

Capital Account Liberalization: The Indian Experience

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I. INTRODUCTION

When India and China successfully withstood the contagion from the East Asian crisis in 1997, the relatively restrictive capital account regime of these two countries was generally highlighted as the savior. Unlike the pre-crisis period when capital controls were generally viewed as a taboo, policy thinking in the post-crisis period has changed dramatically, with several emerging market economies slowing down the pace and content of liberalization of capital controls with a view to limiting their vulnerability to crisis. The benefits and costs of an open capital account appear more ambiguous today than what many researchers and policymakers had believed in the pre-crisis period. In this context, the approach to capital account liberalization as adopted by India and China has become an important subject of international policy discussions.

“When knowledge is limited, the rule for policymakers should be—first do no harm.”² Forms of liberalization that may not solve any problem but can potentially become a source of instability must be avoided. Following this dictum, India has followed a gradual and calibrated approach towards capital account liberalization. In particular, the Indian policy towards capital flows has laid emphasis on encouraging larger non-debt and longer-maturity debt flows, since the benefits associated with such flows may clearly outweigh the costs. On the other hand, the policy has retained controls on short-term debt inflows and also on capital outflows involving residents.

Today, the policy challenges for India arising from capital account liberalization broadly fall under two categories:

- Management of the surge in capital flows, and
- Achieving preconditions that could create room for further liberalization of the capital account.

On the management of flows, in the face of weak domestic absorption of foreign capital and with a managed float exchange rate regime in India, the large reserves accretion in recent years has given rise to a challenge on the monetary management front. Even though effective sterilization has helped in regaining control over the money supply, the costs associated with sterilization have been an issue, which is still being widely debated. Some have even argued that the reserves accumulation policy has adverse growth implications and must be abandoned in favor of a regime characterized by a flexible exchange rate and full market absorption of foreign capital. Others view the recent surge in capital flows as a response to positive interest rate differentials in the face of a stable/appreciating exchange rate.

Therefore, the conditions that cause such surge in inflows must change. ~~[Note: We would~~

~~recommend dropping these two sentences, as they appear out of place.]~~ On the preconditions for the further liberalization of flows, some argue that the overemphasis on such, in particular fiscal consolidation and a strong financial system, has also been viewed as the factor that has slowed down the progress on liberalization of capital account. All these views clearly indicate the trade-offs that may be involved in current policy choices in the context of capital account liberalization. This paper is aimed to clarifying some of these issues based on an

assessment of the costs and benefits of capital account liberalization against the background of India's specific circumstances and needs.

Section II reviews the received wisdom on capital account liberalization by drawing upon theoretical literature as well as country experiences. The pre-conditions that emerge are also briefly discussed before dealing with issues involved in the sequencing of capital account liberalization. A cross-country perspective on the policy preference for the broad framework of capital account liberalization is provided in Section III by assessing the impact of capital account liberalization on improving allocative efficiency, disciplining macroeconomic policy, and spurring economic growth. Also discussed are the effectiveness of capital controls; and the appropriateness of the international financial architecture to deal with challenges arising from capital mobility. Section IV details India's approach, which has been diagnosed against the above benchmarks.

II. COSTS AND BENEFITS, PRECONDITIONS AND SEQUENCING OF CAPITAL ACCOUNT LIBERALIZATION

Capital controls have conventionally been used the world over to deal with situations of weak balance of payments. Over time, they have also been increasingly viewed as an instrument of monetary and exchange rate autonomy. In a number of countries, application of capital controls allowed the authorities to manipulate interest rates and exchange rates so as to attain the objectives of internal and external balance. The "Impossible Trinity" (that is, the incompatibility between monetary policy independence, an open capital account and a fixed or managed exchange rate regime) also validated a role for capital controls in countries

operating a fixed or managed exchange rate regime. Subsequent analyses based on asymmetric information and herd behavior in financial markets suggested that capital controls may help in dealing with market failures more effectively, particularly those arising from volatility in short-term capital flows and exchange rates. As pointed out by Johnston and Tamirisa (1998), capital controls are more likely to exist in countries with a fixed or managed exchange rate regime, lower per capita incomes, larger government consumption (as a share to GDP), less independent central banks, larger current account deficits, low levels of economic development, high tariff barriers, and large black market premia.

Over the years, however, open capital accounts have been advocated quite strongly for developing economies, even when the perceived benefits of capital account liberalization were deemed to be limited. For example, Gilbert et. al. (2000) argued that “if the benefits of capital market liberalization are smaller for the poorest countries than for the middle income countries, the same is probably also true of the costs.”

A. The Case For an Open Capital Account

In assessing the case for and against capital account liberalization, the benefit of an open capital account is typically expected to be the following:

- Brings greater financial efficiency, specialization and innovation by exposing the financial sector to global competition;

- Attracts foreign capital, to developing countries needed to sustain an excess of investment over domestic saving;
- Provides residents the opportunity to base their investment and consumption decisions on world interest rates and tradables prices, which could enhance their welfare;
- Enables aggregate saving and investment to be optimized, by setting prices right, leading to both allocative efficiency and competitive discipline;
- Permits both savers and investors to protect the real value of their assets through risk reduction, by offering the opportunity to use global markets to diversify portfolios;
- Avoids capital controls so as to discourage hidden capital flight and/or financial saving diversion into real assets, gold, etc., which might otherwise be brought on during periods of macroeconomic stability and lead to a suboptimal use of internal resources.

It should be noted that capital controls are not very effective, particularly when current account is convertible, as current account transactions create channels for disguised capital flows. Capital controls must also be intended to insulate domestic financial conditions from external financial developments, but here too, they are increasingly becoming ineffective. The influence of external financial developments has been increasing over the years even in countries with extensive capital controls, as the costs of evading these controls have declined and the attractiveness of holding assets in offshore markets have increased. Finally, there is

the “squeezing on a balloon argument,” with capital being fungible. Therefore, restrictions on one form of capital and not on others would quickly lead to displacement of flows to the uncontrolled segment.³

B. The Case Against an Open Capital Account

The cost of an open capital account can be summarized as follows:

- Leads to the export of domestic savings, which for capital scarce developing countries would cripple the financing of domestic investment.
- Weakens the ability of the authorities to tax domestic financial activities, income and wealth.
- Exposes the economy to greater macroeconomic instability arising from the volatility of short-term capital movements and the risk of large capital outflows and associated negative externalities.
- Premature liberalization—that is, if the speed and sequencing of reforms are not appropriate—could initially stimulate capital inflows that would cause the real exchange rate to appreciate and thereby destabilize an economy undergoing the fragile process of transition adjustment and structural reform. Once a stabilization program lacks credibility, currency substitution and capital flight could trigger a balance of payments crisis, exchange rate depreciation and spiraling inflation.

- Commodity convertibility rather than financial convertibility is of greater welfare significance.
- Divert resources from tradable to nontradables sectors as a result of the real effective exchange rate (REER) appreciation arising from larger capital inflows following capital account liberalization. This could happen in the face of rising external liabilities and, as a result, risk of the “Dutch disease effect.”
- Lead to financial bubbles, especially through irrational exuberance of investment in real estate and equity markets financed by unbridled foreign borrowing.
- Expose the distortions in the price of borrowing from abroad vis-à-vis the domestic market and, under such circumstances, create conditions where private firms borrow more than what is socially optimal. This generally increases the cost of foreign borrowing for all borrowers.

C. Preconditions for Capital Account Liberalization

The ever growing literature on capital account liberalization has thrown up the following pre-conditions:

- Substantially narrow the differences between domestic and external financial market conditions, and establish a flexible interest rate structure.

- Reduce the fiscal deficit and undertake deficit financing in a noninflationary way (that is, a complete avoidance of use of inflation tax), and limit and/or reduce taxes on income, wealth, and transactions to international levels.
- Implement an appropriate exchange rate policy, with greater flexibility as the degree of openness increases.
- Restructure and recapitalize domestic financial institutions (FIs), and strengthen the prudential supervision of them.
- Enhance domestic competition by fostering greater allocative and operational efficiency within the financial sector.
- Reduce restrictions inhibiting wage price flexibility.
- Introducing second generation reforms—the promotion of domestic competition, increased transparency and accountability, good governance, labor reforms, and measures to ensure more equitable growth.

