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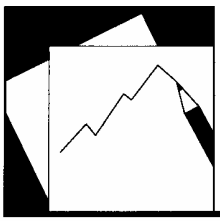

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India in the 1980s and 1990s: A Triumph of Reforms

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India in the 1980s and 1990s: A Triumph of Reforms

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Abstract

Bradford DeLong and Dani Rodrik have argued that reforms in India cannot be credited with higher growth because the growth rate crossed the 5 percent mark in the 1980s, well before the launch of the July 1991 reforms. This is a wrong reading of the Indian experience for two reasons. First, liberalization was already under way during the 1980s and played a crucial role in stimulating growth during that decade. Second, growth in the 1980s was fragile and unsustainable. The more systematic and systemic reforms of the 1990s, discussed here in detail, gave rise to more sustainable growth. The paper concludes by explaining why the growth rate in India nevertheless continues to trail that of China.

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I. INTRODUCTION

While public opinion in India continues to move toward the view that liberalization has been good, that more of it is needed, and that its pace must be accelerated, the view in some scholarly and policy circles has turned skeptical. It is being pointed out that the average annual growth rate of gross domestic product (GDP) hit the 5.6 percent mark in the 1980s, well before the launch of the July 1991 reforms. Alternatively, the growth rate in the 1990s was not much higher. Therefore, liberalization cannot be credited with having made a significant difference to growth in India.[2]

The key contribution expressing this skepticism has come from economic historian J. Bradford DeLong (2001, pp. 5–6) who writes in an article on growth in India:

> "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 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

[2] While the documentation below is limited to scholarly writings, many opponents of reforms in the political arena, including some in the Congress party, share this view.

> 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 the 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* about the change in *policies*, possibly implying that the attitudes having changed for good, growth would have been sustained even without the reforms of the 1990s.

This interpretation itself raises two immediate questions: Is there evidence demonstrating that official attitudes changed significantly during the 1980s and if so how was this change conveyed to the public? Most observers of India are likely to question the view that there had been a significant shift in official attitudes in the 1980s. Indirect evidence of the general dominance of the old attitudes can be found in the care Manmohan Singh took in packaging the bold reforms of 1991, describing them as a continuation of the old policies. A careful reader of Singh's historic 1991 budget speech is bound to be struck by the 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. 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 twenty-first century.

More directly, commenting on a previous draft of this paper, N.K. Singh who has been directly involved in policymaking in India during the 1980s as well as the 1990s and is currently Member, Planning Commission wrote the following to the author:

> "I am somewhat intrigued by the statement of Delong & Rodrik stressing change in official attitude over change in policies implying that if attitude changed for good, growth would have been sustained even without reforms in the 1990s. Even today, more than change in policies we are struggling with change in attitude. The first reflex of any observer of Indian economy or potential foreign investor would be that while policies may not be so bad it is the attitude particularly of official ones which becomes the Achilles heel. In fact the 80s and even the 90s have seen far-reaching change in policies which have not translated themselves fully into changes in attitudes. This attitudinal change indeed constitutes a major challenge in our reform agenda."

But even conceding that a change in attitude on the part of officials had taken place, one must confront the question how officials could have conveyed this change to

entrepreneurs without a change in the policy or its implementation? 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 such as, for instance, by issuing import licenses more liberally so that officials could convey the change in their attitudes to entrepreneurs. By extension, the absence of further reforms would have surely signaled to entrepreneurs a reversion back to the old attitudes.

The policy versus attitude change issue apart, the key question is whether minor changes in either policy or attitudes in the 1980s produced the same outcome as the major reforms in the 1990s. In this paper, I demonstrate that the skeptical view offered by Rodrik and DeLong overstates the growth and understates the reforms during 1980s. Growth during the 1980s was fragile, highly variable from year to year, and unsustainable. In contrast, once the 1991 reforms took root, growth became less variable and more sustainable with even a slight upward shift in the mean growth rate.

At the same time, reforms played a significant role in spurring growth in the 1980s. The difference between the reforms in the 1980s and those in the 1990s is that the former were limited in scope and without a clear road map whereas the latter were systematic and systemic.[3] This said the reforms in the 1980s must be viewed as precursor to those in the 1990s rather than a part of the isolated and sporadic liberalizing actions during the 1960s and 1970s, which were often reversed within a short period. The 1980s reforms proved particularly crucial to building the confidence of politicians regarding the ability of policy changes such as devaluation, trade liberalization, and delicensing of investment to spur growth without disruption. It is questionable, for example, whether the July 1991 package would have been politically acceptable in the absence of the experience and confidence in liberal policies acquired during 1980s.

