

Capital Account Convertibility: A Neglected Consideration

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On any liberal view, capital account convertibility (CAC) like free trade must be a consummation devoutly to be wished. At some deep level, the case for both is a moral one—the freedom of individuals to undertake economic transactions, including the right to buy and sell goods regardless of their destination or provenance (free trade) and the right to buy and sell future and contingent claims to these goods to/from people regardless of their nationality (CAC).

The operative word, of course, is consummation. Over the course of history, all societies have placed restrictions on these freedoms for a number of reasons, some good and some less so.¹ Usually, restrictions stem from the assessment that individual freedoms are subordinate to the greater economic good. But societies do progressively eliminate the restrictions as they have become richer: this is true not just of today's Organization for Economic Cooperation and Development (OECD) countries but other emerging market countries as well. The key question then is not whether but when.

This piece examines one consideration that should influence the timing of any move to CAC. Its restricted focus stems from the view that this consideration is of first-order importance for long-run growth, from the relative inattention to it, and from the well-rehearsed arguments for the other considerations. The Tarapore Committee (1997) provided an excellent summary of the state of the debate on this issue, including exchange rate policy, but devoted less attention to the issue that will be the focus of this piece.²

Not to prolong the suspense, this consideration is the *level* of the real exchange rate or what might be called the objective of avoiding overvaluation. This is an issue related to the

¹ Jagdish Bhagwati's widely cited "capital myth" is the classic analysis for why restrictions on capital are more justified than restrictions on free trade.

² Reddy (2004) gives a brief but excellent discussion of many of the important issues. Prasad and Rajan (2005) suggest a modality for moving toward CAC without taking a strong view on timing.

real side of the economy and should be distinguished from those (stability and volatility) that are related to the macroeconomic and financial sectors.

Three points should be stressed at the outset. First, the uncertainties about CAC and the arguments in the paper relating to them are all about non-foreign direct investment (FDI) related flows. The positive growth impact of FDI appears to be well-established.

Second, the arguments advanced in the paper need to be appropriately calibrated/modified to take account of the fact that the issue being debated currently and the action being contemplated by the government is not a move from being closed to capital flows to becoming completely open. India is already quite open to flows involving nonresidents. What is under consideration would involve perhaps a less dramatic change, largely affecting residents.

Finally, and most importantly, the calculus of benefits and risks will reflect a number of factors, including the efficiency and capital- and resource-augmenting benefits of CAC, the strength of the financial system, and the macroeconomic preconditions. This paper should be seen as adding an element into the calculus without claiming decisive status for it.

Growth, Tradable Sectors, and Diversification

Successful economic growth and development are almost always associated with the growth of the tradable sector. Lee Kuan Yew, delivering the Jawaharlal Nehru Memorial Lecture in 2005, expressed this succinctly and dramatically: “Since the industrial revolution, no country has become a major economy without becoming an industrial power.” Given that manufacturing is the tradable sector par excellence, the underlying sentiment is that manufacturing growth is a concomitant, perhaps even a *sine qua non* of, overall growth. Chart 1 illustrates this proposition, plotting the share of manufacturing exports in GDP against the level of income, for the set of successful growers in Asia—Singapore, Korea, Thailand, Malaysia, Indonesia, China, Taiwan, and India; for the sake of comparison averages for Latin America and Africa are also plotted.

Another related stylized fact is that successful growth is accompanied by the private sector undertaking new, varied, and sophisticated activities (Imbs and Wacziarg 2003; Hausmann and Rodrik 2004). All economies start off agricultural, and the successful ones diversify away from agriculture toward manufacturing and, within manufacturing, from simple to more sophisticated activities. Diversification is thus intrinsic to development. Chart 2 (drawn from Imbs and Wacziarg 2003) plots a measure of concentration of activities in manufacturing (which is the inverse of diversification) on the vertical axis for a group of countries. The typical pattern is that over time, as countries grow, they tend to diversify (reflected in declining concentration) before they specialize. The chart shows that Asian countries have been far more diversified than countries in Latin America (the line for Asia lies completely below that for Asia). Read together with chart 1, this suggests that the fast growing Asian countries have not only had a bigger tradable sector but also a richer and more varied set of activities within it.³

³ Although not shown, both Asia and Latin America are substantially more diversified than countries in sub-Saharan Africa.