D. Sequencing of Capital Account Liberalization

In the neo-classical framework, capital inflows contribute to economic growth primarily by supplementing domestic saving. In contrast, in the endogenous growth framework, the economic growth attributed to capital flows comprise the spillover effects associated with foreign capital in the form of new technology, skills, and products, as well as the positive externalities arising from more efficient domestic financial markets and the resultant

improved resource allocation. Since the spillovers and externalities associated with different forms of foreign capital could vary, a pecking order approach to the composition of capital flows is often advocated, which could help in prioritizing capital inflows based on perceived growth enhancing role of each form of capital. Symmetrically, prioritization of outflows has also been emphasized in the literature.

McKinnon (1973) underscored that restrictions on trade in goods and services should be liberalized prior to capital transactions. He argued that large capital flows might come in response to opening up of the capital account could give rise to real exchange rate appreciation, which in turn could erode trade competitiveness and thereby constrain trade liberalization. McKinnon and Pill (1996) viewed that liberalization of the capital account should wait till the reform process in the banking sector is completed and yields the desired result. Gilbert et. al. (2000) sounded a serious precautionary note, "... even with the best possible sequencing, mistakes will be made and crises will occur." It is widely contended that costs outweigh the benefits when the sequencing of liberalization becomes faulty and therefore, it is the attainment of preconditions that should determine the sequencing of liberalization.

III. CROSS-COUNTRY PERSPECTIVE

A country's policy approach to its capital account essentially involves a search for answer to some broad questions:

- Can free mobility of capital ensure an efficient allocation of global savings?
- Does capital account liberalization promote higher growth?
- Can financial openness discipline domestic macroeconomic policies?
- Can capital controls be effective?
- Is the design of the international financial architecture appropriate to deal with the challenges arising from free capital mobility?

The growing global macroeconomic imbalances—as evidenced by the large and sustained current account deficit of the United States—suggests that markets may, at times, allocate global saving differently from what may be perceived by policymakers as appropriate and sustainable in the long run. The distribution of the private capital flows to emerging markets also reveals the high degree of concentration in a few countries. Despite the available empirical research on the determinants of capital flows, the behavior of capital flows at times cannot be explained by any fundamentals, as the market often gets dominated by herd behavior driven by noise rather than news. For instance, the Southeast Asian countries received US\$94 billion in 1996 and another US\$70 billion in the first half of 1997. In the second half of 1997, however, there was an outflow of US\$102 billion. Such order of reversal in a single year can hardly be explained by fundamentals alone.

The beneficial effects of capital account liberalization on growth are also ambiguous. An empirical assessment conducted by Rodrik (1998) found that, “... there is no evidence that

countries without capital controls have grown faster, invested more, or experienced lower inflation.” Indeed, highlighting the possible presence of reverse causality—that is, countries with better overall economic performance favoring removal capital controls—the study concluded that empirical relationships between open capital account and economic performance are more likely to hide the negative relationship than explaining any positive relationship. “Capital controls are essentially uncorrelated with long-term economic performance once other determinants are controlled for.” A caveat is in order here. In empirical analyses, statistical measure of the degree of capital control has all along been a major irritant. As noted by Cooper (2001), “results (of empirical analyses) cannot be considered decisive until we have better measures of the intensity, as opposed to the mere existence, of capital controls.”

There is, however, some unanimity on the point that open capital account exerts pressures to discipline the domestic macroeconomic and financial environment. Gruben and McLeod (2001) studied the potential link between two important developments in the 1990s—greater financial openness across a large number of countries and the significant decline in global inflation. The link between the two could arise from the penalties for excess money creation under an open capital account regime. They concluded that by giving rise to disinflation, open capital account could contribute to higher growth. Another study by Kim (1999) that analyzed the disciplinary effects of an open capital account on the fiscal deficit suggests that complete freedom for outward capital mobility could be associated with a reduction in budget deficit by 2.3 percent of GDP. Gourinchas and Jeanne (2002) emphasized that many emerging countries may actually benefit from the discipline effect

rather than the conventional resource allocation effect. They concluded, “capital account openness is not always and everywhere a necessary condition for an economic take-off.”

On the effectiveness of capital controls, country experiences are varied, depending, at times, on the form of control used [Box 1], the specific areas that are picked for liberalization [Table 1], and the motive behind the use of controls [Table 2]. The broad lesson from country experiences suggests that to be effective, controls may have to be comprehensive and strongly enforced and must be accompanied by fundamental economic reforms so that controls are not seen as a substitute for reforms. Most importantly, capital controls need not work in the face of persistent presence of incentive for circumvention, particularly in cases of attractive return differentials in the offshore market and growing expectations of currency depreciation.

Controls on outflows can be broadly classified into preventive controls and curative controls. While the former intend to prevent the emergence of a balance of payments crisis, the latter could be applied as a means to manage a crisis (as in the case of Malaysia). Yoshitomi and Shirai (2000) present a review of the empirical studies on the effectiveness of both variants of control, which suggests that, “... in almost 70 percent of the cases where the controls on outflows were used as a preventive measure, a large increase in capital flight was observed after their imposition.” The support for using curative control came from Krugman (1998), who suggested temporary use of controls amidst a crisis to avoid the adverse effects of the alternative—that is, a high interest rate to defend of the exchange rate.⁴

The Malaysian case offers several interesting lessons. The Malaysian ringgit fell sharply from RM 2.5 per U.S. dollar in the second quarter of 1997 to RM 4.2 per U.S. dollar in the second quarter of 1998. Initially, the authorities tried to defend the depreciation through tight monetary policy.⁵ In the face of a large difference in the onshore and offshore interest rates, controls were implemented in September 1998 to prevent speculative activities. The controls banned transfers between domestic and foreign accounts and between foreign accounts, prohibited the extension of ringgit credit to nonresident banks and brokerage firms, prevented repatriation of investment for one year (amounting to a compulsory one year holding period requirement), and fixed the exchange rate at RM 3.8 per U.S. dollar. In February 1999, price-based controls replaced prudential/quantitative controls, with levies on repayment of debt and repatriation of profits.⁶ These measures allowed nonresidents to withdraw funds, but also penalized them for early withdrawals. From September 1999 onwards, the measures were further simplified and partially lifted. The major advantage of these controls, besides stemming speculation, was in terms of giving policy discretion to the authorities for restoring market confidence.⁷ On the other hand, as noted by Yoshitomi and Shirai (2000), the success of controls in Malaysia should not be overemphasized because controls were imposed almost 14 months after the crisis started, by which time large part of the speculative outflows had already occurred. The controls were also introduced against the backdrop of an undervalued exchange rate, which enhanced the probability of success.

Unlike the controls on outflows, in discussions relating to the effectiveness of controls on inflows, one generally refers to the Chilean experience. During 1978–82, when Chile experienced surge in capital flows, external loans up to 24 months maturity were forbidden,

and those with maturities from 24–36 months were subjected to noninterest-yielding reserve requirement ranging from 10–25 percent. Prudential regulations also helped in limiting the foreign liabilities of commercial banks, which were linked directly to the banks' equity. Chile, however, could not avoid a crisis despite such restrictions in 1982. Chilean capital controls, thus, may have given a false sense of security.⁸

In the early 1990s, Chile again used similar instruments. In June 1991, all external loans were subjected to 20 percent noninterest-yielding reserve requirement.⁹ In May 1992, the reserve requirement was raised to 30 percent and also extended to most other forms of foreign capital (including trade credits, issuance of ADRs by Chilean companies, other portfolio inflows (foreign loans, bonds issues) and foreign direct investment. ~~foreign deposits with domestic banks, foreign direct investment (FDI) in the financial sector [?]~~ and American Depository Receipt (ADR)/General Depository Receipt (GDR) proceeds). In June 1998, when Chile experienced capital outflows, the reserve requirement was reduced to 10 percent, and subsequently to zero percent in September 1998 (alternative forms of such taxes and their equivalents and the motive behind their use are set out in Table 3).¹⁰ In assessing the effectiveness of these controls, Edwards (1999) emphasized the need (i) to slowdown the volume of capital inflows and to tilt the composition in favor of longer maturities; (ii) to avoid real exchange rate appreciation that stemmed from surges in capital flows; and (iii) to maintain a domestic interest rate different from foreign rates so that domestic rates could be used as part of independent monetary policy to attain monetary policy goals. Overall, the experience of Chile suggests that none of these objectives could be eventually met, which validates the argument that controls on inflows may not be effective.¹¹

Finally, the inappropriateness of the international financial architecture to deal with the crises arising from open capital account has been recognized in the post East Asian crisis period. As underscored by Gilbert et. al. (2000), “within a cost-benefit framework, the benefits are seen as more modest than had previously been supposed, while the Asian crisis has increased our estimates of the potential costs of liberalization.” The change in international thinking on the issue appears quite stark in the context of the decision of the Interim Committee in April 1997 favoring an amendment of the International Monetary Fund’s (IMF) Articles of Agreement to make liberalization of the capital account as part of its mandate (Eichengreen, 1999). Despite the recent international initiatives on crisis prevention and resolution, the international architecture falls short of the requirement of enhancing confidence in emerging economies while designing country-specific strategies for capital account liberalization. Unlike in the pre-crises period, the need for entrenching preconditions has come to the forefront of policy thinking in deciding on the pace, timing, content and sequencing of liberalization.