Before I move to the next section, let me note that the view that liberal economic policies did not make a significant contribution to the shift in growth during the 1980s extends well beyond reform skeptics and includes some of the ardent advocates of reform.[4]

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[3] This is not unlike the stop-go reforms in China though the latter did go much farther during the 1980s, especially in the Special Economic Zones and Open Cities.

[4] Among skeptics, Joseph Stiglitz too seems to have bought into the DeLong-Rodrik story, though with a different twist. Thus, in an exchange with economist Kenneth Rogoff published in the Wall Street Journal Europe (October 18, 2002), he is reported to have said, "The two countries that have the most impressive economies now are China and India. They happen to be the two that bought the least into the globalization story that the IMF and others are selling." But there is little basis for such a claim. All the reforms undertaken by India, described below, are those that reform-minded economists and the IMF would recommend. The pace of reforms has been slower but this is to be attributed not so much to conscious choice as to the country's democratic political process that demands consensus that is slow to build. It is true that India has chosen not to embrace capital-account convertibility to-date but

(continued…)

Joshi and Little (1994, chapter 13), who have been champions of reforms and have extensively studied Indian macroeconomic policies in the 1980s, recognize the role of reforms but regard fiscal expansion financed by external and internal borrowing as the key to the acceleration of growth during the 1980s.[5] This is also the view expressed indirectly by Ahluwalia (2002a, p. 67) who states that while the growth record in the 1990s was only slightly better than that in the 1980s, the 1980s growth was unsustainable, "fuelled by a build up of external debt that culminated in the crisis of 1991." Srinivasan and Tendulkar (2003) attribute some role to the reforms but they too underplay them when they state:

> "India's exports increased over this period [1980s] 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 performance was also distinctly better in the 1980s than in the earlier period. This surge in growth, however, was supported on the demand side by unsustainable fiscal policies, and it ended with an economic crisis in 1991."[Emphasis added.]

Finally, Das (2000), as quoted by DeLong, gives the strongest impression of all writers that reforms originated with the July 1991 package announced by Manmohan Singh:

> "…in July 1991… with the announcement of sweeping liberalization by the minority government of P.V. Narasimha Rao… opened the economy… dismantled import controls, lowered customs duties, and devalued the currency… virtually abolished licensing controls on private investment, dropped tax rates, and broke public sector monopolies…. We felt as though our second independence had arrived: we were going to be free from a rapacious and domineering state…"

Among those who have ventured to attribute the acceleration in growth in the 1980s to liberalization are Desai (1999), Pursell (1992), and Virmani (1997). Desai focuses on liberalization in the industry and industrial growth and Pursell on trade liberalization in the 1980s. I draw on their work later, particularly the latter. The discussion in Virmani is brief but he attributes the shift in the growth rate in the 1980s virtually entirely to liberalization. Moreover, he views the liberalization measures during the 1980s and 1990s as "subphases" of an overall phase. In contrast, the view

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many reform-minded economists, especially from India including the author, have advocated caution in this area.

[5]Specifically, Joshi and Little (1994, p. 190) note, "It appears that "Keynesian" expansion, reflected in large fiscal deficits, was a major cause of fast growth." In personal correspondence, Vijay Joshi has recently changed his mind, however. Commenting on an earlier draft of this paper, he writes, "Joshi and Little did point to the importance of the mildly liberalizing reforms in the 1980s but in retrospect we should have put greater stress on them exactly as you have done."

taken here is that the liberalization in the 1980s served as the necessary groundwork for the more systemic and systematic reforms of the 1990s. The 1990s reforms were qualitatively different from those in the 1980s in that they represented a broad acceptance of the idea that entrepreneurs and markets were to be given priority over government in the conduct of economic activity and that government interventions required proper justification rather accepted by default.

The main conclusions of this paper can be summarized as follows:

- Growth during the 1980s was higher than in the preceding decades but fragile. It not only culminated in a crisis in June 1991 but also exhibited significantly higher variance than growth in the 1990s. Central to the high growth rate in the 1980s was the super high growth of 7.6 percent during 1988–91. Absent this growth, the average growth in the 1980s would be significantly lower than in the 1990s.

