

India in the 1980s: Weak Reforms, Fragile Growth

Arvind Panagariya*

* The author is a Professor of Economics at the University of Maryland, College Park, MD 20742. Email: panagari@econ.umd.edu. I have greatly benefited from comments by Jagdish Bhagwati on an earlier draft.

1 Introduction

While the consensus in India continues to move towards the view that liberalization has been good, that more of it is needed, and that it is not moving fast enough, the view in some scholarly circles has turned skeptical. In a recent paper on growth and economic reforms in India, J. Bradford DeLong (2001, pp. 5-6) expresses the following view:

“What are the sources of India's recent acceleration in economic growth? Conventional wisdom traces them to policy reforms at the start of the 1990s... Yet the aggregate growth data tells us that the acceleration of economic growth began earlier, in the early or mid-1980s, long before the exchange crisis of 1991 and the shift of the government of Narasimha Rao and Manmohan Singh toward neoliberal economic reforms.”

DeLong (2001, p. 6) continues:

“Thus apparently the policy changes in the mid- and late-1980s under the last governments of the Nehru dynasty were sufficient to start the acceleration of growth, small as those policy reforms appear in retrospect. Would they have just produced a short-lived flash in the pan--a decade or so of fast growth followed by a slowdown--in the absence of the further reforms of the 1990s? My hunch is that the answer is ‘yes.’ In the absence of the second wave of reforms in the 1990s it is unlikely that the rapid growth of the second half of the 1980s could be sustained.

But hard evidence to support such a strong counterfactual judgment is lacking.”

[Emphasis added.]

The paper by DeLong appears in a volume edited by Dani Rodrik. Summarizing the main message of the paper in the introduction to the volume, Rodrik (2002) carries DeLong’s skepticism to the next level. He notes,

“How much reform did it take for India to leave behind its ‘Hindu rate of growth’ of three percent a year? J. Bradford DeLong shows that the conventional account of India, which emphasizes the liberalizing reforms of the early 1990s as the turning point, is wrong in many ways. He documents that growth took off not in the 1990s, but in the 1980s. What seems to have set off growth were some relatively minor reforms. Under Rajiv Gandhi, the government made some tentative moves to encourage capital-goods imports, relax industrial regulations, and rationalize the tax system. The consequence was an economic boom incommensurate with the modesty of the reforms. Furthermore, DeLong’s back-of-the-envelope calculations suggest that the significantly more ambitious reforms of the 1990s actually had a smaller impact on India’s long run growth path. DeLong speculates that the change in official attitudes in the 1980s, towards encouraging rather than discouraging entrepreneurial activities and integration into the world economy, and a belief that the rules of the economic game had changed for good may have had a bigger impact on growth than any specific policy reforms.”

It is not entirely clear as to what *policy* message is to be gleaned from this skepticism. Neither DeLong nor Rodrik suggests that the reforms of 1990s were detrimental to the growth process. DeLong explicitly states that in the absence of the second wave of reforms in the 1990s, it is unlikely that the rapid growth of the second half of the 1980s could have been sustained. Rodrik is more tentative, emphasizing the change in official *attitudes* over the change in *policies*, possibly implying that the attitudes having changed for good, growth would have sustained even without the reforms of 1990s.

If this reading is correct, one must ask immediately how the officials signaled the change in their attitude to entrepreneurs except through a change in the policy or its implementation within the existing policy framework. It is only through policy changes such as the expansion of the Open General Licensing list at the expense of the banned and restricted import licensing lists and change in the implementation strategy as, for instance, by issuing import licenses more liberally that the government could convey the change in its attitude to entrepreneurs. By extension, the absence of further reforms would have surely signaled to entrepreneurs a reversion back to the old attitudes.

Even setting aside its policy implications, is the DeLong-Rodrik skepticism that the acceleration of reforms in the 1990s did not contribute significantly to a better outcome justified? In the following, I will argue that the answer to this question is in the negative. The skeptical view overstates the growth and understates the reforms during 1980s. The understatement of the reforms is partially the result of the reforms by stealth during the pre-1991 era. In this respect, one can argue that DeLong and Rodrik have

actually got the story in the reverse: it was the change in policy rather than visible change in the attitudes of policy makers that entrepreneurs were readily able to observe during the 1980s. Indeed, one is hard pressed to find evidence of the change in attitudes of the officials prior to the 1990s. Thus, as late as 1990, Rakesh Mohan, who served as the Economic Advisor in the Ministry of Industry at the time and struggled in its corridors to change the attitudes in favor of liberal policies, could write (Mohan and Aggarwal 1990),

“There is now little receptivity to outside ideas: the attitude is one of hostility. From a time when India was one of the favorite haunts of development economists, few academics are now interested. This has resulted partly from onerous procedures restricting the entry of researchers into India--not unlike the procedures restricting imports! *One consequence of the autarky in thinking has been the continued influence of ideas that have long been questioned elsewhere.*”

[Emphasis added.]¹

Yet another example of the general dominance of the old attitudes can be found in the care Manmohan Singh took in packaging the bold reforms of 1991 as a continuation of the old policies. A careful reader of Singh’s historic 1991 budget speech is struck by the