IV. THE INDIAN APPROACH

In India, capital account liberalization received policy attention in the aftermath of the 1991 external payments crisis. As part of the overall restructuring package of the external sector, it aimed at reducing reliance on debt creating flows—particularly short term—while encouraging foreign investment, especially FDI. While the focus was primarily on attracting adequate private capital of the desired composition, during surges in capital flows, policy

measures were also directed at regulating inflows. Under a gradual liberalization of both foreign direct investment and foreign portfolio investment (FPI), the Indian rupee for all purposes has been made convertible for foreign investors. However, restrictions on capital outflows involving residents continue. Such controls have indeed served the needs of the external sector and the overall economy well, and many of them can be removed depending on lasting progress on the aforementioned preconditions.

A. Linkage Between Current and Capital Account

The Indian experience of capital account liberalization, like many other developing countries was preceded by trade liberalization, most notably the virtual elimination of import licensing and a progressive shift of restricted items of imports to Open General Licenses (OGL). At the same time, a reduction of tariff rates was initiated in the early 1990s, with the average tariff rate more than halved between early and late 1990s. The long-term objective of India's tariff reduction is to bring such rates in line with those prevailing in the member economies of Asia-Pacific Economic Cooperation. Tariff reduction was followed by removal of nontariff barriers. Between 1999 and 2001, India eliminated all quantitative restrictions on imports, which were earlier imposed for balance of payments consideration.

Initial reform measures were directed at current account convertibility leading to acceptance of Article VIII of the IMF's Articles of Agreement in August 1994. Foreign exchange regulations, however, built in certain safeguards related to current account transactions. The precautionary safeguards stemmed from the recognition of possible linkages between capital

account and current account transactions, like capital outflows in the guise of current transactions. Such safeguard measures, which strengthened the effectiveness of the management of the capital account included:

- Requiring the repatriation and surrender of export proceeds, while allowing a portion of it to be retained in foreign currency accounts in India, which could be used for approved purposes;
- Allowing authorized dealers to sell foreign exchange for underlying transactions based on documentary evidence; and
- Placing indicative limits on the purchase of foreign exchange to meet different kind of current account transactions, which were reasonable in relation to the purpose.

B. Preconditions for Capital Account Liberalization

Even before the onset of the Asian crisis of 1997, India had worked on an appropriate road map for capital account liberalization through its Committee on Capital Account Convertibility.¹² A report prepared by the committee recommended detailed measures for achieving capital account convertibility, including specification of the preconditions, sequence and time frame for undertaking such measures, and suggestion of the necessary domestic policy measures and institutional framework changes. The findings and recommendations of the report appear particularly path-breaking, when assessed in the context of similar recommendations that started flowing from almost every quarter, albeit, only after the East Asian financial crisis. The unique aspect of the committee's report was its

emphasis on the importance of preconditions and sequencing, despite the strong wave in favor of capital account convertibility that prevailed prior to the East Asian crisis. The recognized preconditions in the report included fiscal consolidation, low inflation, comfortable foreign exchange reserves, and a strong and resilient financial system, which have hence received wider support. Only on an appropriate exchange rate regime that could be consistent with capital account convertibility was the report's recommendation somewhat inconsistent with the now popular "Impossible Trinity." Capital account convertibility may require a more flexible exchange rate, and any fixed or managed regime may become vulnerable to attack once the capital account is opened up. Real exchange rate targeting and the associated loss of nominal anchor also have implications for monetary policy independence. Recognizing these limitations, the Indian authorities rightly did not accept the recommendation of the Committee confining the movement of the REER to within a band of +/- 5 percent, but still practice a managed float regime. The exchange rate that evolved under this regime (since March 1993) has successfully avoided both large volatility and major misalignment in terms of a REER appreciation.

Subsequent to the report, substantial liberalization of the capital account has been made, particularly with respect to inward foreign investment. This has been possible due to significant progress towards achieving the preconditions for liberalization, as noted in Table

4. Specifically, India has managed to achieve the following preconditions:

- A mandatory annual average inflation rate of 3–5 percent (as against the realized rate of 3.4 percent in 2002–03);

- A deregulated interest rate environment (except rates on bank savings deposits and small savings schemes);
- A reduction of the cash reserve requirement (CRR) to the statutory minimum of 3 percent (as against the current requirement of 4.5 percent);
- An external debt service ratio of 20–25 percent of total exports (as against 14.6 percent in 2002/03);
- Foreign exchange reserves providing an import cover of more than six months (as against 17 months at end-October 2003); and
- The adoption of best practices for risk management, accounting standards and disclosure norms **by banks and FIs**.

On the other hand, India has yet to make considerable progress on other preconditions such as:

- Fiscal consolidation with a stipulation of reducing the gross fiscal deficit to 3.5 percent of GDP by 1999/2000 (as against 5.9 percent in 2002/03 and budgeted estimate of 5.6 percent in 2003/04);¹³ and
- Further strengthening of the financial system with the indicative gross nonperforming advances (NPAs) of total advances to be brought down to 5 percent by 1999/2000 (as

against reduction in gross NPAs of public sector banks from 16 percent to 11 percent in 2001/02).¹⁴

C. Operationalizing Capital Account Convertibility

It needs no emphasis that mere attainment of the preconditions for capital account convertibility may not be enough to go for full liberalization. The approach towards capital account convertibility must be consistent with the overall policy framework that is assigned to the objective of growth and stability. Incremental higher growth that comes at the expense of greater instability should be avoided. Indeed, avoiding instability itself has emerged as a major precondition to achieving higher growth. Needless to say, liberalization measures have already been undertaken in areas that are clearly beneficial need priority attention in India. As underscored by Panagariya (1998), "... most of the benefits of capital mobility can be reaped via partial mobility, principally equity and direct foreign investment." Within India, however, some have preferred more extreme forms of capital account convertibility. Virmani (1999), for example, had advocated that every resident individual should be allowed to use up to US\$50,000 per annum to purchase goods and services abroad and to open a bank account abroad. It was also recommended that corporations and businesses be allowed to make financial capital transfers abroad (including opening bank accounts with a check facility) up to a limit of US\$50,000 per annum. Indeed, most of these suggestions for liberal overseas investment have been recently implemented with a robust external sector and burgeoning foreign exchange reserves.

India considers capital account liberalization as a process and not a single event. As highlighted by Reddy (2000), in its gradual and cautious approach for operationalizing capital account convertibility in India, a clear distinction is made between inflows and outflows, with asymmetrical treatment from the control angle for inflows (less restricted), outflows associated with inflows (free) and other outflows (more restricted). Differential restrictions are also applied to residents versus nonresidents, to individuals (highly restrictive) versus corporate entities (restrictive) and financial intermediaries like commercial banks (more restrictive) and institutional investors (less restrictive). A combination of direct administrative controls (that is, interest rate ceilings) and market-based instruments of control (that is, tax rates or reserve requirements) is used to ensure a prudent approach to managing the capital account.

The policy of ensuring a well-diversified capital account with a rising share of nondebt liabilities and low percentage of short-term debt in total debt liabilities, is amply reflected in India's policies on FDI, FPI and external commercial borrowing (ECB). Quantitative annual ceilings on ECB along with maturity and end-use restrictions broadly shape the ECB policy; although these, too, have been relaxed considerably from February 2004. Non-resident Indian (NRI) deposits have also been liberalized, while the policy framework has imparted stability to such flows. FDI is encouraged through a liberal but dual route: a progressively expanding automatic route and a case-by-case route. FPI, which also has been progressively liberalized, is restricted to select players, particularly approved institutional investors and NRIs. Indian companies are also permitted to access international markets through ADRs/GDRs, subject to approval. Foreign investment in the form of Indian joint ventures abroad is also permitted

through both automatic and case-by-case routes. Restrictions on outflows involving Indian corporations, banks, and other foreign exchange earners (for example, exporters) have also been liberalized over time, subject to certain prudential guidelines.

