

The background of the cover features a grayscale image of financial data. It includes a line graph with a grid, a bar chart, and various numerical values and text labels such as '30 year yield', '10040', '19930', and '10000'. The overall aesthetic is that of a professional financial report or market analysis.

# Indian Macroeconomic Management

## At the Crossroads Between Government and Markets

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## Introduction

The most fundamental issue facing policymakers in India is the question of the balance between government and free markets. Throughout the postwar era, India has adopted a highly interventionist approach. But since 1991, the country has been deregulating and liberalizing the domestic economy and opening it to the world. However, India has remained cautious in its approach to liberalization, an approach vindicated in the light of comparisons with the East Asian experience. Yet, reformers in India appear determined to accelerate liberalization despite recent events in East Asia. It is appropriate to use these events as an opportunity to review the merits and demerits of India's latest reform program.

Evidence from other Asian countries, as well as from India itself, supports the maintenance of a certain degree of Government intervention that is welfare-enhancing. In particular, governments continue to play an important role in designing and implementing the institutional framework within which agents can operate. Moreover, due to informational imperfections, the credit market is a key platform for appropriate and beneficial government intervention. Therefore, governments should consider the pros and cons of giving up control over monetary policy to independent central banks.

## Macroeconomic Policy Management Prior and During the 1991 Crisis, and Implications

### The Crisis of 1990/91

In 1991, India faced a full-blown balance of payments crisis. While this was triggered partly by external events, the root causes were mainly to be found in domestic policies. In 1989/90, the often volatile agricultural sector recovered abruptly. Furthermore, domestic credit creation continued to expand, thus

fueling domestic demand. Significant Government spending added to this (fiscal demand boosted the fiscal deficit to more than 10 percent of gross domestic product [GDP] in 1990/91). Since much of the fiscal spending was funded by credit creation by the commercial banks or the Reserve Bank of India (RBI), it further added to money supply expansion. This strong domestic expansion boosted imports. Hence the current account deficit expanded to 3 percent of GDP. Similar to the late 1980s, this was initially largely funded by either remittances of overseas Indians or government and private sector borrowing from abroad.<sup>1</sup> After the Iraqi invasion of Kuwait in August 1990, however, oil prices rose sharply. This led to an abrupt widening of the Indian trade deficit. At the same time, Indian residents abroad, many of them in the affected Gulf region, sharply reduced their remittances home. Meanwhile, strong domestic demand boosted nominal economic growth above the potential growth rate. This not only fueled imports, but also pushed up the inflation rate to 12 percent and higher in early 1991.<sup>2</sup>

Bulging fiscal and current account deficits and the threat of rampant inflation did not make the rupee attractive to foreign investors. India's creditworthiness was downgraded by international rating agencies. As private foreign lending and overseas remittances dried up, the official foreign exchange and gold reserves had to be relied upon to plug the gaping hole in the balance of payments. Eventually, official reserves reached alarmingly low levels of only \$1 billion—just two weeks worth of imports. Having actually run out of liquid dollar assets, RBI was even forced to ship gold bullion to the Bank of England. India was on the verge of outright default on its foreign liabilities. To avoid this, the Government asked for assistance from the International Monetary Fund (IMF).

### Causes of the Crisis

A mounting body of evidence indicates that the increasingly open trade regime introduced by the Gandhi administration from the mid-1980s has had

an adverse impact on the Indian economy. Most of the high growth during the 1980s was based on domestic demand and was generated by the consumer goods sector. Only 11 percent of the 52 percent output rise was due to exports. Output of capital goods fell by 7 percent and that of intermediate goods also dropped slightly. Marjit and Nirvikar (1993) found that “there was no strong evidence that exports were a spur to improved performance, including technological change.” Nambiar and Tadas (1994) observed that “for the period 1978/79 to 1989/90, trade shrank value added in manufacturing roughly by 6 percent points.” At the same time, the booming import-intensive consumer durable sector worsened the current account balance. Since the growing openness to the world market resulted in gains of the resource- and labor-intensive sectors at the cost of the technology- and capital-intensive industries, Nambiar and Tadas (1994) conclude: “Trade is certainly the root cause of inverting the structure of Indian industry. If this is the kind of industrial restructuring that is being attempted, then the country is heading for long-run trouble. It will kick people from relatively high-paid to low-paid jobs.” Other researchers have come to similar conclusions.<sup>3</sup>

Finally, the increasingly liberal trade regime left the Government with fewer policy tools to rein in the current account deficit. Until the 1980s, balance of payments crises were met mainly by the imposition of tariff and nontariff barriers to imports. However, the policy of deregulation and tariff reduction that began in the mid-1980s blocked this traditional avenue.

### Policy Response and Implications for India’s Approach Toward Further Liberalization in the 1990s

The policy response was to deploy severe quantitative restrictions on imports. IMF-imposed policies, as always, focused on restricting domestic demand by reducing credit expansion (which was achieved by raising the cash reserve requirement [CRR], increasing margin requirements for loans,<sup>4</sup> and raising

interest rates), and draconian fiscal tightening. Consequently, real GDP growth slowed to 0.9 percent, the lowest since 1979/80. Industrial production growth slowed equally sharply to only 1 percent. Based on this contraction of domestic demand growth, the balance of payments improved sharply. Meanwhile, a standby credit from IMF was used to support a 19 percent devaluation of the rupee. Funding was conditional on a far-reaching reform package, having found overexpansionary fiscal policy to be the main culprit in the creation of the crisis.<sup>5</sup> The IMF package included reforms in trade and capital account, banking sector, and industrial policy.

However, the occurrence of the crisis and the role of hasty precrisis reforms under Gandhi strengthened the case of the gradualists who had been arguing in favor of only moderately progressing liberalization, as opposed to the “shock therapy” approach espoused by international organizations. Those favoring a gradualist approach to reform argued in 1991 that the political and social acceptability of the reform package is an essential condition for its sustainability.<sup>6</sup>

## Overview of Macroeconomic Management and the Liberalization Process

### Macroeconomic Management in the 1990s

The new Government that took office in June 1991 was committed to a far-reaching program of structural reforms. Yet, the immediate task faced was the need to stabilize the economy. Following the time-worn IMF recipe, it adopted measures to reduce the fiscal deficit and inflation, and improve the balance of payments. A drastic squeeze on domestic credit creation by the banking system and the central bank was used to restrict domestic demand. At the same time, fiscal tightening reduced the Government’s claims on given resources. As domestic demand shrank sharply, for any given propensity to import,

the trade balance had to improve. The drastic import controls that had been introduced when the balance of payments crisis first emerged were also continued. This was combined with a 19 percent devaluation of the rupee, which had been supported by a standby credit from IMF.

As a result, GDP growth slowed to 0.8 percent in 1991/92 and agricultural and manufacturing output fell by 2.3 percent and 1.7 percent, respectively.<sup>7</sup> The balance of payments improved sharply, from a deficit of 3.5 percent of GDP in 1990/91 to only 0.7 percent in 1991/92. Foreign exchange reserves shot up to \$6 billion. Inflation, on the other hand, increased further to about 14 percent on average in 1991/92.<sup>8</sup>

From 1992/93, an initially patchy recovery of domestic demand turned into a broad-based full-blown economic recovery. Although industrial production remained weak in 1992/93 and 1993/94, it accelerated in 1994/95 and 1995/96 (averaging 10.5 percent). India had not only recovered within a year from a severe balance of payments crisis, but had also quickly come out of the recession that resulted from measures taken to address the balance of payments crisis. The goal of external stability was clearly achieved, and not only in the initial postcrisis months. The current account deficit remained below 1 percent of GDP in all but one year from 1991/92 to 1994/95.

However, because India's recession had been brief, the risks associated with the policy to stabilize the external value of the currency at the cost of domestic demand were not as visible as those in most East Asian countries affected by the 1997/98 crisis. Therefore, it is not clear that other countries that suffer from a balance of payments crisis should necessarily follow India's example. One reason why the recession in India was shorter than anticipated was the rapid accumulation of foreign reserves, partly due to capital inflows that started to rise from 1992. These capital inflows were partly attracted by the increased opportunities for foreign investors in postreform In-

dia due to the policy shift from a closed economy to a more globalized economic system.

The sequencing of balance of payments crises is important. If the crisis comes at a time when foreign capital has not been invested to any significant degree in the country, then a reform program may help attract foreign investors, who will then contribute to an accumulation of foreign exchange reserves and an improvement in the balance of payments. However, it is a one-off trump card that the East Asian countries had mostly played by 1994, at a time when there was no economic crisis. On the contrary, their excessive opening to foreign capital, which attracted short-term funds that were eventually withdrawn at short notice, was an important cause of their crises.

India, however, was not tempted by its positive experience with foreign investors, to open the doors to them too quickly. As we will see below, the cautious Indian stance toward borrowing from abroad, especially for the short term, has been the main reason why India has avoided being drawn into the Asian crisis directly.

### Overview of Timing and Sequencing of the Liberalization Process Since 1991

In late 1991 and early 1992, a far-reaching reform program was introduced in India. The fundamental aim had been to liberalize markets and switch the economic system to one characterized by market orientation. Key policy changes in terms of domestic macroeconomic management had been focused on the containment of the fiscal deficit, the subsidence of inflationary pressures, and the restoration of monetary policy toward regulating money and credit in the pursuit of its central objectives of price and exchange rate stability. These changes coincided with the movement toward global integration of financial services. Since reforms of industrial and trade policies had already begun in the 1980s, the banking sector experienced the biggest change as a result of the 1991/92 reforms.

## FINANCIAL SECTOR REFORM POLICIES

In India, financial sector reform is virtually identical to banking sector reform. More than 80 percent of the funds flowing through the financial sector are accounted for by the banking system. In 1969, all large banks were nationalized. Today, most banks are still in public hands, but the share of private banks has risen from 11 to 17 percent.<sup>9</sup> In the prereform era, authorities heavily regulated virtually all bank activities. This included completely regulated interest rates and full licensing on branching, as well as most commercial operations. Indeed, quantitative targets virtually prescribed their commercial strategies, such as the plans for the expansion of bank branch networks in rural areas, as well as detailed credit controls.

As economic reforms were introduced in the 1980s, RBI and other reform-minded interests began to circulate the idea that the Indian financial sector needed to be reformed drastically. In particular, the argument was made that prudential regulations, as well as consumer, depositor, and investor protection, had been neglected. Moreover, poor profitability of public sector commercial banks and their dependence on regular equity infusions from the Government was criticized. As a result, the Chakarvarty Committee was set up to examine the issues facing the financial sector. Its 1985 report advocated independent monetary management and targeting, restructuring of the interest rate structure, reducing the reliance of the banking system on the Government, granting a greater degree of autonomy to banks in their lending operations, and raising interest rates on Government securities toward market-determined rates. The report of the Working Group on the Money Market in 1987 led to reforms to create an active market for short-term financial assets by introducing bill financing. Since the late 1980s, RBI has introduced steps to liberalize and simplify the interest rate structure.<sup>10</sup> Moreover, the introduction of certificates of deposit in June 1989 and commercial paper (CP) in January 1990 increased the use of market-determined inter-

est rates. However, the implementation of the recommended reforms was considered too slow by the proreform camp. The balance of payments crisis and intervention by IMF suddenly strengthened their leverage. This resulted in the financial reforms.

In the early 1990s banking reform proceeded in two phases. The first phase was launched in 1992 and closely followed the recommendations of the Committee on Financial System (CFS) in November 1991. It focused on the modification of the political environment and the degree of direct Government intervention in the banking system. The second phase was launched in October 1997 by RBI Governor C. Rangarajan.<sup>11</sup> It was aimed at improving the financial soundness and credibility of banks, creating a competitive environment, and strengthening the institutional framework.

During the first part, RBI and the reformers lobbied for greater freedom for banks to determine key variables of their industry, such as the setting of interest rates, the size and role of reserve requirements, and the size and role of the compulsory lending requirement to the Government (via the statutory liquidity requirements). The measures that were implemented in line with the CFS report included the following:

- in February 1992, accounting practices for bank financial statements were brought more in line with international standards in order to enhance transparency and credibility.
- in April 1992, asset classification criteria were improved and income recognition has been rendered more stringent;<sup>12</sup>
- the complex and detailed administered interest rate structure was deregulated. The most important interest rates are now market determined. These include all deposit rates, except for fixed savings deposits (which account for 15–20 percent of bank deposits).<sup>13</sup> Banks are now free to determine their lending rate for loans above Rs2 lakh. Below this amount, a maximum ceiling prevails, so that small borrowers are

- treated like the large ones.<sup>14</sup> Moreover, interest rate subsidies have been significantly reduced;
- the licensing of branching was partially abolished;<sup>15</sup>
  - prudential norms have been introduced, especially with respect to provisioning for various categories of market-related and substandard assets. Specifically, the definition for nonperforming loans (NPLs) was tightened;<sup>16</sup>
  - between April 1992 and March 1996, RBI phased in the 8 percent capital/risk-weighted assets adequacy requirement based on the Basle Committee norm.<sup>17</sup> The combined impact of increased write-offs and provisions to reflect the weakened financial position due to more stringent prudential and accounting standards was estimated to require \$4 billion equivalent of new capital;
  - in mid-1992, RBI introduced new Government securities through auction sale (364-day Treasury bills, and five-year and ten-year bonds);<sup>18</sup>
  - in July 1992, the establishment of the Board for Financial Supervision (BFS), which is part of RBI, was announced. BFS would enhance the supervision of banks and nonbanking financial institutions (NBFIs) and development finance institutions;
  - in August 1992, the Government allowed public sector banks to access the capital market in order to raise the additional capital needed to fulfill the new capital adequacy and prudential requirements; and
  - the mandatory credit allocation to priority sectors was scaled down by reducing interest rate subsidies, thereby boosting banks' profitability. The statutory liquidity requirement (SLR) and CRR have been progressively reduced.<sup>19</sup>

In September 1992, a working group on financial companies recommended a strengthening of regulation and supervision of NBFIs<sup>20</sup> by the newly constituted BFS. The regulatory framework for NBFIs, effective January 1998, involves making credit ratings compulsory,<sup>21</sup> introducing prudential guidelines

(along the lines of commercial banks),<sup>22</sup> capital adequacy set at 10 percent,<sup>23</sup> an interest ceiling fixed at 16 percent,<sup>24</sup> and a minimum liquid deposit requirement of 12 percent of total deposits.<sup>25</sup>

The second phase of banking sector reform began in April 1998 with the report of the Committee on Banking Sector Reforms,<sup>26</sup> which recommended further deregulation and liberalization of the banking system, together with the further tightening of prudential requirements. The committee also argued for further strengthening of the independence of RBI by amending the various laws prescribing its legal status (Appendix 1).

Concerning credit controls, the 1998 Narasimham report asserted that recent developments in Asia had "served to reinforce the point that a strong and efficient financial system is necessary both to strengthen the domestic economy and make it more efficient and also to enable it to meet the challenges posed by financial globalization. Nothing is more indicative of the quality of the banking sector's assets than the quantum and incidence of nonperforming assets (NPAs). The causes for a high proportion of NPAs are varied. Often, as international experience has shown, a high incidence of NPAs could be traced to policies of directed credit. When banks are required by directive to meet specific quantitative targets, there is, as our own experience has shown, the danger of erosion of the quality of the loan portfolio."

#### **ASSESSMENT OF BANKING REFORMS**

Reform efforts have been justified to overcome shortcomings and distortions in the banking sector and improve efficiency in mobilizing and allocating resources, thus providing the basis for accelerating economic growth and development. Reforms were thought to enhance the access of the private sector to financial savings, and reduce interest rate and credit allocation distortions. Reform advocates have foreseen branch and bank mergers as well as substantial staff retrenchment with potentially severe social impact as a result of these reforms. They ar-

gued that the reforms would ensure that only investments with the highest returns are funded.

No doubt, India's approach to the implementation of reforms, namely to move in slow, careful steps and avoid "shock therapy," must be highly commended.<sup>27</sup> However, given recent experiences in Asia and other countries, there is also a great need to review the fundamental premises of the banking reform program.

The case for the success of the reforms is implicitly made in the 1998 Narasimham report, which contends that interest rate deregulation for loans above Rs2 lakh has increased competition among banks to attract a greater number of big corporate clients. Consequently, interest payments for big projects have been reduced, making more projects profitable and, therefore, encouraging these big companies to borrow from banks. At the same time small borrowers have so far remained protected, because of the ceiling imposed on interest rates of smaller loans.

However, this case in favor of interest rate deregulation is tenuous and based on partial equilibrium analysis.<sup>28</sup> On a macro level, it is clear that if interest rates had actually been too high to ensure a welfare-optimal level of investment, as the above argument implies, then instead of a costly banking sector reform, RBI could have simply lowered interest rates.

On the contrary, there is indeed evidence that banking sector reform carries high costs and high risks. Over the past two decades, accumulated evidence from many advanced countries suggests that deregulation of banking systems usually leads to major resource misallocation. These can be divided into costs that are due to the cyclical and the structural impacts of the reforms.

### **Cyclical Impact of Reforms**

A significant short-term cost of the early reforms is the reduction in private sector credit creation, which has been triggered since the mid-1990s by increasing tightening of prudential regulations. Given the much more difficult prudential and capital adequacy

ratios and the requirement to mark more of their investments to market (since 1992), there has been strong evidence that banks have become more risk-averse. Since the reforms raised interest rates of Government securities, as the reformers had demanded, they are now more attractive. Overall, banks' assets have, therefore, been reallocated toward increased investments in securities and less bank credit to the private sector. This has happened at a time when the reforms also reduced the compulsory bank purchases of Government bonds as prescribed by the SLR. As a result, loan extension to the corporate sector is not as strong as would be desirable.

### **Structural Impact of Reforms:**

#### **Assessment of Credit Control Policies**

The imposition of credit controls is the key reform issue, because such controls have acted as the unified tool of fiscal, monetary, and structural policies.<sup>29</sup> The main question concerning banking sector reform is, therefore, whether the credit market should be left to its own devices, without any Government intervention beyond prudential regulations, or Government intervention in the credit market can be welfare-enhancing and, therefore, India should continue its system of credit controls even in a modified system.

The results of decades of controls and direction of bank activity were described as being "surprisingly positive" even by critics of Government intervention in financial markets.<sup>30</sup> For instance, because of direct targets on the establishment of bank branches, especially in rural areas, the number of actual bank branches has expanded at a dramatic pace. This has helped increase savings, and thus reduce inflationary pressures. Also, it has enabled the Government to allocate new purchasing power to the corporate sector, without the threat of accelerating inflation.

The credit controls have been criticized for years, especially by international organizations. The

argument is that they constitute undue Government involvement in markets, which, it is said, must entail inefficiencies and lead to resource misallocation. While the latter is certainly a danger and a possibility, it does not necessarily follow. In imperfect markets or when externalities are present, economic theory tells us that Government intervention can be welfare enhancing.<sup>31</sup> Moral hazard may apply not only to borrowers, but also to lenders, if there is explicit or implicit free deposit insurance or government assurance of bailout (as is common in modern economies). Its dangers, however, are exacerbated during liberalization, as banks are given increased freedom with regard to interest rates and the direction of credit. Even supporters of liberalization concede that in such circumstances, ceilings on deposit and loan interest rates may well be desirable.<sup>32</sup> Thus, the issue on the efficiency of credit controls in India remains to be settled.

India's credit controls certainly helped avoid the vast resource misallocation seen in many countries that have deregulated their banks. The share of lending, and hence credit creation, used for speculation has remained low by international standards. In India, less than 10 percent of loans have been extended to the real estate sector or for use in capital markets.<sup>33</sup> This has prevented the emergence of a significant asset bubble.

Another argument in favor of regulated credit markets is that regulated interest rates have kept the cost of funding the fiscal deficit and national debt under control. Interest rate deregulation and a shift of Government funding from the banking system and central bank to the open market raise interest costs and potentially the overall interest rate level. As Joshi and Little (1996) argue, this may not only be detrimental to economic growth, but "high interest rates consequent upon interest deregulation can lead to financial crises...this provides a valid ground for some interest rate regulation." They therefore recommend that "it would be wise to put deposit rate deregulation on hold until (i) further progress is made with

fiscal adjustment, and (ii) deposit rates are fully deregulated to keep in reserve the power to impose a ceiling on the lending rate and to use it in good time if it becomes necessary." It seems, therefore, that a full-scale review of the merits and dangers of deregulation of interest rates is necessary before too many costs and the danger of a major financial crisis are imposed on a country that has other problems to struggle with (such as poverty, income and wealth disparities, social welfare and education, infrastructural bottlenecks, etc.) and is in no need for new, policy-induced disasters.

Although credit controls have been criticized as discriminating against private sector borrowers, it is hard to see how a liberalized banking system would solve the problem of discrimination. In a perfectly competitive banking system that has been fully deregulated, imperfect information implies that banks ration credit even in equilibrium. Pervasive credit rationing results in discrimination against small firms. This suggests that the banking sector reforms at best merely substitute one form of discrimination by another. However, since the Government for the past half century has been highly successful in supporting economic growth and development while minimizing social costs, it is hard to see why this mandate should now be taken away.

In a developing economy where market efficiency is even less likely to be attained than in advanced countries and where most other economic policy tools suffer from implementation problems, credit controls represent a simple and efficient tool that can serve many purposes. For instance, credit controls have enabled the Government to monetize fiscal spending, as banks were effectively forced to purchase Government bonds. This meant that both fiscal and monetary policies could be implemented simultaneously and in a coordinated fashion. Moreover, the statutory Government bond purchases acted as a de facto prudential instrument. By controlling the allocation of credit among various sectors of the economy, structural and social policy objectives could be



met. Thus, directed credit has acted as the unified policy tool to implement structural, sectoral, and social policies, as well as prudential policy, in addition to the standard fiscal and monetary cyclical policies.

There is no clear indication that taking away this tool from the democratically elected government and instead empowering unelected banks or a central bank as the key decision makers, which are prone to pursue sectarian rather than public interests, will enhance social welfare. Unlike mere financial intermediaries, the banking sector performs a public good function by creating and allocating the vast majority of purchasing power. Therefore, Government intervention, or even ownership of this sector, may be welfare enhancing.