- The fragile but faster growth during the 1980s took place in the context of significant reforms throughout the decade but especially starting in 1985. While this liberalization was ad hoc and implemented quietly ("reforms by stealth" is the term often used to describe them), it made inroads into virtually all areas of industry and laid the foundation of the more extensive reforms in July 1991 and beyond. The liberalization pushed industrial growth to a hefty 9.2 percent during the crucial high-growth period of 1988–91.

- Growth during the 1980s was also propelled by fiscal expansion financed by borrowing abroad and at home. But this was unsustainable and led to the crisis of June 1991.

- The reforms in the 1990s were more systematic and systemic and they gave rise to a decidedly more stable and sustainable growth from 1992 on.

- Nevertheless, India continues to lag behind China, growing at an average rate of 5 to 6 percent compared to the latter's average growth rate of 8 percent. The key reason for the difference is that industry has failed to grow rapidly in India and still accounts for only a quarter of the GDP compared with half in the case of China.

- If India is to catch up with China, some key reforms aimed at helping industry grow faster are essential: labor laws that give firms the right to reassign and lay off workers under reasonable conditions, end to the small-scale industry reservation that currently reserves most of the labor-intensive products for small firms, bankruptcy laws, and tariff levels comparable to or lower than those in the East Asian economies.

The remainder of the paper is organized as follows. In Section II, I contrast the experience during the 1980s with that in the 1990s, arguing that growth in the

former period was fragile and unsustainable. In Section III, I link the shift in the growth rate in the 1980s to the conventional economic reforms both in terms of the policy changes and outcomes. In Section IV, I discuss the role played by expansionary fiscal policies supported by both internal and external borrowing that made the growth process unsustainable. In Section V, I describe briefly the main reforms undertaken since 1991 and their impact. In Section VI, I offer remarks on why growth in the 1990s has continued to fall behind that of China and what India could do to catch up with the latter. Finally, in Section VII, I summarize the paper and offer concluding remarks.

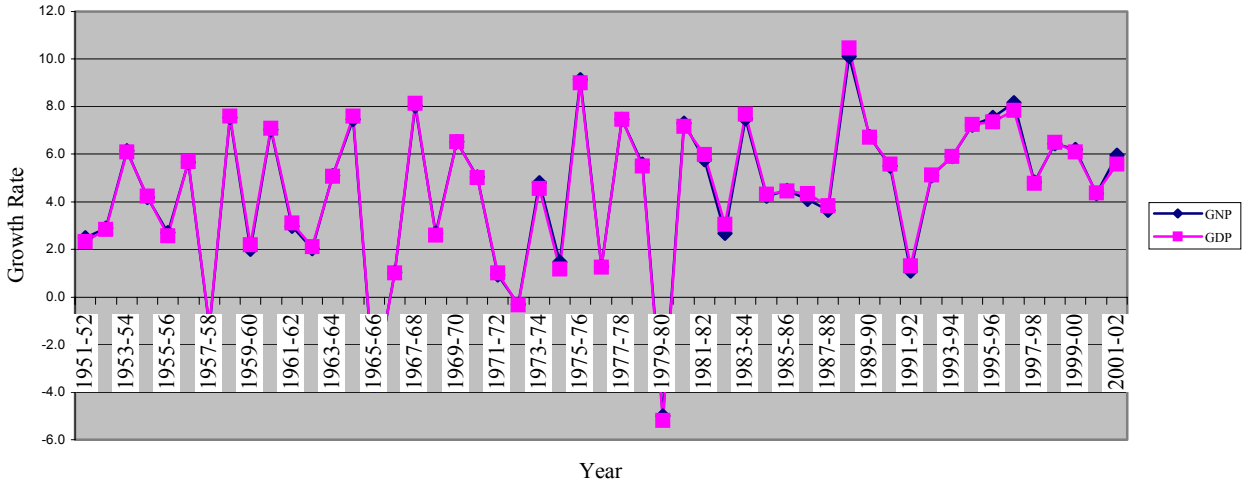
II. THE FRAGILITY OF GROWTH IN THE 1980S

In comparing the performance prior to the July 1991 reforms and that following them, the conventional practice is to draw the line at 1990–91 and thus divide the time period into the decades of 1980s and 1990s. But this division does not accurately reflect the division into periods prior to and following the July 1991 reforms. Indeed, because 1991–92 was the crisis year and the 1991 reforms were a response to rather than the cause of the crisis, the conventional practice creates a serious distortion by including the year 1991–92 into the post-1991 reform period. The July 1991 reforms and subsequent changes could not have begun to bear fruit prior to 1992–93.