D. Management of Debt-Creating Inflows

The major plank of external debt management has been (i) maintaining a strict control on short-term debt, (ii) encouraging long-term debt, (iii) avoiding the bunching of repayments, gradual liberalizing debt inflows by prioritizing them with regard to their utilization for productive investments, and (iv) providing necessary flexibility to borrowers for risk management of their debt portfolio. As a result of this prudent external debt management, there has been a significant turnaround in debt indicators for India. While the debt-to-GDP ratio declined from a peak of 38.7 percent in 1991/92 to 20.0 percent in 2002/03, debt service ratio was more than halved from a high of 35.3 percent in 1990/91 to 14.7 percent in 2002/03. Reflecting the consolidation in external debt, India is now classified as a “less” indebted country by the World Bank, in sharp contrast to being nearly classified as a “severe” indebted country in the early 1990s. Another crucial feature in India’s external debt management is a history of strong commitment towards making no compromise on honoring debt service obligations, as it has never defaulted on any external obligations.

External Commercial Borrowing

External commercial borrowing (ECB) has been guided by the overall consideration of prudent external debt management. Access to ECB has been generally restricted to resident

Indian corporations and development financial institutions, thereby keeping out banks from such borrowings. At the same time, ECB have been subjected to overall annual ceilings, maturity norms and end-use restrictions. Effective February 2004, companies can borrow up to US\$500 million under the 'automatic route', and above this limit with the RBI's approval.¹⁵ End-use and maturity prescriptions have also been substantially liberalized in the recent years, besides permitting ECB for rupee expenditures. Indian corporations can now access ECB from any recognized lender with a minimum maturity of three years subject to a ceiling on spreads over LIBOR rates. End-use restrictions for financing real estate and equity market investment are still in force (except for developing integrated townships and financing public enterprise disinvestment)..

A distinguishing feature of the liberalized regime is to provide greater flexibility to companies in managing their exposure on ECB. This is being done by allowing prepayment under the automatic route (without any ceiling) and also permitting hedging through rupee forward covers (up to one year as is currently available) and rupee options (introduced in June 2003). Furthermore, in order to enable corporations to hedge exchange rate risks and raise rupee resources domestically, rupee-denominated structural obligations are permitted to be credit enhanced by international banks/international financial institutions/venture partners[please clarify the meaning of this shaded area]. While these measures will encourage companies to hedge their exposure and thereby limit risks on their balance sheets, given their long-term exposure to currency risks, there is an urgent need to develop the nascent rupee derivatives market expeditiously.

Following the policy imperatives, gross disbursement of ECB (excluding India Development Bonds (IDBs), Resurgent India Bonds (RIBs) and India Millennium Deposits (IMDs)) declined from a peak of US\$7.4 billion in 1997/98 to US\$1.9 billion in 2002/03, reflecting reduced reliance on debt financing. Net flows (excluding IDBs, RIBs and IMDs), in fact, turned negative in 1998/99, reflecting the reduced recourse to ECB as well as prepayment undertaken by corporations in recent years to take advantage of soft interest rates prevailing in the overseas market.¹⁶

Nonresident Deposits

Significant changes have been made in the policy framework for NRI deposits held by the Indian banking system, which constitute a major portion of external debt for India. The balance of payments crisis of 1990/91 demonstrated the volatility of NRI deposits due to large interest differentials and explicit exchange rate guarantee provided by the Government of India at the time. Since then, the policy has been aimed at attracting stable deposits. This has been achieved through:

- The withdrawal of exchange rate guarantees on various deposits;
- A policy induced shift in favor of local currency-denominated deposits;
- The rationalization of interest rates on rupee-denominated NRI deposits;
- Linking interest rates on to foreign currency-denominated deposits to LIBOR for;

- Deemphasizing short-term deposits (up to 12 months) in case of foreign currency-denominated deposits; and
- Making NRI deposits fully repatriable.¹⁷

The reserve requirement on these deposits has also been varied as an instrument to influence monetary and exchange rate management and to regulate the size of the inflows depending on the country's requirements.

Outstanding NRI deposits grew steadily from US\$14.0 billion at end-March 1991 (constituting 16.7 percent of total external debt) to US\$28.5 billion at end-March 2003 (25.3 percent of total external debt). However, there has been a significant policy-induced shift in the composition of NRI deposits to ensure their stability, with the proportion of local currency-denominated deposits increasing from around one-fourth in end-March 1991 to over two-thirds by end-March 2003. The short-term component of NRI deposits also declined sharply during the corresponding period. More recently, to prevent arbitrage-driven inflows on rupee-denominated NRI deposit, short-term flows (less than one year) have been discontinued and interest rate paid made subject to a ceiling of 25 basis points over LIBOR.

Short-Term Debt

Apart from annual ceilings on long-term ECB, short-term borrowing is under severe quantitative restrictions, excepting those strictly related to trade. These ceilings are applied in consonance with the outlook for the balance of payments. The differential treatment in favor

of trade-related flows is accorded due to its stable source of financing and also to the leads and lags in trade-related payments that affect the level of short-term debt. The tight control on short-term debt resulted in an absolute decline from US\$8.5 billion in end-March 1991 (10.2 percent of total debt) to US\$5.8 billion in end-June 2003 (5.3 percent of total debt). This has led to a significant improvement in liquidity indicators, with short-term debt as a proportion of foreign currency assets declining sharply from 382.1 percent in end-March 1991 to 7.4 percent in end-June 2003.

Government Account Debt

External borrowing by the Government of India till now has been limited to borrowing from official sources—that is, credit from bilateral and multilateral sources. Such debt flows are characterized by their long maturity and high concessional element. As part of prudent debt management, the Government has not contracted any short-term debt. At the same time, state governments are not allowed to directly access any form of external borrowing. In recent years, as part of the Government of India's active management of the external debt portfolio, it has prepaid some of its high cost debt (US\$3.1 billion in 2002/03) With reduced reliance on external borrowing, external debt of the Government declined steadily from US\$50.0 billion in end-March 1991 to US\$45.8 billion at end-December 2002. Given this and the rise of private debt, the share of public debt in the total external debt declined accordingly from 59.6 percent in end-March 1991 to 43.7 percent in end-December 2002.

E. Management of Nondebt Creating Inflows

Foreign Direct Investment

Since the 1980s, there has been a gradual liberalization of norms governing the operation of companies under foreign collaboration. This process gathered momentum and took definite shape during the 1990s. The Industrial Policy Statement (1991) effected significant liberalization in the context of foreign collaborations—both financial and technical. Two specific routes for foreign collaborations were specified—the automatic route and case-by-case approval. Initially certain specific sectors were identified where foreign collaborators could approach the RBI for setting up new units under the automatic route. By and large, the maximum permissible foreign equity participation under the automatic route was at 51 percent.

In the course of the 1990s, sectoral coverage of FDI under the ambit of automatic route approval was significantly enhanced. The automatic route is no longer limited to the manufacturing sector. There are major thrusts in allowing foreign collaborations in infrastructure-related and technology-intensive sectors through the automatic route. Since 2000, all industries, except a small list, have been brought under the purview of the automatic route.¹⁸ In addition, there is a negative list of only six industries where the Government prohibits FDI.¹⁹ All other cases of FDI, including collaborations and takeovers of existing Indian companies require case-by-case approvals from the Government. The Foreign Investment Promotion Board (FIPB), set up by the Government of India, acts as the nodal agency for case-by-case approvals of foreign collaborations.

The automatic route is currently divided into four different categories. Key sectors where 100 percent foreign ownership is allowed under the automatic route include power, roads and highways, ports and harbors, mass rapid transport system, drugs and pharmaceuticals, the hotel and tourism sector, advertising, and mining. Another major thrust area where up to 100 percent FDI has been permitted under the automatic route in Special Economic Zones for most manufacturing activities. The major sectors where less than 100 percent FDI is permitted under the automatic route are the defense industry (26 percent) telecommunications sector (49 percent), airports (74 percent). The financial sector has also been gradually opened for FDI in tune with the gradual liberalization initiated since the early 1990s. Currently, FDI is allowed in private sector banks (49 percent), nonbanking financial companies (NBFCs) (100 percent), and insurance sector (26 percent).

In addition to sectoral policy reforms, other measures have been initiated to facilitate FDI flows. The disinvestment process for public sector enterprises is open to FDI finance, subject to sector guidelines. Measures have also been introduced to allow foreign companies to set up wholly-owned subsidiaries (WOSs) in India or to convert joint ventures (JVs) into them. Furthermore, the percentage of FDI through merger and acquisition route has also been increased from around 10 percent in 1999 to around 30 percent at present. Apart from equity participation, various terms and conditions relating to technical collaborations have also been brought under the automatic route. Under this approach payment to foreign collaborators on account of trademark, brand name, lump sum fees, etc. are allowed under the automatic route up to certain threshold limits.