However, the recent reforms and latest reform proposals have not only drastically reduced the power of intervention of the Government. Through tightening of capital adequacy rules, they have created a back-door policy avenue toward de facto privatization of the banking system. As banks are forced to raise capital, and as the Government is prevented by recent reforms from providing equity capital, private sector fund raising will occur, diluting Government ownership. Privatization, an important policy decision, should not be implemented in such a way. Rather, parties in favor of privatization should take their proposals to the appropriate democratic institutions.

Directed credit has been successful in its instrumental role of bringing about fast economic growth in Japan; Korea; Malaysia; and Taipei, China among others. Criticism of this argument focuses on the fact that the explicit, official programs of directed credit, via Government development banks, were very small in those East Asian countries and hence could not sufficiently explain their stunning development success.<sup>34</sup> However, this shows a fundamental misunderstanding of the programs of directed credit in those countries. The official lending by Government development banks accounted indeed for a diminishing fraction of total directed lending. The

key mechanism of directing credit flows is far less known and thus has hardly been covered by the literature. It is the imposition of credit growth targets over the commercial banking system and the direction of all lending by commercial banks among the various industrial sectors that were conducted by the central banks in those countries. In Japan, for instance, from 1942 to 1991, the Bank of Japan used its window guidance credit controls not only to control the quantity of credit allocation but more crucially, to regulate its allocation among industrial sectors. Loans to sectors that were less important for fast economic growth were quantitatively restricted (such as "consumptive" loans to the consumer and individual household sector, but also, until the 1970s, real estate loans). On the contrary, banks were virtually ordered to expand loans to the sectors that were deemed highly productive, i.e., the key growth industries designated by the Ministry of International Trade and Industry (MITI). There can be no doubt that this program has been the single most important reason for the meteoric rise of the postwar Japanese economy.<sup>35</sup>

Given these considerations, and the stark empirical evidence of the impact of deregulating the banking sector in Asia and Europe, including recent events in the Asian region, the Indian Government must be commended for resisting for so long the political pressures from interested parties, such as RBI, to abolish credit controls and the strong reservations it posited against hasty acceleration of a financial sector reform program.

### **Financial Sector Supervision and Central Bank Independence**

The reforms have de facto transferred supervisory power over the financial sector, as well as decision-making power over monetary policy and the economically effective part of fiscal policy from the Government to RBI. The decoupling of fiscal and monetary policies has strengthened the hand of RBI. In addition, the creation of BFS, which is de facto

part of RBI, has greatly reduced the influence of the Government over the banking system. This is not necessarily a positive development. While there is literature that proposes a causal link between central bank independence and low inflation, recent work shows that no such link exists. Moreover, there is strong evidence that independent central banks that lack significant checks, balances, and mechanisms for accountability may act detrimentally to national welfare.<sup>36</sup>

The most recent example has been the policy of the Bank of Thailand in the second half of the 1990s. The Bank of Thailand acted fully independently—while the Government and its Ministry of Finance were unable to intervene—when it created what must be considered the biggest peacetime misallocation of resources in Thai history.<sup>37</sup> Concentrating too much power over any sector of the economy in the hands of one institution is likely to create vested interests and incentives to place priority on sectarian interests, rather than the maximization of overall national welfare. The selection of personnel of RBI should be farmed out to an independent outside institution and RBI should be made directly accountable for its policies. Moreover, supervision over the financial sector should not be conducted by an institution connected to RBI.

### REFORM OF MONETARY POLICY

Monetary policy is an integral part, and indeed the core of macroeconomic management policy of the Government. Originally, RBI, founded in 1934, acted as the executive branch of the Ministry of Finance in implementing monetary policy. Since 1969, RBI has announced its credit policy every six months, determined jointly with the Ministry of Finance.<sup>38</sup> However, over the past two decades, RBI has striven to gain control over monetary policy and reduced the influence of the Government over its activity. Yet, government policy tools, such as the SLR, severely limited RBI's room to maneuver. In an attempt to emphasize its own stance, since 1985, RBI has set

an official money supply (M3) target as an intermediary policy target, which it announces at the beginning of the fiscal year in April (with a mid-term review in October). A target for commercial bank credit growth was set consistent with this. The money and credit growth targets were determined by adding an expected inflation rate to the desired real GDP growth rate<sup>39</sup> and by scaling the coefficient derived from an empirical money demand function.<sup>40</sup>

In the past the RBI has used quantitative tools in implementing monetary policy, such as the CRR and the setting of the bank rate. However, since 1992, open market operations in the gilt-edged market, as well as Government bills have been used. Since then, the repo rate has increasingly been emphasized as intermediary target.<sup>41</sup> The operations of RBI now also include such money market instruments as private CPs and certificates of deposit (CDs) as well as overnight call money intervention.

### Monetary Statistics and Intermediary Target

The tradition of compilation and dissemination of RBI monetary statistics dates back to 1935. However, the rationale and analytical foundation of the compilation of monetary aggregates were only reported to the public in the report of the First Working Group on Money Supply (FWG) of 1961 and the report of the Second Working Group (SWG) of 1977.

The SWG recommended the presentation of monetary statistics based on balance sheet data of the central bank, the banking sectors and the postal authorities. However, the Governor of RBI set up the Third Working Group (TWG) on 3 December 1997, whose recommendations were submitted on 23 June 1998.<sup>42</sup> The TWG argued that due to increasing financial liberalization, since the late 1980s, and the resulting gradual blurring of distinctions between different types of financial institutions, the existing monetary aggregates had to be changed. Moreover, it suggested that the new IMF Manual on *Monetary and Financial Statistics*, available so far in draft form, needed to be reflected in the Indian statistics.

This is based on the ongoing move by RBI to emphasize indirect instruments of monetary control, i.e., to shift from credit controls to interest rates as monetary policy tool.

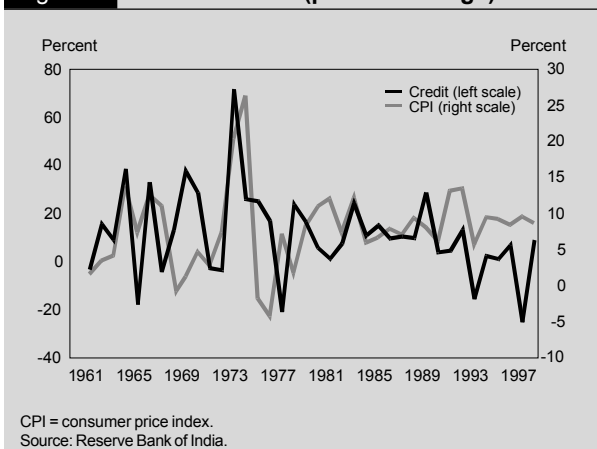
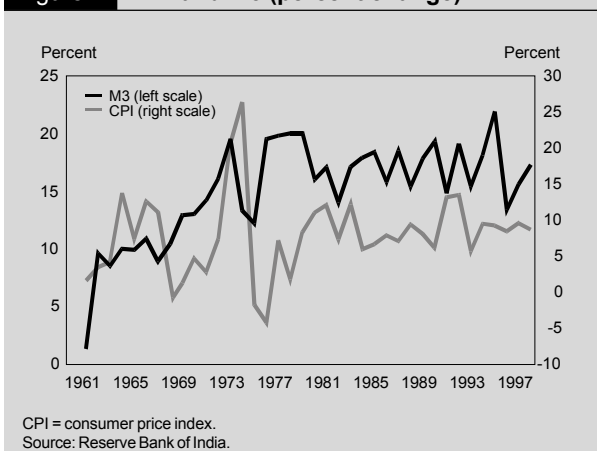
The TWG defines money “for policy purposes” “as the set of liquid financial assets, the variation in the stock of which could impact on aggregate economic activity.”<sup>43</sup> In the report, a distinction is being made between the “money issuing sector,” namely the banking sector, and the “money holding sector,” defined as the aggregate of households, non-financial commercial sector and nondepository financial corporations.<sup>44</sup> Similar to central banks in other countries, the RBI has defined the money supply by various subsets of private sector savings, such as M1 or M3, with the official rationale that they are characterized by a good correlation with GDP.<sup>45</sup> The TWG concluded by recommending the compilation of four measures of monetary aggregates and three measures of liquidity aggregates, all of which are varying, arbitrary subsets of private sector savings.<sup>46</sup>

Werner (1993 and 1997) shows that for purposes of economic analysis and monetary policy, it is necessary to focus on banking sector assets, as these constitute the net creation of new purchasing power, which can theoretically be expected to be in a more stable relationship with nominal GDP. The TWG acknowledges the importance and relevance of this argument, as it admits that: “Bank credit is often specifically referred to in several writings in monetary economics, as a critical variable affecting consumption and capital formation in a direct manner. As such it is often regarded as a more useful indicator of real sector activity than money supply.” Moreover, in India, one of the objectives of monetary policy is “ensuring adequate flow of credit to the productive sectors of the economy.” Given also the growing openness of the economy, the TWG recognized the need for having comprehensive measures of credit.<sup>47</sup> It proposed to broaden the definition of bank credit to the commercial sector by including bank investment

in CP, shares and debt instruments issued by the sector in the conventional credit aggregates. It also recommended the preparation of a comprehensive financial sector survey on a quarterly basis.<sup>48</sup>

While the TWG recognizes the existence of such approaches, it failed to recommend the aggregates that are to be published, and the policy tools and intermediary targets to be used. The recommended monetary aggregates do not go beyond the ones listed above, without mention of the credit approach. The policy target used by RBI was “broad money,” namely M3, which appears to be endorsed by the TWG. A major reason for this sudden unilateral focus on traditional M-indicators appears to be the citation of empirical evidence in favor of this approach. According to the report, the “real broad money balances and aggregate income were found to be cointegrated, reflecting a long-run equilibrium relationship between real broad money (M3) and real GDP.” However, statistical deficiencies, especially concerning the stability properties of the relationship, were found.<sup>49</sup> As a result of these, the group admits that “monetary policy exclusively based on the demand function for money could lack precision.” Yet, despite these crucial shortcomings, and in spite of the theoretical superiority of the credit approach, the TWG failed to advance the increased use of credit aggregates.<sup>50</sup>

Independent research concerning the crucial relationship between the monetary sector and the real economy is, therefore, required. A first modest attempt is presented in Appendix 2.<sup>51</sup> It has been mentioned at various places in the paper that credit policy seemed to be important in India in order to achieve price stability. The common monetary approach to explain inflation is based on money aggregates such as M2 or M3 (quantitative theory of money), and India follows that approach, even though the TWG recommends the introduction of liquidity measures.<sup>52</sup> To show the relationship between credit and inflation, both credit and M3 have been plotted against the consumer price index (CPI) (Figures 1 and 2).

**Figure 1: CPI and Credit (percent change)****Figure 2: CPI and M3 (percent change)**

### The Credit Approach

Werner (1997) has indicated that money should be seen as credit. Traditional measures of the money supply, such as M3, consist mainly of deposit money that is no longer available to the economy. Werner, therefore, sees M3 as “potential purchasing power.” Credit, on the other hand, can be seen as effective purchasing power. The driving forces for real economic activity are, therefore, found on the asset side of the balance sheets of the banks.<sup>53</sup> Applied to the Indian economy, not M3 but credit should therefore be expected to be the driving force for the CPI.

### Statistical Evidence During the Different Crises

In this study, RBI’s “credit to commercial sector,” (primary credit creation) was used as a proxy for

overall credit creation in the economy. As can be gleaned from the figures presented, the credit aggregate has greater explanatory power than the money supply aggregate. Special attention should be drawn to the different crises India went through during the observation period (see Appendix 2).

Based on the credit interpretation presented in Appendix 2, the conclusion by the TWG has no empirical support. Instead of broader monetary aggregates, which the TWG referred to as “liquidity aggregates,” detailed credit aggregates should be introduced. Furthermore, monetary targeting should focus on credit. Even though only “RBI credit to commercial sector” has been used for the analyses, it beats the money supply, measured as M3, in explaining inflation in India. An even better result might be possible if bank credit to the commercial sector could be included. Detailed credit figures broken down by industrial sector could also serve as proxies for price changes in different sectors. The TWG recognizes that detailed credit figures will be necessary for more thorough analyses. Comprehensive and timely credit statistics, also disaggregated by industrial sector, need to be collected and published.

It must be mentioned, however, that the credit approach may not be as unpopular at RBI as the central bank claims in its official statements. Despite the official liberalization of credit controls, there is still ample room for RBI to use “moral suasion” to control credit quantities, as well as the allocation of funds. As eyewitness testimonies have confirmed, RBI monitors the total balance sheet of banks fortnightly. RBI then compares credit growth with data on industrial production, capital investment, and prices in order to determine whether the economy is likely to expand faster than targeted.

### Monetary Policy Decision Making and Status of RBI

On 31 March 1997, amended legislation was passed that vested more powers with RBI, in particular, the expanded competence to oversee

NBFIs.<sup>54</sup> Further, it was agreed that by the year 2000, RBI would be completely independent. In a phased program, the central bank has gradually received greater autonomy in its management of the economy. Before April 1994, the money supply was to an important extent driven by Government recourse to central bank borrowing (automatic monetization; ad hoc bill issuance). This meant that a close link existed between fiscal and monetary policies. However, in the 1990s, there was a policy decision to delink monetary and fiscal policies. Since April 1994, this has been phased out over a period of three years and then, from April 1997, stopped altogether. This was the centerpiece of the structural policy to shift India's economy from one with administered, centralized planning and directed investment to one where decisions are taken on the basis of prices in liberalized markets. Instead, the "ways and means resources" procedure has been implemented, which requires the Government to borrow at the interbank rate.<sup>55</sup> Moreover, all Government borrowing is now conducted through the auction process.<sup>56</sup>

### Policy Coordination

In conclusion, monetary policy is now in theory and practice fully in the hands of RBI, which also unites the function of lender of last resort and regulator of the financial sector. Since RBI is not directly an agency representing the elected Government, the possibility exists that monetary policy will not be coordinated with fiscal and other policies. Uncoordinated monetary and fiscal policies, implemented by two separate entities (the Ministry of Finance and RBI) could lead to a major macroeconomic misallocation of resources. There are many examples in other countries of disastrous combinations of tight monetary and loose fiscal policy (which could lead to spiralling fiscal deficits) or loose monetary and tight fiscal policy (which can lead to credit-driven real estate boom/bust cycles). The lack of coordination of fiscal and monetary policies has been a major cause of the boom/bust cycle in Japan in

the 1980s and 1990s, as well as the currency and financial crises in Thailand in the 1990s, among other countries.<sup>57</sup> Governments should therefore be aware of the pros and cons of decoupling fiscal policy from monetary policy.

## FISCAL POLICY AND PUBLIC SECTOR REFORM

### Public savings

In sharp contrast to India's private savings performance—comparable to those of Malaysia and other East Asian economies—India's public savings performance (the excess of central and state government revenues over current expenditure plus the gross profits of public enterprises) has been much worse and deteriorating. Since the 1980s it has been constantly in decline from about 3 percent to virtually zero at present. Improving public savings performance is needed, particularly to raise public investment shares in infrastructure and social services that would help to achieve and sustain satisfactory rates of growth and poverty reduction. Due to persistent fiscal deficits, total government debt has increased from 45.5 percent of GDP (Rs59,749 crore) in 1980/81 to 65.2 percent (Rs314,558 crore) in 1990/91. While rising in absolute terms to an estimated Rs773,541 crore in 1997/98, it has fallen somewhat as a share of GDP to 61.4 percent. However, these figures are defined as total internal and external liabilities, including liabilities to RBI. Excluding RBI liabilities, the debt-GDP ratios were 35.7 percent in 1980/81, 51.4 percent in 1990/91, and a high 53 percent in 1997/98. Due to the increased independence of RBI and, thus, drastically reduced ability of the Government to borrow from the central bank, the latter ratios are likely to rise rapidly over the coming years to converge with the ratios inclusive of RBI liabilities. Given these large levels of central Government debt, interest payments have reached high levels. Of the total fiscal deficit of an estimated Rs86,345 crore in 1997/98, Rs65,700 crore or 76 percent are interest payments, while the primary deficit accounts for only Rs20,645 crore.

### State Finances

The Government allocates to the states about 30 percent of the tax receipts it mobilizes and 40 percent of the tax receipts it retains. It also provides loans and grants to the states equivalent to about 25 percent of its total expenditure. In order to solve their financial problems, as a rule, the states have been heavily relying on the central Government for funds, which have been provided over the years mainly through three main channels: (i) transfer through the Finance Commission (appointed every five years by the President of India), which has declined from 65 percent during 1969–1974 to 58 percent of the total central Government transfers to the states in 1992/93; (ii) allocations authorized by the Planning Commission for Economic and Social Development—in this manner about 50 percent of state deficits has been financed in recent years; and (iii) the central Government, which has direct or indirect control over the way in which the remainder of these deficits is financed.

### Fiscal Deficits

While India recorded modest fiscal deficits up to the late 1970s, the situation deteriorated sharply in the 1980s, as government expenditures on interest payments, defense, and subsidies increased rapidly. Consequently, the fiscal deficit of the Government expanded from 6.2 percent of GDP in 1980/81 to 8.3 percent in 1990/91. Fiscal reform policies have, nevertheless, reduced the fiscal deficit to 5.9 percent of GDP in 1991/92, 5.4 percent in 1995/96, and 5.2 percent in 1996/97. However, according to revised estimates, the 1997/98 budget deteriorated significantly again to 6.1 percent of GDP. A major reason for the sudden deterioration has been the slowdown in tax revenues, adversely affected by slower economic growth in industrial output and imports. The latter is largely the result of banking reform (which has raised the risk aversion of banks) and the monetary policy of RBI.

The two key policy developments concerning fiscal reform have been: (i) a systematic reform of the tax structure in line with the Tax Reform Committee; and (ii) a Memorandum of Understanding between the Government and RBI to phase out the automatic monetization of the fiscal deficit over a three-year period.

### Reform Measures in Subsequent Budgets

The central Government budget for 1996/97 aimed at a moderate reduction of the fiscal deficit to 5 percent of GDP. The budget included measures to expand the tax base and reduce tax rates. A minimum tax on corporate profits was introduced, the coverage of the tax on services was expanded, and the MODVAT (moderate value-added tax) system of excise duty credits was extended to the textile sector. The Government also reduced custom duties on capital goods and intermediate inputs and cut in half the surcharge on corporate income. On the spending side, the budget included a contingency provision to meet the costs of the Pay Commission recommendations on pay scales, as well as higher allocations for spending on the social sectors, infrastructure, and support of state plans, in line with the Government's "Common Minimum Program." A reduction in defense spending was targeted, which could keep the total expenditure constant as a share of GDP.

However, supplementary allocations for defense spending were added. Expenditures were 0.3 percent of GDP less than budgeted, despite supplementary allocations for defense spending (0.2 percent of GDP). The savings came from unused provision for the Pay Commission's awards (postponed until 1997/98) and lower plan outlays (0.2 percent of GDP) related to failure of the Government to fully utilize funds on rural developments, public works, and mid-day school meals. Mainly due to good bank liquidity during the fiscal period, the Government program for market borrowing was successful.

The central Government budget for 1997/98 aimed to reduce the fiscal deficit from 5 percent of GDP to

4.5 percent—the lowest level for two decades—while cutting substantially income tax rates and customs duties. Key changes included the reduction of the top marginal personal income tax rate from 40 to 30 percent, decrease in corporate tax rate for domestic companies from 40 to 35 percent, abolition of surcharges on corporate tax, lowering of the tax rate on royalty and technical service fees to foreign companies from 30 to 20 percent, exemption of export profits from the minimum alternate tax, and abolition of tax on dividends.

On import duties, the Government decided to achieve the average level of tariffs prevalent in Association of Southeast Asian Nations (ASEAN) countries by 2000. To this end, the peak level of customs duties was lowered from 50 to 40 percent, while customs duties were brought down further on a large number of selected inputs, and raw materials and intermediate inputs in the power, chemicals, textiles and information technology sectors. The duty on capital goods was further lowered from 25 to 20 percent. For excise duties, the concession scheme for small-scale units was radically simplified, and the ambit of service taxes widened to cover road transportation service, consulting engineers, steamer/ship-ping agents, air travel agents, etc.

The targeted deficit reduction is largely to be achieved through an increase in divestment receipts (budgeted at Rs48 billion or 0.3 percent of GDP), while tax revenues and expenditures are projected to be broadly unchanged relative to GDP. However, modest steps have been taken to widen the tax base. Currently, only a small proportion of the population actually pays taxes. Attempts were made to raise this proportion by stipulating that residents of large metropolitan cities who satisfy certain specified economic criteria must file a tax return. Moreover, an estimated income scheme was introduced for retail traders. Finally, a new Voluntary Disclosure of Income Scheme was introduced, which proved highly successful.

On 1 June 1998, India's finance minister, Yashwant Sinha, announced the budget for 1998/

99. Even though there are differing views on the impact of the budget on improving the state of development, the common underlying assessment is that India fell back into a higher degree of interventionist policy. As the *Economist*<sup>58</sup> stated, "many of the party members (of the Bhanatiya Janata Party [BJP]) ... believe Indian companies should be built up before the economy is opened up to foreign competition." One step in that direction is the flat 8 percent import-duty surcharge and increased duties on several items, such as copper, aimed at protecting Indian industry. At the same time the Government woos mainly overseas Indians by offering new concessions and schemes to invest in India. This can also be seen as one step toward higher self-reliance.