Enter Exchange Rates

The ability of and incentives for the private sector to engage in activities in the tradable sector, to move away from traditional agriculture, and to do new and varied things are shaped by numerous factors—history, endowments, culture, institutions, and so on—but also by the policy environment. One key policy that deters investment in tradable sectors and militates against diversification away from traditional, simple activities is an overvalued exchange rate. The exchange rate is key for a number of reasons: In contrast to trade liberalization, which can help exports, a competitive exchange rate helps both exports and import-substitutes (i.e., it helps all tradable sectors); it has the added advantage, unlike subsidies, directed credit, and other forms of industrial policy, of being a market-based mechanism and not requiring administrative intervention and all the costly rent-seeking that that can give rise to; unlike some of these measures, it is self-targeting: It helps those sectors that actually perform because the benefit kicks in when there are actual exports; and finally, it is self-eliminating because the more successful the policy is in promoting exports and growth, the greater the pressure for trend appreciation of the currency and hence for the natural “elimination” of the policy.

Evidence from the experience of the successful growth experiences is informative. In Johnson, Ostry, and Subramanian (2006), we calculated, based on a standard methodology, the extent to which countries’ real exchange rates were over or undervalued using a simple methodology.⁴ We found that the countries that had sustained economic growth and growing manufacturing exports had consistently avoided overvaluation. Chart 3 shows that Asian countries have not had overvalued exchange rates, while Latin America and Africa have had bouts of overvaluation.⁵ In addition, the successful growers in East Asia had shorter spells (i.e., consecutive years) of overvaluation and smaller magnitudes of overvaluation during these spells. For example, the Asian economies had an average spell of overvaluation of four years (compared with seven for Latin America and 14 for sub-Saharan Africa, respectively); and the average overvaluation during this spell was 7 percent compared with 16 percent and 29 percent for Latin America and sub-Saharan Africa, respectively). Interestingly, India has never suffered a spell of overvaluation, and China has avoided overvaluation since its growth took off in 1978.

More formal evidence on the impact of the real exchange rate is in Prasad, Rajan, and Subramanian (2007) and Rodrik (2007). Both of these contributions document a statistically and economically strong relationship between growth and real exchange rates: a percentage point increase in overvaluation reduces long-run growth by about 0.1 percent. Prasad, Rajan, and Subramanian (2007) also show that real exchange rates work by affecting the fortunes of the exportable sector in developing countries.

⁴ It should be stressed that all methodologies for estimating equilibrium exchange rates are fraught with problems.

⁵ It is interesting that during the period 1960–80, when Latin American and Asian growth was close, their competitiveness positions were not that dissimilar (see chart 2).

Of course, investment in tradables is affected not just by the level but also the volatility of the exchange rate. Risk and uncertainty about returns have a significant dampening effect on investment in tradables. Here too, the evidence is telling. A measure of volatility is the standard deviation of changes in the parallel market exchange rate. For Latin America, the standard deviation is about 10 times that for Asian countries.

So the evidence points to a competitive and stable exchange rate, and the consistent avoidance of overvaluation, as a correlate, and perhaps even a key ingredient, of facilitating sustained growth by eliminating the disincentives for investing in the tradable sector.

CAC and Competitiveness

What is the role of CAC in all of this? The simple answer is that the ability to manage an exchange rate is circumscribed by CAC. The famous trilemma of international macroeconomics says that a country cannot simultaneously attain the three objectives of open capital account, monetary independence, and a fixed exchange rate. India, which has had a flexible exchange rate for much of its history, can continue to have monetary independence even with CAC.

The problem will arise when there are significant upward pressures on the exchange rate as a result of capital inflows (or foreign currency borrowing by domestics). In this case, the government might want to resist this pressure for the sake of preventing undue pressures on the tradable sector. In other words, it might de facto want to maintain a fixed or a semi-fixed exchange rate, and the trilemma will then bite.⁶

It is not that preserving competitiveness will become impossible. In recent years, India and especially China have sought to keep a lid on the exchange rate and have done so with some success. But there are limits and costs. These have been well illustrated by developments in India over the last few months.