¹ The Mohan and Aggarwal paper was originally presented at a conference in Washington D.C., with the present author serving as the formal discussant. Reflecting the outside perceptions of the prevailing ethos among Indian policy makers at the time, I mischievously commented (Panagariya 1990, p. 740), “These are brave words for which the authors must be applauded. As I read the paper, I could not help but wonder how such a bold document could have been produced in an office of the government of India. The only explanation that came to my mind was that the government had perhaps extended the policy of setting up export-processing zones to the area of economic-policy thinking. Duty-free imports of inputs (ideas) are being permitted for use in “output” produced for foreign markets. My principle hope is that, as in the case of other export-processing zones, there will be some leakage of output to the domestic market.”

effort he made to draw a close connection between his proposals and the policies initiated by India's first Prime Minister Jawaharlal Nehru and carried forward by his grandson Rajiv Gandhi.²

Impressions aside, the substantive questions are whether the growth experience during 1980s is comparable to that in 1990s, whether liberal reforms can be credited with the higher growth achieved in the 1980s, and whether growth performance of the late 1980s would have continued into the 1990s even without the reforms undertaken during that decade. These are the question I address in the remainder of this paper.

2 The Fragility of Growth in the 1980s

Contrary to the consensus view, which traces the initial growth spurt to early 1980s, at least the faint signs of a shift in growth can be seen starting in the late 1970s. Thus, consider Table 1, which documents the average annual growth rates of net national product at factor cost according to the five-year plan periods as well as by decades.

If we consider growth rates according to the plans, the first major break from the Hindu rate of growth occurs during the Fifth Five Year Plan (1974-79) with the growth rate reaching 5 percent per annum. This was in comparison to 3.4 percent annual growth during the preceding 23 years taken together and the best prior performance of 4.1 percent during the Second Five Year Plan (1956-61). On the other hand, if we go by

² As I noted in Panagariya (1994), Singh continuously reiterated the usefulness of the past policies in the speech and repeatedly referred to the contributions of Nehru to development, while also recalling the just-assassinated former Prime Minister Rajiv Gandhi's dream of taking India into the 21st century.

growth rates over decades (see the second half of Table 1), the break in performance occurs during 1980s with the net national product growing at 5.4 percent annually.

But both of these observations are misleading. To identify the break in the performance more sharply and relate it to changes in policies, we must begin by examining the growth rates in individual years. This is done in Table 2 where I present growth rates in individual years starting with 1969-70, the first year of the Fourth Five-Year Plan. In the last two columns of this table, I show the averages of growth rates during the five and ten years ending with the year shown, respectively. For example, the first entry in the third column of the table shows the average of the annual growth rates between 1965-66 and 1969-70.³

Two important facts can be gleaned from Table 2. First, the earliest break in the growth rate occurs in 1977-78. Even though the average during the Fifth Plan had reached 5 percent, growth rates during the first three years of the plan averaged less than 4 percent and were characterized by very high variance. Second, though the average growth rate over a whole decade hit the 5 percent mark for the first time during 1980-90, year-to-year growth during this period exhibited considerable fragility.

In particular, the 7.5 percent growth rate in 1980-81 came on the heels of a 6 percent *decline* in the net national product.⁴ Consequently, despite the high growth rate

³ To calculate the averages in the first four years in this column, growth rates from years 1965-66 to 1968-69 have been used as necessary but not shown in the table.

⁴ Two key factors contributing to the large decline in the net national product in 1979-80: a severe draught, which led to a decline in agricultural production by 12.5 percent, and a large hike in the international price of oil.

in 1980-81, the level of income at the end of that year was not much higher than that reached two years earlier at the end of 1978-79. Not surprisingly, the average of the growth rates over the ten-year period spanning from 1978-79 to 1987-88 was an unimpressive 3.8 percent. Anyone looking back at the performance during the preceding 10 years in 1988 would not have been impressed and indeed would have concluded that the economy was still on the Hindu growth path. Even the average of growth rates during the seven-year period from 1981-82 to 1987-88 was below the 5 percent rate achieved in the Fifth Five Year Plan. Thus, it is the inclusion of the 7.5 percent figure from 1980-81 and exclusion of the -6 percent figure in 1979-80 that leads to the (misleading) figure of 5.6 percent growth between 1980-81 and 1988-89. If we consider the ten-year period from 1981-82 to 1990-91, the average of growth rates is 5.4 percent but it is largely the outcome of rapid growth in the last three years of the ten-year period.

In contrast, growth during the 1990s has been more robust and far less volatile. Following the June 1991 crisis, the annual growth rate quickly picked up and reached the 5 percent mark in 1992-93 and never fell below 4.2 percent subsequently. The five-year averages of growth rates during 1992-93 to 2001-02 have ranged from 5.5 to 6.7 percent (see the last five entries in the second column of Table 2). This compares with the five-year averages of growth rates ranging from 4.4 to 6 percent during 1981-91 and 3 to 6 percent during 1977-91.

To sum up the evidence, the initial break in India's growth rate can be detected in the year 1977-78 when the economy grew at 7.7 percent followed by 5.6 percent in 1978-79. But growth remained fragile and achieved an average of only 3.8 percent over the

ten-year period of 1977-78 to 1987-88. Growth picked up in a major way only in 1988-89 when it registered a whopping 10.6 percent rate. It is the 7.6 percent average annual growth achieved during the three-year period of 1988-91 that largely accounts for the 5.4 percent growth during 1981-91. Thus, growth was fragile and the economy crash-landed in 1991-92 hitting the low growth rate of 0.5 percent. After the July 1991 reform, growth exhibited greater stability, with the growth rate shifting upward by approximately 1 percent on the average during the 1990s. The performance during the post-1991 period has been decisively superior to that in the pre-1991 period.