#### **Government Subsidies in India**

In order to reduce the budget deficits and total Government debt, methods to raise revenues (such as increases in the tax base and fee-based provision of services) as well as methods to lower expenditures must be considered. An important proposal that could simultaneously decrease expenditures and raise revenues is the reduction of subsidies on the provision of services. Currently, subsidies (unrecovered costs) in the provision of economic and social services by the Government are pervasive. According to a study by the National Institute of Public Finance and Policy (NIPFP), the aggregate level of subsidy in 1994/95 for all services provided by the central and state governments amounted to Rs137,338 crore and constituted 14.4 percent of GDP. The NIPFP distinguished between "merit" and "nonmerit" subsidies. It found out that subsidies by the central Government on "merit goods" accounted for Rs6,923 crore, or less than 1 percent of GDP. Since the average all-India recovery for the nonmerit subsidies is just 10.3 percent, the subsidy rate amounted to almost 90 percent. The policy proposal to reduce the scale of subsidies is to phase increases in user charges.

## CAPITAL ACCOUNT AND EXCHANGE RATE POLICIES

### Capital Account Policies

The Indian Government has been cautious toward liberalizing the capital account. As part of the structural reform package, inflows and outflows by non-residents have been partly deregulated. Foreign direct investment (FDI) was allowed into India after 1991.<sup>59</sup> Portfolio investment into India was allowed only under the restriction that it be implemented by foreign institutional investors (FIIs), consisting mainly of broad-based funds such as investment funds and pension funds. In August 1994, when India accepted Article 8 of the Articles of Agreement of IMF, it made its current account fully convertible.

In the aftermath of the Mexican crisis of December 1994, capital inflows slowed significantly. Together with a widening current account deficit and an appreciating dollar, this contributed to a 9 percent depreciation of the rupee between August and October 1995. In order to recoup reserve losses and attract foreign inflows, RBI adopted another set of deregulation measures: (i) foreign currency nonresident (FCNR) and nonresident (nonrepatriable) rupee deposits were exempted from the CRR, (ii) inward remittances of global depository receipt (GDR) proceeds and external borrowing norms were relaxed, (iii) interest rates on nonresident external deposits were raised, (iv) the scheme of postshipment export credit denominated in dollars (PSCFC) was terminated, (v) an interest rate surcharge was imposed on import finance, (vi) interest rates on postshipment export rupee credit for more than 90 days and up to 180 days were freed, and (vii) the cancellation of forward contracts was put under RBI monitoring. On the other hand, foreign investors are free to repatriate profits without limit and nonresidents enjoy complete currency convertibility.<sup>60</sup> In 1998, inflows and outflows of gold were also deregulated.

Despite these steps toward liberalization, many important restrictions remain. First, capital outflows

by residents are still forbidden or highly controlled.<sup>61</sup> Second, portfolio investment by foreigners is allowed, but only through FIIs whose investments are restricted to listed securities, excluding Government debt (but recently including financing bills).<sup>62</sup> Third, offshore borrowing by Indian entities is under strict control of the Ministry of Finance. Fourth, controls exist both on the end-use of the loans (i.e., only for productive purposes) and on the maturity of the loan (a minimum maturity is set, ensuring long-term investment). Fifth, an overall cap is set on external borrowing. Banks are not allowed to maintain external foreign liabilities without approval. Short-term borrowing is completely forbidden. There is an aggregate ceiling for medium-term debt with maturity of five to ten years (maximum aggregate is \$8 billion, with permission). Each bank cannot draw more than \$15 million offshore. Borrowing for exports and infrastructure can be of maturities as short as three years. Borrowing above 10 years' maturity is completely free.<sup>63</sup> Given all these restrictions, short-term foreign currency liabilities of banks account for less than 10 percent of total liabilities and not more than 15 percent of tier-1 capital.<sup>64</sup> Excluding trade-related borrowing, total short-term foreign denominated borrowing amounts to only 25 percent of total RBI foreign exchange reserves and 7 percent of total external debt. Strict rules exist on holding foreign exchange, whether on- or offshore.<sup>65</sup>

The measures have been successful, as the rupee remained remarkably stable during 1996/97 and until the outbreak of the Asian crisis.<sup>66</sup> As the capital account surplus more than doubled (to about \$11.6 billion during 1996/97, exceeding the previous peak of \$9.7 billion of 1993/94), RBI was forced to intervene in order to prevent an appreciation of the rupee.<sup>67</sup> The resulting buildup of foreign exchange reserves threatened to boost domestic credit creation, which in turn prompted the RBI to reintroduce repo operations (discontinued in the second half of 1996/97) in November 1996 and accelerate the implementation of the Government borrowing requirement for



1997/98. Currently, short-term debt amounts to only \$6 billion.<sup>68</sup>

Since 1991, India's capital accounts have remained manageable. Yet in the turbulent environment created by the Asian economic crisis, several challenges may lie ahead.

- Foreign investments in India's oil industry have been insufficient so far in spite of the efforts of the Government to attract them. By early 1999, India was expected to import crude oil.
- India is scheduled to repay \$24 billion of its external debt (estimated at \$96 billion of which \$4 billion is short-term debt) before the year 2000. This is in addition to the rollover of both the short-term debt and the nonresident Indian (NRI) accounts. Even without the rollover, with the present financial requirements of the current account deficit, India needed to mobilize about \$33 billion of external finance for the 1997–2000 period.
- NRI foreign currency accounts continue to be a potential source of pressure since in theory they can be withdrawn on demand, subject to a small penalty, and thus create vulnerability.
- Although India enjoys a strong liquidity position—\$31.6 billion of reserves versus short-term liabilities—recent developments in emerging capital markets have highlighted the macroeconomic turbulence that sudden changes in market sentiments can bring about.
- The unprecedented sequence of good monsoons might end, bringing bad ones.

### Latest Reforms

In order to facilitate investment financing, particularly in infrastructure, the Government has taken further steps to reduce restrictions on capital account transactions in 1996/97. With a view to moving toward capital account convertibility, the Union Budget for 1997/98 proposed the introduction of a legislative bill entitled "Foreign Exchange Management Act" to replace the "Foreign Exchange Regulation

Act" passed in 1973. Furthermore, a Committee on Capital Account Convertibility was appointed by RBI on 28 February 1997. The Committee submitted five recommendations in its report on 30 May 1997.<sup>69</sup> First, capital account convertibility should be implemented over three years. Second, certain preconditions or signposts and attendant variables should be monitored including those that were identified from lessons of international experience. In particular, the Committee recommended the monitoring of fiscal consolidation and inflation. The Committee also suggested giving full independence to RBI in order to achieve liberalization.<sup>70</sup> Third, India should consolidate its financial system with a full deregulation of interest rates in 1997/98, a gradual reduction in the average effective CRR to 3 percent in 1999–2000, and a decrease in gross NPAs to 5 percent. Fourth, macroeconomic indicators should be monitored, particularly exchange rate, balance of payments, and adequacy of reserves. Finally, the supervisory system in the financial market should be strengthened and greater autonomy should be given to banks and financial institutions.<sup>71</sup> Concerning the conditions of liberalization, the Committee argued that over the three-year period, external sector policies should be designed to ensure a rising trend in the current-receipts-to-GDP ratio. The Committee also recommended that the debt-service ratio be reduced to 20 percent.

### Assessment of Cautious Capital Account Liberalization

The conditionality of further capital account liberalization is aimed at ensuring the right sequencing of reforms. In particular, the Committee felt that excessive capital inflows would lead to an excessive expansion of bank balance sheets (as seen in Asia and Latin America), resulting in a deterioration in credit quality at banks and maturity mismatch as short-term capital inflows are invested in long-term or illiquid assets rendering repayment at short notice impossible. Moreover, with the regulatory and

prudential environment unprepared for an influx of volatile foreign money, rapid capital account deregulation would invite great potential instability. The Committee, as well as studies (e.g., Joshi and Little, 1996) rightfully emphasized the importance of sequencing the reforms correctly, with trade liberalization taking the lead, followed by financial regulation and fiscal consolidation. Only in the final stage would capital account liberalization be advisable.

India was aware of the dangers of loosening up its capital account too quickly, long before the Asian economies ran into crisis. The crisis in Asia has vindicated the Indian approach. Indeed, as a result of the Asian crisis, India has delayed the implementation of the three-year phased program recommended by the Committee. This appears to be a highly sensible decision. More than that, in the light of recent empirical evidence of the negative impact of capital account liberalization in Asia, a wholesale review of the premises and conclusions of the Committee appears necessary.

### EXCHANGE RATE POLICY

From 1975 to 1992, the rupee exchange rate was officially determined by RBI based on a weighted basket of currencies of India's major trading partners. This was possible because of the severe restrictions on current and capital account transactions. As a result of the 1991 balance of payments crisis, however, the rupee was devalued twice, on 1 and 3 July 1991 (totalling 19 percent). From March 1992 to February 1993, a dual exchange rate system, the Liberalized Exchange Rate Management System (LERMS), was put in place. In March 1993, exchange rates were unified, marking the beginning of the era of freely floating exchange rates in India. Thus, from 1993 to 1996, India for the first time had to deal extensively with questions of exchange rate management.

Since 1995, a new package of measures has been implemented in order to integrate and develop the Indian foreign exchange market. These are as follows:

- effective 3 July 1995, civil government debt service payments were routed through the market;
- effective 4 October 1995, RBI discontinued quotation of its buying and selling, and introduced a system of only quoting its spot buying rate to any authorized dealer (AD) on receiving a specific request;
- effective 4 January 1996, the uniform limit of Rs150 million on overnight positions of ADs was removed and banks were allowed to operate on the limits fixed by their management, but under continued RBI monitoring.<sup>72</sup>
- starting October 1996, banks have been permitted to provide foreign currency denominated loans to their customers, mobilizing their pool of FCNR (B) deposits. They were also advised that RBI could call upon them at any time to report their daylight positions and cases of frequent cancellations and rebooking;<sup>73</sup>
- since early 1996 rules concerning ADs have been relaxed sequentially. From April 1996, ADs have been allowed to initiate cross currency positions overseas and offer derivative products to enable customers to hedge their external liabilities. From August 1996, they have been allowed to offer interest rate swaps, currency swaps, coupon swaps, interest rate caps/collars, and forward rate agreements without prior approval of the Government or RBI.<sup>74</sup> Since September 1996, they have been permitted to offer certain options.<sup>75</sup> Beginning April 1997, they have been allowed to borrow from their overseas representations, invest funds in overseas money market instruments up to \$10 million or, since October 1997, up to 15 percent of the tier-1 capital of banks.<sup>76</sup> They can now also arrange foreign exchange rupee swaps between corporations and run a swap book within their open position/gap limits without prior approval of RBI;
- in August 1997, FIIs were allowed to cover their debt exposure in the forward market. In October 1997, this was extended to nonresident in-

vestor depositors, concerning deposits held in nonresident (external) rupee accounts (NRE[R] A) and foreign currency nonresident (bank) schemes (FCNR [B]); and

- exporters and foreign exchange earners are permitted to keep 50 percent of their foreign exchange earnings in exchange earners' foreign currency accounts.

RBI feels that these measures have led to considerable deepening and widening of the foreign exchange market and improved its integration with other markets.

### TRADE, INVESTMENT, AND INDUSTRIAL POLICY REFORMS

Under India's 70-year old foreign exchange scheme, exporters who wish to sell their products abroad must notify RBI. Since this scheme gives the authorities a good idea about foreign exchange holdings among exporters, it has helped prevent diversion of foreign exchange reserves out of the country, as happened, for instance, in Thailand in the 1990s, where no such scheme exists.

Concerning trade, investment, and industrial policies, the main elements of the post-1991 reforms were as follows:

- currency devaluation of 18 percent in June 1991. By March 1993, the real depreciation of rupee was 25 percent;
- scrapping of the licensing system controlling internal production in 1992. According to informal RBI calculations, today more than 90 percent of value added are estimated to be produced without license requirement;
- abolition of the reservation of many areas of economic activity for the State. Now all industries, except six, have been opened to private ownership;
- significant relaxation of restrictions on the inflow of foreign capital and technology transfer. Up to 51 percent foreign participation in companies was permitted automatically in 34 industries. Clearance

for higher levels or in industries outside the 34 were processed speedily and foreign equity inflows rose rapidly after 1991. Foreigners can now own 30 percent of equity in industry and 20 percent in banks without Government approval;

- substantial relaxation of restrictions on the large industrial houses (designed to curb monopoly). Consequently, large companies were able to expand existing units and construct new ones;
- abolition of quantitative restrictions on imports of raw materials, intermediates, and capital goods. Considerable restrictions on the import of consumer goods remained, although by 1995 an increasing number of items was being put on Open General License, but still subject to tariffs;
- sharp reduction in import tariff levels.<sup>77</sup> The average tariff rate fell from more than 200 percent in 1990 to 65 percent in 1994 and about 40 percent in 1998 (although tariffs on consumer goods remained comparatively high). The average nominal tariff more than halved during 1990–1994; and
- simplification of exchange controls and establishment of full currency convertibility of the rupee on the trade account.

### Issues for Investment and Trade Policies

In the past two decades a shift in industrial structure toward expansion of consumer durables sector took place, fuelled by an expansion of middle income purchasing power and increased openness to imports and international taste patterns. However, at the same time, there was a retreat from technology- and capital-intensive sectors in favor of resource- and labor-intensive sectors. Unlike India's previous decades of growth, this put its structure more in line with the static Heckscher-Ohlin model of international resource allocation and trade patterns. Instead, India opted for the import substituting, dynamic type of economic growth. With the recent structural changes and reforms, however, India is at a policy crossroads. The old postwar model has increasingly been

dismantled. Despite the long-standing attempts to first promote and then to protect small-scale industries (SSIs), the share of this sector in industrial output is now lower than in comparable countries. With the declining importance of the import-substitution strategy, some of its advantages are also in danger of being lost. Thus, there is some evidence that there has been a systematic drift toward lower levels of labor productivity and toward sectors of lower skill intensity (Kaplinsky, 1997; Nambiar and Tadas, 1994). The change in industrial structure was associated with increasing income inequality, drop in household savings, and growth in the trade deficit, which in turn helped trigger the economic crisis of 1991. Moreover, there is a question as to whether the changes in the strategic orientation of the economy are consistent with rising per capita incomes (Kaplinsky, 1997).

Despite these reforms, India's investment policy still faces tremendous challenges. A major problem is that, notwithstanding high rates of investment, the country's infrastructure sector is relatively less developed than in other Asian economies. The recent production slowdown in the infrastructure sectors has added to the concerns that insufficient capacity and inefficiencies in infrastructure use could increasingly constrain production and exports. Although the impact of infrastructure on economic growth is hard to quantify, there are signs that industrial production has already been hurt by frequent power shortages, particularly as far as smaller enterprises are concerned, and that the recent slowdown in export growth is partly related to port and transport bottlenecks. Though faced with growing budgetary constraints, the Government has sought to encourage private sector investment—including foreign investment—to supplement public investment. While some private power projects have already been completed, the overall impact of private participation has so far been limited. There have been significant reforms in industrial policy over the past years. Limits on investment in sectors reserved for SSI—plants and machinery—were increased from Rs6 million to

Rs30 million. Export obligations for non-SSI enterprises producing reserved items were relaxed (from 75 to 50 percent), and a limited number of reserved items were fully deregulated (14 out of a total of 850 items).

On the external trade front, India also continues to face critical challenges. Its trade deficit widened to 4 percent of GDP in 1996/97. After three successive years of increases close to 20 percent, export growth in dollar terms fell to 5.3 percent in 1996/97. The deceleration was most pronounced in manufactured goods, while exports of agriculture products continued to do well. The slowdown has reflected a range of factors: (i) the dwindling impact of the exchange rate devaluation and trade liberalization of the early 1990s; (ii) declining import demand growth of partner countries (import growth fell from 28 percent in 1995/96 to 6.7 percent in 1996/97; (iii) structural problems faced by the strongly export-oriented SSIs (which account for roughly half of all exports); (iv) infrastructure bottlenecks (notably in roads and ports); and (v) temporary factors such as a sharp decline in world diamond prices (affecting gems and jewelry exports) and the tightening of domestic environmental regulations that accounted for an estimated 4 percentage points of the slowdown.

Critics argue that India's continuing problems in trade and investment are due to lack of liberalization. According to them, the list of policies that have not yet been addressed remains long.<sup>78</sup> However, there is a group of scholars that has begun to argue that some of India's problems with trade and investment are due to the liberalization process itself.

### Assessment of Timing and Sequencing of Liberalization Process

Given that India had made the decision to liberalize its domestic economy as well as its links with the world, a step by step approach to accomplishing this has

proven successful. Careful pacing and sequencing of reforms makes economic and political sense. Shock treatment has caused dislocation and social crisis in Latin America and some countries of Eastern Europe, including Russia. The Indian Government has been more sensitive to the impact of reforms than many other countries. Moreover, the order of liberalization, with trade liberalization, financial regulation, and fiscal consolidation taking priority, while capital account liberalization has been delayed until the last stage of the reform program, has also been correct. As a result, India has successfully weathered the storms brought about by the Asian crisis.

## Assessment of the Degree of Globalization of the Economy and Policy of Gradual Liberalization

### Degree of Globalization

#### MEASURES OF OPENNESS AND THE DEGREE OF GLOBALIZATION

##### Trade

The ratio of India's international trade to GDP, a measure of its openness to foreign technology and competition, increased at only about the median rate for all developing countries between 1980–1983 and 1990–1993.<sup>79</sup> In real terms, trade volumes relative to real GDP rose by only about 0.1 percentage point per annum, less than East Asia or Latin America. With the trade liberalization of the 1990s, India's trade openness rose to about 0.75 percentage points per annum between 1991 and 1994, although this was still below the equivalent figure for East Asia and Latin America (2 percentage points). Considering simply the ratio of foreign trade to GDP in rupee terms, this measure of openness and integration with the world has risen significantly over the past decade: from 11.6 percent in 1985/86 to 14.1 percent in 1990/91, before increasing sharply to 19.6 percent in 1997/98. This ratio is significantly larger than, for instance,

the equivalent ratio for Japan and some other Asian countries, and it lends support to the thesis that India's economy has not only been more open than generally believed, but is also opening up rapidly.

##### Trade Restrictions

Despite trade liberalization, the level of India's tariff and other trade restrictions remained among the highest in the world even in the 1990s. In 1993, the unweighted average tariff rates stood at about 60 percent (compared to regional median values of about 14 percent in East Asia and Latin America). Almost 50 percent of domestic production was estimated to remain protected by nontariff barriers.<sup>80</sup> In East Asian countries, such as Korea, Malaysia, and Thailand, quantitative restrictions covered less than 5 percent of tariff lines.

##### Foreign Direct Investment

FDI is also usually considered an indicator of global integration, partly due to its potential role for diffusion of technology and skills. India's FDI inflows have traditionally been low and they showed little increase in the periods 1981–1983 and 1991–1993. Brahmabhatt, Srinivasan, and Murrell (1997) observed that the rate of increase, about 0.002 of a percentage point of GDP per annum, was about the same as the median for all developing countries and significantly below the equivalent ratio of 0.03 for East Asia. The ratio of FDI to GDP, also a measure of access to foreign technology and competition, only increased at the median rate for all developing economies. FDI relative to GDP in purchasing power terms in the early 1990s put India into the bottom third of developing countries. In 1994/95, however, FDI surged to an estimated \$1.3 billion. In 1995/96, it rose further to \$2.1 billion, then to \$2.7 billion in 1996/97. The most recent data, for 1997/98, showed another surge of FDI by 19 percent to \$3.2 billion. Investment has, thus, reached levels that are significantly above the median for all developing countries. FDI into India overtook that to the Philippines and

Thailand in 1997/98.<sup>81</sup> It must therefore be concluded that, taking FDI as a measure of globalization, India has become significantly more open than in the past and does not have to shy away from comparisons with other Asian countries, let alone developing economies in general.

### Credit Ratings

Credit ratings of sovereign debt are sometimes used as an indicator of access to international capital markets of the country concerned.<sup>82</sup> Higher country ratings reduce the cost of overseas funding.<sup>83</sup> According to *Institutional Investor* magazine, India is among the developing countries with superior rating. In the period 1993 to 1995, it already ranked 17th among 93 countries. Since then, the sovereign debt ratings of most Asian countries, as well as of many Eastern European and Latin American countries that have been affected by the fallout from the Asian and emerging markets crisis, have been lowered sharply. Even Japan's sovereign rating has been downgraded. India, on the other hand, has been far less affected by the crisis and hence its rating has not suffered as much. A downgrading after the nuclear tests in the summer of 1998 seemed inevitable. However, in relative terms, compared to other developing countries, India's rating has actually improved. Using credit ratings as an indicator of globalization, India has been found to be in a leading position among developing countries.

### Share of Manufactures in Exports

The ratio of manufactures to total exports may be used as a measure of access to technology learning gains.<sup>84</sup> By this measure, India's performance has been in the top quartile of all developing countries, showing the fastest increase in the share of manufactured goods among exports over the 1980s, and the highest levels of manufactured goods as a share of exports in the early 1990s.<sup>85</sup> Again, India's internationalization is well advanced by this indicator.

## INDIA'S DEGREE OF GLOBALIZATION AND INTEGRATION INTO WORLD MARKETS

Brahmbhatt et. al. (1997) developed a "speed of integration index" from changes between the early 1980s and early 1990s in the real trade-GDP ratio, the inward FDI-GDP ratio, the *Institutional Investor* credit ratings, and the share of manufactures in exports. The index is defined by the simple average of the changes in the four indicators expressed as "standardized scores."<sup>86</sup> Using this index, they ranked developing countries in four quartiles ranging from "fast integrators" with the highest index values to "slow integrators" with the lowest. The result was that India falls in the "moderate integrator" category, ranked number 34 out of the 93 developing countries observed.

In a recent study of the postwar histories of more than 90 developing countries, Sachs and Warner (1995) classified a country as "open" if it satisfied four criteria: (i) average import tariff rates of 40 percent or less on intermediate and capital goods, (ii) import quotas and licenses covering 40 percent or less of total imports, (iii) a black market exchange rate premium of 20 percent or less on average, and (iv) no State monopolization of trade in the leading exports. They found that India failed these criteria by a wide margin since import tariffs were significantly above 40 percent and import licensing covered virtually all international trade until the 1990s. They considered India a closed, State-led economy that fared very badly in the past 40 years.