Inflation in India picked up over the last few months while capital inflows continued to surge. These twin developments placed the Reserve Bank of India (RBI) in a quandary. Combating inflation required a tightening of monetary policy, which can be achieved by a combination of rising interest rates and an appreciating currency. On the other hand, maintaining competitiveness required resisting the appreciation pressures stemming from the capital flows.

What did the RBI do? To prevent the nominal appreciation, it intervened in the foreign exchange markets (that is, it bought up the dollars). But this increased the supply of liquidity which ran exactly counter to what the doctor ordered for combating inflation. To offset this liquidity expansion, it sterilized the intervention, by issuing interest-bearing securities to the banks, which in return sold the rupees back to the RBI. But when you increase the supply of interest-bearing securities, their price, namely interest rates, tend to go up, or more strictly tend to be higher than otherwise. Domestic agents, especially corporates,

⁶ This suggests that greater exchange rate flexibility need not per se address the problem of capital flow-induced threats to competitiveness.

found it advantageous to borrow in dollars, which resulted in further inflows. The tail started to wag the dog.

The inducement to borrow in dollars was, of course, facilitated by the RBI's then apparent policy of holding the rupee. Domestic firms were, in effect, given a huge, albeit implicit, subsidy: They could pocket the difference between domestic interest rates and those in dollars without suffering any losses from rupee depreciation, which had been (sort of) ruled out by RBI policy. In other words, those borrowing in dollars and investing in rupee assets were given a one-way bet—a free lunch.

Thus, the limits to sterilization are set by the fact that with an open capital account, sterilization adds to the very pressures that it is meant to address, creating a cycle of flows, sterilization, further flows, etc. It is the inability to manage this that led the RBI to abandon this policy and allow the rupee to float.

The costs of sterilization are really the flip side of the subsidy to domestic borrowers of foreign currency. The financial cost is the difference in interest rates between the paper issued and the returns on the foreign asset), while the underlying or the real cost is the foregone investment and growth opportunity as interest rates are forced to be higher than they otherwise would be in the absence of capital flows.

The point is that with CAC exchange rate movements are dominated by financial flows and asset markets: In theory, movements generated by asset market behavior should be consistent with the underlying fundamentals, namely the real side of the economy. But experience has shown that there can be systematic and prolonged divergences between the two (the current level of the US dollar being a good example) and that the process of correction—described by Calvo (2005) as “sudden stops”—can be abrupt and disruptive, involving overshooting and real costs, to the detriment of a country's ability to manage the exchange rate with an eye to maintaining the vibrancy of the tradable sector.

The assertion here is not that openness to capital inflows is the sole cause of overvalued exchange rates. Both could be the outcome of deeper political economy factors, reflecting the power of elites who have an interest in overvalued exchange rates (and thus cheaper access to imports) and in open capital accounts as protection against future expropriation. It could also be the case that exchange rates are ultimately determined by demographics: For example, overvalued exchange rates can only be avoided if there is a large and growing labor force (which could explain the behavior of Asian exchange rates). Regardless of the deep determinants, at the very least, it seems that some restrictions on capital are a necessary, proximate condition for being able to sustain competitive exchange rates and avoid persistent overvaluation. Evidence for this is in chart 4, reproduced from Prasad, Rajan, and Subramanian (2007), which shows that countries that witness more flows, regardless of type, tend to see greater overvaluation of their currencies.

But there is evidence on the detrimental trade and export impact of capital flows from another unlikely quarter. Note that the argument about the impact of capital flows on tradable goods via the exchange rate is not confined to private flows. Analytically, the argument also applies to official flows, i.e. to foreign aid. Rajan and Subramanian (2005) show that aid flows have a negative impact on labor-intensive and export sectors. In particular, they show that in countries that received more aid, labor-intensive and export sectors grew much slower and that this effect was mediated through exchange rate changes. On their estimates, a 1 percentage point increase in aid reduces the growth of manufacturing by about 0.5 percent.

Charts 2 and 3 illustrate the association between sub-Saharan Africa's poor manufacturing export performance and its consistently overvalued exchange rates. Thus, the experience of Asia, Latin America, and even Africa, are all consistent in suggesting possible effects from openness to capital flows to exchange rates and the growth of the tradable sector.