The critical question to which I turn next is what accounts for the fragile but significantly higher growth during 1977-91, especially 1988-91, than in the preceding years. While substantially more detailed and quantitative work than done here is required for a full understanding of the determinants of the spurt, two broad factors can be identified. First, liberalization played a significant role. On the external front, policy measures such as import liberalization, export incentives and a more realistic real exchange rate contributed significantly to productive efficiency. On the domestic front, freeing up of several sectors from investment licensing reinforced import liberalization and allowed faster industrial growth than in the past. Second, borrowing on the external front allowed investment to be maintained at levels higher than what was possible otherwise and high levels of public expenditures helped boost the economy through the expansion of demand. Unfortunately, the external borrowing and high public expenditures were both unsustainable without deeper structural reforms and therefore

carried the seeds of the macroeconomic crisis of 1991 that brought the economy to a grinding halt.

Consider each of these factors in turn.⁵

3 Connection to Liberalization in the Late 1970s and 1980s

To appreciate the role of liberalization in stimulating the pre-1991 growth, it is useful to begin with a brief historical background on import controls in India. In their pioneering study, Bhagwati and Desai (1970) provide the most comprehensive and systematic documentation of the wide sweep of the interventionist policies that had come to exist by late 1960s. As they note, general controls on all imports and exports had been present since 1940. After independence, import controls were relaxed through the expansion of the Open General Licensing (OGL) list in a stop-go fashion. But a foreign exchange crisis in 1956-57 put an end to this phase of liberalization and comprehensive import controls were restored and maintained until 1966. In June that year, under pressure from the World Bank, India devalued the rupee from 4.7 rupees to 7.5 rupees per dollar. The 57.5 percent devaluation was accompanied by some liberalization of import licensing and cuts in import tariffs and export subsidies for approximately a year. But by

⁵ In passing, some role of agriculture may also be mentioned in helping the high growth rates during 1988-91. Though the years 1986-87 and 1987-88 were a disaster for agriculture due to bad weather, the subsequent three years, especially 1988-89, produced unusually high agricultural growth. According to the data in the *Economic Survey 2002-03* (Tables 13 and 16), agriculture and allied activities (forestry and logging, fishing, mining and quarrying), which accounted for a little more than one third of the GDP, grew at an annual average rate of 7.3 percent during 1988-91.

1968, intense domestic reaction to the devaluation led India to turn inward with vengeance.⁶ Almost all liberalizing initiatives were reversed and import controls tightened. This regime was consolidated and strengthened in the subsequent years and remained more or less intact until the beginning of a period of phased liberalization in the late 1970s.

According to Pursell (1992), the severity of the controls was reflected in a decline in the proportion of non-oil and non-cereals imports in the GDP from the low level of 7 percent in 1957-58 to the even lower level of 3 percent in 1975-76. Since consumer goods imports had been essentially banned, the incidence of this decline was principally borne by machinery, raw material and components. The impact on the pattern of industrialization and efficiency was visible. Pursell (1992, pp. 433-4) offers a vivid description of the costs to the economy in the following words:

“During this period, import-substitution policies were followed with little or no regard to costs. They resulted in an extremely diverse industrial structure and high degree of self-sufficiency, but many industries had high production costs. In addition, there was a general problem of poor quality and technological

⁶ Bhagwati and Srinivasan (1975, Chapter 10, p. 153) offer a fascinating political economy analysis of the 1966 devaluation. In a key concluding paragraph, they note, “The political lesson seems particularly pointed with regard to the use of aid as a means of influencing recipient policy, even if, in some objective sense, the pressure in the ‘right’ direction. The Indian experience is also instructive for the political timing of devaluation: foreign pressure to change policies, if brought to bear when a government is weak (both because of internal-structural reasons and an impending election, which invariably prompts cautious behavior) can be fatal.” Had the World Bank heeded this advice, it could have avoided many mistakes it made pushing structural adjustment programs at wrong times in many countries.

backwardness, which beset even low-cost sectors with comparative advantage such as the textiles, garment, leather goods, many light industries, and primary industries such as cotton.”

Pursell (1992, p. 434) continues,

“Although import substitution reduced imports of substitute products, this was replaced by increased demand for imported capital equipment and technology and for raw materials not domestically produced or in insufficient quantities. During the 1960s and the first half of the 1970s, the former demand was suppressed by extensive import substitution in the capital goods industries and attempts to indigenize R&D. By about 1976, however, the resulting obsolescence of the capital stock and technology of many industries was becoming apparent, and a steady liberalization of imports of capital equipment and of technology started soon after.”⁷

Two factors facilitated the emergence of the liberalization phase. First, as already hinted in the above quote from Pursell (1992), by mid 1970s, industrialists themselves were beginning to find the strict regime counterproductive and started pressing the government for the relaxation of controls. A domestic lobby in favor of liberalization of

⁷ Jagdish Bhagwati, who, upon his return from study abroad in the early 1960s, initially shared in the intellectual attitudes that helped India turn inward but quickly changed his mind in light of the realities on the ground, tells an anecdote that aptly captures the deleterious impact protectionist policies had on the quality of the Indian products. In one of the letters to Harry Johnson, written during his tenure at the Indian Statistical Institute in the early 1960s, Bhagwati happened to complain about the craze he observed in India for everything foreign. Harry Johnson promptly responded that if the quality of the paper on which Bhagwati wrote his letter was any indication of the quality of homemade products, the craze for the foreign seemed perfectly rational to him!

imports of raw materials and machinery had come to exist. At the same time, in the case of raw materials and machinery imports that had no import substitutes, there was no counter lobby. Second, improved export performance and remittances from overseas workers in the Middle East had led to the accumulation of a comfortable level of foreign-exchange reserves. This lent confidence to policy makers and bureaucrats who had lived in the perpetual fear of a balance of payments crisis.