Gross FDI flows, which were barely US\$0.6 billion in 1992/93, increased sharply over the ensuing decade to US\$6.2 billion in 2001/02, but fell back to US\$4.8 billion in 2002/03. These flows still remain low in comparison to other emerging market economies. As part of adopting international best practices in compiling FDI statistics, data on FDI for both inward and outward flows was revised in June 2003 and is now based on a new methodology that includes reinvested earnings and other direct capital (in particular inter-corporate debt transactions between related entities) in FDI.

Portfolio Investment

Investment by foreign institutional investors (FIIs) has been permitted since the early 1990s. Portfolio investments are restricted to selected players—mainly for approved institutional investors. A single FII can invest up to 10 percent in any company, while FIIs together can invest up to sectoral caps in both the primary and secondary markets. Two classes of FIIs exist—the first one is the equity route, including investment up to 30 percent in debt instruments (including holdings of government securities and units of debt-oriented mutual funds) and the second one is the debt route, or investment of 100 percent in debt instruments (subject to an overall cap of US\$1.75 billion in 2003/04, up from US\$1 billion during the previous year). The cap on investment by debt securities is based on the consideration of controlling short-term debt flows as part of the strategy for external debt management. Moreover, premature opening up of FII investment in debt securities, particularly in short-

term government securities, could increase vulnerability to a liquidity crisis and speculative attack, as evidenced from the Russian crisis in 1998.²⁰

There are no restrictions on repatriation of portfolio investment unlike stipulation of a minimum lock-in period imposed in some countries. However, taxes on short-term gains are higher than long-term gains. In tune with the priority accorded to liberalize inflows, corporations are allowed to raise funds through ADRs/GDRs. While FPI has increased substantially over the years, it has also shown much greater year-to-year variations, ranging from a net inflow of US\$3.3 billion in 1996/97 to a net outflow of US\$61 million in 1998/99. In 2002/03, net portfolio investment amounted to US\$1.0 billion.

F. Liberalization of Capital Outflows

The major issues with respect to liberalization of capital outflows include lifting of controls on convertibility of domestic assets by residents, the dollarization of domestic assets, and internationalization of local currency. While some measures are being taken to liberalize overseas investment, particularly in the recent years, the stance on dollarization and internationalization of the rupee has been quite conservative, based on appropriate prudential consideration for ensuring financial stability.

Overseas Investment

Overseas investment in JVs or WOSs has been recognized as important instruments for promoting the global business of Indian companies. At present, the complete use of

ADR/GDR proceeds and the export earner foreign currency account balances for this purpose is permitted. As a result of liberalization of the policy framework for Indian investment abroad, FDI flows from India increased from negligible levels in early 1990s to US\$1.4 billion in 2001/02, before declining marginally to US\$1.1 billion in 2002/03. Facilitated by the burgeoning reserves, overseas investment was further liberalized in 2003. Indian companies can now invest abroad in a JV or 100 percent WOS up to US\$100 million without any prior approval. Similarly, an individual as well as a listed Indian company can invest abroad in listed shares and debt securities of any company that holds at least 10 percent equity in a listed Indian company. Further, a registered mutual fund, subject to an overall cap of US\$1 billion, can invest in debt securities and listed shares of companies with at least a 10 percent equity stake in a listed Indian company. All of these measures are expected to make Indian companies globally competitive.

The hierarchy followed with regard to liberalization of outflows has been in the order of corporations, financial intermediaries and individuals. This is, however, in contrast to the Tarapore Committee recommendation of preferring the liberalization of flows on individual accounts earlier in the hierarchy. It would be reasonable to expect some further liberalization on outflows with regard to companies in the near term, and for banks and other financial intermediaries with further progress in financial sector reforms.

Convertibility of Domestic Assets

A crucial element in capital account liberalization is allowing free convertibility of domestic assets by residents. In the event of any external shock, there could be expectations of an imminent depreciation of the local currency. An anticipated depreciation of the local currency could lead to a large number of residents to simultaneously decide to convert their domestic assets, which could be self-fulfilling, thereby making a severe external crisis inevitable. For India, the possible impact on the exchange rate could be gauged by the fact that domestic stock of the bank deposits in rupees was close to US\$290 billion at the end of March 2003, more than four times the level of foreign exchange reserves. However, for industrial countries with international currencies like the U.S. dollar or the euro, this kind of eventuality is less likely to occur since these currencies are held internationally by banks, corporations and other entities as part of their long-term global asset portfolio. In contrast, for emerging market currencies, banks and other intermediaries normally take a daily long or short position for purposes of currency trades. Thus, for India, convertibility of domestic assets is expected to be lower down in the agenda towards capital account convertibility.

Dollarization and Internationalization of Rupee

A related issue that arises with capital account liberalization is allowing domestic residents to open foreign currency-denominated accounts. A highly conservative approach is adopted with reference to both dollarization of domestic economy and internationalization of domestic currency. On dollarization, it has been generally recognized that large-scale dollar-denominated assets within a country can disrupt the economy by creating potential

destabilizing flows. As a result, no dollar-denominated transactions have been generally allowed between residents in India.²¹

The counterpart of dollarization is internationalization of a currency, which is characterized as the official trading of the currency outside the country without any underlying trade or investment transactions. When a currency is held increasingly outside the country, any expectation of a currency depreciation could lead to a widespread sell-off, resulting in a very sharp fall in the currency's value, especially when the local markets are not well developed. Keeping this concern, India does not permit rupee to be transacted offshore; that is, the rupee is not allowed to be officially used as international means of payment or store of value.²²

G. Opening of the Financing Sector

The opening of the financial sector is a crucial element of capital account liberalization due to its implications of systemic risks on macroeconomic and financial stability, and thus needs to be carefully sequenced and timed. The Indian financial sector was steadily opened up to FDI in the 1990s. The issue of foreign investment in the Indian financial sector could be viewed from the twin angles of the signaling impact and market discipline. First, in case of emerging market economies, such as India, the liberalization of foreign investment in the financial sector is often taken to be a benchmark of the reform process itself. Second, the introduction of foreign players typically imparts a degree of market discipline to the domestic industry. Foreign banks in India, for example, have typically enjoyed higher profitability with wider interest spreads as well as better asset quality. In order to provide a level playing

field, the FDI in private sector banks was raised to 49 percent to 74 percent of their paid-up capital under the automatic route in 2004 (inclusive in the new limit are investments through portfolio schemes by FIIs and NRIs). In case of public sector banks, FDI and FPI are allowed up to 20 percent. However, FDI in Indian banks remains relatively low mainly because of two reasons, first, most leading international banks already have a presence in India through their subsidiaries; second, and voting rights of foreign shareholders in Indian private banks is remained capped at 10 percent in Indian private banks.

In addition to banks, other financial intermediaries have also been opened for foreign investment. FDI in NBFCs is permitted up to 100 percent subject to minimum capital norms. In the insurance sector, even though foreign companies are not allowed to operate directly, they are permitted to enter into a JV arrangement with an Indian company up to 26 percent stake in the paid-up equity capital of the company (foreign capital of Rs. 6.3 billion, or approximately US\$140 million, was invested in new private insurance companies as of end-March 2002). With the announcement of the new pension scheme by the Government of India, pension funds are also being opened up to the private sector with access to foreign funds.

H. Reserves Management

Reflecting liberalization measures, India has attracted considerable private inflows, primarily in the form of FDI, FPI, ECB and NRI deposits. In the process, capital flows have also undergone a major compositional change in favor of nondebt flows as well as longer maturity

debt flows (Table 5). The surplus in India's capital account increased from US\$3.9 billion during the 1980s to US\$8.8 billion during the 1990s (1992/93-2001/02) and further to US\$12.8 billion in 2002/03, with an increasing share in investment versus debt flows. As a proportion of GDP, total capital flows increased from 1.6 percent during the 1980s to 2.3 percent during the 1990s and further to 2.4 percent in 2002/03, in line with India's absorptive capacity given its growth performance during the 1990s.

With the current account deficit averaging a modest 1 percent of GDP in the 1990s, private capital flows have generally appeared adequate, leading to comfortable reserve build up.

However, given a current account surplus each of the last three years, there has been a sharp build up in reserves. In absolute terms, foreign exchange reserves increased from

US\$5.8 billion at end-March 1991 to US\$~~75.4~~ 76.1 billion at end-March 2003, and further to US\$~~111.6~~ 113 billion at end-March 2004. However, ~~the rapid~~ reserves accumulation ~~policy~~ has been viewed by some as a costly measure for the economy. It is, therefore, appropriate to examine in some detail the relevance of such concerns in the context of the overall approach pursued by India for opening its capital account in particular and the external sector in general.