Therefore, for the purpose of this paper, I take 1991–92 as the dividing line between the two periods. The post-1991 reform period is defined to start in 1992–93 and last until the latest year for which data are available, 2002–03. Pre-1991 reform period precedes this period with the starting date left vague at this point. Though it may be argued that the June 1991 crisis was the result of the policies of the pre-1991 reform period and therefore the year 1991–92 legitimately belongs in it, where appropriate, I present the analysis with and without this year included in the pre-1991 reform period. *Throughout the paper, unless otherwise stated, the terms "1980s" and "1990s" refer to the pre- and post-1991 reform periods as per these definitions*.

At the outset, it may be noted that it is difficult to pinpoint the timing of the upward shift in India's growth rate. Thus, in a recent attempt to pinpoint structural breaks in the growth series, Wallack (2003) is able to achieve at best partial success. She finds that with a 90 percent probability the shift in the growth rate of GDP took place between 1973 and 1987. The associated point estimate of the shift, statistically significant at 10 percent level, is 1980. When Wallack replaces GDP by gross national product (GNP), however, the cutoff point with 90 percent probability shifts to the years between 1980 and 1994. The associated point estimate, statistically significant at 10 percent level, now turns out to be 1987.

Figure 1: Annual Growth Rates: GNP and GDP



Thus, even though growth rates of GDP and GNP follow nearly identical, overlapping paths (see Figure 1), Wallack's cutoff dates for the shift in the growth rate turn out to be vastly different for them.[6] The outcome is highly sensitive to small movements in the data. When we recognize the fact that the errors in the measurement of GNP and GDP perhaps dwarf the differences between the two series as measured, we cannot place a high degree of confidence in the cutoff dates obtained by Wallack.[7] Besides, by construction, the calculated cutoff date is itself influenced by the events following the cutoff date. Future policies that influence future growth can automatically change the calculated date of the shift in the growth rate. For example, had the policies and therefore growth experience in the 1990s been vastly different, the cutoff date would also be different. Alternatively, addition or deletion of data points can alter the cutoff point. Even holding the data set fixed, Wallack finds multiple candidates for the shift. Thus, while she reports only the year with the maximum F-statistic (that is, the strongest rejection of the null hypothesis that average growth was the same in the two periods), for each series she finds additional years in the 1980s with test statistics close to the maximum value and above the 10 percent critical value.

The difficulty in pinpointing the date of shift in the growth rate does not allow us to precisely define the starting point of the "1980s" growth period. Fortunately, however, two important related facts remain valid regardless of which starting date we choose. First, the years 1988–91 during which the economy grew at the super high average annual rate of

[6] Table 1 lists the GDP growth rates from 1951–52 to 2002–03.

[7] Wallack (2003, p. 4314) herself is careful to recognize this fragility. Thus, she notes, "Although the evidence for the existence of a break is strong, the data are more ambiguous on its exact timing in the early and mid-1980s."

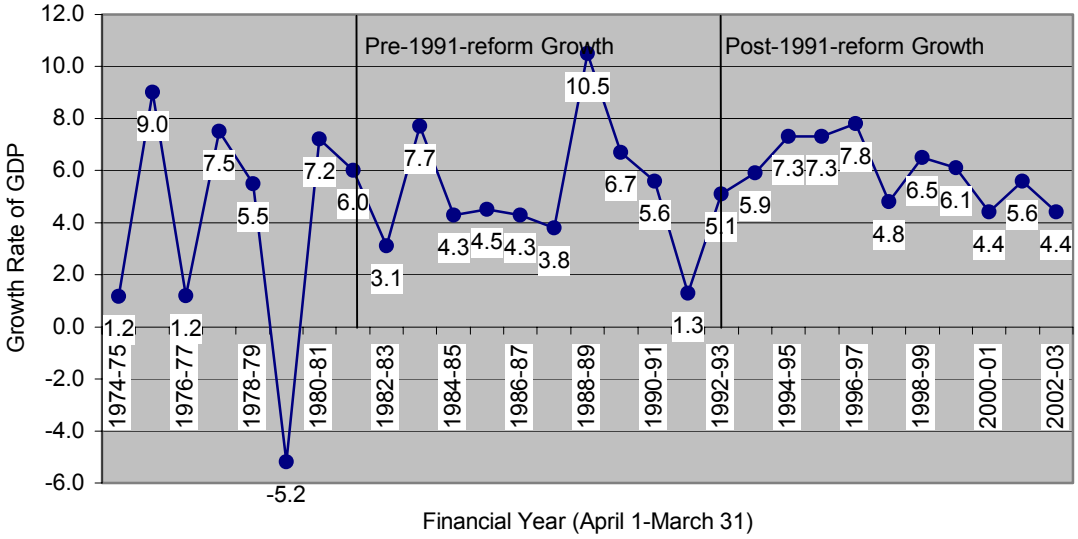
7.6 percent are critical to obtaining an average growth rate during the 1980s that is comparable to the growth rate in 1990s. Second, the variance of growth rates during the 1980s is statistically significantly higher than that in the 1990s. In this sense, growth during the first period was fragile relative to that in the second and, indeed, culminated in the June 1991 crisis.