In this background, consider successively the reforms undertaken starting the late 1970s and their impact on the economy.

3.1.1 Reforms During Late 1970s and 1980s

In view of their quiet nature, “liberalization by stealth” is an apt characterization of the pre-1991 reforms. Nevertheless, it gives the misleading impression that these reforms were marginal or inconsequential to the growth performance. The prevailing regime rested on a complex system of licensing but involved no explicit *quantitative* import restrictions. Therefore, liberalization could be affected merely through a liberal grant of the licenses, without any policy announcements. And given the generally protectionist and anti-liberalization ethos in the country, that is the route Indian politicians chose.

Though the process of reforms had been initiated in the late 1970s, the major liberalizing steps were taken only during the second half of the 1980s. Indeed, as we will see below, during this period, the policy had begun to take a somewhat activist form. In turn, the external sector registered a dramatic improvement in the performance. Exports,

which had grown annually at a paltry 1.2 percent rate during 1980-85, registered the hefty annual growth of 14.4 percent during 1985-90 (Table 3). Growth also accelerated significantly during the late 1980s.

Broadly, five liberalizing steps can be identified. First, the OGL list was steadily expanded. Having disappeared earlier, this list was re-introduced in 1976 with 79 items on it. By April 1990 when the import policy covering years 1990-93 was issued, the list came to have 1,339 items on it. In 1987-88, 30 percent of all imports entered under OGL. The inclusion of an item in the OGL list was usually accompanied by an “exemption,” which amounted to a tariff reduction. In almost all cases, the items on the list were machinery or raw materials for which no substitutes were produced at home.

The second source of liberalization was the decline in the share of canalized imports. Canalization refers to monopoly rights of the government for the imports of certain items. Between 1980-81 and 1986-87, the share of these imports in total imports declined from 67 to 27 percent. Over the same period, canalized non-POL (petroleum, oil and lubricants) imports declined from 44 to 11 percent of the total non-POL imports. This change significantly expanded the room for imports of machinery and raw materials by entrepreneurs.⁸

Third, several export incentives were introduced or expanded, especially after 1985, which helped expand imports directly when imports were tied to exports and indirectly by relaxing the foreign exchange constraint. Replenishment (REP) licenses,

which were given to exporters and could be freely traded on the market, directly helped relax the constraints on some imports. Exporters were given REP licenses in amounts that were approximately twice their import needs and, thus, provided a source of input imports for good sold in the domestic market. The key distinguishing feature of the REP licenses was that they allowed the holder to import items on the restricted (and therefore those outside of the OGL or canalized) list and had domestic import-competing counterparts. Even though there were limits to the import competition provided through these licenses, as exports expanded, the volume of these imports expanded as well. This factor became particularly important during 1985-90 when exports expanded rapidly.

In addition to a substantial widening of the coverage of products available to exporters against replenishment licenses, Joshi and Little (1994) list the following export incentives introduced between 1985-86 and 1989-90, referring to them as the "quasi-Southeast Asian style" reforms:

- In the 1985 budget, 50 percent of business profits attributable to exports were made income tax deductible; in the 1988 budget this concession was extended to 100 percent of export profits.
- The interest rate on export credit was reduced from 12 to 9 percent.
- In October 1986, duty-free imports of capital goods were allowed in selected "thrust" export industries. In April 1988, access for exporters to imported capital

⁸ The decline in the share of canalized imports was due to increased domestic production of food grains, cotton and crude oil and reduced world prices of canalized imports such as fertilizers, edible oils, nonferrous metals and iron and steel.

goods was increased by widening the list of those available on OGL and by making some capital goods available selectively to exporters without going through "indigenous clearance."

- Exporters were given an assurance that the incentives announced in the export-import policy would not be reduced for a period of three years.

The fourth source of liberalization was a significant relaxation of industrial controls beginning in 1985. Traditionally, the industrial licensing system applied to all firms with fixed capital in excess of 3.5 million rupees. This meant that investment by new firms as well as capacity expansions by the existing firms beyond this limit required a license. In March 1985, 25 product groups were freed from licensing. In December 1985, another 22 products were removed from the list provided plants were located in the designated backward areas. In January 1986, 28 industry groups were broad-banded meaning that they were defined more broadly so as to allow the firms in them to expand into related products without permission from the licensing authority. Finally, in 1986, firms that reached 80 percent capacity utilization were assured authorization to expand capacity up to 133 percent of the maximum capacity utilization reached in any of the previous years.