There is another subtler way in which CAC can affect the exchange rate and tradable goods. When confidence in the currency is high, domestic corporates can take advantage of interest differentials and borrow in cheaper non-rupee liabilities. Their balance sheets will start getting dollarized on the liability side. Once this happens, the ability of the exchange rate to act as an effective tool of increasing domestic demand and helping the fortunes of the tradable sector will be reduced. The reason is the balance sheet effect (Kaminsky and Reinhart 1999). On the one hand, any decline in the exchange rate will increase demand through normal channels (exports become cheaper and imports become more expensive); on the other, such a change will simultaneously be contractionary because domestic firms (and households will face) significantly higher debt servicing in rupee terms as a result of currency changes. Frankel (2004) has argued that devaluations, which used to be expansionary before the 1990s, have now become less so because of the contractionary tug exerted by balance sheet effects.

To summarize, CAC has two distinct effects: first, it reduces a country's ability to influence the exchange rate; and second, because of possible balance sheet effects, it reduces the sensitivity of the both aggregate demand and the boost provided to the tradable sector to exchange rate changes.

India

To recapitulate, the chain of reasoning suggested above is that: First, the tradable sector is key for promoting growth; second, that a competitive exchange rate is important in promoting the tradable sector; and finally, that CAC reduces, albeit does not eliminate, the ability to sustain a competitive exchange rate, especially in the face of large capital inflows.

How do these three links apply in the case of India today? Take them in reverse order. In the period ahead, is India likely to be a large net recipient of capital flows? Even discounting for some of the euphoria surrounding "India Shining," it looks like the growth prospects for India are indeed quite bright. In Rodrik and Subramanian (2004), we had conservatively projected a trend growth rate of 7.5 percent per year. If anything close to that is realized, India is likely to attract sizable flows of capital for the foreseeable future. One offsetting factor, of course, is the pent up demand for foreign assets from Indian residents, especially households. The open question, of course, is whether this is likely to be a one-off stock adjustment or something that will persist and offset the long-run flows, which will tend to be dictated by differential growth rates, and the higher implied return on Indian relative to global assets.

Will such flows constrain the ability to prevent the exchange rate from becoming overvalued? As argued earlier, India can deploy a number of instruments in the event that surging inflows put upward pressure on the exchange rate. But even sterilization, perhaps the least distortionary form of intervention, is costly, and the fiscal costs, which would be less of an issue if the fiscal position were sound, become a more serious concern in India's case where the fiscal outlook is amongst the few clouds on an otherwise clear macroeconomic

horizon. Also, there are limits to sterilization: By forcing interest rates to be higher, it aggravates the inward flow of capital that gives rise to the problem in the first place.

One response to fears about loss in competitiveness through exchange rate appreciation is that other policy tools should be used to offset the loss: fiscal adjustment, trade liberalization, and structural reform, more broadly. While undoubtedly true, it begs the question as to why avoiding overvaluation should also not be part of the package of measures geared to attaining competitiveness.

There is the related issue of whether CAC will lead to the type of dollarization that could blunt the exchange rate as an effective instrument to boost demand and the tradable sector. In the buoyant situation that India currently finds itself, it is quite likely that residents will take on foreign currency-denominated liabilities (this seems to underly the recent clamor for CAC by the private sector). Indeed, it would be a surprise, and counter to the interest parity condition, if liability dollarization did *not* happen. The future consequences will depend on risk management practices in the private sector. The more sophisticated these are, the more likely that companies will hedge some or all of their foreign currency exposure. In this case, there might be fewer risks associated with CAC. More research is required to understand the likely behavior of the domestic corporate sector to CAC.

Perhaps the most important question for India when considering CAC is the importance of developing the traded goods sector. Many have observed that India has underexploited its manufacturing potential (which is to some extent true as reflected in chart 1). In this view, the revival of manufacturing is vital if India is to achieve high growth coupled with providing employment opportunities for its large pool of unskilled labor (Joshi 2005; Acharya 2006). If this analysis is correct, it would seem that a competitive exchange rate needs to be part of a package of measures, along with labor reform and development of infrastructure that is geared to reviving the fortunes of manufacturing, especially in the backward states. Kochhar et al., 2006 suggest that the current pattern of skill-based development, which has been at the expense of low-skilled manufacturing, may persist. Their analysis points to threats faced by labor-intensive manufacturing, arising from a kind of Dutch disease as the price of skilled labor is bid up. In such a situation, preserving the ability to influence the exchange rate to protect unskilled manufacturing would appear very important.