Thus, consider Table 2, which offers the average growth rates for several selected periods. The average annual growth rate during the eleven-year period from 1992–93 to 2002–03 that I have defined as the post-1991 reform period or the "1990s" is 5.9 percent. One obvious criterion for defining the pre-1991 reform period or the "1980s" is to select 11 years immediately preceding the post-1991 reform period: 1981–82 to 1991–92. Average annual growth rate during this period is 5.3 percent. If the inclusion of the crisis year, 1991–92, into this period is objectionable, we can consider the ten-year period between 1981–82 and 1990–91. In this case, the average growth rate rises to 5.7 percent.[8] Either way, growth rates between the 1980s and 1990s are comparable.

But consider for a moment annual average growth rates until 1987–88. If we take the ten-year period from 1978–79 to 1987–88, the average growth rate is an unimpressive 4.1 percent. In 1988, anyone looking back at the ten-year experience would have concluded that India was still on the Hindu growth path. Indeed, even limiting ourselves to 1981–82 to 1987–88, we get an average growth rate of only 4.8 percent, which is strictly below the growth rate of 4.9 percent achieved during the Fifth Five Year Plan (1974–79). Thus, had it not been for the unusually high growth rate of 7.6 percent during 1988–91, we would not have reason to debate whether the reforms of 1990s made a significant contribution to growth. The implication is that any explanation of growth in the 1980s must explain the exceptionally high growth during 1988–91.

[8] We could include 1980–81 but the 7.2 percent growth during this year was preceded by a 5.2 percent *decline* in GDP in 1979–80 and was, thus, artificially high.

Figure 2: Yearly Growth Rates of GDP



This discussion already suggests that growth during the 1980s was subject to high variance. The point is also apparent in the data plotted in Figure 2: growth path is visibly more volatile in the 1980s than 1990s. More importantly, we can test the hypothesis formally by applying the standard F-test. In Table 3, I report variances of growth rates during the 1980s and 1990s, taking various cutoff dates for the former period. Irrespective of which cutoff dates we choose for the 1980s, we uniformly reject the null hypothesis of no higher variance in the 1980s than in the 1990s in favor of the alternative that variance was higher in the 1980s. The conclusion that growth in the 1980s was more fragile than in the 1990s receives unequivocal support in the data.[9]

The critical question to which I turn next concerns the sources of the shift in the growth rate in the 1980s, especially the subperiod 1988–91. In the following two sections, I argue that two broad factors account for much of the spurt. 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 to productive efficiency. On the internal front, freeing up of several sectors from investment licensing reinforced import liberalization and allowed faster industrial growth. Second, both external and internal borrowing allowed the government to maintain high levels of public expenditures and thus

[9] We may ask which sector among agriculture, industry, and services predominantly accounts for the higher variance in the 1980s. For each sector, the null hypothesis of equal variances across the 1980s and 1990s fails to be rejected even at 10 percent level of significance. Difference in the variances of *total* GDP growth between the 1980s and 1990s arise largely from movements in covariance terms between growth rates of individual sectors.

boost growth through demand. Unfortunately, these factors carried with them the seeds of the June 1991 macroeconomic crisis that brought the economy to a grinding halt.[10]

III. CONNECTION TO LIBERALIZATION

To appreciate the role of liberalization in stimulating growth in the 1980s, 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 the late 1960s. As they note, general controls on all imports and exports had been present since 1940. After independence in 1947, import controls were relaxed through the expansion of the Open General Licensing (OGL) list in a stop-go fashion, with the First Five Year Plan (1951–56) representing a period of "progressive liberalization" (Bhagwati and Desai, 1970, p. 282). 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 1968, intense domestic reaction to the devaluation led India to turn inward with a vengeance.[11] 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 GDP from the low level of 7 percent in

[10] In passing, the role of excellent agricultural performance in yielding the high overall growth rates during 1988–91 may also be acknowledged. Whereas the years 1986–87 and 1987–88 were a disaster for agriculture due to bad weather, the subsequent three years, especially 1988–89, proved unusually good. 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 GDP, grew at an annual average rate of 7.3 percent during 1988–91.