The relaxation of industrial controls reinforced the ongoing import liberalization. In the presence of these controls, firms had to have an investment license before they could approach the import-licensing authority for machinery and raw-material imports. For products freed of industrial licensing, this layer of restrictions was removed. More importantly, under industrial licensing, even for products on the OGL, machinery imports

were limited by the approved investment capacity and raw material imports by the requirements implied by the production capacity. With the removal of licensing, this constraint was removed.

The final and, indeed, the most important source of liberalization was a realistic exchange rate. At least during the years of rapid growth, there is strong evidence of nominal depreciation of the rupee correcting the overvaluation of the real exchange rate. According to the charts provided in Pursell (1992), both the import-weighted and export-weighted real exchange rates depreciated steadily from 1974-75 to 1978-79 with the approximate decline of the former being 30 percent and of the latter 27 percent. It bears reminding that this was also a period of rapid export expansion (see below) and foreign exchange reserves accumulation that paved the way for import liberalization subsequently. The years 1977-79 also registered the hefty average annual net national product growth of 6.5 percent. The real exchange rate appreciated marginally in the following two years, stayed more or less unchanged until 1984-85 and once again depreciated steadily thereafter.

Joshi and Little (1994) attribute a considerable part of the success in export expansion during the second half of the 1980s to the real exchange rate management. Observing that starting in 1986-87, Indian exports grew considerably faster than world trade and as fast as the exports of comparable developing countries, they offer the following assessment (Joshi and Little 1994, Chapter 7, p. 183):

“The real exchange rate was again a critical factor as it depreciated by about 30 percent from 1985/86 to 1989/90. Since Indian inflation in this period rose faster

than that of its trading partners, a devaluation of the nominal effective exchange rate of about 45 percent was required and achieved...This reflects a considerable change in the official attitude toward exchange rate depreciation. The change had already begun in 1983, but during 1983 and 1984 action was restricted to keeping the real effective exchange rate constant. From 1985 onward exchange rate policy became more active though the fiction of a fixed basket-peg was still maintained. From a presentational point of view, the sharp devaluation of the U.S. dollar, which began in 1985, helped a great deal. A devaluation of the real effective exchange rate could be secured by keeping the exchange rate or the rupee against the dollar constant, and in fact there was a mild depreciation in terms of the dollar as well. Cabinet approval was sought and obtained to achieve the real effective exchange rate prevailing in 1979 (thus offsetting the competitive disadvantage that had been suffered since then). When that objective had been reached, cabinet approval was again obtained to devalue the rupee further to maintain the competitive relationship vis-à-vis a narrower range of developing-country 'competitor countries,' many of whom depreciated in real terms along with the U.S. dollar in 1986. This was a sensible exchange rate policy. Policymakers recognized that a real exchange rate devaluation was necessary though the terms of trade were modestly improving, because the debt-service burden had increased

and a faster growth of imports was to be expected in the wake of industrial and import liberalization.”⁹

3.1.2 Impact of the Reforms

The impact of reforms could be seen most clearly on trade flows. Pursell (1992, p. 441) states this succinctly and emphatically, “The available data on imports and import licensing are incomplete, out of date, and often inconsistent. Nevertheless, whichever way they are manipulated, they confirm very substantial and steady import liberalization that occurred after 1977-78 and during 1980s.” He goes on to note that imports outside of canalization and licensing (i.e., those mainly on the OGL) increased from 5 percent of total imports in 1980-81 to 30 percent in 1987-88. The share of non-POL imports in the remaining imports increased from 8 percent to 37 percent over the same period.

Quite apart from this compositional change, there was considerable expansion of the level of imports during 1970s and the second half of 1980s. Increased growth in exports due to the steady depreciation of the real exchange rate and remittances from the overseas workers in the Middle East had begun to relax the balance of payments constraint during the first half of the 1970s, leading to the expansion of non-oil imports at the annual rate of 17.8 percent (Table 3). This rapid expansion continued during the second half of the 1970s with non-oil imports registering an impressive 15 percent annual

⁹ This view of the government taking an activist role, shared by the author, is in contrast to the view taken by Srinivasan and Tendulkar (2003, p. 23): “India’s exports increased over this period of piecemeal reforms, but this was more due to a real exchange rate depreciation mostly as a result of exogenous forces than due to an active policy of nominal devaluation or due to explicit policy reforms aimed at reducing trade barriers.”

growth rate over the ten-year period spanning 1970-79. In contrast, in the subsequent five years when the real exchange rate appreciated slightly and the income growth slowed down, non-oil imports expanded only 7.1 percent per annum (Table 3). Again, during 1985-90, they grew 12.3 percent. Thus, liberalized licensing rules flexibly accommodated the increased demand for imports during the fast-growth periods.

Alternatively, the impact of liberalization can be seen in the movement in the imports-to-GDP ratio. Table 4 shows the non-oil imports as a proportion of the GDP. In 1976-77, this ratio had bottomed out at 4.1 percent. Starting in 1977-78, fortuitously the year in which growth in the net national product showed a break and the real exchange rate depreciated substantially, this ratio began to rise, reaching 5.1 percent in 1980-81. In the subsequent years, it showed a moderate downward trend reaching 4.8 percent in 1984-85. In 1985-86, when the Rajiv Gandhi era reforms were kicked off, the ratio began to climb up steadily again until it reached 6 percent in the year 1989-90. This rise is especially important since net national product itself grew at an average annual rate of 5.8 percent during these years.

