchange banks are required to notify the MOFE of funding with maturities exceeding one year and amounts exceeding US$50 million.

Imports and Exports	
Commercial Credits	Commercial credits other than trade credits (including deferred payments, installment payments, exports advances, and export down payments) up to US$30 million require notification to foreign exchange banks. Other credits exceeding US$30 million require notification to the MOFE.
Documentation Requirements for Release of Foreign Exchange for Imports	No documentation requirements.
Export Proceeds—Surrender Requirements	Effective 2 March 2006, export earnings exceeding US$500,000 (previously US$100,000) must be repatriated within one and a half years (effective 1 January 2006; previously, six months) of receipt. These funds, however, may be held abroad and used for overseas transactions in accordance with the regulations on foreign exchange transactions.

NOTES

1. Acharya (2006) and Virmani (2006) discuss the roles of different policies in driving India's growth.
2. See RBI (2004) and Bery and Singh (2007) for a comprehensive documentation of this evolutionary process. In reviewing monetary policy outcomes, Virmani (2007) notes that there has been a steady convergence between Indian and international (US) inflation levels, as measured by comparable consumption deflators, over the last 15 years. Such convergence greatly facilitates financial integration and needs to continue.
3. This point has been made by Virmani (2007).
4. See Mohan (2007) and Reddy (2007) for a clear articulation of some of these issues in India's context.
5. In plain language, even if the exchange rate of the rupee for the dollar remains fixed, India loses competitiveness if its inflation rate is higher than US inflation. This is because the rupee's real exchange rate—nominal appreciation, augmented by the inflation differential—has appreciated. There are several related concepts of the real exchange rate. One concept focuses on the change in the relative price of non-tradables (haircuts) to tradables (iPods), with an increase in the price of non-tradables representing a real appreciation of the rupee. An alternative concept focuses on external competitiveness and typically compares changes in price levels between the home country and its main competitors. We use the term 'real effective exchange rate' to refer to the latter concept.
6. Bosworth and Collins (2008) present calculations of total factor productivity growth for China and India, both at the aggregate level and separately for agriculture, manufacturing and services.
7. See the analysis in the IMF's October 2007 *World Economic Outlook*, and the references therein.
8. Kaminsky, Reinhart and Vegh (2004) discuss how procyclical fiscal policy has hurt the ability of Latin American economies to deal with capital flows.
9. See Chapter III in the IMF's October 2007 *World Economic Outlook*. Of course, it is difficult to establish a clear counterfactual in such an exercise (how much the exchange rate would have appreciated if there was no intervention), so one should be cautious in interpreting these results.
10. This box is based on material taken from Prasad (2008).
11. Patnaik and Shah (2007) discuss the related problem of moral hazard caused by implicit government guarantees such as those related to reducing exchange rate fluctuations through intervention. They provide firm-level evidence that a managed exchange rate induces firms to increase unhedged currency exposures.
12. See Shah (2007) for a more detailed discussion of these points.
13. In a recent contribution, Rose (2007) marshals empirical evidence that countries that have adopted inflation targeting regimes have lower exchange rate volatility and fewer sudden stops than similar countries that do not target inflation. He also notes that this monetary regime seems durable—no country has yet been forced to abandon an inflation targeting regime.
14. See Brash (2000).
15. Crowe and Meade (2008) discuss different aspects of central bank transparency and provide some evidence on the benefits of increased transparency.
16. See Forbes (2006, 2007).
17. This suggestion is taken from Virmani (2007).

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