[11] Bhagwati and Srinivasan (1975, Chapter 10) offer a fascinating political economy analysis of the 1966 devaluation. In a key concluding paragraph on page 153, 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 is 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." This is an important lesson in the political economy of reforms.

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 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."[12]

Two factors facilitated the emergence of the liberalization phase. First, as already hinted in the above quote from Pursell (1992), by the 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 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. These reserves lent confidence to policymakers and bureaucrats who had lived in the perpetual fear of a balance of payments crisis.

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[12] 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 in his reply 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!

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

A. Reforms During the 1980s

In view of the continuing dominance of leftist ideology in India, pre-1991 reforms were introduced quietly and without fanfare. Therefore, the term "liberalization by stealth," often used to describe them, is fully justified. Yet, this description gives the misleading impression that the reforms were marginal or inconsequential to the growth performance. As I will argue below, the reforms were deeper than is generally appreciated and had a distinct impact on the growth rate in the 1980s.

Though the process of relaxation of regulation of industry began in the early 1970s and of trade in the late 1970s, the pace of reform picked up significantly only in 1985. Major changes were announced between 1985 and 1988 with the process continuing to move forward thereafter. Indeed, during this latter period, liberalization had begun to take a somewhat activist form. In turn, GDP growth and the external sector registered a dramatic improvement in performance. As already noted, GDP grew at the annual rate of 7.6 percent from 1988–89 to 1990–91. Exports, which had grown annually at a paltry 1.2 percent rate during 1980–85, registered a hefty annual growth of 14.4 percent during 1985–90 (Table 4).

Broadly, the reforms of the 1980s, which were largely in place by early 1988, can be divided into five categories. First, the OGL list was steadily expanded. Having disappeared earlier, this list was reintroduced in 1976 with 79 capital goods items on it. The number of capital goods items included in the OGL list expanded steadily reaching 1,007 in April 1987, 1,170 in April 1988, and 1,329 in April 1990. In parallel, intermediate inputs were also placed on the OGL list and their number expanded steadily over the years. Based on the best available information, this number had reached 620 by April 1987 and increased to 949 in April 1988. According to Pursell (1992, p. 441)), 'imports that were neither canalized not subject to licensing (presumably mainly OGL imports) increased from about 5 percent in 1980–81 to about 30 percent in 1987–88.' The inclusion of an item into the OGL list was usually accompanied by an "exemption," which amounted to a tariff reduction on that item. In almost all cases, the items on the list were machinery or raw materials for which no substitutes were produced at home. As such their contribution to increased productivity was likely to be significant.

The second source of liberalization was the decline in the share of canalized imports. Canalization refers to monopoly rights of the government for the import 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.[13]

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 goods 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, p. 184) 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 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.

[13] 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. Good weather and discovery of oil were partially behind the increased domestic output of food grains, cotton, and crude oil.

The fourth source of liberalization was a significant relaxation of industrial controls and related reforms. Several steps are worthy of mention:

- Delicensing received a major boost in 1985 with 25 industries delicensed.[14] By 1990, this number reached 31. The investment limit below which no industrial license would be required was raised to Rs 500 million in backward areas and Rs. 150 million elsewhere, provided the investments were located in both cases at stipulated minimum distances from urban areas of stipulated sizes. Traditionally, the industrial licensing system had applied to all firms with fixed capital in excess of Rs 3.5 million. There remained 27 major industries subject to licensing regardless of the size and location of investment. These included a number of major industries like coal, large textile units using power, motor vehicles, sugar, steel, and a large number of chemicals. Products subject to Small Scale Industries (SSI) reservation were also off limits though the asset ceiling of firms designated as SSI units was raised from Rs. 2 million to Rs. 3.5 million.
- Broad banding, which allowed firms to switch production between similar production lines such as trucks and cars, was introduced in January 1986 in 28 industry groups. This provision was significantly expanded in the subsequent years and led to increased flexibility in many industries. In some industries, the impact was marginal, however, since a large number of separate product categories remained due to continued industrial licensing in those products.
- In 1986, firms that reached 80 percent capacity utilization in any of the five years preceding 1985 were assured authorization to expand capacity up to 133 percent of the maximum capacity utilization reached in those years.
- Firms that came under the purview of the Monopolies and Restrictive Trade Practices (MRTP) Act were subject to different rules and could not take advantage of the above liberalizing policy changes. To relax the hold of the licensing and capacity constraints on these larger firms, in 1985–86 the asset limit above which firms were subject to MRTP regulations was raised from Rs. 200 million to Rs. 1,000 million. As a result, as many as 90 out of 180 large business houses registered under the MRTP Act were freed from restrictions on growth in established product lines. Requirement of MRTP clearances for 27 industries was waived altogether. MRTP firms in a number of industries were exempt from industrial licensing provided they were located 100 kilometers away from large cities. MRTP firms were allowed to avail themselves of the general delicensing measures in sectors in which they were not considered dominant undertakings. These measures significantly enhanced the freedom of large firms (with assets exceeding Rs. 1,000 million) to enter new products.
- Price and distribution controls on cement and aluminum were entirely abolished. Decontrol in cement eliminated the black market and through expanded production brought the free-market price down to the controlled levels within a short time. New