Any argument such as that advanced in this piece, namely that promoting the tradable sector is a key priority for a developing country, naturally raises the question as to when this ceases to be a priority or at least an overriding one. Or, to put it bluntly, when does a developing country cease to be a developing country from the perspective of developing the tradable sector? It is very difficult to be definitive or precise about this, but one crude way of thinking about this is the following.

Assume that the process of development follows the Kuznets hypothesis and that the tradable sector is represented by manufacturing. The Kuznets hypothesis suggests that the manufacturing will first rise with development and then fall as incomes rise. Thus, the share of manufacturing in GDP should follow an inverted U shape. One could posit that tradables should cease to be a “target” of development around the point that its share in the economy starts declining: at this point, a developing country is more like a developed country. What is the income level associated with this turning point? We can actually do a simple calculation to ascertain this. For the latest year for which data are available, we run a regression of the

share of manufacturing in GDP against per capita purchasing power parity (PPP) GDP and its square for over 100 countries for which data are available. The Kuznets relationship is indeed confirmed by this regression. The regression also yields a turning point for this relationship of about US\$15,000 per capita in PPP terms. Assuming a country was “normal” and that it followed the typical pattern, this could be the level at which manufacturing ceases to be the focus of development policy.⁷

A number of good arguments could be advanced for why India is not a typical country: Because of its idiosyncratic development strategy, it might have a smaller role for manufacturing in the future than the normal country; and because it is already highly diversified, much more so than the typical country, it needs to provide less policy assistance to promote diversification (see Kochhar et al. 2006). But even so, at a per capita income level of about US\$2,600, the question remains whether Indian policy makers can afford to take their eyes off the tradable sector.⁸

The Current Conjuncture

The issue of CAC has acquired new resonance because of the dramatic shift in the policy of the RBI in response to a combination of recent inflows and inflationary pressures: From a managed float, the RBI seems to have moved to a more flexible exchange rate policy.

But the permanence of this policy cannot be taken for granted because there will inevitably be pressures for further appreciation of the rupee and already we see clamor for “something to be done” about the exchange rate.

In the current context, three remarks can be made about the role of CAC. First, it is difficult to contemplate any major reversal of Indian policy toward CAC. The costs in terms of damaging market confidence in India’s reform credentials would be high, even prohibitively high. That said, policymakers should not further undermine flexibility by taking policy actions in the direction of further liberalizing inflows. There may even be a case for tightening external commercial borrowings (ECBs) that were surprisingly relaxed in the last year. If feasible, some tightening of short-term (hot) flows might be warranted. Skill and timing will be essential in implementing any such tightening so as to not disrupt markets. One possibility would be to reduce caps on ECBs whenever they are not fully met and to continue this process as long as the slack allows.

Second, the point is made that given the magnitude and increase in capital flows, it is simply foolhardy to try and manage or reverse this process. According to this view, India should codify what is de facto an open capital account and just get on with it. But the real issue here is not how much capital is coming in “naturally,” which obviously should be

⁷ It is worth mentioning that a number of industrial countries—the United Kingdom, France, Italy, Greece, and Ireland—moved to full CAC at income levels well above US\$15,000 per capita.

⁸ An alternative way of calculating such a turning point is to look at diversification within manufacturing. At what point does diversification cease to be important for a country in the development process? A similar exercise yields a turning point of about US\$18,000. This is broadly consistent with the figure obtained above when the question is posed in terms of manufacturing. Again, India, despite being an outlier, is far away from the turning point.

allowed to come in, but what the future policy actions should be. If ECBs, even as they are now, play a role in limiting inflows, it seems that they should be managed carefully, and not liberalized on the grounds that agents will always find it easy to circumvent controls. As long as policy has some impact, that flexibility should be retained. Similarly, another major area where there is still effective policy control in inflows relates to inflows into the bond market. Again, these should not be liberalized prematurely without taking into account the effect on the exchange rate.