Although Malaysia, Singapore, and Thailand have been classified as countries that maintained open trade (Thailand just got under the 40 percent tariff threshold), based on the four criteria, fewer than 20 developing countries were always open to international trade in the postwar period or from the time of their independence (if that is more recent).<sup>87</sup>

Other researchers also concluded that India's integration with the world economy in the decade to the early 1990s was modest, its level of integration

remained low and the degree of globalization lagged behind other countries, especially when compared to East Asian and Latin American economies.<sup>88</sup>

Reviewing the facts, it is clear that India has remained reluctant to open up its economy with any haste. Based on several indicators, India has remained more closed and less integrated with the world than many other developing countries, especially in East Asia. However, as events since 1997 have demonstrated, the lack of globalization and internationalization has not been a disadvantage for India in the past two years. Indeed, when future historians evaluate India's long-term economic performance, the lack of speedy internationalization may well be commended as one of the factors helping the country to develop without too many hitches.

## Assessment of Gradualist Reform Policy

### POLICY OF GRADUAL OPENING

Many researchers recommend that India abandon its cautious stance toward globalization and rapidly increase its degree of openness to the world. However, "openness" per se does not lead to sustainable output growth, nor to high levels of employment and desirable distributional patterns. Moreover, the links between degree of openness or integration and economic performance are not clear cut. First, while increased international competition may enhance welfare through productivity gains and comparative advantage in some areas, many developing countries may also suffer welfare losses, as many of their indigenous industries would be driven close to extinction. Thus, the overall welfare gain even in a comparative static analysis would not be clear. However, moving on to a dynamic analysis that goes beyond the static model of comparative advantage, it is clear that developing countries can improve their long-term welfare by using government intervention in order to create new spheres of comparative advantage. This requires that many infant industries be protected.

India's advantage has been that it has had access to a variety of indigenous raw material sources at home that did not burden the balance of payments.<sup>89</sup> Consequently, its policy of Government-led economic development did not require as large an emphasis on export orientation. Therefore, adjusting for the vast difference in India's endowment with raw materials, it is not clear that its economic development strategy has been inconsistent with the general strategies followed by the Asian miracle economies. It is, therefore, rash to praise the Asian strategy and dismiss the Indian approach. Both were designed with the same goals in mind and fundamentally follow the same strategy (i.e., to use government intervention together with market forces, in order to create a position of dynamic comparative advantage).

The reform process initiated in 1991 brought far-reaching change to the Indian economy, which showed a strong performance in the following years. There was a period of rapid growth between 1993 and 1996, with growth averaging 7 percent in fiscal years 1995/96 to 1997/98. This strong performance is often put forward as evidence that economic liberalization increases the growth potential of the economy. However, no such causal relationship could be proven. Moreover, after 1996, the economy began to slow down, despite the Government's lowering of interest rates and other credit measures. Even a star performer in the previous fiscal year such as agriculture slowed during 1997/98. FDI, however, has not dried up. It rose by 52 percent in the first 11 months of 1997 on a year-on-year basis. According to a review of macroeconomic and monetary developments in 1997/98, given by RBI Governor Bimal Jalan,<sup>90</sup> there are different causes for concern. First, the slowdown in industrial growth in the first half of 1997 turned out to be more persistent than originally expected. Second, the dollar value of exports grew by only 2.6 percent, compared to a 5.6 percent growth in the corresponding previous period and in contrast to an average growth of 20 percent from 1994 to

1996. Third, there is a considerable slowdown in the primary issue of equity in stock exchanges. Fourth, the development in some Asian currencies brought the exchange rate of the rupee under pressure. On 16 January 1998, a package of monetary measures was introduced. It included a hike in the bank rate from 9 to 11 percent and an increase in the CRR to 10.5 percent. The squeeze on liquidity, subsequently, stabilized the rupee and it became possible to reverse some of the measures. Different from the crisis India had before, the Deputy Governor of RBI, Y.V. Reddy, called it “a crisis of currencies, corporate stocks and banking.” Evidence has since been mounting that liberalization has its costs, and many of these costs may be detrimental to balanced economic development.

#### **GRADUALIST CAPITAL ACCOUNT LIBERALIZATION POLICY PREVENTED FALLOUT FROM ASIAN CRISIS**

RBI made it clear that India understood the danger that lies in opening up the capital account, if it is done too quickly. Bimal Jalan’s predecessor as governor of RBI, Chakravanty Rangarajan (1997), pointed out two lessons that India had learned from the Asian crisis. First, when the current account deficit exceeds a certain level, countries become vulnerable to external shocks. In this situation, India is not much better off than most of the other Asian countries. Second, on the financing of the current account deficit, when the proportion of short-term debt to total debt becomes high, countries become vulnerable as the former needs to be rolled over in frequent intervals. Rangarajan

pointed to the case of Thailand, where the ratio of short-term debt to total debt exceeded 32 percent. In the case of India this ratio was about 7 percent.

The dangers of loosening up the capital account too quickly are reflected in the size and composition of the actual foreign debt balance. In India, the ratio of nondebt creating inflows to debt-creating inflows more than doubled in the period from 1991/92 to 1993/94. The debt service ratio also went down from 35.3 percent in 1990/91 to 25.6 percent in 1993/94. Until 1996/97, this ratio stayed almost stable.

Such caution has clearly paid off, as the country has not been as badly affected by the sudden withdrawal of foreign investment as other Asian countries. Portfolio and FDI inflows into India have been increasing steadily from only \$133 million in 1991/92 to \$6 billion in 1996/97 and, in the aftermath of the Asian crisis, falling to a still sizable \$4.8 billion. The commendable feature, which clearly worked to India’s advantage when the Asian crisis broke out, was the comparatively low share of portfolio investment and the dominant role of FDI among these figures. As Table 1 shows, FDI dropped from 56 percent of total foreign investment inflows in 1992/93 to only 14 percent in 1993/94. However, that reduction was due to the significant surge in equity investment that was directed at emerging markets that year. Absolute FDI continued its steady rise, and as portfolio investment started to fall again, it regained its dominant role. This can be seen in 1997/98 data, when a sizable investment of \$3.2 billion (67 percent of total foreign investment) was accounted for by FDI, a postwar record for India.

**Table 1: Comparison of Foreign Direct Investment and Portfolio Investment**

Year	Foreign Direct Investment		Portfolio Investment		Total	
	Amount (\$ million)	%	Amount (\$ million)	%	Amount (\$ million)	%
1991/92	129	97	4	3	133	100
1992/93	315	56	244	44	559	100
1993/94	586	14	3,567	86	4,153	100
1994/95	1,314	26	3,824	74	5,138	100
1995/96	2,133	41	2,748	59	4,881	100
1996/97	2,696	45	3,312	55	6,008	100
1997/98	3,197	67	1,601	33	4,798	100

Source: Ministry of Finance, *Economic Survey 1997–1998*.



FDI is usually comparatively long term and, therefore, does not expose a country to the danger of sudden, simultaneous liquidation of foreign assets at short notice, as portfolio investment does. India's policy of only gradually opening the capital account to free flows, and the focus on initially encouraging FDI, has clearly been superior to other countries' premature and rapid opening to incoming portfolio and short-term capital flows that have played such a large role in exposing the East Asian economies to instability and crisis. In the future, India should, therefore, be encouraged to continue its cautious policy stance toward opening up and integrating into the world economy whose vagaries and volatilities have recently become much more visible.

### Policy of Gradual Liberalization

Together with the liberalization of regulations concerning external transactions, many economists and international institutions have been urging India to liberalize its domestic economy. Indeed, the steps taken since the reform package was launched in 1991 have been of historic proportions and have clearly shifted India away from a regulated economy toward one that is market oriented.

Even before the Asian crisis broke out, there had been some evidence that market-opening and liberalization policies were not beneficial for India. For instance, the criticism is often made that the range of products produced in import-substituting economies is wider than would be the case had these economies opened trade and taken advantage of international specialization. However, on an aggregate level, this could not be observed in India: the trade-GDP ratio (the sum of imports and exports over GDP) in 1992 was larger (19.7 percent) than in the US (16.4 percent) (Kaplinsky 1997). However, researchers have found some evidence that the lack of specialization has been visible on the firm level. Kaplinsky (1997) and Jacobsson and Ghayur (1994) argue that the large product range of Indian firms has produced suboptimal scales of

production. The recognition of this problem was indeed a significant factor that led to the relaxation of controls over the large industrial houses during the 1980s. It is widely held that a more liberal trade regime would induce a greater degree of international specialization, thus also forcing local firms to increase their specialization. However, Jacobsson and Ghayur (1994) found that the problem of lack of specialization became worse after the liberalization process was set in train.

The rapid credit expansion and simultaneous deregulation policies of the 1980s induced a marked shift in the relative growth of key sectors of the economy. The primary growth sectors in the early postwar era were metal based. However, by the 1980s, this had shifted to the petrochemical industry, food processing, and electrical machinery. The problem is that the employment elasticity of growth had dropped, since the petrochemical industries are highly capital intensive. Moreover, the export intensity of manufacturing also declined, as the domestic-resource ratios in chemicals are higher than in metal-based industries. This raised the rates of effective protection (Kaplinsky, 1997).

### Coordination of Fiscal and Monetary Policies

Unlike in many East Asian countries, the reforms to liberalize the Indian economy were implemented in synchrony with standing Government policies. In particular, exchange rate policies were not out of line with other economic policies. However, there is one area where these policies were at fault in the period leading up to the 1990/91 crisis, and where macroeconomic policies may once again become inconsistent leading to misallocation of resources. This is the coordination of monetary policy with other policies, especially with fiscal policy.

Until the recent reforms, one important tool of Government intervention in the financial system was its legal power to force the central bank to monetize

budget deficits by buying “ad hoc” Treasury bills. This ensured coordination of monetary and fiscal policies and minimized crowding out of fiscal policy.

The switch from automatic monetization to capital market funding has made the central bank more independent. However, this switch has significantly increased the funding cost for the Government. This is due to the higher market interest rate, which also includes a larger risk premium, which was fueled by the rise in the deficit. Ironically, this rise has been spurred by the very switch to market funding. The increase in the Government’s funding costs has been estimated at almost 1 percent of GDP. This has made it harder for the Government to reduce the fiscal deficit. In fact, the underlying fiscal deficit was cut in 1997 and 1998, but the overall deficit was kept high by the interest cost. As RBI now takes less paper than in the past, total credit creation has slowed. This may have helped cause economic slowdown in 1998.

The RBI has already been acting as central bank and regulator of the financial sector. While many voices support changes to render the RBI even more powerful, there are some economists that argue in favour of maintaining a link between monetary and fiscal policies, in order to ensure a high degree of coordination between the two policies (see Box).

Finally, the reduction of the SLR and introduction of direct borrowing by the central and state governments have significantly reduced the degree of control that the central Government has had over state government spending. In the past, state governments were restricted by a quota of bonds that could be bought by banks, determining to some extent state government expenditures. But the reforms have gradually allowed state governments to increase their direct borrowing from the market. In five years, they will be able to borrow without restrictions. This has increased the danger of fiscal profligacy of certain states, without much influence of the central Government over them.

## Policy Recommendations for Macroeconomic Management

### The Role of the Government: Between Intervention and Free Markets

Many economists favor India’s policy of moving toward free markets and have been impatient with the slow pace this is being achieved. Their analysis is based on the crucial assumption that free markets are always welfare superior. There is no doubt that inappropriate government intervention can cause great harm to economic development. However, economic theory as well as empirical evidence over the past decade have shown that even free markets do not allocate resources optimally, as informational imperfections and externalities render markets skewed. Opening up markets, especially the capital account, exposed many Asian economies to forces that were eventually highly detrimental to their welfare. India’s interventionist policy stance seemed to have served the country well. It must therefore be commended for resisting the political pressures, often motivated by sectarian interests or financial interests of leading industrialized countries, to open up its markets and “globalize” its economy. As the successful postwar development experience of Japan and other East Asian countries has shown, the key to success in economic development, macroeconomic management, and balanced resource allocation lies not in unqualified free-market policies, but in the right combination of market forces and appropriate government intervention. In those countries, government intervention did not focus on command-economy style micromanagement of all transactions.

Regarding Indian trade, a strong case has been made by economists that the decontrol of imports had a negative effect on the economy. The argument put forward by Bouton (1998) that the first phase of the reform process opened the economy to boom

### Central Bank Independence and Economic Performance: The Jury Is Still Out

That central bank independence is good for economic performance has become a widely held belief among economists and policymakers. However, as there has been little, if any, empirical support for this argument, it remains an unproven hypothesis. On the contrary, empirical research on the economic dislocation in Japan and Asia over the past years has revealed that central banks made costly policy errors in an environment of excessive independence, lack of coordination of monetary and fiscal policies, and lack of accountability. Therefore, when considering the case of central bank independence, governments should carefully weigh its costs and benefits. They should take into account the need to coordinate monetary and fiscal policies, the possible conflict of interest from concentrating economic power in an unelected body, and the need for transparency and accountability in monetary policy decisions.

The logic of the hypothesis that greater central bank independence yields better economic performance is based on two assumptions: first, that inflation is bad for economic welfare; second, that high inflation results from a lack of central bank independence. The main empirical work supporting the second assumption is provided by Emerson et al. (1992) in a study commissioned by the European Commission in a bid to launch an independent European Central Bank.\* All papers in the study arbitrarily select the countries and the time period, and construct an "index of central bank independence" based on selected variables, such as the legal locus of central bank decision making on interest-rate policy. Most of the papers use a similar index and a similar set of countries.

The validity of the first assumption is not examined in this brief discussion. But inflation is clearly not the only result of central bank policies. Other important results concern economic growth and the rate of unemployment, as well as the impact of the degree of coordination between monetary and fiscal policies. An independent central bank implies less coordination. Hence, central bank policies that have resulted in low inflation but also in high unemployment and a long economic slump (such as the policies of the Bank of Japan in the 1990s) would be deemed commendable in most studies like Emerson's by virtue of the framework they employ, despite the fact that the policies have been socially suboptimal.

Even if one were to accept the view that low inflation is the only goal of the central bank, it is not evident that such a goal is achievable only by independent central banks. A paper by Forder (1998) examines the above empirical study critically. Forder does not question the choice of countries or time period, the design of the "index of independence," or the general methodology of the papers. He is merely concerned with determining whether the authors' data were applied correctly within their framework. Finding significant errors in the use of the data, Forder adjusts for the errors and concludes that there is "no evidence for a clear correlation between low inflation and central bank independence." According to him, there is "no basis" for the hypothesis that central bank independence improves economic performance.

On the contrary, there is evidence that bad economic performance, for instance in the case of Asian countries, has been due to excessive de facto (if not de jure) independence of the central bank. Werner (1998, 1999) conducted detailed empirical research on the decision-making process behind the key monetary policy variables that led to the creation of the bubble in Japan in the 1980s. He found that, contrary to common belief, the Bank of Japan acted completely independently in determining these variables (namely the quantity of central and commercial bank credit), yet its policies resulted in asset inflation. There is also evidence (see the detailed Nukul Commission report, 1998) that the Bank of Thailand acted largely independently in making the key decisions that led to the crisis in Thailand. Both central banks were nonetheless rewarded for their lack of accountability and the lack of coordination between their policies and those of the government by being made even more independent and powerful through legal changes. On the other hand, India, which was not affected by the Asian crisis, has a central bank with fewer de facto powers than those of Japan and Thailand.

\*Its methodology is based on Alesina (1989), Alesina and Summers (1992), and similar papers, which in turn are based on an unpublished paper by Parkin and Bade (1980). Cukierman (1992) and Grilli, Masciandaro, and Tabellini (1991) take another approach, but Mangano (1997) raises doubts about the accuracy of their data.

and bust and that the obstacles and pain of the next phase will be greater still should provoke the question why India should not go back to controls. Bouton's underlying assumption is that free markets per se will compensate India for the pain on its way to free markets. There is, however, no evidence that such an assumption holds.

Free markets are not likely to benefit the poor rural population in India. In order to help the agricultural sector, the supply of credit should be increased. This is what the Government has aimed at and partly achieved as a result of its credit controls,

which must be commended and should not be discontinued.

Given the advanced state of India's free market reforms and the doubts about their wisdom, an urgent review of this approach and the potential dangers is called for so that India will not jeopardize the successes of decades of economic development.

### FISCAL POLICY

Appropriate state intervention does not require budget deficits. The general principle should be to allow large and expanding deficits only in times of

economic recession, at which time the monetization of these deficits must be ensured. In times of economic recovery and high growth, every effort should be made to balance the budget. The macroeconomic danger of continued deficits is that purchasing power is diverted for consumptive purposes, and not productive purposes (such as investment). This would depress the potential growth rate. The necessary policies, however, should not focus in a one-sided way on cutting expenditures. In particular, this should be initiated only without damaging public funds for human resource development and poverty-alleviation programs. Reducing subsidies, particularly for fertilizers, readjusting oil prices, and achieving further consolidation at central Government levels should be undertaken together with continuing the tax reform process—especially improving tax administration and collections. Further, extending the tax base and increasing the role of personal income taxes must be pursued. Total tax collection amounts to only about 16 percent of GDP. In a country in which the middle class is estimated to number between 100 million and 200 million, there are only about eight million taxpayers. In order to improve efficiency and reduce debt, privatization of public enterprises can be considered in industries, where the absence of externalities allows private sector activity to be welfare equivalent to Government firms. This should be decided on a case-to-case basis. It certainly makes sense to privatize areas where the Government has no comparative advantage, where there are few natural monopolies, and no problems with externalities, or where goods and services are offered that have no public goods character. For instance, it is hard to argue that the Government should continue to run hotels, especially when they are losing money. It must be kept in mind that privatization represents a one-off sale and so the Government should not rely on it too much in order to increase state revenues.

At state level, further fiscal consolidation should introduce cost recovery programs (particularly in water and power), and contain the growth of current

expenditure. The Planning Commission, which, in fact, plays the role of a development bank, should ensure that the transfers it authorizes are used for the intended purposes and that borrowed resources are utilized only for such expenditures that yield a return adequate to meet the cost of borrowing.<sup>91</sup> Fiscal adjustment by the states has been worse than that of the center.<sup>92</sup>

Concerning the role of the state in the pension system, privatization is likely to be beneficial. A fully funded pension system would enable funds to pursue long-term objectives. They could thus match their assets and liabilities by financing long-term investment by buying 30-year bonds. The introduction of pension funds, provident funds, insurance funds, and a certain degree of competition between them would be advisable. Currently, two Government-owned firms maintain a monopoly, which has enabled the Government to siphon off the revenues of these long-term investments for deficit financing. This is not a wise policy, as it only creates funding problems in the future. A switch to a fully funded system that does not allow the Government access to the funds is required.

#### **Administrative Reform**

The Government has an important role to play in designing the organizational environment of the private sector and intervening in markets to enhance resource allocation (especially using the credit market). However, for the Government to be able to efficiently implement such policies, Government institutions themselves must be designed in the appropriate way, so that incentive structures ensure the unification of individual goals and overall desired outcome. One area of inefficiency appears to be a lack of means testing. While the Government allocates funds, the basic management is done by the municipalities and local authorities, with limited monitoring of expenditures and actual services provided. There are few checks if benefits actually reach the targeted beneficiaries or development sectors.

For example, while agriculture provides employment to two thirds of the employed workforce and accounts for 30 percent of GDP, the Government hardly invests in it directly. There are projects to support farmers, such as the Integrated Rural Development Program and the Prime Minister's Employment Generation Program. However, only about 15 percent of the programs reach the small farmers, the key target group. The Government price stabilization scheme, whereby the Government buys grains and foods at higher prices and sells them at lower prices, tends to help only the larger farmers that manage to supply the Government. A Rural Micro-enterprise Program aims at lending to school leavers. The inefficiency of such programs is a big problem. Only 15 percent of the program funds paid reaches the targeted group while 85 percent is spent for administration.

A particular problem of the current organization of the Indian public sector is the distribution of decision-making power, as well as resource allocation, between the central Government and the various state governments.<sup>93</sup> Expenditures are shared more or less equally between the central Government (in charge of defense, space, research, large food and fertilizer subsidies, and state assistance) and state governments (which spend on infrastructure, social welfare, and education). While the central Government has introduced fiscal cost cutting measures, such as the increase of the retirement age of civil servants from 58 to 60 years, it has little leverage in controlling state deficits, as the states can borrow directly from the market. Irrigation, national highways, social infrastructure (with exception of major national projects), mines and minerals, and most local utilities fall under the responsibility of the States. Thus, reforms to increase the market-orientation must also operate at the state level.

Another problem is the lack of coordination among public sector entities. This has been a problem especially in infrastructure, such as transport and communications. There are various ministries that deal

with these issues (Ministry for Surface Transport, Ministry of Railways, and Ministry of Aviation), but there is no single Government institution orchestrating the efforts of these ministries. The Planning Commission is a good candidate as it could unite central and state government planning in order to coordinate planning of infrastructure improvement projects. Moreover, administrative reform should create a central Ministry of Transport. Another issue is power supply. There is no coordination between transport and power policies, for instance, stunting the electrification of railways.

### Keeping the Economy Close to the Noninflationary Potential Growth Rate

Economic activity is only possible if purchasing power is exerted, or, in simple words, if money is spent. However, not all money that is spent has a net positive effect on the economy. Net positive effects are the result of the creation of *new* purchasing power. Economic growth only occurs if the total amount of net purchasing power in the economy increases.

New net purchasing power can only be created by the central bank and the commercial banking system through credit creation. Given the informational imperfections in the credit market, it has been demonstrated that a free credit market will not ensure optimal resource allocation, particularly from a development and welfare optimization policy perspective. The credit market, therefore, does not only require appropriate Government intervention in order to enhance economic welfare and growth; it is also the ideal tool for minimalist, top-down intervention. Instead of abandoning the system of credit controls, India should refine and improve it. First, the government should conduct a cost-benefit analysis of the pros and cons of greater central bank independence. Second, the mechanism for credit allocation should be made explicit and transparent. Third, its component should be a target for overall, noninflationary credit creation, with maximum ceilings for

the allocation of this new purchasing power among the various sectors of the economy. Preference should be given to sectors of the economy that are highly productive and sectors where the allocation of resources would increase overall welfare. Meanwhile, the reforms to increase regulatory, supervisory, and prudential structures in the banking system should continue. However, it is important to keep the prudential limits low enough for the banking system to be able to meet the overall credit growth targets. In particular, since Indian banks do not have much presence in international financial markets, there is hardly any need to follow the high Bank for International Settlements (BIS) capital adequacy ratio (CAR). Most banks in the second largest economy in the world (the regional banks in Japan), for instance, are not required to keep the 8 percent CAR. It seems, therefore, to border on the irrational to demand this from Indian banks, especially when the proven effect has been to reduce banks' willingness to lend.