While India's foreign exchange reserves increased sharply during the last three years, it needs to be noted that bulk of the accretion to reserves has been on account of nondebt creating flows. For instance, out of the total reserves accretion of US\$20.8 billion during the 2002/03, the major nondebt creating sources, namely the current account surplus, foreign investment and valuation changes, together accounted for 60.1 percent of the increase.

Further, net drawdown in foreign assets of banks, which are also nondebt creating flows, contributed to an increase in net banking capital by US\$4.9 billion, thereby accounting for another 23.6 percent of reserves accretion.²³ So far as nondebt creating flows are concerned (that is, FDI and FPI), such inflows bear the same risk-return profile as any domestic investment and therefore the cost to the economy of such flows is the same irrespective of whether they accrue to foreign reserves or are matched by equivalent foreign currency outflow due to higher imports by India or investment abroad by residents. Further, NRI deposits, which accounted for 14.4 percent of the reserves accretion in 2002/03, are now paying interest rates in line with those prevailing overseas, and external assistance, as concessional flows, continue to be contracted at much lower interest rates. Thus, the cost of additional reserves is not an area of concern given its present structure.

I. Monetary and Exchange Rate Management and Capital Account Liberalization

Reflecting the policy imperatives, as highlighted by Jalan (2003), the main pillars of exchange rate management in India can be characterized as follows:

- The RBI does not have a fixed “target” for the exchange rate, which it tries to defend or pursue over time;
- Rather, the RBI pursues a managed float and, as such, is prepared to intervene in the market to dampen excessive volatility as and when necessary;

- The RBI's purchases or sales of foreign currency are undertaken through a number of banks and are generally discreet and smooth; and
- An attempt is made to ensure that foreign exchange operations and exchange rate movement are transaction oriented rather than being purely speculative in nature.

Reflecting these objectives, the RBI must balance the need to contain the monetary (and hence inflationary) effect of capital flows on the one hand and maintain the export competitiveness of the economy on the other. In order to strike the desired balance, Starting in the 1990s, it has controlled the domestic liquidity impact of foreign inflows through timely monetary management. In the process, the RBI has moved monetary control away from direct instruments (cash reserve requirements) to indirect ones (open market operations, including repo. Given the large inflows in recent years, the ability of the RBI to successfully manage their impact on domestic liquidity has some replenishment of the RBI's stock of government securities, most recently through issue of market stabilization bonds by the Government of India to the RBI for monetary management purposes.

V. CONCLUSION

In terms of the standard indicators of effectiveness of capital controls, one could view that controls have been effective in India because: (i) despite strong inflows there have been no major real appreciation of the exchange rate, (ii) monetary independence has not been lost and a wedge between domestic and foreign interest rates has been successfully created and maintained, and (iii) the black market premium on the exchange rate has declined drastically to negligible levels with concomitant decline in capital flight. The emphasis on preconditions

and a policy of gradual liberalization have enabled India to reap the benefits of opening while avoiding the sources of vulnerability. Inadequate absorption of foreign capital has weakened the contribution of foreign capital to growth; however, the current policy of **a reserves accumulation** maintaining an adequate level of foreign exchange reserves and the associated prevention of exchange rate appreciation, both of which provide a cushion to financial stability, should not be abandoned in favor of a more flexible exchange rate and more open capital account just to deal with recent current account surpluses. If the capital account liberalization fails to increase absorptive capacity, such a policy can also represent a recipe for disaster. Given the trade-off between efficiency and stability associated with capital flows, India's preference has strongly been in favor of avoiding instability. Such an approach has imparted stability not only to the financial system but also to the growth process. The relative weights to efficiency versus stability needs to be constantly reviewed with reference to both domestic and foreign developments **[one could easily argue that a more efficient economy is inherently a more stable one?]**. While realizing that growth performance could be augmented with foreign capital, it is imperative to ensure that liberalization of the capital account responds to the requirement of the overall economy in an appropriate, gradual and cautious manner. Inflows have been substantially liberalized in India with a preference for companies versus individuals, which is expected to continue, but if the momentum of capital flows persists, it may be possible that with limits to sterilization, more capital account liberalization on outflows could be forthcoming, particularly for corporate entities and financial intermediaries. The pace of liberalization, particularly for the latter, would, however, continue to depend on domestic factors, especially the progress in the financial

sector reform and fiscal consolidation, but also taking into account the evolving international financial architecture.

Box 1. Types of Capital Controls²⁴

Capital controls have in general taken two main forms: (i) direct or administrative controls and (ii) indirect or market-based controls.

- Direct or administrative capital controls restrict capital transactions and/or the associated payments and transfer of funds through outright prohibitions, explicit quantitative limits, or approval procedures (which may be rule-based or discretionary). Administrative controls typically seek to directly affect the volume of the relevant cross-border financial transactions. A common characteristic of such controls is that they impose administrative obligations on the banking system to control flows.
- Indirect or market-based controls discourage capital movements and the associated transactions by making them more costly to undertake. Such controls may take various forms, including dual or multiple exchange rate systems, explicit or implicit taxation of cross-border financial flows (for example, a Tobin tax), and other predominantly price-based measures. Depending on their specific type, market-based controls may affect the price and/or volume of a given transaction.
 - Ø In dual (two-tier) or multiple exchange rate systems, different exchange rates apply to different types of transactions. Two-tier foreign exchange markets have typically been established in situations in which the authorities regard high short-term interest rates as imposing an unacceptable burden on domestic residents and attempt to split the market for the domestic currency by either requesting or instructing domestic financial institutions not to lend to those borrowers engaged in speculative activity. Foreign exchange transactions associated with trade flows, FDI, and usually FPI are excluded from the restrictions. In essence, the two-tier market attempts to raise the cost to speculators of the domestic credit needed to establish a net short domestic currency position, while allowing nonspeculative domestic credit demand to be satisfied at normal market rates. Two-tier systems can also accommodate excessive inflows and thus prevent an overshooting exchange rate for current account transactions. Such systems attempt to influence both the price and quantity of capital transactions. Like administrative controls, they need to be enforced by compliance rules and thus imply the administration of resident foreign exchange transactions and nonresident domestic currency transactions in order to separate current and capital transactions.
 - Ø Explicit taxation of cross-border flows involves the imposition of taxes or levies on external financial transactions, thus limiting their attractiveness, or on income resulting from holdings by residents of foreign financial assets or holdings by nonresidents of domestic financial assets, thereby discouraging such investments by reducing their overall rate of return. Tax rates can be differentiated to discourage certain types of transactions or maturities. Such taxation could be considered a restriction on cross-border activities if it discriminates between foreign and domestic assets or between nonresidents and residents.
 - Ø Indirect taxation of cross-border flows, in the form of non-interest bearing compulsory reserve/deposit requirements (URR hereafter) has been one of the most frequently used market-based controls. Under such schemes, banks and nonbanks dealing on their own account are required to make zero-interest deposits with the central bank of the domestic or foreign currency equivalent to a certain proportion of the inflows or of the net positions in foreign currency. URRs may seek to limit capital outflows by making them more sensitive to domestic interest rates. For example, when there is downward pressure on the domestic currency, a 100 percent URR imposed on banks would double the interest income forgone by switching from domestic to foreign currency. URRs may also be used to limit capital inflows by reducing their effective rates of return; these returns may also be differentiated to discourage particular types of transactions.
 - Ø Other indirect regulatory controls have the characteristics of both price- and quantity-based measures and involve discrimination between different types of transactions or investors. Though they may influence the volume and nature of capital flows, such regulations may at times be motivated by concerns arising from domestic monetary control or prudential regulation. Such controls include (i) the provisions for the net external position of commercial banks, (ii) asymmetric open position limits that discriminate between long and short currency positions or between residents and nonresidents, and (iii) certain credit rating requirements to borrow abroad. While not a regulatory control in the strict sense, reporting requirements for specific transactions have also been used to monitor and control capital movements (for example, derivative transactions and non-trade related transactions with nonresidents).