Citing extensive and systematic evidence, I have argued in Panagariya (2003) that openness is a necessary condition for sustained rapid growth. From the discussion and evidence above, it should be clear that India's pre-1991 experience is no exception to this proposition. We may squabble about the magnitude of trade and industrial liberalization during these years. But it is difficult to overlook the sizable expansion of non-oil exports and imports in the years of high growth without which growth would have been scuttled.

The changes in the investment and import licensing policies and the real exchange rate led to considerable response of the industry and trade.

The impact of reforms can also be seen in terms of higher industrial growth. Discussing the changes in the domestic industrial policy, Desai (1999, p. 21) notes, “The changes were complex and arbitrary, but they led to an acceleration of industrial growth from 4.5 per cent in 1985-86 to a peak of 10.5 per cent in 1989-90.” According to the *Economic Survey 2002-03* (Table 16), manufacturing, construction, electricity, gas and water supply, which together accounted for a little less than a quarter of the GDP, grew at an average annual rate of 8.9 percent during 1988-91.

According to Goldar and Renganathan (1990), the import penetration ratio in the capital goods sector rose from 11 percent in 1976-77 to 18 percent in 1985-86. This trend appears to have continued subsequently. Malhotra (1992) notes that the incremental capital-output ratio, which had reached as high as 6 at times, fell to approximately 4.5 during 1980s. These observations are consistent with the finding by Joshi and Little (1994) that the productivity of investment increased during 1980s, especially in private manufacturing.

But more systematically, Chand and Sen (2002) have recently studied the relationship between trade liberalization and productivity in manufacturing using 3-digit industry data spanning 1973-88 econometrically. They take 30 industries, which accounted for 53 percent of gross value added and 45 percent of employment in manufacturing over this period. These industries divide approximately equally among consumer, intermediate and capital goods. They measure protection by the proportionate

wedge between the Indian and U.S. price and estimate total factor productivity growth (TFPG) in the three industry groups averaged over three non-overlapping periods: 1974-78, 1979-83 and 1984-88. They then relate this productivity growth to liberalization.

Table 6 presents the findings of Chand and Sen (2002, Table 3). Consistent with the discussion in the previous subsection, according to their measure also, protection declines over the sample period in intermediate and capital goods sectors but not consumer goods sector. Moreover, there is a significant improvement in TFPG in all three sectors in 1984-88 compared with the two earlier periods. Thus, the jump in TFPG coincides with the liberalization in capital and intermediate goods.

Chand and Sen (2002) do some further tests by pooling their sample and employing fixed-effects estimator to allow for intrinsic differences across industries with respect to the rate of technological progress. Their estimates show that on average one percentage point reduction in the price wedge leads to 0.1 percent rise in the total factor productivity. For the intermediate goods sector, the effect is twice as large. The impact of the liberalization of the intermediate goods sector on productivity turns out to be statistically significant in all of their regressions.

4 Unsustainable External Borrowing and Public Expenditure

But the liberalization of industry and trade tell only a part of the story. Another factor responsible for the rapid growth during the pre-1991 era was borrowing abroad and rising government expenditures at home.

The external borrowing helped bridge the considerable gap between exports and imports. Despite faster growth in exports than imports in the second half of 1980s, due to a sizable initial gap, the absolute difference between imports and exports remained large. Based on the RBI trade data on the balance of payments accounts, which differ significantly from the customs (DGCIS) data, total imports-to-GDP ratio exceeded the total exports-to-GDP ratio by 2.5 to 3 percentage points throughout the 1980s.¹⁰ Accordingly, the higher level of imports was financed partially through external borrowing.

Viewed another way, during 1985-90, on average, gross domestic savings and investment were 20.4 and 22.7 percent of the GDP, respectively. With foreign investment being negligible and annual foreign aid staying unchanged at approximately \$400 million through much of the decade, it was largely foreign borrowing that made up the difference between savings and investment.

While foreign borrowing, thus, helped the economy achieve a higher rate of investment and imports, it also led to a rapid accumulation of foreign debt, which rose from 20.6 billion dollars in 1980-81 to \$64.4 billion in 1989-90 (Joshi and Little, 1994, p. 186). The accumulation was especially rapid during the second half of the decade with long-term borrowing rising from the annual average of \$1.9 billion during 1980-81 to 1984-85 to \$3.5 billion from 1985-86 to 1989-2000. Moreover, “other” capital flows and

¹⁰ Imports such as offshore oilrigs and defense expenditures that do not go through the customs but do enter the balance of payments presumably account for the discrepancy.

errors and omissions turned from a large negative figure in the first half of the decade into a positive figure indicating an increase in the short-term borrowing in the latter period. The external-debt-to-GDP ratio rose from 17.7 percent in 1984-85 to 24.5 percent in 1989-90. Over the same period, the debt-service ratio rose from 18 to 27 percent.

The growth in debt was also accompanied by a rapid deterioration in the “quality” of debt between 1984-85 and 1989-90. The share of private borrowers in the total long-term debt increased from 28 to 41 percent. The share of non-concessional debt rose from 42 to 54 percent. The average maturity of debt declined from 27 to 20 years. Thus, while external debt was helping the economy grow, it was also moving it steadily towards a crash.