The principle of overall credit growth targeting should be to aim at keeping the economy close to its potential growth rate. After an estimate of the potential growth rate has been made, credit growth targets should be set so as to keep nominal GDP growth in line with them. This minimizes inflation.

The declared main aim of RBI monetary policy is to keep inflation in check.<sup>94</sup> However, there is evidence that this view, which has indeed gained popularity with central banks, is not necessarily in the best interests of an economy whose aim is noninflationary growth maximization. A key issue is, therefore, the main goal of monetary policy. Is it really wise to focus single-mindedly on inflation reduction or inflation targeting, when nominal GDP growth is low or deflation poses a potential threat? Keeping the economy close to its maximum potential growth rate can be achieved by targeting nominal GDP instead of inflation. Such a policy minimizes unemployment and loss to national welfare. If demand growth threatens to rise above the potential growth rate, then in-

flationary pressures would be a danger and the central bank should aim to slow economic growth. If demand growth is below the potential growth rate, then deflationary pressures are a danger and the central bank should aim to expand economic growth. Of course, in such monetary policy targeting, the determination and measurement of the potential growth rate is important. This should be supported by structural policies aimed at increasing the potential growth rate.

Many central banks, including RBI, have been arguing that more independence is necessary in order to enhance economic welfare. The implicit assumption is that central banks aim at maximizing economic welfare. However, this argument is again based on the reasoning that a one-sided focus on inflation reduction is welfare-enhancing. The evidence in support of such an argument is not clear-cut (see Box).

In contrast, the experience of de facto independent central banks in Japan and Thailand of the 1990s, as well as the US experience of the 1930s, has demonstrated that independence, especially when combined with lack of both transparency of decision making and accountability for actual policies can be instrumental in not only creating the environment for major economic crises, but also exacerbating and prolonging them. The policy to concentrate all regulatory, supervisory, and monetary policy decision-making power in the hands of one single institution, RBI, which at the same time lacks mechanisms for accountability, transparency, and checks-and-balances, needs a review. It cannot be denied that the historical record of central banks has been to create boom/bust cycles. Why this was so and what mechanism should be put into place to prevent this, needs further research before conclusive answers can be given.

### Boosting the Noninflationary Potential Growth Rate

Structural policies should aim at maximizing potential growth, while monetary policy should aim at keep-

ing the economy close to this maximum potential. Potential growth is a function of the quantity of factor inputs (land, labor, capital, and technology) and the quality of their use (factor productivity).

In the East Asian experience, the first thrust of growth-enhancing policies has focused on factor-input mobilization. This policy emphasis will be successful as long as all resources are not yet fully mobilized. This is likely to be the case in India.

Policies for increasing workforce participation and quality include enhancing the educational standards of the population, while maintaining equal opportunities. This calls for public education at low or zero cost to the beneficiary. Such policies should continue to remain at the top of the macroeconomic policy agenda, and should not be sidelined by a misguided focus on free markets. This set of policies also includes increasing health and welfare of the population and direct measures to alleviate poverty.<sup>95</sup> For instance, education fees are extremely low and if linked to parent-income, could be raised at least for the higher income groups. Government hospitals are free for all, but could have differential pricing for different income groups. Electricity is usually supplied for free to agriculture.<sup>96</sup> Identifying, introducing, and supporting measures to promote labor-intensive agricultural production may increase farm exports and job creation. Typically, measures that attempt to increase farm product quality and marketing are accompanied by labor demand increases. Organizing farmers in production cooperatives and associations may also contribute to their ability to deal with poverty alleviation.

Policies aimed at improving land utilization should include a review of the Urban Land Ceilings Act. Currently, no land in urban areas can be sold, bought, or leased without specific Government approval, the allocation of which has been less than efficient. Urban planning and Government regulation of the land market is, however, necessary to maximize gains and minimize negative externalities from land use decisions.

Increasing all factor inputs does not necessarily ensure fast economic growth. They must be combined efficiently to enhance productivity. Policies toward that goal include improving transport and communication infrastructure. For India, the rapid introduction of modern telecommunications and computing networks is likely to prove a cost-effective way of leapfrogging in terms of infrastructural development. On transportation infrastructure, an effort must be made to address severe bottlenecks.<sup>97</sup> Due to lack of investments in recent years, insufficient capacity has become particularly evident in such sectors as power generation, roads, and ports.

### Dealing with the World

India's policies have been largely successful in dealing with the world. This shows that its policies to restrict capital flows, as well as to adopt a flexible exchange rate regime are appropriate. India should be wary of running a current account deficit higher than 3.5 percent of GDP unless long-term export growth can be stepped up significantly above 10 percent a year. This is valid even if capital inflows are not debt creating. While such inflows have better risk-sharing characteristics, they do require a rate of return considerably higher than the interest rate on bonds.

Monitoring the overall size of inflows is desirable, and instruments to moderate short-term inflows (such as reserve requirements and taxation of profits) should be kept in place. Liberalization of outflows by residents over and above the necessary freedom to repatriate inflows, would be risky until fiscal adjustment is complete and political commitment to convertibility is strong enough to rule out its abandonment.

Devaluation in a large and unindexed economy such as India is not an important cause of inflation, which is driven in India mainly by agricultural production, money supply growth, and fiscal deficits. Therefore, the exchange rate regime as managed in 1996/97—floating rates with the nominal exchange

rate targeted for achieving the real exchange rate which yields a sustainable current deficit—is a sensible strategy over the medium term, when capital movement is likely to be volatile.

One important question concerning trade policy is how far imports should be liberalized. As already outlined earlier, complete import liberalization does not seem to be a feasible option for the near future. With fully liberalized imports, the ratio of imports to GDP would increase, and this in turn would require higher inflows of foreign capital, which can be very volatile. Furthermore, the level of foreign debt has to be watched in order not to make India too dependent on foreign capital. Reform of the Indian trade sector, therefore, has to be achieved without raising the import ratio in the short run.

One possible solution was introduced by Bimal Jalan as early as 1991. Jalan (1991) believes that the least risky strategy available for India is to boost exports first and liberalize imports afterwards. To achieve this, the balance of profitability should be shifted in favor of exporters.

With budgetary constraints likely to persist in the future, the additional burden of export subsidization should be shifted to importers. This could be done by making use of the replenishment license mechanism for financing imports.

The prevailing import control system is that of “actual user” in which domestic manufacturers are allowed to import raw materials and components, irrespective of whether sales are made at home or abroad. The replenishment license mechanism provides an additional import facility to exporters, which is linked to the value of exports. These licenses can be used to import a wider range of commodities and they are freely tradable in the market with a premium. The exporter could sell the licenses to importers and would be provided with an additional subsidy. Jalan’s underlying idea is to make all import permits conditional on replenishment licenses. This would mean a step by step reduction of the actual user licenses in favor of the replenishment licenses.

A number of important advantages would likely accrue.<sup>98</sup>

This policy would only indirectly mean a move away from interventionism, though. Traditionally, interventionism concerning trade was realized by imposing high import duties. Even though these import duties might decline, as market forces will then partly contribute to allocation, this will only take place because of a change in the tool for intervention. It would be a shift from micro-intervention to an intervention that only sets a framework. The quality of intervention, however, would be much higher than before. The Indian Government would create a framework in which Indian companies could act freely, providing a chance to deregulate the domestic market first and get ready to slowly open up the economy instead of doing it hastily. Furthermore, competition used as an incentive is likely to result in high efficiency.

Unlike its East Asian neighbors, India’s comparatively moderate external borrowing and constant watch on the rupee exchange rate may have helped avoid an economic crisis. Severe restrictions on FIIs’ activities may have also contributed to its prevention. Given the scale of the country and neighbouring region, India harbors enormous potential for development and growth.

## Actual Policy Responses to the Financial and Currency Crisis in Asia

### Comparison of Key Macro Features Between India and Affected Asia

The financial and currency crisis that erupted in Southeast Asia in 1997 has not failed to make an impact on India’s economy. However, India has clearly avoided being drawn into the crisis to a degree comparable to that of the Southeast Asian countries, such as Indonesia, Korea, Malaysia, and Thailand. This is not entirely surprising. There are fundamental differences between India and these countries.



### IMPORTANCE OF EXTERNAL SECTOR

The external sector as a percentage of GDP is small in India compared to Southeast Asian economies. Exports accounted for only 10.3 percent of nominal GDP in 1996/97.<sup>99</sup>

### SIZE OF CURRENT ACCOUNT DEFICIT

The current account deficit fell from 1.8 percent of GDP in 1995/96 to 1.2 percent in 1996/97. In 1997/98, it rose to 1.7 percent. Meanwhile, foreign exchange reserves have been increasing from \$22 billion in 1995/96 to \$26 billion in 1996/97 and \$29 billion in 1997/98, covering about seven months of imports in 1996/97 and almost eight months in 1997/98.

### DEGREE OF FOREIGN INDEBTEDNESS

In 1996/97, India's total external debt stood at \$93.43 billion and thus ranked India eighth among developing countries in terms of total indebtedness.<sup>100</sup>

However, India's debt-gross national product (GNP) ratio was only 28 percent, far below that of Indonesia (67 percent), Thailand (56 percent), Malaysia (49 percent), and Philippines (49 percent).<sup>101</sup> The ratio of short-term debt to total debt has been small due to restrictions on short-term capital inflows. In 1996, it stood at only 7.5 percent, one of the lowest among developing countries and significantly lower than the countries affected by the Asian crisis.<sup>102</sup>

The ratio of short-term debt to the level of reserves (STD/FER), probably the single most reliable indicator of a country's vulnerability to a balance of payments crisis, amounted to only 0.23 in 1995/96, 0.26 in 1996/97, and an even lower 0.20 in 1997/98.<sup>103</sup>

Usually a ratio of more than 1 is a sign that a country is exposed, because a sudden withdrawal of short-term funds would quickly threaten default on foreign liabilities.<sup>104</sup> The Indian STD/FER ratios are a far cry from the high 1.47 that the country recorded in 1990/91, just before its solvency crisis. Moreover, they are significantly lower than the corresponding figures for any of those countries that were hit by

the financial crises. In June 1997, Thailand's STD/FER was 1.45, Korea's 2, and Indonesia's 1.7—reliable warning signals of possible solvency problems.<sup>105</sup> Meanwhile, India's net external commercial borrowing as a percentage of total capital flows fell from 43 percent in 1995/96 to only 10.6 percent in 1996/97. Total external debt as a percentage of GDP continued its decline after the 1991 crisis. At that time, it had reached 41 percent, but by 1995/96 it had fallen to 28.3 percent. From there, it fell further to 26.2 percent in 1996/97 and 26.4 percent in 1997/98. Debt service payments, having risen to 3.6 percent in 1994/95 and 1995/96 (from 3.3 percent in the years from 1991/92 to 1993/94), decreased again to 3.3 percent in 1996/97 and 2.8 percent in 1997/98.

### FOREIGN EXCHANGE POLICY

While RBI has not been above active market intervention to influence the rupee's international value, India's foreign exchange regime has largely been determined by supply and demand for foreign exchange. This allows for a two-way movement in the exchange rate and does not provide opportunities for one-way bets by speculators. The latter was a problem for virtually all Southeast Asian economies, with the exception of the People's Republic of China (PRC) and Hong Kong, China as they continued to defend the pegs despite signs of overvaluation.

### EXCESSIVE CREDIT CREATION

A root cause of the financial crisis in Asia has been the fact that virtually all the Southeast Asian economies (including the PRC and Hong Kong, China) experienced excessive domestic credit expansion for nonproductive use (especially speculation in the real estate sector). This created asset price inflation and heavily exposed the domestic banking sectors to the threat of NPLs. While excessive credit creation was to some extent a problem in the propagation of the 1991 Indian balance of payments crisis, no such phenomenon has occurred in the 1990s. Real estate

lending by Indian banks has remained modest by Indian and international standards and indeed prudential requirements for the banking system were already in the process of becoming stricter and more comprehensive even before 1997.<sup>106</sup>

### **CAPITAL ACCOUNT LIBERALIZATION**

In India, far fewer domestic financial transactions have been given to foreign players compared with most affected Southeast Asian countries. Not only have there been strict caps on external commercial borrowings, especially of a short-term nature, but also restrictions on the end-use of such borrowings. Moreover, India did not allow foreign investors to borrow or lend in the domestic money markets at all. While this closed nature of key aspects of Indian financial markets, especially the remaining capital controls, has been severely criticized, it is now clear that the relative conservatism of Indian financial markets insulated the country well from contagion as the Asian crisis evolved.

### **Overall Impact of the Asian Financial Crisis on India**

Despite the above fundamental differences between India and the rest of the region, Indian financial markets could not remain entirely unaffected by the crisis. As India is a rapidly developing economy in Asia, since the crisis broke out in 1997, it has often been lumped together with the other economies of Southeast Asia. This has been felt in the Indian stock market.

### **EXCHANGE RATE**

The rupee has not experienced a depreciation comparable to the affected Southeast Asian economies. On the contrary, its gradual depreciation merely shows the continuation of a trend that began much earlier, and the rate of decline in the value of the rupee has actually decelerated. In 1995/96, it fell by 6.1 percent (to Rs33.45/\$), in 1996/97 by 5.8 percent (to

Rs35.50/\$) and in 1997/98 by only 4.5 percent (to Rs37.16/\$). Despite occasional speculative attacks, the flexible exchange rate system has not provided currency speculators with a clear target. Compared to the sharp depreciation of its Southeast Asian competitors, the Indian exchange rate has become stronger. This has been reflected in a sharp appreciation of the real effective exchange rate (REER). According to the Ministry of Finance, the REER vis-a-vis the top ten trading partners rose, on an Index with base 100 for 1985, from 52.41 in 1996, to 56.57 in 1997. However, this is not dramatically above the 54.67 recorded in 1994.<sup>107</sup>

### **EXTERNAL TRADE**

Due to the collapse of their domestic economies, a slowdown in imports by the Southeast Asian countries was inevitable. However, this occurred at a time when fewer imports were demanded by India's major trading partners (accounting for 56 percent of Indian exports in dollar terms). Export growth to these countries declined from 13.4 percent in 1994 and 18.2 percent in 1995 to 3.6 percent in 1996 and probably even less in 1997. The combined effect of this slowdown in external demand and the REER appreciation resulted in a deceleration of export growth from a modest 5.3 percent in 1996/97 to a sluggish 1.5 percent, according to the provisional 1997/98 data. However, the deceleration in export growth was less pronounced in special drawing rights (SDR) terms. Exports in SDR terms grew 10.8 percent in 1996/97 and 6.7 percent in 1997/98 (provisional), although down from 13.6 percent in 1994/95 and 16.7 percent in 1995/96. Moreover, India's export slowdown comes against the backdrop of a global export slowdown in dollar terms, to 3.7 percent in 1996, after 19.8 percent growth in 1995 and 13.7 percent in 1994. However, unlike countries such as Thailand, whose exports contracted by 1.3 percent in 1996, India's exports grew by 5.3 percent in 1996/97 and 1.5 percent in 1997/98 in dollar terms.

## BALANCE OF PAYMENTS

A slowdown of Indian imports has followed that of exports continuing a pattern of recent years. After growing by 22.9 percent in 1994/95, and 28 percent in 1995/96, import growth dropped to 6.7 percent in 1996/97 and 4.2 percent in 1997/98. This was mainly due to weak domestic demand and a slowdown in industrial activity. Consequently, the overall balance of payments did not deteriorate markedly in 1997/98.

## Policy Response to the Asian Crisis

As the Asian crisis broke out, RBI intervened to curb speculation and influence market expectations in order to prevent drastic deviations from the fundamentals. RBI made it clear that it was ready to intervene in the foreign exchange market to moderate volatility, if necessary. However, since the rupee had remained stable in the precrisis period (or even appreciated at times), many market participants began to substitute domestic debt with foreign currency borrowings to take advantage of interest rate arbitrage. Others kept their oversold or short positions unhedged. Consequently, when the Asian crisis broke out in July and August 1997 and international foreign

exchange volatility and risk aversion rose, there was increased demand to liquidate FCNR bank funds and a rush to cover unhedged positions. This pushed the rupee down by 2.5 percent by the first week of September 1997 and forward premiums firmed visibly during this period. RBI intervened in both the spot and forward segments of the market to prevent sharp depreciations and reduce volatility. The intervention appeared to have been successful, as the rupee subsequently appreciated from about Rs36.60 to the Rs36.20 range against the dollar in the third week of September and remained near these levels until the second week of November 1997. At that time, the second phase of the Asian financial crisis hit and market volatility soared again. Thus the rupee was pushed down by about 9 percent between November 1997 and January 1998. Since market intervention proved insufficient to cool down expectations of further depreciation, RBI implemented a series of measures (Table 2). As a result of monetary measures announced on 16 January 1998, the rupee began to stabilize and market expectations about further depreciations were reversed successfully. The rupee appreciated from RS40.36/\$ by the end of the same month.

**Table 2: List of Policy Measures Undertaken by the Reserve Bank of India in the Aftermath of the Asian Crisis**

Category/Date of Policy Decision	Particulars
<b>Cash Reserve Requirement</b>	
28 November 1997	Deferment of future program of bringing about a reduction in cash reserve requirement
2 December 1997	Increase in cash reserve requirement by 0.5 percentage points to 10 percent effective from fortnight beginning 6 December 1997
16 January 1998	Increase in cash reserve requirement by 0.5 percentage points to 10.5 percent with effect from fortnight beginning 17 January 1998
23 March 1998	Decrease in cash reserve requirement by 0.5 percentage points to 10 percent from 10.5 percent in two phases of 0.25 percentage points from fortnight beginning 28 March 1998 and 11 April 1998
<b>Nonresident deposits</b>	
2 December 1997	Abolition of 10 percent incremental cash reserve requirement on nonresident external rupee accounts and nonresident reserve deposit schemes with effect from 6 December 1997
<b>Repurchase operations</b>	
2 December 1997	Introduction of fixed rate repos at 4.5 percent to absorb surplus liquidity
4 December 1997	Raising the interest rate on fixed rate repos to 5 percent effective 3 December 1997
11 December 1997	Raising of interest rate on fixed rate repos to 6.5 percent
16 January 1998	Raising the interest rate on fixed rate repos to 7 percent
16 January 1998	Raising the interest rate on fixed rate repos to 9 percent
17 March 1998	Making available reverse repos facility to primary dealers in Government Securities market at bank rate on discretionary basis and subject to stipulation of conditions relative to their operations in the call money market
	Reduction of the interest rate on fixed rate repos from 9 to 8 percent
<b>Export Credit<sup>a</sup></b>	
26 November 1997	Increase in interest rate to 15 percent on postshipment rupee export credit on usance bills for period (comprising usance period of export bills, transit period, and grace period wherever applicable) beyond 90 days and up to six months from the date of shipment
28 November 1997	Application of the 15 percent interest rate on postshipment rupee export credit from the date of advance. Exporters were expected to take advantage of the time gap available up to 15 December 1997 by expediting realization of their export proceeds
17 December 1997	Imposition of interest rate of 20 percent per annum (minimum) on overdue export bills from the date of advance. In case of demand bills and shorter-term usance bills, the higher rate of interest was not applicable where the total period of credit including the period of overdue is less than one month from the date of bill/negotiation
31 December 1997	Imposition of interest rate of 20 percent per annum on overdue export bills only for the overdue period and not from the date of advance. Rate will not be applicable with respect to certain chronic cases (where even six months ago, the bills were overdue)
<b>Surcharge on Import Finance</b>	
17 December 1997	Imposition of interest rate surcharges of 15 percent of the lending (excluding interest tax) on import finance
16 January 1998	Increase in the interest rate surcharge on import finance from 15 to 30 percent

<sup>a</sup> The rate of interest on post-shipment rupee export credit (other than against overdue export bills) for the period beyond 90 days and up to six months is 13 percent per annum effective 1 January 1998. Hence, the position prevailing prior to 26 November 1997 was restored.  
Source: Reserve Bank of India.

## Appendix 1

## Recommendations of the Committee on Banking Sector Reforms, April 1998

The key proposals include the following:

Concerning capital adequacy, the committee suggests that banks be required to mark the entire portfolio of Government securities to market. Moreover, the risk weight attached to Government and other approved securities should be raised from 0 to 5 percent. The risk weight for Government advances should be the same as for other advances. Foreign exchange open positions should be incorporated into the calculation of risk weighted assets and receive a 100 percent risk weight. Finally, overall capital adequacy norms should be raised (the Basle ratio should be increased from 8 to 10 percent.) The Reserve Bank of India (RBI) should be given the authority to raise this further for individual banks, if it deems necessary. The Committee recommends that public sector banks should not receive additional capital from the Government to meet these requirements but should "be encouraged" to raise these funds from the markets, "at home or abroad." Also, it recommends smaller banks to merge as a way to meet stricter capital adequacy requirements.

Concerning asset quality, the committee recommends tightening of definitions of nonperforming assets (NPAs) further, e.g., by including advances covered by Government guarantees, that have "turned sticky" and which, in the absence of such guarantees, would have been classified as NPAs. It also recommends increasing regulatory pressure on banks to quickly dispose of nonperforming loans (NPLs) and full tax deductibility of provisions, although it again warns against recapitalization via Government money.