Third, some have argued that one way to manage the exchange rate consequences of capital flows is to liberalize outflows, taking some pressure off the exchange rate. While such action might help, there are two consequences of liberalizing outflows that should be considered. Liberalizing outflows, often, engenders additional confidence in policy and results in further inflows. A second and more subtle point relates to international political economy. The more a country liberalizes outflows, the less easy it becomes to justify the asymmetry between policies to outflows and inflows. Trading partners will inevitably ask why they should be expected to open their economies to Indian capital when India does not similarly reciprocate. In other words, liberalizing outflows could easily lead to pressures from partners on India to further liberalize inflows. India should be mindful of this consideration.

Concluding Remarks

Decisions on CAC will no doubt be complex, involving the juggling and reconciliation of multiple objectives and constraints. In the debate on CAC in India, financial and macroeconomic objectives and constraints have been paramount, with much less discussion on the growth and development dimensions of CAC. Of course, the growth dimension cannot be the only, or even the most important, ingredient determining CAC, but it would seem to merit more consideration, given its consequences.

One reason why Indian policymakers have devoted less attention to this issue than it merits and have not seen exchange rate policy as being a constraint on development may be because of having managed it so well. Exchange rate policy must be rated as one of the few consistent policy successes in India, reflected in the consistent avoidance of exchange rate overvaluation. And this success may have bred a certain sanguineness about, and hence some inattention to, exchange rate management in what could be a very different era of CAC. It is striking—even shocking—to read the two Tarapore Committee reports and find such little discussion of the exchange rate and discussions of the potential problems in managing it in a world of greater capital movements. The philosopher Santayana famously cautioned against repeating the mistakes of the past. Reading the Tarapore Committee reports in light of recent experience brings home the realization that perhaps there is also wisdom in not repeating the *successes* of the past.

At the end of the day, CAC might well turn out to be an overblown issue: a tale full of sound and fury, signifying much less than the strong views of proponents and opponents alike might suggest. This paper raises the question whether these gains and risks are symmetrically moderate if the competitiveness and growth consequences from an early move to CAC are fully taken into account. Echoing St. Augustine, if Indian policymakers were to

say, “let us have CAC but not yet,” would it be a case of undesirable procrastination or of wisely heeding the precautionary principle? The answer to that question may well be the former, but it would be a whole lot reassuring if it were arrived at after factoring in the exchange rate and growth consequences of CAC.

Chart 1. Manufacturing Exports to GDP (1960-2005)
(in percent)