A similar story was also evolving on the internal front. While external borrowing helped relieve some supply side constraints, rising current domestic public expenditures provided the stimulus to demand, particularly in the services sector. Joshi and Little (1994), as also Srinivasan and Tendulkar (2003), assign much of the credit for the growth during 1980s to this demand-side factor. Defense spending, interest payments, subsidies and the higher wages following the implementation of the Fourth Pay Commission recommendations fueled these expenditures. Table 5, which reproduces Table 7.5 in Joshi and Little (1994), documents the magnitude of the expansion of current government expenditures at the center and state levels combined during the second half of the 1980s. During the first half of the 1980s, these expenditures averaged 18.6 percent. In the second half, they rose to average 23 percent with the bulk of the expansion coming from

defense, interest payments and subsidies, whose average rose from 7.9 to 11.2 percent of the GDP.

As with the external borrowing, high current expenditures proved unsustainable. They manifest themselves in extremely large fiscal deficits. As Table 5 shows, combined fiscal deficits at the central and state levels, which averaged 8 percent in the first half of the 1980s went up to 10.1 percent in the second half. Continued large deficits of this magnitude led to a build up of very substantial public debt with interest payments accounting for a large proportion of the government revenues. They also inevitably fed into the current account deficits, which kept rising steadily until they reached 3.5 percent of the GDP and 43.8 percent of exports in 1990-91. The eventual outcome of these developments was the June 1991 crisis.

5 Concluding Remarks

I have argued that the growth spurt prior to 1991 was fragile and volatile. There was a jump in the growth rate during 1977-79, massive decline in 1979-80, a jump again in 1980-82, return to the Hindu rate during 1982-88 except 1983-84, climb up again in 1988-91 and crisis in 1991-92. This volatility in the growth pattern itself raises doubts about the sustainability of a 5 percent plus growth rate over long haul. The 1991 crisis only confirmed the fundamental weakness of the underlying forces *ex post*.

In contrast, growth during 1990s has been more robust, exhibiting far less volatility. Whereas in the late 1980s, many observers of India were betting on a crisis any time, there are few takers of such a bet today. Despite well-known vulnerabilities

resulting from fiscal deficits that are as large today as in the late 1980s and slow pace of banking reforms, few pundits are predicting an external crisis today. The external-debt-to-GDP ratio has been declining and foreign-exchange reserves at more than \$80 billion exceed the currency in circulation. Indeed, in a recent careful examination of India's vulnerability to external crises, Ahluwalia (2002) points to several key weaknesses in fiscal and banking areas and emphasizes the urgency of tackling them. But he stops well short of predicting a crisis. Indeed, since reforms have continued in spite of many hiccups and are likely to continue in the future and since the dynamic, fast-growing information technology sector is poised to grow into a sizable proportion of the economy in the coming years, long-term-growth prospects can get only better.

At the same time, significantly higher average rate of growth during the 1980s *relative* to that in the preceding decades was not achieved without important policy changes. While the reforms required have been so sweeping that there remains a long way to go, it cannot be denied that the process began in the 1980s. While the changes in the 1980s were undoubtedly small in relation to those in the 1990s, they were significant when compared with the regime prevailing until the 1970s. Recall that a key message of the theory of distortions is that the larger the initial distortion, the greater the benefit from its relaxation. Therefore, the large response to limited reforms is quite consistent with at least the static theory of distortions. One suspects that under plausible assumptions, this result would translate into larger growth responses to larger initial distortions in the endogenous growth models. In this respect, DeLong's observation that the elasticity of growth to reforms was higher in the 1980s than in the 1990s is not altogether inconsistent

with theory, though the analysis in this paper leads to the conclusion that weak reforms essentially produced fragile growth that was unsustainable without more concerted reforms.

DeLong's contention that we lack hard evidence to support the view that rapid growth of the second half of the 1980s could not be sustained without the second wave of reforms in the 1990s is untenable. I have argued that pre-1991 growth was itself fragile and sporadic. And even then, it ended in a balance of payments crisis. The scenario of the second half of 1980s involving large amounts of external borrowing could not have been sustained. Absent that, more substantial reforms that improved efficiency, brought foreign investment to the country and allowed sectors such as information technology to grow constituted the only way to avoid the return to the Hindu rate of growth of the first 30 years of independence.

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Table 1: Average Annual Growth Rates by Plans at Constant 1993-94 Prices (percent)

PERIOD	NET NATIONAL PRODUCT	PER-CAPITA NET NATIONAL PRODUCT
ACCORDING TO FIVE-YEAR PLANS		
FIRST PLAN (1951-56)	3.6	1.8
SECOND PLAN (1956-61)	4.1	2
THIRD PLAN (1961-66)	2.5	0.2
THREE ANNUAL PLANS (1966-69)	3.8	1.5
FOURTH PLAN (1969-74)	3.3	1
FIFTH PLAN (1974-79)	5	2.7
ANNUAL PLAN (1979-80)	-6	-8.3
SIXTH PLAN (1980-85)	5.4	3.2
SEVENTH PLAN (1985-90)	5.8	3.6
TWO ANNUAL PLANS (1990-92)	3	0.9
EIGHTH PLAN (1992-97)	6.7	4.6
NINTH PLAN (1997-2002)	5.5	3.6
ACCORDING TO DECADES		
1951-61	3.9	1.9
1961-71	3.5	1.3
1971-81	3.1	0.8
1981-91	5.4	3.2
1991-01	5.5	3.5
Memo		
1951-74	3.4	1.3
1977-91	4.9	2.7
1992-02	6.1	4.1