Table 1. Type of Capital Transactions That Could be Subject to Controls

Type of Transaction	Inflows	Outflows
I. Capital and Money Markets		
Shares or other securities of a participating nature	Purchase locally by nonresidents	Sale or issue locally by nonresidents
Bonds or other debt securities		
Money market instruments		Purchase abroad by residents
Collective investment securities		
II. Derivatives and Other Instruments		
	Purchase locally by nonresidents	Sale or issue locally by nonresidents
	Sale or issue abroad by residents	Purchase abroad by residents
III. Credit Operations		
Commercial and financial credits	To residents from nonresidents	By residents to nonresidents
IV. Guarantees, Sureties, and Financial Backup Facilities		
	To residents from nonresidents	By residents to nonresidents
V. Direct Investment		
Inward direct investment		Outward direct investment Controls on liquidation of direct investment
Real estate transactions	Purchase locally by nonresidents	Purchase abroad by residents Sale locally by nonresidents
Provisions specific to commercial banks	Nonresident deposits Borrowing abroad	Deposits overseas Foreign loans
Personal capital movements 1/	To residents from nonresidents	By residents to nonresidents
VI. Settlements of Debts Abroad by Immigrants		
	Transfer into the country by immigrants	Transfer abroad by emigrants
Provisions specific to institutional investors		Limits (maximum) on securities issued by nonresidents and on portfolio invested abroad Limits (maximum) on portfolio invested locally

Source: IMF, 1997, 1998, 1999 and 2001.

1/ Deposits, loans, gifts, endowments, inheritances, and legacies.

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Source: [?]

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Table 2. India: Purpose of Capital Control

Purpose of Control	Method	Direction of Control	Example
General revenue finance war effort	Controls on capital outflows permit a country to run higher inflation with a given fixed-exchange rate and also hold down domestic interest rates.	Outflows	Most belligerent use during WW-I and WW-II.
Financial repression/ credit allocation	Government that use the financial system to reward favored industries or to raise revenue may use capital controls to prevent capital from going abroad to seek higher returns.	Outflows	Common in developing countries.
Correct a balance of payments deficit	Controls on outflows reduce demand for foreign assets without contractionary monetary policy or devaluation. This allows a higher rate of inflation than otherwise would be possible.	Outflows	U.S. interest equalization tax, 1963-74
Correct a balance of payments surplus	Control on inflows reduce foreign demand for domestic assets without expansionary monetary policy or revaluation. This allows a lower rate of inflation than would otherwise be possible.	Inflows	German Bardepot scheme, 1972-74
Prevent potentially volatile inflows	Restricting inflows enhances macroeconomic stability by reducing the pool of capital that can leave a country during crisis.	Inflows	Chilean encaje, 1991-98
Prevent financial destabilization	Capital controls can restrict or change the composition of international capital flows that can exacerbate distorted incentives in the domestic financial system	Inflows	Chilean encaje, 1991-98
Prevent real appreciation	Restricting inflows prevents the necessity of monetary expansion and greater domestic inflation that would cause a real appreciation of the currency.	Inflows	Chilean encaje, 1991-98
Restrict foreign ownership of domestic assets	Foreign ownership of certain domestic assets—especially natural resources—can generate resentment.	Inflows	Article 27 of Mexico's constitution
Preserve savings for domestic use	The benefit of investing in the domestic economy may not fully accrue to savers to that economy, who as a whole, can be made better off by restricting the outflow of capital.	Outflows	
Protect domestic financial firms	Controls that temporarily segregate domestic financial sectors from the rest of the world may permit domestic firms to attain economies of scale to compete in world markets.	Inflows and outflows	

Source: Neely (1999).

Table 3. Three Proposals for "Sand in the Wheels" Capital Controls, and How They Differ

	Chile's Deposit Requirement on Inflows	Eichengreen-Wyplosz Deposit Requirement Proposal	Total Tax Proposal
Motive	Prevents over-indebtedness	Protects the balance of payments	Reduces volatility in the exchange rate (and raises revenue)
Tax applied to:	Capital inflows	Capital outflows (and inflows)	All foreign exchange transactions, including trade.
Paid immediately by:	Foreign investors	Banks	All traders (mostly banks)
Paid immediately to:	Central bank (foreign currency earnings)	Central bank (seignorage only)	Tax authority (domestic revenue)
Relationship of tax amount to interest rate	Rises with foreign interest rate	Rises with domestic interest rate	Invariant to interest rate
Relationship to maturity	Fixed amount (falling with maturity in percent per annum terms) when maturity less than one year	Falls with maturity, but does not apply to intra-day trading	Fixed amount. In percent per annum terms, falls continuously with maturity
Where imposed	One country (facing inflows)	One country (facing outflows)	Must be worldwide
Probable level of tax rate	Moderate (30 percent of the interest rate)	High (to discourage speculative attacks)	Low (to avoid distortions and substitution)

Source: Frankel (1999).

Table 4. India: Current Position in Respect of the Preconditions Suggested in the Report on Capital Account Convertibility

Preconditions	Current Status
I. Fiscal Consolidation	
Reduction in the gross fiscal deficit as a percentage of GDP from 4.5 percent in 1997/98 to 4.0 percent in 1998/99 and further to 3.5 percent in 1999/2000.	Gross fiscal deficit as a percentage of GDP stood at 5.9 percent during 2002/03 and is budgeted at 5.6 percent for 2003/04.
II. Mandated Inflation Rate	
The mandated rate of inflation for three years should average 3-5 percent.	The realized (not mandated) inflation rate in 2002/03 was 3.4 percent.
Reserve Bank of India should be given freedom to attain [tarred] mandate of inflation approved by Parliament.	Although inflation is an important objective of monetary policy, there is no targeted/mandated inflation approved by the Parliament
III. Strengthening of the Financial System	
Interest rates to be fully deregulated in 1997/98 and any formal or informal interest rate controls must be abolished.	All interest rates (except savings bank interest rate) have been deregulated.
Cash reserve requirement (CRR) to be reduced in phases to 8 percent in 1997/98, 6 percent in 1998/99, and to 3 percent in 1999/2000.	CRR reduced to 4.5 percent by 2003/04.
Nonperforming assets (NPAs) as share of total advances to be brought down in phases to 12 percent in 1997/98, 9 percent in 1998/99, and to 5 percent in 1999/2000.	NPAs of the public sector banks as a share of total advances have come down from 16.0 percent at end-March 1998 to 11.1 percent at end-March 2002.
100 percent marked-to-market valuation of investments for banks.	The original concept of 100 percent marked-to-market valuation has been replaced by the revised concept of banks classifying their entire portfolio into three categories: 'Held to Maturity,' 'Available for Sale,' and 'Held for Trading.' Investments in the first category should not exceed 25 percent of [total asset]; in the other two categories, banks have the freedom to decide the proportion of assets, as these investments will be marked-to-market.
Best practices on risk management and accounting/ disclosure norms be implemented.	Risk management guidelines have been issued (broadly covering credit risk and market risk), and the regulatory and supervisory system has been strengthened to ensure effective monitoring, transparency and compliance with prudential standards.
IV. Important Macroeconomic Indicators	
A monitoring band of +/-5 percent around the neutral real effective exchange rate (REER) to be introduced and attained through intervention whenever the REER goes outside the band.	The exchange rate policy has no explicit/implicit target (whether point or band). The market has generally ensured an exchange rate path that avoids major misalignment in terms of REER.
Debt service ratio to be reduced to 20 percent from 25 percent of [total exports].	Debt service ratio has steadily declined from 19.5 percent in 1997/98 to 14.6 percent in 2002/03.
The foreign exchange reserves should not be less than six months of imports.	As at end-March 2003, foreign exchange reserve cover was for more than a year's import.

Source: Reserve Bank of India, 2003.

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Source: [?]