[14] Of these, 16 industries had been out of the licensing net since November 1975 while some were reserved for the small-scale sector.

entrants intensified competition, which led to improvements in quality along with the decline in the price.

- There was a major reform of the tax system. The multi-point excise duties were converted into a modified value-added (MODVAT) tax, which enabled manufacturers to deduct excise paid on domestically produced inputs and countervailing duties paid on imported inputs from their excise obligations on output. By 1990, MODVAT came to cover all subsectors of manufacturing except petroleum products, textiles, and tobacco. This change significantly reduced the taxation of inputs and the associated distortion. In parallel, a more smoothly graduated schedule of excise tax concessions for small-scale-industries (SSI) firms was introduced, which reduced incentives for them to stay small.

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 list, 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 perhaps the most important source of external 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 GDP 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 of 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."[15]

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 the 1970s and the second half of the 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 4). This rapid expansion continued during the second half of the 1970s with non-oil imports registering an impressive 15 percent annual 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 4). Again, during 1985–90, they grew by 12.3 percent. Thus, liberalized licensing rules flexibly accommodated the increased demand for imports during the fast-growth periods.

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[15] 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) as quoted in the introduction.

Alternatively, the impact of liberalization can be seen in the movement in the imports-to-GDP ratio. Table 5 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 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 GDP itself grew at a relatively high rate during these years.

Citing extensive and systematic evidence, I have argued in Panagariya (2003) that low and/or declining barriers to trade constitute a necessary condition for sustained rapid growth. From the discussion and evidence above, it should be clear that India's experience during the 1980s is no exception to this proposition. Although we may squabble about the magnitude of trade and industrial liberalization during these years, it is difficult to overlook the reduction in many direct and indirect barriers to trade and the sizable expansion of non-oil exports and imports in the years of high growth without which growth would have been scuttled.

In this context, it may be reiterated that during the 1980s, India was also helped by the discovery of oil and the spread of the Green Revolution, which helped reduce the need for oil and food imports and thus freed up foreign exchange for non-oil, non-food imports. That these developments helped cannot be denied. At the same time, had India not responded by opening up trade and investment rules, the opportunity offered by these developments would have been lost.

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." Industrial growth during 1988–91 at 9.2 percent was particularly high when compared with earlier periods.

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 the 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 nonoverlapping periods: 1974–78, 1979–83 and 1984–88. They then relate this productivity growth to liberalization.

Table 8 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.

Joshi and Little (1994, Ch. 13) also address the issue of the shift in the growth rate. They analyze the years 1960–61 to 1989–90 dividing them into a low-growth period from 1960–61 to 1975–76 and a high-growth period from 1976–77 to 1989–90. Average annual growth rates during these periods were 3.4 and 4.7 percent, respectively, and statistically significantly different from each other at 5 percent level of significance.[16] A key finding of Joshi and Little is that increased investment cannot be credited with the increase in the growth rate during 1976–90 over that during 1960–76. To quote them (Joshi and Little, 1994, p. 327):

> "Public real investment averaged 7.7 percent of GDP in the first period and 9.9 percent in the second period. Private real investment averaged 12.0 percent of GDP in the first period and 11.7 percent in the second period. Thus the whole of the rise in the investment level took place in the public sector (ignoring errors and omissions). However, the rate of growth of public sector GDP declined (from 7.8 to 7.2 percent a year), while that of the private sector rose (from 2.6 to 3.7 percent a year)."