Table 2: Annual Growth Rates

Year	Average of Five Years		Average of Ten Years
	Actual	Ending with the Year*	Ending with the Year**
1969-70	6.7	2.7	3.7
1970-71	5.1	4.6	3.5
1971-72	0.6	4.6	3.3
1972-73	-0.8	2.8	3.1
1973-74	4.8	3.3	3.1
1974-75	1.2	2.2	2.4
1975-76	9.5	3.1	3.8
1976-77	0.9	3.1	3.9
1977-78	7.7	4.8	3.8
1978-79	5.6	5.0	4.1
1979-80	-6	3.5	2.9
1980-81	7.5	3.1	3.1
1981-82	5.8	4.1	3.6
1982-83	2.3	3.0	3.9
1983-84	7.6	3.4	4.2
1984-85	4	5.4	4.5
1985-86	4.3	4.8	4.0
1986-87	3.9	4.4	4.3

1987-88	3.4	4.6	3.8
1988-89	10.6	5.2	4.3
1989-90	6.8	5.8	5.6
1990-91	5.4	6.0	5.4
1991-92	0.5	5.3	4.9
1992-93	5	5.7	5.2
1993-94	5.8	4.7	5.0
1994-95	7.1	4.8	5.3
1995-96	7.3	5.1	5.6
1996-97	8.2	6.7	6.0
1997-98	4.6	6.6	6.1
1998-99	6.5	6.7	5.7
1999-00	6.2	6.6	5.7
2000-01(Provisional Estimate)	4.2	5.9	5.5
2001-02 (Quick Estimate)	6.2	5.5	6.1

*For example, the first entry in this column shows the average of the growth rates over 1965-70. To calculate the averages in the first four years in this column, growth rates from years 1965-69 have been used as appropriate but not shown.

** For example, the first entry in this column shows the average of the growth rates over 1960-70. To calculate the averages in the first nine years in this column, growth rates from years 1960-69 have been used as appropriate but not shown.

Source (Tables 1 and 2): Economic Survey, 2002-03, Table 12 and the author's calculations

Table 3: Average Annual Growth Rates of Non-oil Merchandise Exports and Imports in Current Dollars

Year	Exports	Imports
1970-71 to 1974-75	16.2	17.8
1975-76 to 1979-80	13.7	12.3
1980-81 to 1984-85	1.2	7.1
1985-86 to 1989-90	14.4	12.3

Source: Author's calculations from the data in RBI Statistical Handbook, 2001 (Table 115). RBI cites its source as the Directorate General of Commercial Intelligence and Statistics (DGCIS).

Table 4: Merchandise non-oil exports and imports as percent of GDP

Year	Non-oil Exports as Percent of GDP	Non-oil Imports as Percent of GDP
1970-71	3.3	3.3
1971-72	3.3	3.3
1972-73	3.6	3.1
1973-74	3.8	3.7
1974-75	4.3	4.3
1975-76	4.8	4.9
1976-77	5.7	4.1
1977-78	5.3	4.4
1978-79	5.2	4.7
1979-80	5.3	4.9
1980-81	4.7	5.1
1981-82	4.5	5.0
1982-83	4.0	4.6
1983-84	3.7	5.0
1984-85	4.0	4.8
1985-86	3.7	5.3
1986-87	3.9	5.6
1987-88	4.2	5.1
1988-89	4.7	5.7
1989-90	5.5	6.0

Source: Calculated from data on exports, imports, GDP and exchange rates in the RBI Statistical Handbook, 2001. RBI cites its source of the trade data as the Directorate General of Commercial Intelligence and Statistics DGCIS.

Table 5: Fiscal Indicators: 1980-81 to 1989-90
(As percent of GDP)

	Average 1980-81 to 1984-85						Average 1985-86 to 1989-90	
	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1989-90	1989-90
Revenue	18.1	19.5	20	20.1	19.6	20.9	19.5	20
Current expenditure	18.6	21.4	22.6	23.1	22.7	24.8	23.9	23
Defense	2.7	3.3	3.8	4	3.8	3.6	-	3.7
Interest	2.6	3.3	3.6	4	4.2	4.6	4.8	3.9
Subsidies*	2.6	3.3	3.4	3.5	3.6	4.2	-	3.6
Capital expenditure	7.5	7.4	8.3	7	6.3	6.5	6	7.1
Total expenditure	26.1	28.8	30.9	30.1	29	31.3	29.9	30.1
Fiscal deficit	8	9.3	10.9	10	9.4	10.4	10.4	10.1

*CSO Estimates.

Source: Government of India, Ministry of Finance (various issues) *Indian Economic Statistics--Public Finance* [Joshi and Little (1994, Table 7.5)]

Table 6: Changes in Protection and Total Factor Productivity Growth (TFPG) by Industry Classification (unweighted averages)

Industry Classification	Consumer Goods	Intermediate Goods	Capital Goods
Protection: (percent change)			
1974-78	4.5	0.4	-1.8
1979-83	-1.1	1.4	1.7
1984-88	-0.4	-5.4	-4.3
TFPG (percent)			
1974-78	-0.5	-1.2	-1.6
1979-83	-1.2	-3.1	-1.5
1984-88	5.1	4.8	3.7

Source: Chand and Sen (2002)