Table 5. India: Pattern of Capital Flows and Their Use 1/

(In millions of U.S. dollars, unless otherwise

Current Account Balance	Net Capital Flows					Total Capital Inflows	Reserves (End-March)	Increase (+) Decrease (-) in Reserves 3/	Current Account		Short-Term Debt 4/	Debt Service 5/	
	Foreign investment	External commercial borrowing	NRI deposits	External aid	Other capital 2/				Balance	Stock			
1990/91	-9,680	103	2,248	1,536	2,210	1,091	7,188	5,834	-1,278	-3.1	10.2	28.7	35.3
1991/92	-1,178	133	1,456	290	3,037	-1,139	3,777	9,220	3,385	-0.3	8.3	38.7	30.2
1992/93	-3,526	557	-358	2,001	1,859	-1,123	2,936	9,832	698	-1.7	7.0	37.5	27.5
1993/94	-1,158	4,235	607	1,205	1,901	1,747	9,695	19,254	8,724	-0.4	3.9	33.8	25.4
1994/95	-3,369	4,922	1,030	172	1,526	1,506	9,156	25,186	4,644	-1.0	4.3	30.8	25.9
1995/96	-5,910	4,902	1,275	1,103	883	-3,474	4,689	21,687	-2,936	-1.7	5.4	27.0	24.3
1996/97	-4,619	6,153	2,848	3,350	1,109	-2,048	11,412	26,423	5,818	-1.2	7.2	24.5	21.2
1997/98	-5,500	5,390	3,999	1,125	907	-1,410	10,011	29,367	3,893	-1.4	5.4	24.3	19.0
1998/99	-4,038	2,412	4,362	960	820	-294	8,260	32,490	3,829	-1.0	4.4	23.6	17.8
1999/2000	-4,698	5,191	313	1,540	901	3,155	11,100	38,036	6,142	-1.0	4.0	22.1	16.2
2000/01	-3,590	6,789	3,732	2,317	427	-3,819	9,446	42,281	5,830	-0.8	3.6	22.4	17.2
2001/02	782	8,151	-1,579	2,754	1,204	445	10,975	54,106	11,757	0.2	2.8	21.0	13.9
2002/03	4,137	5,639	-2,353	2,976	-2,428	9,009	12,843	75,428	16,980	0.8	4.4	20.1	14.7

Sources: Reserve Bank of India; and author's estimates.

1/ Net inflows into the capital account (excluding IMF) and the accretion to the foreign exchange reserves. Since 2000/01, data on foreign direct investment have been revised with expanded coverage to approach international best practices.

2/ Includes errors and omissions.

3/ Not adjusted for valuation effects.

4/ In percent of total external debt.

5/ In percent of total exports.

Table 5. India: Pattern of Capital Flows and Their Use 1/

(In millions of U.S. dollars, unless otherwise indicated)

Current Account Balance	Net Capital Flows					Total Capital Inflows	Reserves (End-March)	Increase (+) Decrease (-) in Reserves 3/	Current Account Balance				
	Foreign investment	External commercial borrowing	NRI deposits	External aid	Other capital 2/				Account Balance	Debt Stock	Short-Term Debt 4/	Debt Service 5/	
1990/91	-9,680	103	2,248	1,536	2,210	1,091	7,188	5,834	-1,278	-3.1	10.2	28.7	35.3
1991/92	-1,178	133	1,456	290	3,037	-1,139	3,777	9,220	3,385	-0.3	8.3	38.7	30.2
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1997/98	-5,500	5,390	3,999	1,125	907	-1,410	10,011	29,367	3,893	-1.4	5.4	24.3	19.0
1998/99	-4,038	2,412	4,362	960	820	-294	8,260	32,490	3,829	-1.0	4.4	23.6	17.8
1999/2000	-4,698	5,191	313	1,540	901	3,155	11,100	38,036	6,142	-1.0	4.0	22.1	16.2
2000/01	-3,590	6,789	3,732	2,317	427	-3,819	9,446	42,281	5,830	-0.8	3.6	22.4	17.2
2001/02	782	8,151	-1,579	2,754	1,204	445	10,975	54,106	11,757	0.2	2.8	21.0	13.9
2002/03	4,137	5,639	-2,353	2,976	-2,428	9,009	12,843	75,428	16,980	0.8	4.4	20.1	14.7

Sources: Reserve Bank of India; and author's estimates.

1/ Net inflows into the capital account (excluding IMF) and the accretion to the foreign exchange reserves. Since 2000/01, data on foreign direct investment have been revised with expanded coverage to approach international best practices.

2/ Includes errors and omissions.

3/ Not adjusted for valuation effects.

4/ In percent of total external debt.

5/ In percent of total exports.

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² Rodrik (1998).

³ Quirk (1989).

⁴ In his open letter to Prime Minister Mahathir on the capital controls in Malaysia, however, Krugman (1998) emphasized that (i) controls should disrupt ordinary business as little as possible, (ii) distortions associated with controls are serious and tend to grow over time, suggesting that controls must be used as a temporary measure, (iii) controls may do most damage when the intention is to defend an overvalued exchange rate, and (iv) controls must aid reforms and should not be viewed as the alternative to reform.

⁵ Growth in base money fell from 25 percent in 1997 to minus 15 percent in 1998, and the domestic lending rate hardened by close to 3 percentage points.

⁶ The one-year holding period requirement was replaced by a 0–30 percent graded exit levy on outflow of principal and 10–30 percent levy on profit repatriation, depending on the period over which profits were realized.

⁷ After the introduction of the controls, short-term interest rates fell by close to 5 percentage points and as a matter of policy the fiscal deficit widened from 3.7 percent of GDP in 1998 to 6.1 percent in 1999.

⁸ According to Edwards (1999), capital controls in Chile were effective on short-term inflows on original maturity basis, but not on residual maturity basis.

⁹ The reserves were to be maintained with the central bank for a minimum period of three months.

¹⁰ While some suggest the imposition of a tax on a permanent basis on all inflows, Tobin suggested a “throwing sand in the wheels” approach under which countries must appropriately raise the “threshold limit on capital inflows.” As per a modified two-tier Tobin tax, a country could impose a transaction tax to increase the cost of foreign exchange trading and an exchange surcharge with the rate progressively increasing with the deviation from the equilibrium exchange rate.

¹¹ Neither the volume nor composition of capital flows (in terms of residual maturity rather than original maturity) altered drastically in response to controls. The real exchange rate appreciated by 28 percent during April 1991 and September 1998. The interest rate differential (adjusted for the expected change in the exchange rate) was small and disappeared quickly.

¹² The Committee on Capital Account Convertibility was chaired by the then Deputy Governor of the Reserve Bank of India, Mr. S. S. Tarapore.

¹³ The Fiscal Responsibility and Budget Management Law, which stipulates the elimination of the revenue deficit of the Central Government by end-March 2008, is expected to create an environment conducive for fiscal consolidation.

¹⁴ The ongoing efforts of banking sector reforms, which focus on better credit risk management and asset recovery measures (including the recent Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act, 2002) are expected to provide banks with additional avenues for the disposition of their NPAs.

¹⁵ Previously, companies could only borrow up to US\$50 million through the automatic route and up to US\$100 million with prior approval of the RBI.

¹⁶ Total prepayment by corporates, which amounted to US\$1.1 billion during April 2001 to December 2002, is estimated to have saved interest cost of US\$90 million for the corporates.

¹⁷ As part of the rationalization of NRI deposits, nonrepatriable rupee denominated (NRNRD) deposits (which amounted to US\$7.1 billion at end-March 2002), on which only interest payments were freely repatriable, were discontinued effective April 1, 2002. At the same time, as part of the gradual move towards capital account convertibility, the maturity proceeds of outstanding NRNRD deposits were eligible to reinvest in fully repatriable NRI deposits. Accordingly, the outstanding NRNRD deposits declined steadily to US\$2.8 billion by end-July 2003, with the bulk of such deposits being reinvested in the NRE account of NRI deposits.

¹⁸ The small list of industries that require case-by-case approvals from the FIPB include domestic airlines, the petroleum sector (except private sector oil refining), print and broadcast media, postal and courier services, development of integrated township, tea plantations, defense and strategic industries, atomic minerals, the establishment and operation of satellites, and investment companies in infrastructure and the services sector.

¹⁹ The negative list includes retail trading; atomic energy; the gaming, betting, and lottery business; the housing and real estate business; and agriculture (excluding floriculture, horticulture, seed development, vegetable and mushroom cultivation under controlled conditions, animal husbandry, pisciculture, services related to agriculture and allied sectors) and plantations (other than tea).

²⁰ By late 1997, the year when nonresidents were allowed to invest in government securities, roughly 30 percent of the GKO (a short-term government bill) market was accounted for by nonresidents.

²¹ However, to provide foreign exchange earners with greater flexibility, their foreign currency accounts could be used only for external payments. If such balances are to be used for local payments, they have to be converted into Indian rupees. Further, since November 2002, resident individuals have been allowed to open domestic foreign currency accounts only when they acquire foreign exchange through normal banking channels.

²² Moreover, Indian banks are not permitted to offer two-way quotes to NRIs or nonresident banks.

²³ Out of the US\$8.4 billion increase in net banking capital flows, the net drawdown in foreign assets of banks contributed to an increase in banking capital by US\$4.9 billion. The remaining portion of the increase in banking capital was due to net increase in foreign liabilities of banks, comprising mainly of NRI Deposits (US\$3.0 billion).

²⁴ ~~IMF document [please specify]~~; IMF, World Economic Outlook, October 1997, May 1998, October 2001; and IMF (1999), Country Experiences with the Use and Liberalisation of Capital Controls, August.