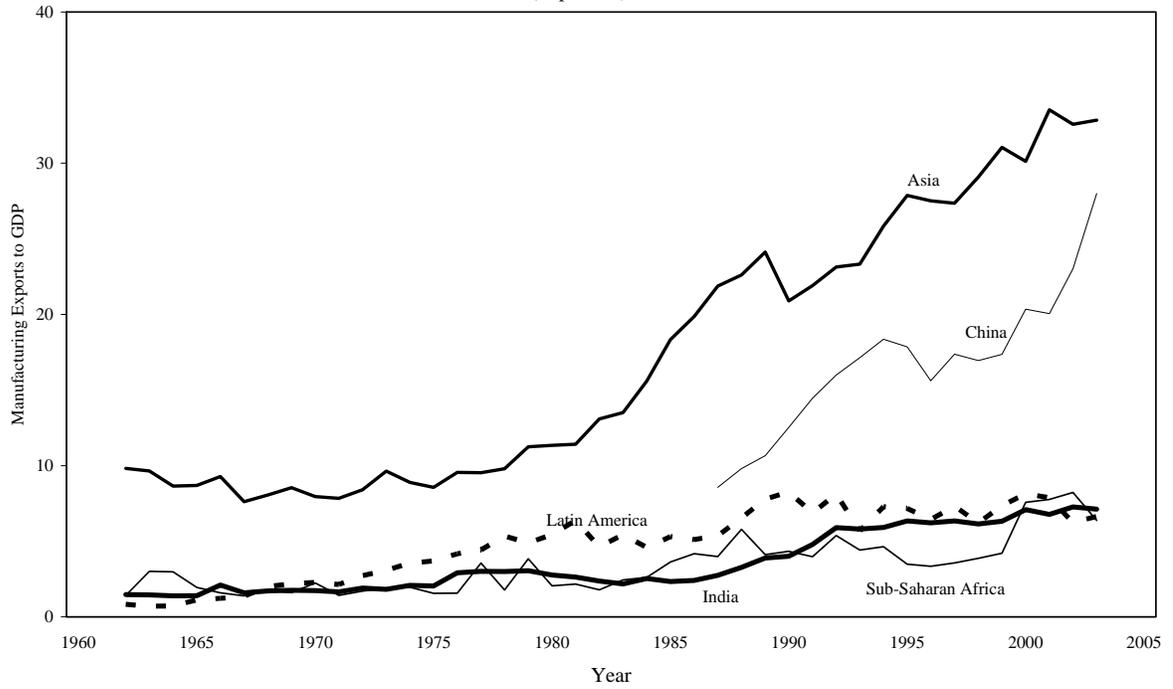


Chart 2: Diversification, 1970–98
(The Herfindahl index measures concentration—the inverse of diversification)

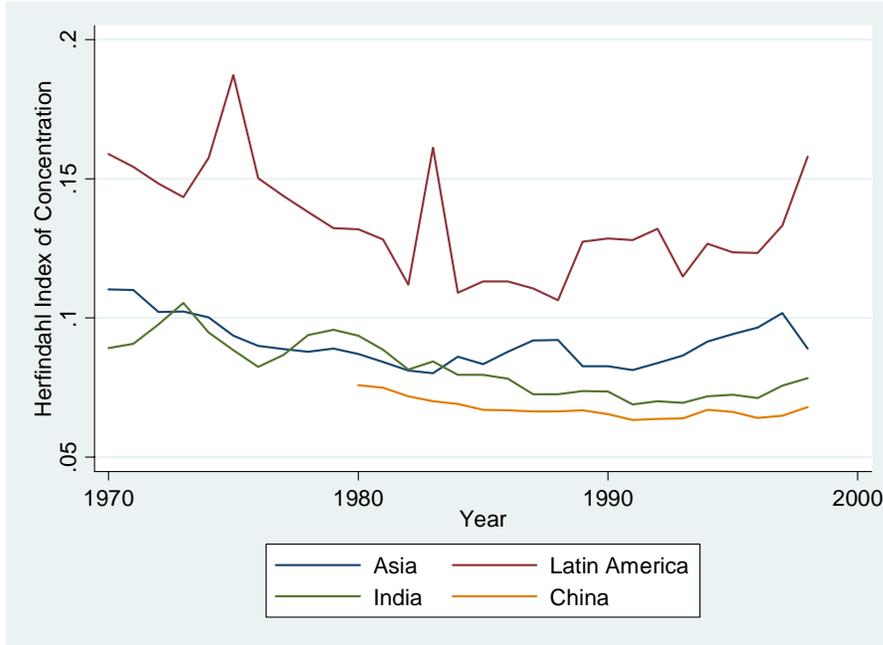


Chart 3. Exchange Rates: Exchange Rates: Deviation from Long-Run Equilibrium (1960-2000)
(+ deviation signifies overvaluation)