Directed credit has not been abolished, as recommended by the Committee on Financial System (CFS) in 1991. The Committee on Banking Sector Reforms argues that directed credit has been responsible for a significant amount of NPLs held by banks. However, it recognizes the importance of small-scale credit to small and marginal farmers and tiny businesses that otherwise would not be able to obtain purchasing power. While stopping short of repeating the CFS recommendation of abolition of directed credit, the Committee asks for the abolition of any interest rate subsidy on directed credit.

On disclosure requirements, the Committee argues that income recognition, asset classification, and provisioning norms should apply even to Government-guaranteed advances. Moreover, it calls for disclosure of the maturity pattern of assets and liabilities, as well as the publication of

consolidated bank group balance sheets. The Committee is asking banks to improve their systems and methods, especially concerning information processing, accounting, controlling, automation, as well as their credit analysis, loan review, asset-liability management, treasury management, and human resource management.

The Committee recommends the continuation of licensing new private banks and allowing foreign banks to set up subsidiaries or joint ventures in India. Among the legal issues that are currently dealt with are bank loan recovery instruments, bankruptcy and insolvency code, as well as mortgage law and legal steps to facilitate mortgage-backed securities and other forms of securitization.

Finally, the Committee argues that the independence of RBI should be strengthened and that it should be made independent of the Government. This should be done via changes in the Banking Regulation Act and the Reserve Bank of India Act, as well as the State Bank of India Act. (The Committee laments: "The Banking Regulation Act is structured on the premise that bank supervision is essentially a Government function and that RBI's position is somewhat on the lines of an agent. The Act also provides appellate powers to the Government over the decisions of RBI in this regard and original powers in certain instances. The Committee feels that these provisions should be reviewed" [Chapter VIII, para 8.17]).

The Committee, as well as RBI, argues that banks should be provided with greater freedom concerning their deposit/lending operations. Although interest rates on domestic term deposits were deregulated in 1997, a restriction was imposed on banks that they must offer deposits of the same maturity irrespective of the size of such deposits. Another change will concern the lending to small- and medium-size enterprises. Up until now, there is a strong disincentive to lend to those sectors because of the administered rates of interest. In order to remove the disincentive from the flow of credit to small borrowings below Rs2 lakh, instead of prescribing a specific rate uniformly for all banks, it is being stipulated that the interest rates on loans below Rs2 lakh should not exceed the prime lending rate (PLR), which is available to the best borrowers of the concerned bank. Furthermore, all advances against term deposits should be at an interest rate equal or below the prime lending rate.

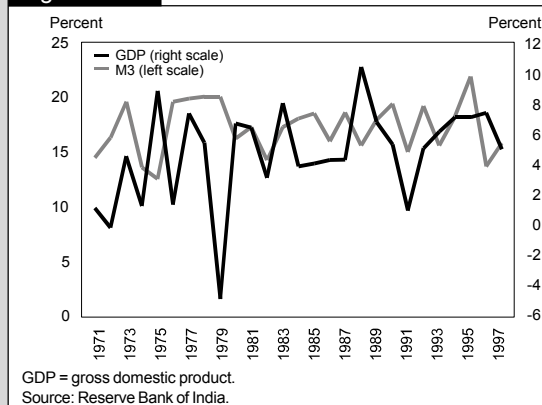
Source: Reserve Bank of India.

## Appendix 2

## Credit and M3 vs. Gross Domestic Product

Given the severe data limitations and with the availability only of annual gross domestic product (GDP) series, it seems futile to employ a sophisticated set of statistical specification tests. Hence, the empirical research methodology adopted is that of eye inspection of correlation.<sup>a</sup> Figure A2.1 shows nominal GDP growth plotted against the M3 money supply measure. Figure A2.2 shows nominal GDP growth plotted against commercial bank credit growth. Even employing this simple methodology, the credit approach appears superior.

**Figure A2.1: GDP vs. M3 Growth**



### Credit and India's Crises

The first severe problem with regard to inflation occurred in 1965 and 1967. In June 1966, mainly under foreign pressure, a devaluation-liberalization-package was introduced. The stance in credit policy, however, did not change. In both years primary credit creation by the central bank increased and with it inflation rose.

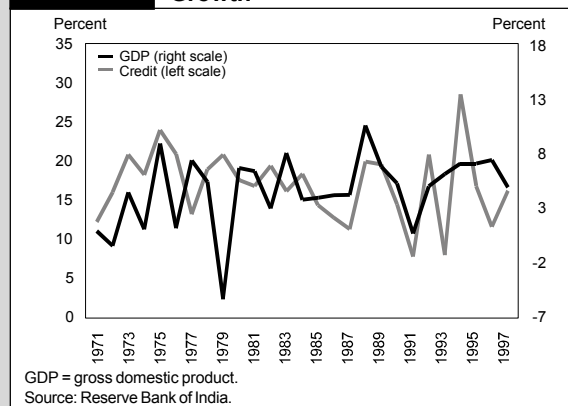
The second crisis began in 1972. Inflation was 20.8 percent in 1973 and 26.8 percent in 1974. The severe droughts in 1972 and 1974 were considered the main reasons for the high inflation. But as in the first crisis, credit creation seemed to have played a major role also in the period 1972–1974. After a decrease in RBI credit to the commercial sector in 1972 by 2.3 percent, it rose by a stunning 73.1 percent in 1973, the sharpest rise in RBI credit to the commercial sector since 1961. After 1973, credit declined and with a lag of about one year, inflation dropped as well. The measures introduced by the Government in July 1974, which consisted of tough fiscal, monetary (based on M3), and income measures, therefore, cannot be seen as the sole solution to the inflation problem. In order to show the influence money can have on inflation, Joshi and Little (1994) explained the fall in prices with the tight monetary policy that started in September 1973. While Joshi and Little were mainly concerned with M1 and M3, credit seemed to have had a greater influence. M3 fell by only 6.2 percentage points, whereas credit decreased by 45.8 percentage points from 1973 to 1974.

The next crisis started in 1979, when inflation began to rise again. Inflation peaked in 1981 at 12.5 percent and again in 1983 at 12.6 percent. In November 1981, India

entered an extended agreement with the International Monetary Fund (IMF). This agreement enabled India to withdraw SDR5 billion over a three-year period. Ceilings were set for net bank credit to Government and total domestic credit. Furthermore, total foreign non-IMF borrowing was restricted. Before the IMF loan, credit ceilings set by the Reserve Bank of India (RBI) for individual banks were consistently exceeded. RBI credit to the commercial sector picked up after 1981, instead of declining. This seems to be the reason for the increase in prices that began in 1982. M3, however, declined in the period from 1981 to 1982. In 1982, credit increased by 8.8 percent and, in 1983, it even went up by 25.8 percent. Prices also peaked again in 1983. M3 rose in 1983. During the whole period, banks exceeded their credit limits and that of RBI.

The period 1985–1989/90 can be seen as the road to the next crisis. In 1989/90 there was a strong agricultural recovery. Exports also boomed because of the devaluation of the rupee. Imports increased by 10 percent (dollar value) partly due to the continuation and extension of import liberalization. The situation is different from the crises before, which showed credit expansion in periods of droughts. This time, credit expansion took place during a time of agricultural recovery. RBI's "credit to commercial sector" expanded in 1989 by 30.1 percent. Inflation peaked one year later, with a 13.7 percent increase. This cannot be explained by a drought. Credit policy, however, showed the same stance as in the crises before. One major outcome of the crisis of 1990 is that RBI strengthened its position with the agreement concerning the "ad-hoc" Treasury-bills (T-bills). It can be seen as a first step toward an independent monetary policy. The Government gave up its tool of monetizing its fiscal deficits by "ad-hoc" T-bills, because of the central bank argument that this automatic monetization would cause inflation. RBI, however, neglects to mention the explosive rise of credit to the commercial sector (as opposed to the Government sector). M3 does not seem to account for price behavior throughout the entire period.

**Figure A2.2: GDP vs. Commercial Bank Credit Growth**



Source: Thon (1998).

<sup>a</sup> See also Thon (1998).

## Appendix 3

## Import Tariffs

Even during the late 1980s, mean nominal import tariffs in India were comparatively high.

**Table A3.1: Mean Nominal Tariff Rates in India, Pakistan, Brazil, and Thailand in Late 1980s**

Item	India (1988)	Pakistan (1988)	Brazil (1989)	Thailand (1985)
Mean	141.20	65.60	43.00	33.80
Standard Deviation	50.40	53.20	19.10	27.30
Coefficient of Variation	0.36	0.81	0.44	0.81

Source: Aksoy (1992), as quoted by Kaplinsky (1997).

The collection rate of Indian tariffs grew further during the 1980s (from less than 50 to more than 80 percent during 1978–88), according to Kaplinsky (1997). As a result, import duties as a percent of imports increased from 29.7 percent in 1980 to 61.9 percent in 1987 and import duties as a percentage of tax revenues rose from 24.8 percent to 34.8 percent during the same period. This placed India into the highest import tax bracket in the developing world (for a selected international comparison, see Aksoy, 1992).

However, in the late 1970s and mid-1980s, the Government lowered its effective protection rates and nontariff barriers. Yet, a really significant reduction in protection was only felt after the introduction of the new economic policy in 1991. The majority of nontariff barriers was abolished (e.g., restricted lists) and tariff rates were lowered. The policy was visibly successful. The average weighted nominal tariff rate fell from 141 percent in 1988 to 33 percent by 1994/95.

**Table A3.2: Weighted Average Nominal Tariffs (percent)**

Item	1990/91	1992/93	1993/94	1994/95	No. of Items
Consumer Goods	164	144	na	na	1,347
Intermediate Goods	117	55	40	31	2,337
Capital Goods	97	76	50	38	988
Economy	87	64	47	33	5,040

na = not available.  
Source: World Bank (1995).

## Appendix 4

## Principal Capital Account Restrictions

Regulations and Objectives	Activities	
	Permitted	Restricted
<p><b>Direct Investment</b></p> <ul style="list-style-type: none"> <li>Industrial policy liberalized on 24 July 1991 to attract larger foreign direct investment (FDI) in infrastructure and other critical economic sectors.</li> <li>Bulk of FDI still subject to discretionary approval by the Foreign Investment Promotion Board (FIPB).</li> </ul>	<ul style="list-style-type: none"> <li>Automatic approval by the Reserve Bank of India (RBI) for FDI and trading companies primarily engaged in export activities.</li> <li>Up to 51 percent of equity permitted for FDI in 57 capital-intensive, high-technology industries and up to 100 percent in selected power projects.</li> <li>Nonresidents of Indian origin or overseas corporate bodies allowed to invest up to 100 percent of equity in the list of high-priority industries with repatriability of capital and income and up to 51 percent of equity in unlisted companies.</li> </ul>	<ul style="list-style-type: none"> <li>FDI for industries not on the automatic list (requires clearance from the FIPB on a case-to-case basis).</li> <li>Dividend remittance on FDI on consumer goods industries (required to be balanced by export proceeds over a period of seven years from initial investment).</li> <li>Outward direct investments by residents (automatic approval for Indian joint ventures in cases involving equity of up to \$4 million).</li> </ul>
<p><b>Portfolio Investment</b></p> <ul style="list-style-type: none"> <li>Foreign Institutional Investors (FIIs)—pension funds, mutual funds, etc.—allowed to purchase stocks and debentures on local exchanges (since July 1991) and to invest in unlisted securities (since August 1996).</li> </ul>	<p><i>FII investment</i></p> <ul style="list-style-type: none"> <li>In all listed securities in primary or secondary markets in India as well as unlisted securities.</li> <li>In longer-term Government-dated securities.</li> <li>Up to 100 percent of funds in corporate debt.</li> </ul>	<p><i>FIIs</i></p> <ul style="list-style-type: none"> <li>Holding of Treasury bills.</li> <li>Access to the forward foreign exchange market.</li> <li>Investment exceeding 30 percent of any company.</li> </ul> <p><i>Residents</i></p> <ul style="list-style-type: none"> <li>Placing portfolio investments abroad from domestic income.</li> </ul>
<p><b>International Capital Market Activity and Foreign Borrowing</b></p> <ul style="list-style-type: none"> <li>Gradual opening by the Government of avenues for external commercial borrowing and international equity issues. (This is to provide access to international capital markets while containing external indebtedness and debt service obligations and to moderate the potential impact of capital surges in macroeconomic conditions.)</li> </ul>	<ul style="list-style-type: none"> <li>Access to international capital market through Euro-equity issues (global depository receipts [GDRs]) given to Indian companies with a track record of financial performance (three years).</li> <li>Requirement may be waived for companies investing in infrastructure industries.</li> <li>External commercial borrowing subject to Ministry of Finance approval with the following requirements/conditions: <ul style="list-style-type: none"> <li>seven years minimum average maturity (MAM) except loans for infrastructure financing (where MAM is set at five years);</li> <li>set indicative ceiling for total approvals (\$8 billion for 1997/98); and</li> <li>short-term loans/credits maturing within a year for import/export trade financing. (Financing for up to three years maturity subject to RBI approval).</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>End use of GDR receipts is regulated (No more than 25 percent can be used for general corporate restructuring).</li> <li>Issuance of money market instruments abroad.</li> <li>For nonresidents, issuance of securities in the local market.</li> </ul>
<p><b>Foreign Exchange Market</b></p> <ul style="list-style-type: none"> <li>General: <ul style="list-style-type: none"> <li>access to foreign exchange regulated under the Foreign Exchange Regulation Act (1973) amended in 1993; and</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Access to foreign exchange market for <i>bona fide</i> current payments.</li> </ul>	<ul style="list-style-type: none"> <li>Holding of foreign exchange by the public (residents under obligation to offer foreign currency receipts for sale to authorized dealers [ADs]). Exporters may retain 20% of savings though exceptions may be given.</li> </ul>

Continued next page



## Appendix 4

## Principal Capital Account Restrictions (Cont'd)

Regulations and Objectives	Activities	
	Permitted	Restricted
<ul style="list-style-type: none"> <li>– foreign exchange market activity strictly tied to underlying current account and permitted capital account transactions.</li> <li>• ADs appointed by RBI to provide competitive foreign exchange services (in spot and forward markets) for <i>bona fide</i> transactions.</li> <li>• Responsible for many aspects of compliance with foreign exchange controls.</li> </ul> <p><b>Nonresident Account</b></p> <ul style="list-style-type: none"> <li>• Regulated by RBI to attract foreign exchange while minimizing the impact of net flows on the external balance.</li> </ul>	<ul style="list-style-type: none"> <li>• General commitment made by India in August 1994, based on the provisions of Article 8 of the IMF agreement.</li> <li>• Spot and forward foreign exchange dealings: <ul style="list-style-type: none"> <li>– write cross-currency options on a matched basis; and</li> <li>– maintain positions in convertible currencies and balances abroad.</li> </ul> </li> <li>• Opening of foreign exchange position limits and forward gap limits agreed with RBI on a bank-to-bank basis. <ul style="list-style-type: none"> <li>– use of derivatives to hedge risks on their own portfolio: purchase hedge “investments” for corporate clients;</li> <li>– carrying out rupee swaps within ADs’ open position/gap limits; and</li> <li>– on lending of foreign currency funds obtained under foreign currency nonresident (bank) (FCNR)[B] schemes.</li> </ul> </li> </ul> <p>• Accounts offered to nonresidents depending on use and include rupee and foreign currency, repatriable and nonrepatriable. (From 1994/95, income accruing on nonrepatriable accounts may be considered repatriable.)</p>	<ul style="list-style-type: none"> <li>• Restrictions counter to Article VII including dividend remittances and bilateral payment arrangements.</li> <li>• Access to international interbank markets (lending/borrowing abroad is subject to a ceiling of \$10 million to/from overseas officer or correspondents).</li> <li>• Writing options on the rupee.</li> </ul> <p>• Opening of accounts abroad by residents.</p>

Source: International Monetary Fund, *India: Recent Economic Developments*, 1998.

## Appendix 5: Statistical Tables

Table A5.1: Selected Macroeconomic and Financial Indicators

Item	Average		1993/94	1994/95	1995/96	1996/97 <sup>a</sup>	1997/98 <sup>a</sup>
	1980/81 to 1989/90 (10 years)	1990/91 to 1994/95 (5 years)					
Real GDP (% change)	5.9	5.1	6.2	7.8	7.2	7.5	5.0
Industrial Production (% change) (base: 1993/94 = 100) <sup>b</sup>	7.4	5.3	6.0	8.4	12.7	5.6	6.5
Agricultural Production (% change)	3.8	2.4	3.8	4.9	(2.4)	9.4	(3.7)
Foodgrains Production (million tons)	146.5	180.0	184.3	191.5	180.4	199.3	194.1
Gross Domestic Savings Rate (% of GDP)	20.0	23.5	22.7	25.6	25.3	26.1	na
Gross Domestic Investment Rate (% of GDP)	22.0	25.0	23.3	26.9	27.1	27.3	na
Central Government Finances (% of GDP)							
Total Revenue	17.2	16.6	16.1	16.6	15.1	15.7	16.6
Total Expenditure	18.8	17.9	17.5	16.7	15.9	15.7	16.6
Revenue Deficit	1.8	3.2	4.0	3.2	2.7	2.6	3.1
Fiscal Deficit	7.2	6.7	7.4	6.0	5.4	5.2	6.1
Monetized Deficit	2.2	0.9	...	0.2	1.8	0.2	0.9
Interest Payments	2.8	4.4	4.5	4.6	4.5	4.7	4.6
Internal Debt	26.5	28.6	30.3	27.7	27.5	27.0	27.3
Monetary Aggregates (% change)							
Broad Money (M)	17.2	18.2	18.4	22.3	13.7	16.2	17.6
Narrow Money (M <sub>L</sub> )	15.1	19.0	21.5	27.5	11.7	12.0	11.1
Reserve Money	16.8	17.0	25.2	22.1	14.9	2.8	13.1
Scheduled Commercial Banks (% change)							
Aggregate Deposits	18.1	18.3	17.3	22.8	12.1	16.5	19.7
Bank Credit	16.8	16.1	8.2	28.7	20.1	9.6	16.4
Non-Food Credit	17.8	15.2	5.7	29.8	22.5	10.9	15.1
Investments in Government Securities	19.4	22.9	33.3	16.3	12.4	20.2	17.7
Wholesale Price Index (% change)							
Point-to-Point	7.5	10.8	10.8	10.4	5.0	6.9	5.3
Average	8.0	10.7	8.4	10.9	7.8	6.4	4.8
Consumer Price Index (% change)							
Point-to-Point	8.9	10.6	9.9	9.7	8.9	10.0	8.3
Average	9.1	10.4	7.3	10.3	10.0	9.4	6.8
BSE Sensitive Index (% change)	22.3	42.9	0.1	37.1	(17.3)	5.5	9.9
Trade and Balance of Payments							
Exports in \$ (% change)	8.1	10.0	20.0	18.4	20.8	5.3	1.5
Imports in \$ (% change)	7.2	7.3	6.5	22.9	28.0	6.7	4.2
Current Account (% of GDP)	(2.0)	(1.4)	(0.4)	(1.1)	(1.8)	(1.2)	(1.7)
Capital Account (% of GDP)	1.7	2.5	3.8	3.0	1.4	3.1	2.9
Foreign Exchange Reserves <sup>c</sup> (\$ million)	5,579	13,865	19,254	25,186	21,687	26,423	29,367
External Debt (\$ million)	na	90,162	92,695	99,008	92,679	93,431	94,404
Debt-GDP Ratio	na	35.9	35.8	32.3	28.3	26.2	26.4
Debt Service Ratio	na	28.8	25.6	26.2	24.3	21.2	19.5
Exchange Rate (Rupee/\$)							
High	7.73	17.28	31.21	31.37	31.32	34.14	35.70
Low	17.13	32.65	31.49	31.97	37.95	35.96	40.36

BSE = Bombay Stock Exchange, GDP = gross domestic product.

( ) = negative values are enclosed in parentheses, na = not available, ... = negligible.

<sup>a</sup> Provisional.<sup>b</sup> Base 1980/81 = 100 for the first three columns.<sup>c</sup> As at the end of the period.Source: Ministry of Finance, *Economic Survey 1997-1998*.

## Appendix 5

Table A5.2: Sectoral Growth Rate and Share of Gross Domestic Product

Year	Annual Growth Rate (%)					Share of GDP (%)			
	Agriculture	Mining	Industry	Services	GDP	Agriculture	Mining	Industry	Services
1970/71						44.5	1.3	22.4	31.9
1971/72	(1.9)	2.6	2.9	3.7	1.0	43.2	1.3	22.8	32.7
1972/73	(5.0)	5.9	3.6	2.9	(0.3)	41.2	1.4	23.7	33.8
1973/74	7.2	1.3	2.0	3.3	4.6	42.2	1.4	23.1	33.4
1974/75	(1.5)	4.9	1.8	4.0	1.2	41.1	1.4	23.2	34.3
1975/76	12.9	12.1	5.1	6.8	9.0	42.6	1.4	22.4	33.6
1976/77	(5.8)	3.6	9.1	4.8	1.2	39.6	1.5	24.2	34.8
1977/78	10.0	3.1	6.9	5.1	7.5	40.5	1.4	24.0	34.0
1978/79	2.3	2.7	9.2	6.8	5.5	39.3	1.4	24.9	34.4
1979/80	(12.8)	1.1	(3.3)	1.8	(5.2)	36.2	1.5	25.4	37.0
1980/81	12.9	12.2	3.0	3.2	6.8	38.2	1.6	24.5	35.8
1981/82	5.9	13.5	7.6	6.0	6.5	38.0	1.6	24.7	35.6
1982/83	(1.2)	11.5	4.3	6.5	3.1	36.4	1.8	25.0	36.8
1983/84	10.8	2.7	9.2	5.2	8.2	37.3	1.7	25.2	35.8
1984/85	0.0	1.4	6.3	6.3	3.9	35.9	1.6	25.8	36.6
1985/86	0.2	5.5	4.5	7.4	4.1	34.6	1.7	26.0	37.8
1986/87	(1.7)	13.5	6.9	7.6	4.3	32.6	1.8	26.6	39.0
1987/88	0.4	3.4	6.6	6.1	4.3	31.4	1.8	27.2	39.6
1988/89	16.3	15.0	8.7	7.3	10.6	33.0	1.9	26.7	38.4
1989/90	1.7	7.3	10.5	8.9	6.9	31.4	1.9	27.6	39.1
1990/91	3.8	10.7	7.0	5.2	5.4	30.9	2.0	28.0	39.1
1991/92	(2.3)	3.7	(1.7)	4.9	0.8	30.0	2.0	27.4	40.7
1992/93	6.1	1.1	4.4	5.5	5.1	30.2	2.0	27.2	40.6
1993/94	3.6	2.0	7.2	7.3	6.2	29.5	1.9	27.4	41.2
1994/95	4.6	8.1	9.5	7.5	7.8	29.0	1.9	28.0	41.3
1995/96	(3.0)	8.4	13.8	11.1	7.2	26.0	1.9	29.5	42.6
1996/97	7.9	(0.3)	6.9	8.1	7.5	26.1	1.7	29.4	42.8
1997/98	(2.0)	6.3	5.7	8.8	5.0	24.4	1.7	29.5	44.4

GDP = gross domestic product.  
( ) = negative values are enclosed in parentheses.  
Source: Ministry of Finance, *Economic Survey 1997–1998*.