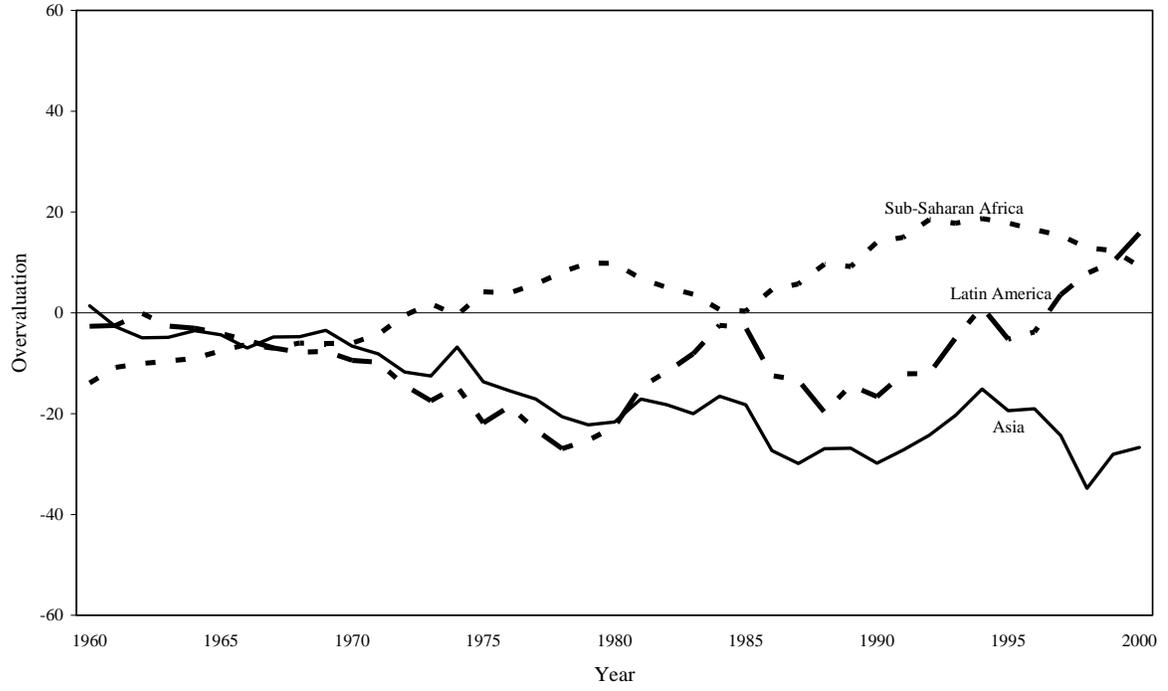
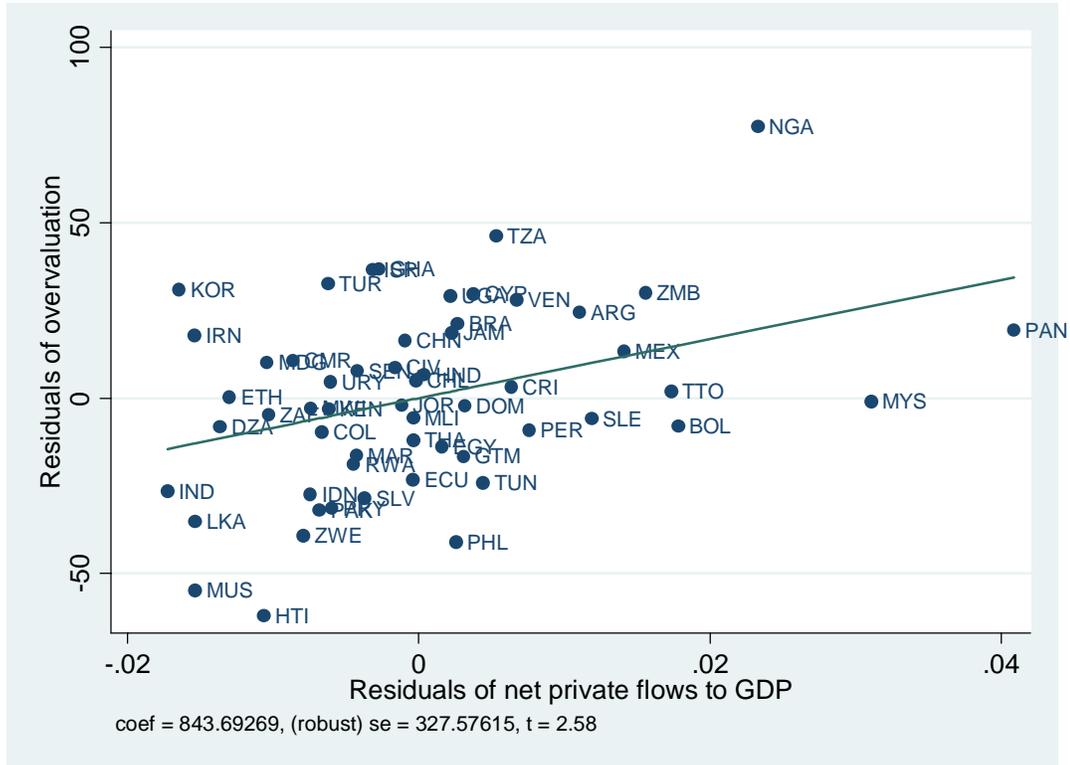


Chart 4. Overvaluation and Capital Flows, 1970–2004



The plot is the conditional correlation obtained by running a regression of overvaluation on net private flows (portfolio equity, debt, and FDI), after controlling for demographic variables. It corresponds to the specification in Table 6, column 4 of Prasad, Rajan, and Subramanian (2007).

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