Table A5.3: Consumption Expenditure (percent change)

Category	At Current Prices		At 1980/81 Prices	
	1995/96	1996/97	1995/96	1996/97
Private Final Consumption Expenditure in the Domestic Market	12.8	13.2	5.3	5.8
Government Final Consumption Expenditure	15.4	14.0	4.8	5.1

Source: Central Statistical Organization, as quoted in *Economic Survey 1996–1997*, Ministry of Finance.

## Appendix 5

Table A5.4: Trade Balance, Current Account Balance, and Capital Account Balance (percent change)

Year	Percent Change			Percent of GDP		
	Trade Balance	Current Account	Capital Account Balance	Trade Balance	Current Account	Capital Account Balance
1994/95	(0.9)	190.9	(5.6)	(3.0)	(1.1)	3.0
1995/96	(11.9)	75.1	(48.9)	(3.5)	(1.8)	1.4
1996/97	(12.4)	(36.8)	125.0	(3.5)	(1.1)	3.0
1997/98	(14.5)	108.4	12.6	(3.9)	(2.1)	3.2

GDP = gross domestic product.  
( ) = negative values are enclosed in parentheses.  
Source: Ministry of Finance, *Economic Survey 1997–1998*.

Table A5.5: Composition of Capital Account Inflows (percent)

Year	Nondebt Creating Inflows	Debt Creating Inflows	Other Capital	Total
1990/91	1.4	81.8	16.8	100
1991/92	3.6	85.6	10.8	100
1992/93	14.3	44.1	41.6	100
1993/94	43.6	19.5	36.9	100
1994/95	52.5	23.4	24.1	100
1995/96	100.4	56.0	(56.4)	100
1996/97	51.7	65.8	(17.5)	100
1997/98	44.7	46.0	9.3	100

( ) = negative values are enclosed in parentheses.  
Source: Reserve Bank of India, *Report on Currency and Finance 1997–1998*.

Table A5.6: Growth Rates of Industrial Production, by Industry (percent)

Year	Mining and Quarrying	Manufacturing	Electricity	Total Industrial Production
1994/95	7.6	8.5	8.5	8.4
1995/96	9.5	13.8	8.1	12.7
1996/97	(2.0)	6.7	4.0	5.6
1997/98	5.7	6.6	6.8	6.5

( ) = negative values are enclosed in parentheses.  
Source: Ministry of Finance, *Economic Survey 1997–1998*.

## Appendix 5

Table A5.7: Credit to Priority Sectors

Year	Amount (Rs Crore)			Percent Change		
	Agriculture	Small-scale Industry	Other Priority Sectors	Agriculture	Small-scale Industry	Other Priority Sectors
1982/83	5,275	4,486	2,561			
1983/84	6,144	5,447	3,308	16.47	21.42	29.17
1984/85	7,657	6,608	4,142	24.63	21.31	25.21
1985/86	9,057	7,816	4,692	18.28	18.28	13.28
1986/87	10,588	9,103	5,368	16.90	16.47	14.41
1987/88	12,009	10,820	6,241	13.42	18.86	16.26
1988/89	13,948	13,127	7,132	16.15	21.32	14.28
1989/90	16,526	15,543	8,314	18.48	18.40	16.57
1990/91	16,750	17,181	8,984	1.36	10.54	8.06
1991/92	18,187	18,158	9,124	8.58	5.69	1.56
1992/93	19,963	20,026	9,843	9.77	10.29	7.88
1993/94	21,208	22,617	10,055	6.24	12.94	2.15
1994/95	23,980	27,612	12,549	13.07	22.09	24.80
1995/96	27,044	31,884	14,401	12.78	15.47	14.76
1996/97	31,442	35,944	17,494	16.26	12.73	21.48
1997/98	34,869	43,508	21,130	10.90	21.04	20.78

Source: Reserve Bank of India, *Report on Currency and Finance, 1997-1998*.

## Appendix 5

Table A5.8: Operations of India's Central Government

Item	1992/93	1993/94	1994/95	1995/96	1996/97	1996/97	1997/98
	<b>Amount (Rs billion)</b>						
Total Revenue and Grants	795.3	796.0	1,016.9	1,173.4	1,412.6	1,372.8	1,641.7
Net Tax Revenue	540.4	534.5	674.5	819.4	973.1	972.1	1,133.9
Gross Tax Revenue	746.4	757.4	922.9	1,112.4	1,321.5	1,323.2	1,536.5
Less: State Share	205.9	222.9	248.4	293.0	348.4	351.1	402.5
Nontax Revenue	245.7	251.6	331.9	342.6	431.4	388.7	496.8
Of which:							
Divestment Receipts	19.6	(0.5)	56.1	14.0	50.0	5.0	48.0
Grants	9.2	9.9	10.4	11.4	8.1	12.0	11.0
Total Expenditure and Net Lending	1,197.1	1,398.6	1,593.9	1,775.8	2,035.3	2,004.1	2,296.0
Current Expenditure	961.5	1,128.6	1,271.1	1,467.0	1,677.4	1,649.1	1,896.3
Of which:							
Major Subsidies	94.1	107.6	115.3	121.3	147.2	142.3	171.3
Interest Payments	310.8	367.4	440.6	500.3	600.0	585.0	680.0
Capital Expenditure and Net Lending	235.6	270.0	322.8	308.9	357.9	355.0	399.9
Overall Balance	(401.7)	(602.6)	(577.0)	(602.4)	(622.7)	(631.3)	(654.5)
Financing	401.7	602.6	577.0	602.4	622.7	631.3	654.5
External (net)	53.2	50.7	51.5	3.2	24.6	25.9	24.3
Domestic (net)	348.5	551.8	525.6	599.2	598.1	605.4	630.2
Oil Coordination Committee (OCC) Balance	(5.1)	(1.5)	12.8	(19.6)	(8.0)	(97.8)	(35.0)
Overall Balance Including OCC Account	(406.8)	(604.1)	(564.2)	(622.0)	(630.7)	(729.1)	(689.5)
Overall Balance Excluding Divestment Receipts	(421.3)	(602.1)	(633.1)	(616.4)	(672.7)	(636.3)	(702.5)
Nominal GDP	7,059.2	8,097.7	9,536.8	10,958.8	12,522.4	12,523.8	14,402.3
	<b>Percent of GDP</b>						
Total Revenue and Grants	11.3	9.8	10.7	10.7	11.3	11.0	11.4
Total Expenditure and Net Lending	17.0	17.3	16.7	16.2	16.3	16.0	15.9
Current Expenditure	13.6	13.9	13.3	13.4	13.4	13.2	13.2
Of which:							
Major Subsidies	1.3	1.3	1.2	1.1	1.2	1.1	1.2
Interest Payments	4.4	4.5	4.6	4.6	4.8	4.7	4.7
Capital Expenditure and Net Lending	3.3	3.3	3.4	2.8	2.9	2.8	2.8
Overall Balance	(5.7)	(7.4)	(6.1)	(5.5)	(5.0)	(5.0)	(4.5)
Overall Balance including OCC Account	(5.8)	(7.5)	(5.9)	(5.7)	(5.0)	(5.8)	(4.8)
Overall Balance Excluding Divestment Receipts	(6.0)	(7.4)	(6.6)	(5.6)	(5.4)	(5.1)	(4.9)
Memorandum Items:							
Net Resources Transferred to States	6.8	6.9	6.2	6.0	6.0	6.1	5.7
Primary Balance	(1.3)	(2.9)	(1.4)	(0.9)	(0.2)	(0.4)	0.2
Consolidated Public Sector Balance	(9.5)	(10.7)	(9.0)	(9.0)	(8.5)	(9.2)	(8.2)

GDP = gross domestic product.

( ) = negative values are enclosed in parentheses.

Source: International Monetary Fund, *India: Recent Economic Developments*, 1998.

## Appendix 5

Table A5.9: Central Government's Financing of Gross Fiscal Deficit (percent of total finance)

Year	Internal Finance			Total Internal Finance	External Finance	Total Finance/Gross Fiscal Deficit
	Market Borrowings	Other Liabilities	91-day \$ Treasury Bills			
1990/91	18.0	49.5	25.4	92.9	7.1	100
1991/92	20.7	45.5	18.9	85.1	14.9	100
1992/93	9.2	47.0	30.6	86.8	13.2	100
1993/94	47.4	26.0	18.2	91.6	8.4	100
1994/95	34.8	54.6	1.7	91.1	8.9	100
1995/96	54.9	28.3	16.3	99.5	0.5	100
1996/97	30.0	45.8	19.7	95.5	4.5	100
1997/98	49.2	46.7	2.7	98.6	1.4	100
1998/99	53.1	44.3	0.0	97.4	2.6	100

Source: Ministry of Finance, *Economic Survey 1997–1998*.

Table A5.10: Financing of State Governments' Gross Fiscal Deficit (percent of deficit)

Year	Loans from Central Government	Market Borrowing	Others	Gross Fiscal Deficit
1990/91	53.1	13.6	33.3	100
1991/92	49.6	17.5	32.9	100
1992/93	42.7	16.8	40.5	100
1993/94	46.3	17.6	36.1	100
1994/95	53.3	14.7	32.0	100
1995/96	47.1	18.7	34.2	100
1996/97	47.5	17.6	35.0	100
1997/98	47.3	13.9	38.8	100
1998/99 <sup>a</sup>	48.7	12.9	38.4	100

<sup>a</sup> Provisional.Source: Ministry of Finance, *Economic Survey 1997–1998*.

## Notes

<sup>1</sup>About two thirds of foreign liabilities were official borrowing.

<sup>2</sup>The change in consumer price index (CPI) for industrial workers averaged 11.6 percent in 1990/91, 7.6 percent for agricultural workers, and 11 percent for urban nonmanual employees. The wholesale price index (WPI) rose by 10.3 percent for all commodities. Broken down, it increased by 13 percent for primary articles, 8.4 percent for manufactured goods, and 12.3 percent for energy.

<sup>3</sup>Kumar (1993), Kaplinsky (1997).

<sup>4</sup>The margin requirement was raised to more than 100 percent, sometimes 300 percent, in order to induce credit rationing.

<sup>5</sup>The views of Joshi and Little (1994) of the World Bank are representative of this conclusion: "The major mistake of macroeconomic policy lay in neglecting the danger signs evident in 1985/86 on the fiscal front. Fiscal deterioration was allowed to proceed apace... By the end of the decade, the macroeconomic fundamentals were out of joint. Even a strictly temporary shock like the Gulf War was enough to trigger a full-scale crisis."

<sup>6</sup>The radical, "shock therapy" approach that favors immediate, full-scale implementation of reforms is based on two crucial assumptions. First, it assumes that after the initial policy-induced recession (with the aim to squeeze domestic demand in order to reduce imports and thus restore balance of payments equilibrium), the economy will stabilize quickly and there will be immediate gains in productivity and efficiency, which will lead to a sustained economic recovery without a rise in the trade deficit. This assumes that the balance of payments crisis was triggered by excessive consumptive demand, such as due to Government spending. While this was partly the case, a neglected complication is the increasing dependence of important sectors of Indian industry on imports of capital goods and components. Second, it assumes that large losses of employment and real income will be accepted without political resistance. The gradualists felt that neither of these assumptions was realistic and that "shock therapy" would therefore do more harm than good. Fortunately for India, the gradualists prevailed against strong outside pressure to implement radical reforms. This held India in good stead during the financial crisis that engulfed much of the rest of Asia in 1997.

<sup>7</sup>The sharp downturn in agricultural production was partly due to bad weather (though falling short of an outright drought), which also had an indirect secondary impact on industrial production.

<sup>8</sup>This was partly the result of the improvement in the balance of payments, induced by the squeeze on domestic demand and recovering exports and the fact that rising foreign exchange reserves remained largely unsterilized, thus increasing the domestic credit expansion of the central bank.

<sup>9</sup>Today, there are 64,000 commercial bank branch offices and 37,000 branches of nonbanking financial institutions (NBFIs). Of the commercial banks, 27 are in public hands, accounting for 84 percent of current deposits and 91 percent of branches. In addition, there are 35 private sector banks and 42 foreign banks. Moreover, in the regions there are 196 regional rural banks and 1,200 cooperative banks (district cooperative societies).

<sup>10</sup>In October 1988, the ceiling rate for general lending by commercial banks was replaced with a floor rate. Interest rate controls on corporate debentures were removed and the fixed lending rate of development financial institutions was converted to a floor rate in August 1991.

<sup>11</sup>In a speech at the Bank Economists' Conference on 6 October 1997.

<sup>12</sup>From 31 March 1993, banks had to classify loan assets into defined groups on the basis of objective criteria and make provisions on a specified basis against each group. Between March 1993 and March 1995, a new income recognition criterion was phased in, which does not recognize income by banks on loans or facilities with interest unpaid for more than 180 days.

<sup>13</sup>However, there is still a ceiling on interest rates to small firms, which must receive loans at the prime lending rate, preventing companies from putting a risk premium on them. Moreover, some export interest rates are also linked to the bank rate. At the same time, prudential banking regulation was strengthened.

<sup>14</sup>The stipulation is that loans up to Rs25,000 should carry an interest rate of 12 percent per annum, and for loans between Rs2,500 and Rs2 lakh, the rate should not exceed 13.5 percent per annum. About one third of total credit is made up of loans of less than Rs200,000.

<sup>15</sup>While branching of foreign banks is still more directly controlled, they are given a competitive advantage over



domestic banks by a much lower priority sector lending requirement of only 15 percent compared with the 40 percent applicable to other banks.

<sup>16</sup>In the past, banks booked interest payments irrespective of whether they were actually paid, thus rendering virtually all loans performing assets. Despite defaults, there was also no motivation to write down their value on the asset side of the balance sheet, cease booking interest on the profit and loss account, and make adequate provisions. Since bank performance was measured mainly in terms of the quantity of loans extended, banks were not reluctant to simply extend new loans when firms were getting into difficulties. The definition of NPL is now 90 days past due. If a loan is overdue more than six months, the bank cannot take it to income account, as it is immediately categorized as a substandard asset, with a requirement to make a 10 percent provisioning. After 24 months, it is classified as a doubtful asset. The secured portion requires a 20–50 percent provisioning and the unsecured portion a 100 percent provisioning. Concerning other prudential requirements, margin loans are limited to a 50 percent loan-valuation ratio.

<sup>17</sup>In order to determine the aggregate figures of NPLs in the Indian banking system, some caution is required: While NPLs are estimated using the Basle definition, the official figures significantly understate the share of NPLs. Only about half of bank credit is extended to the private sector (50 percent is lent to the Government). Therefore, the key ratio to consider is NPL out of total lending to the nongovernment sector. That, however, is at least twice as high as the official NPL ratios out of total loans, and estimated at 17 percent by some analysts. There are six categories of issues: Government (state or central) securities (carrying a zero risk weight), as well as shares, debentures, corporate bonds, and CP (all of which carry a 100 percent risk weight). Private paper is mainly issued by manufacturers. The CP market is regulated, with a rating requirement.

<sup>18</sup>Additionally, in October 1992, RBI introduced a refinance facility for banks and auction sale of securities with a buy back clause. This provides the initial step for the creation of a repo market, which would facilitate the implementation of independent monetary policy by RBI.

<sup>19</sup>In April 1992, the SLR on incremental deposits was reduced from 38.5 to 30 percent and the 10 percent CRR on incremental deposits was eliminated. In October 1992, the CRR was decreased and a target was set to cut the SLR to 25 percent by 1997. Moreover, in order to develop the call

money market, effective 26 April 1997, interbank liabilities were exempted from the SLR.

<sup>20</sup>NBFIs accept deposits from the public and provide services including loans, investments, equipment leasing, hire purchase and housing finance. Between 1981 and 1990, total deposits held by NBFIs grew by 29 percent per annum.

<sup>21</sup>The aim of this policy is to facilitate raising deposits. Currently four credit rating agencies are in operation.

<sup>22</sup>However, for NBFIs, hire purchase and lease assets become automatically nonperforming when they have been overdue for 12 months.

<sup>23</sup>Up from 8 percent, and above the 8 percent for banks.

<sup>24</sup>The maximum interest ceiling is aimed at preventing nonbanks from attracting deposits too aggressively and creating moral hazard problems.

<sup>25</sup>This requirement was due to be raised to 15 percent in April 1999.

<sup>26</sup>Also known as the 1998 Narasimhan Report as the Committee was chaired by Finance Minister M. Narasimhan.

<sup>27</sup>Claessens (1996) distinguishes two different approaches to banking sector reform in transition-countries, namely, the “new entry” approach and the “rehabilitation” approach. The difference in these two approaches lies in the decision whether to allow a new or parallel private sector banking system to emerge, or whether reform efforts should rather focus on reform and rehabilitation of the existing State-owned banking system. India has essentially opted for a combination of both approaches. State-owned banks were made to undergo significant reforms, while new banks are also being allowed to emerge. Whether India should be classified as a transition economy or simply a developing economy is a futile debate. What matters is that it started out with a majority of banks being owned by the Government and active Government intervention in the banking system. Since India has adopted policies to change this and increase the role of markets, it is in a situation similar to that of many Eastern European countries after the Iron Curtain fell. In practice, most countries have included aspects of both approaches.

<sup>28</sup>The problem of partial equilibrium analysis is that the results are based on the *ceteris paribus* assumption. But only *mutatis mutandis* analysis will be able to tell us about

the overall net result of policies, including regulation policy.

<sup>29</sup>They have acted as tool for fiscal policy due to the substantial degree of monetization of fiscal spending, or, in other words, compulsory credit extension by the banking system to the Government. They have served as a tool of monetary policy, as ceilings have been set for total credit creation, which in turn determines money supply and hence economic growth. The credit allocation policies (directed credit) have been a key tool of structural policies, including policies to support socially weak strata.

<sup>30</sup>See, for instance, Vijai Joshi and I. M. D. Little, *India's Economic Reforms 1991–2001*, Clarendon Press, Oxford, 1996, p. 111. However, in this world of imperfect information, this should not come as a surprise. As Stiglitz and Weiss (1981) have shown, with imperfect information, banks always ration credit, even in equilibrium. This means that the credit market is supply-determined. The policy implication is that governments can use the banking system as an efficient tool of economic policy. By utilizing State rationing to ensure that new purchasing power creation is only allocated to reasonably productive use (while undesirable sectors cannot obtain purchasing power), industrial and structural policies can be implemented simultaneously with monetary policy. This has proven to be highly successful in the creation of the “miracle economies” of Japan and other Asian economies.

<sup>31</sup>For instance, Stiglitz and Weiss (1981) have shown that in the presence of asymmetric information, competitive credit markets may not clear. Greenwald and Stiglitz (1986) have proven that with asymmetric information, the free market equilibrium is not constrained Pareto efficient.

<sup>32</sup>See Vijay Joshi and I. M. D. Little (1996). While the authors feel that “this is not an argument for interest rate control in a ‘long run’ equilibrium but a sequencing argument about the order of liberalization,” they concede that “the moral hazard/weak regulation argument for interest rate ceilings is not devoid of relevance” for India (p. 128). However, their argument that “liberalization is only dangerous when conducted in an environment of weak regulation and supervision of banks” is not supported by empirical evidence from countries with strong regulation, such as the UK and US, where banking crises were triggered by deregulation. A primary reason is given in the main text: the fallacy of composition when banks collateralize assets as they are competing for market share.

<sup>33</sup>Banks are weary of lending to the real estate sector because currently, tenancy laws are tough, eviction is difficult, and bankruptcy laws are not on par with international standards. Banks generally find it hard to sell the security. However, legal reform concerning the sector is currently under consideration. As to the absolute share of real estate loans, about 10 percent of total outstanding bank loans is to NBFIs, which in many cases are lending the money on to the real estate sector—a phenomenon witnessed in most countries with excessive credit expansion. Yet, in the Indian case, the degree of such use of credit seems far more modest than in Japan in the 1980s or East Asian countries in the 1990s.

<sup>34</sup>See, for instance, Joshi and Little (1996), op. cit., p. 147, footnote 50.

<sup>35</sup>For details of the mechanism used by the Bank of Japan, see Werner (1998).

<sup>36</sup>Forder (1998) demonstrates that the literature that seems to purport a correlation between central bank independence and low inflation is not based on the empirical record. See, for instance, Werner (1996, 1998) for evidence on how a central bank, when left without checks and balances, can damage national welfare severely.

<sup>37</sup>For details, see the study on macroeconomic management in Thailand that is part of this research project.

<sup>38</sup>Credit policy was announced in April and October—the so-called slack season credit policy and the crop season credit policy.

<sup>39</sup>This is the potential real GDP growth rate. According to RBI sources, the central bank currently estimates this at 7.5 percent, but realistically, in order to place the error margin on the conservative side, uses 6.5 percent as a working estimate.

<sup>40</sup>For instance, with 6.5 percent potential growth and 5 percent expected inflation, the money supply growth target would be 16 percent and the target for commercial bank credit growth 19 percent (this figure excludes public sector borrowing from banks).

<sup>41</sup>Three to four day, as well as 14 day repos (auction, fixed rate).

<sup>42</sup>Report of the Working Group on Money Supply: Analytics and Methodology of Compilation. The TWG consisted of six members. All key members (chairman, vice-chairman and secretary) came from RBI.

<sup>43</sup>“As a statistical concept, money could include certain liquid liabilities of a particular set of financial intermediaries or other issuers” (Chapter II).

<sup>44</sup>Concerning foreign liabilities, only foreign currency non-resident (bank) (FCNR [B]) repatriable fixed deposits are excluded from the domestic money stock.

<sup>45</sup>The TWG argues: “In India, as in many countries, the broad money concept has been found to be operationally useful, because of better correlation with aggregate economic activity.” From among the four monetary aggregates published by RBI, M1 and M3 are most popular “both for policy purposes and in academic exercises.” However, the inclusion of post office deposits as part of the monetary aggregates “may not be in harmony with the notion of ‘depository corporation’ since the postal department is a part of the general government.” This reasoning is accurate, because the post office is not a reserve-depositing client institution of the central bank and hence does not have the power to create credit.

<sup>46</sup>It also argued in favor of publishing a quarterly financial sector survey that aggregates assets and liabilities of financial corporations. The recommended aggregates are as follows:

*Monetary Aggregates:*

- M0 (currency in circulation+bankers’ deposits with RBI + “other” deposits with RBI), weekly;
- M1 (currency with public+demand deposits with banks + “other” deposits with RBI), fortnightly;
- M2 (M1+savings deposits with banks+CDs issued by banks+term deposits up to one year with banks), fortnightly; and
- M3 (M2+term deposits over a year+call/term borrowings from “nondepository” financial corporations by the banking system), fortnightly.

*Liquidity Aggregates:*

- L1 (M3+post office deposits), monthly;
- L2 (L1+term deposits and CDs issued by financing institutions), monthly; and
- L3 (L2+ public deposits of NBFIs), quarterly.

<sup>47</sup>The report makes the point that while bank credit to the Government is clearly identified, bank credit to the commercial sector is only defined by loans, cash credit, overdrafts, bills purchased, bills discounted, and investments in approved securities other than government securities. Bank investment in CP, shares, and debentures issued by the commercial sector are not included in the credit aggregates.

<sup>48</sup>A problem with the credit statistics is that no IMF-style monetary survey has been constructed that measures the flow from the entire financial system to the Government and the commercial sector. Concerning the question of how to handle the increasing volume of credit card use, the Group concludes that their inclusion in monetary aggregates is not necessary, since they “merely provide more convenient and efficient means of transferring demand deposits.” However, considering the credit aggregate approach, they should be included, as they mobilize deposits and thus turn potential purchasing power into effective purchasing power.

<sup>49</sup>“The tests for predictive stability showed that there has been a unidirectional short-term deviation from the long-run equilibrium path that needs to be captured in terms of other relevant variables to ensure predictive accuracy.” The TWG suggests further research on the stability of an error correction model in place of the original structural equation. That, however, has been prevented by the lack of degrees of freedom due to lack of data (only short, annual time series on GDP are available) in order to be able to formulate a robust error correction model (ECM).

<sup>50</sup>A study cited by the TWG concerning the evidence for causality (using Granger causality tests) yielded bidirectional causality. The TWG claims that an “examination of transmission channels for the period April 1993 to March 1997 found output response to expansionary monetary policy operating through interest rates to be stronger and more persistent than that of the credit channel.” However, the details of this finding and its basis are not mentioned.

<sup>51</sup>See also Thon (1998). Bryan and Cecchetti (1993) use the consumer price index excluding food and energy to measure core inflation. Their main finding was that while using the mean of the consumer price index, the relationship with the past money growth is strong. Given an RBI statement that these methods are devised specifically to have a strong relationship with the money growth and thus could be conclusion-induced, it becomes obvious that RBI also officially follows the opinion that inflation is mainly caused by a rise in the money supply. Money supply in that context is given by the money aggregate M3.

<sup>52</sup>The quantity theory of money is expressed as  $MV=PT$ , where M is the quantity of money, most often expressed as M3, V the velocity of circulation, P the price index, and T the volume of transactions. Thus M and P must vary in proportion.

<sup>53</sup>Werner (1997) tested his model in the case of Japan. He explained three anomalies: first, the velocity decline; second, the price bubbles; and third, Japanese capital outflows. He introduces a model of disaggregated credit. This study has to content itself with annual data from RBI. The best proxy to explain inflation in India was found to be “credit to the commercial sector.”

<sup>54</sup>All NBFIs must register at RBI. NBFIs must also conform to liquid asset ratios set by RBI, as well as transfer compulsory reserve funds. Moreover, RBI can also regulate the deployment of funds and credit policy of NBFIs.

<sup>55</sup>The system of ad-hoc Treasury bills as a means of financing the budget deficit was discontinued effective from 1 April 1997. It has been replaced by a system of “ways and means advances” (WMA). Under the new arrangement, the Government decides at the beginning of the year how much of an overdraft facility it will obtain from the RBI. When the overdraft exceeds the target by more than 10 days, the Government is obliged to convert the shortfall into Government bills (90-day Treasury bills), which are then auctioned in the open market. Only if private sector investors do not pick up the issue, can the Government, with the agreement of the RBI, instruct the RBI to monetize the remainder. If the private sector buys the issue, the RBI is not obliged to act as a buyer. After the year 2000, the RBI does not have to buy any under any circumstances, as it will be totally independent. The temporary accommodation by way of WMA for meeting temporary mismatches between expenditure and receipts will be outside the Reserve Bank’s support to the Government’s borrowing program during the year. The size and cost of WMA would be determined on the basis of mutual agreement between the Reserve Bank and the Government. Amounts drawn beyond the WMA limit would be treated as an overdraft. The limit of the WMA for the first six months (April–September) of the fiscal year 1997/98 was fixed at Rs12,000 crore and for the subsequent six months (October–March) of the year at Rs8,000 crore. This change of funding means that the definition of the budget deficit changes. Conventionally, it comprised changes in ad-hoc Treasury bills net of changes in cash balances. This has now been rendered redundant. Therefore, the key measure of the deficit is now in terms of gross figures. On the other hand, the monetized deficit, which mainly captures changes in the RBI’s holding of dated securities and auctioned treasury bills, will reflect the monetary impact of the Government’s fiscal operations. Although the budget has estimated a monetized deficit of Rs.16,000 crore during 1997/98, representing the

ex-ante level of Reserve Bank’s support to central Government market borrowings, the actual out-turn at the close of the year could be different, depending on the independent decisions of the RBI concerning its open market operations during the course of the year. For details, see the Economic Survey 1997–1998, Government of India. In this document, the reason for the change to the WMA system is explained as follows: “The WMA is intended to strengthen fiscal discipline, while providing greater autonomy to the RBI in its conduct of monetary policy. This would make monetary impact of fiscal operations transparent and facilitate the process of fiscal consolidation. A clear-cut WMA limit during the course of the year would put a cap on the automatic monetization of the fiscal deficit and create conducive macro economic environment for setting a “monetary target”. Besides, dismantling of ad-hoc treasury bills also entails a shift in the composition of financing of fiscal deficit toward market borrowing. However, from the operational point of view, the new arrangement of WMA would necessitate improvement in cash management by the central Government as well as debt management by the Reserve banks, so as to keep the cash deficit within the limits of WMA for the year” (p. 21).

<sup>56</sup>Paper of various maturities: 14, 28, 91, and 364 days. A 182-day bill is being introduced.

<sup>57</sup>On Japan, see Werner (1996 and 1998).

<sup>58</sup>The *Economist*, 6–12 June 1998 issue.

<sup>59</sup>FDI increased by \$400 million to reach \$4.4 billion in 1996/97. However, flows remained a fraction of FDI approvals, which exceeded \$20 billion in the past two years. FDI inflows are still only around 0.75 percent of GDP, small compared to countries such as the People’s Republic of China, Indonesia, or Malaysia, which attracted FDI inflows of some 3–4 percent of GDP in 1996.

<sup>60</sup>The only areas controlled by the Government in terms of FDI are in the advertisement and TV sectors, as well as conferences held in India.

<sup>61</sup>Foreign currency nonresident bank scheme: Since 15 August 1993, banks were allowed to accept foreign currency deposits for a minimum period of six months (up to three years). The conditions were that bank positions must be hedged, an interest ceiling is set related to London interbank offered rate (LIBOR). However, with a volume of about \$1 billion per year (less than 5 percent of bank liabilities), such activity is still of minor significance.

<sup>62</sup>FIIIs fall under the jurisdiction of Securities and Exchange Board of India (SEBI), which so far has registered more than 300.

<sup>63</sup>Foreign borrowing is not subject to minimum ratios. Lending in foreign currency is only allowed for productive activities (capital expenditures, working capital). Foreign portfolio investment by Indian residents is not allowed.

<sup>64</sup>Based on interviews at RBI. Exact figures are not published.

<sup>65</sup>A simple limit is set. This means that regulators do not have to prove the illegality of individual transactions. If an agent holds too much, a foreign exchange law violation has been demonstrated.

<sup>66</sup>During this period the spot exchange rate moved in the tight range of Rs35.50–36/\$. Six-month forward premiums remained in the range of 6 to 9 percent during 1996/97 and narrowed further in 1997/98 to 3 to 6 percent.

<sup>67</sup>This was done by net purchases of dollars amounting to \$7.8 billion, which were added to the foreign exchange reserves of RBI.

<sup>68</sup>There is another \$6 billion–\$8 billion in trade credit. Remittances (e.g., from Indians in the Gulf) to nonresident deposits amount to \$9 billion.

<sup>69</sup>The Committee was given the following terms of reference:

- to review international experience in relation to capital account convertibility;
- to recommend measures for achieving capital account convertibility;
- to specify the timing and time frame for such measures; and
- to suggest domestic policy measures and changes in institutional framework.

<sup>70</sup>When the Committee is talking about “more liberal limits with regard to borrowings from abroad,” the increased liberalization refers to direct Government intervention, which will at least partly be shifted to the central bank.

<sup>71</sup>The key reforms suggested by the Committee regarding the liberalization of capital flows over the three-year-period are as follows:

- Indian joint ventures of wholly owned subsidiaries should be allowed to invest up to \$50 million in ventures

abroad at the level of the authorized dealers in Phase 1. This should be subject to transparent and comprehensive guidelines set out by RBI;

- exporters and other exchange earners may be permitted 100 percent retention of earnings in Exchange Earners Foreign Currency accounts with complete flexibility in operation of these accounts including check writing facility in Phase 1;
- individual residents may be allowed to invest in assets and financial markets abroad up to \$25,000 in Phase 1, increasing to \$50,000 in Phase 2 and \$100,000 in Phase 3;
- banks may be given more liberal limits with regard to borrowings from abroad and deployment of funds outside India. Borrowings (short and long term) may be subject to an overall limit of 50 percent of unimpaired tier-1 capital in Phase 1. The borrowings should have a sub-limit for short-term borrowings;
- foreign direct and portfolio investment and disinvestment should be governed by comprehensive and transparent guidelines, and prior reserve bank approval at various stages may be dispensed with subject to reporting by authorized dealers (ADs); and
- all Indian financial institutions fulfilling requisite criteria should be allowed to become full-fledged ADs.

The above recommendations contribute to a liberalization of Indian capital flows and strengthen the position of the central bank. While setting a more liberalized framework, RBI will get more influence over the economy, because of its central position in the process of liberalization of capital flows. Even though prior reserve bank approval may be dispensed with regard to foreign direct and portfolio investment, the control mechanism is only shifted to a second tier. By controlling ADs, not much would change in the control system. The withdrawal from the primary market in Government securities would give RBI a further degree of freedom in managing monetary policy independently, as the central bank could then decide how much of the Government deficit should be monetized. The Government on the other side would lose a degree of freedom to manage the economy independently. Regarding that problem, the discussion should center on the question of whether or not a central bank should be independent.

<sup>72</sup>This followed recommendations of the Expert Group on Foreign Exchange Market, chaired by Shri O. P. Sodhani.

<sup>73</sup>Also, since April 1996, the aggregate gap limit, which before could not exceed \$100 million or six times the net owned funds of a bank, has been left to be determined by the individual banks, subject to RBI approval.

<sup>74</sup>Either by booking the transactions overseas or on a back-to-back basis. Up-front premiums or other charges deriving from hedge transactions can be implemented without prior approval of RBI.

<sup>75</sup>Such as range forwards and ratio range forwards. These are subject to the condition that there is no net inflow of premiums to the customers.

<sup>76</sup>This limit has been modified to include overnight investments out of nostro account balances of the banks. Finally, according to RBI, ADs have also been permitted to book forward cover for exporters and importers on the basis of a declaration of exposures supported by past performance and business projection provided the total forward contracts outstanding did not exceed the average export/import turnover of the last two years. This measure was temporarily withdrawn when foreign exchange volatility soared in mid to late 1997. Presently, forward cover is allowed only on the basis of documents that prove exposure.

<sup>77</sup>This is an ongoing program. On 23 April 1998, RBI issued a binding ordinance that all but two states have to establish an independent regulatory authority that will review the tariff structure and eventually pass tariff reform. For quantitative details of India's tariff rate, see Appendix 3.

<sup>78</sup>Inefficient State enterprises remain as privatization has been limited. A Board for Industrial and Financial Reconstruction (BIFR) was established in 1987, but it could have been more active in resolving the problems of ailing public sector enterprises. Much of the protective framework of India's previous import substitution policy remains in place. Most of the labor legislation was left intact. The politically sensitive "exit policy," both with regard to closures of plants and forced reductions in labor forces, has not been addressed. Liberalization and deregulation in the domestic economy (e.g., abolition of licensing) has proceeded further than that in India's links with the global economy (where many controls over trade and capital remain in place).

<sup>79</sup>Developing countries refer to 93 countries with population of more than one million. Trade is the simple sum of exports and imports of goods and nonfactor services on a national accounts basis. (See Brahmhatt, Srinivasan, and Murrell [1997]).

<sup>80</sup>See Dean, Desai, and Riedel (1994).

<sup>81</sup>Investment was substantial in engineering, chemical, and food and dairy products. The dominant source of the re-

cent inflows has been Mauritius, followed by US, Germany, Netherlands, Singapore and Korea. A possible explanation for the dominant role of Mauritius is the double taxation treaty between the two countries, which favors the routing of overseas foreign investment flows through Mauritius. This, therefore, may give a misleading picture, as the ultimate source country may be different.

<sup>82</sup>See, for instance, Brahmhatt, Srinivasan, and Murrell (1997). It is, however, not clear that credit ratings are actually a good indicator of globalization. They are likely to prove more reliable as indicator of *potential* opening and globalization.

<sup>83</sup>Countries with the highest ratings usually can borrow at rates of up to 50 basis points (bp) above benchmark US rates, while those with poor ratings face stiff premia of 500 bp or more over the benchmark—or cannot borrow abroad at all. For properties of the ratings and their relationship with economic performance, see, among others, Haque et al. (1996).

<sup>84</sup>See, for instance, Sachs and Warner (1995).

<sup>85</sup>See Brahmhatt, Srinivasan, and Murrell (1997).

<sup>86</sup>The standardized score is the variable less its mean divided by its standard deviation.

<sup>87</sup>Sachs and Warner (1995) searched for the reasons why East Asian countries chose more open, market-oriented strategies, while most of the rest of the developing countries, including India, did not. Their best answer lies in national security. Most Southeast Asian countries looked to the UK and the US for military defense and internal security. The US in particular, through foreign aid and technical assistance, helped to nudge Korea; Taipei, China; and Thailand into a relatively open trading regime.

<sup>88</sup>See, for instance, Brahmhatt, Srinivasan, and Murrell (1997).

<sup>89</sup>For details of India's historic development record, see, for instance, Ray (1979).

<sup>90</sup>See Jalan (1998) for a detailed review of the developments in 1997/98.

<sup>91</sup>Options for rationalizing its transfers could include (i) doing away with the fixed (70 percent for major states) loan component of central assistance to state plans, and replacing this with specific purpose loans advanced on the

basis of repayment capacity, with generous provision of technical assistance, particularly for states with weak capacity and (ii) replacing the current system of resources thinly spread across many central schemes with a much smaller set of well targeted redistributive transfers focused on the needy states and monitored by the Planning Commission.

<sup>92</sup>The fiscal deficit has been roughly constant in the region of 3–4 percent of GDP. Most of the small revenue increase has come from increased tax devolution and grants from the center. Total expenditure has increased mainly due to interest payments outweighing a small decrease in expenditure on social and economic services.

<sup>93</sup>The 10th Finance Commission recommended in 1994 a change in the devolution, and a change from individual income tax and excise duty that could be used by the states, to a system where there is a broad overall budget and the states obtain a fixed part of the revenue—a recommended 29 percent of the central Government's total tax revenues, instead of relying on its decisions about tax rates. As a result, revenues for the states have slightly increased.

<sup>94</sup>According to RBI statements, the “objectives of monetary policy in India have evolved as those of maintaining price stability and ensuring adequate flow of credit to the productive sectors of the economy.” However, RBI admitted, though “both output expansion and price stability are important objectives, (...) depending on specific circumstances of the year, emphasis is placed on either of the two. Increasingly, it is being recognized that central banks would have to target price stability since real growth itself would be in jeopardy if inflation rates go beyond the margin of tolerance.”

<sup>95</sup>The poverty alleviation strategy of the Government can be described as follows: (i) increasing the productive employment opportunities in the process of growth itself, and (ii) human resource development comprising better health and nutrition. With 80 percent of India's poor residing in rural areas, any program for poverty alleviation must be tied to the performance of agriculture. Agricultural sector annual growth has been estimated at 3.5 percent since 1991/92 creating an average of six million jobs a year. In addition, state spending on social programs has been maintained at 5.3 percent of GDP since 1991/92. The 1995/96 budget introduced antipoverty programs that required commercial banks to provide credit to small units, scheduled castes and tribes, enterprises in backward regions, and state governments to complete ongoing rural infrastructure projects. In 1996, the Government revised its methodology of measuring poverty by introducing a pov-

erty definition relative to a consumption level equivalent to a daily food intake of 2,100–2,400 calories. According to the measure, 36 percent of the population lived below the official poverty line in 1993/94, which was twice as much as the number calculated by the previous methodology. The new methodology implied a decline of 2.9 percentage points in the poverty rate since 1987/88, the date of the last official estimate. Over the same period, the real wage of unskilled agricultural labor—an alternative poverty indicator—has increased by 1 percent; however, after recovering strongly from a trough in 1991/92, the agricultural wage declined in 1994/95 and 1995/96.

<sup>96</sup>This has led to widespread power theft and misuse, which result in frequent brownouts and blackouts even in New Delhi. In total, more than 50 percent of electricity is supplied for free, while industries are overcharged.

<sup>97</sup>In a recent survey conducted by the Confederation of Indian Industry, participants regarded infrastructure constraints as a major bottleneck to growth, with one third of all responding companies being affected by power constraints.

<sup>98</sup>Export profitability would improve (while domestic profitability would go down, because of the higher cost of sale of goods in the domestic market) while administrative licensing of imports would decrease, since allocation function is transferred to the market. The import cost of raw material and components would go up, which would reduce the rate of protection of final products (high at the moment), and the rate of protection for components would rise (low at the moment).

<sup>99</sup>This is the last year for which GDP is available at current prices.

<sup>100</sup>The total debt disbursed and outstanding may not be a good measure for inter-country comparisons, as some debt may be at low interest rates. Thus the World Bank uses present value (PV) based classifications. India's debt has a high component of concessional debt, which has a lower PV than borrowings on market terms. According to the World Bank, India's PV of debt stood at only \$70.61 at the end of 1996/97. This would put India as No. 9 in terms of indebtedness among developing countries.

<sup>101</sup>Similarly, the ratio of PV of debt to GNP is lower, at 22 percent in 1996/97, putting India further ahead in the international comparison.

<sup>102</sup>World Bank (1998). The corresponding figures (in percent) for other countries in 1996 were as follows:

Thailand, 41.4; Malaysia, 27.8; Turkey, 25.7; Indonesia, 25.0; Brazil, 19.8; People's Republic of China, 19.7; Philippines, 19.3; Mexico, 19.1; and Nigeria, 18.1.

<sup>103</sup>Data for 1997 is up to September only. The data source is RBI.

<sup>104</sup>Another, less reliable indicator, is the ratio of debt service payments to current receipts. This rose from 18.7 percent in 1985/86 to 35.3 percent in 1990/91, before India's balance of payments crisis. However, it subsequently dropped, reaching 24.3 percent in 1995/96, 21.2 percent in 1996/97, and 19.5 percent in 1997/98, the latter being the lowest in more than a decade.

<sup>105</sup>Before the peso and balance of payments crisis of Mexico in June 1994, the short-term debt-foreign reserve ratio had risen to 1.7.

<sup>106</sup>Credit creation for speculative purposes has never been a major problem in postwar India. Not only is real estate-

related lending by Indian banks strictly limited, their exposure to the stock market has also been minimal. Furthermore, unlike US banks, Indian banks have never lent to hedge funds, whose declared aim is to invest borrowed funds speculatively.

<sup>107</sup>An index for the REER is calculated by first determining the effective exchange rate (EER). This simply attaches weights (usually defined by the value of imports from and exports to a given partner country  $i$  divided by total imports and total exports of the home country, i.e.  $w = (M_i + X_i)/(M_{\text{total}} + X_{\text{total}})$  with  $\sum_i w_i = 1$  (summation of the weights over the currencies of all  $i$  countries). Thus the effective exchange rate is  $EER = \sum_i eI_i w_i$  where  $eI_i$  is the exchange rate index for currency  $i$ . The real effective exchange rate simply substitutes the real exchange rate (RER) instead of the nominal exchange rate in the above equation, the determination of the former usually being done by simply scaling the nominal exchange rate by the ratio of suitable price indices, often CPIs.

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