[16] In the data used by Joshi and Little, real GDP is measured at 1980–81 prices. As such their growth rates differ from those computed from real GDP measured at 1993–94 prices as in this paper. Growth rates for the two periods when 1993–94 is the base year are 3.7 and 4.8 percent, respectively.

Joshi and Little find increased demand through fiscal expansion, more efficient use of the existing resources (due to liberalization), and the rise in the real yield of investment in private manufacturing as the principal sources of the shift in the growth rate.[17]

Neither Joshi and Little nor Chand and Sen separately analyze the period 1988–91, which is crucial to obtaining comparable growth rates between 1980s and 1990s. Prima facie it would seem that the results of Chand and Sen would hold even more strongly for this period. The reason is that average annual industrial growth of 9.2 percent during 1988–91 was significantly higher than 6.2 percent growth achieved during 1984–88. In view of the fact that private investment as a proportion of GDP did not rise, the substantially higher growth in industrial output is likely to be the result of increased productivity and therefore related to the 1980s reforms.

IV. Unsustainable External Borrowing and Public Expenditure

While the importance of liberalization of industry and trade for the shift in the GDP growth rate during the 1980s can hardly be denied, borrowing abroad and rising government expenditures at home also played a role. As noted above, Joshi and Little have pointed out that during the 1980s the investment-to-GDP ratio rose exclusively in the public sector while it fell in the private sector. At the same time, the growth rate of public sector output actually fell. Therefore, it is difficult to argue that borrowing abroad contributed to a boost in the growth rate by boosting investment in the 1980s. Nevertheless, it likely helped raise the total GDP growth rate *indirectly* by contributing to the rise in the growth rate of private sector output.

Thus, for example, the external borrowing helped bridge the considerable gap between exports and imports. Despite faster growth in exports than imports in the second half of the 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.[18] Accordingly, the higher level of imports was financed partially through external borrowing.

Thus, foreign borrowing made a positive contribution to growth, it also led to a rapid accumulation of foreign debt, which rose from $20.6 billion 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

[17] Also see Bhargava and Joshi (1990).

[18] 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.

billion during 1980–81 to 1984–85 to $3.5 billion from 1985–86 to 1989–2000. Moreover, "other" capital flows and 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 nonconcessional 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. Srinivasan and Tendulkar (2003) assign much of the credit for the growth during the 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 7, 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 an average of 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 GDP.

As with external borrowing, high current expenditures proved unsustainable. They manifested themselves in extremely large fiscal deficits. As Table 7 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 buildup 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 GDP and 43.8 percent of exports in 1990–91. The eventual outcome of these developments was the June 1991 crisis.

V. A Brief Look at the 1990s

The substantial yet half-hearted reforms of the 1980s gave way to more systematic and deeper reforms of the 1990s and beyond. This time around, there was a fundamental change in approach. Until 1991, restrictions were the rule and reforms constituted their selective removal according to a "positive list" approach. But starting with the July 1991 package, the absence of restrictions became the rule with a "negative list" approach taken to their retention. While the move toward this new regime has been decidedly gradual, with the process still far from complete, the shift in the philosophy is beyond doubt.

To appreciate the wider sweep of reforms in the post-1991-crisis period, consider in detail the reforms in just two key areas: industry and external trade.

A. Deregulation of Industry

In a single stroke, the "Statement of Industrial Policy" dated July 24, 1991 and frequently called the New Industrial Policy did away with investment licensing and myriad entry restrictions on MRTP firms. It also ended public sector monopoly in many sectors and initiated a policy of automatic approval for foreign direct investment up to 51 percent.

On licensing, the new policy explicitly stated, "industrial licensing will henceforth be abolished for all industries, except those specified, irrespective of levels of investment." Exception to this rule was granted to 18 industries included in Annex II of the policy statement. True to the commitment in the policy that "Government's policy will be continuity with change," this list was trimmed subsequently until it came to include only five sectors with all of them having justification on health, safety, or environmental grounds: (a) arms and ammunition, explosives and allied items of defense equipment, defense aircraft and warships; (b) atomic substances; (c) narcotics and psychotropic substances and hazardous chemicals; (d) distillation and brewing of alcoholic drinks; and (e) cigarettes/cigars and manufactured tobacco substitutes.

Alongside, the 1991 policy statement also limited the public sector monopoly to eight sectors selected on security and strategic grounds and listed in Annex I. All other sectors were opened to the private sector. In the subsequent years, Annex I has been trimmed and today, only railway transportation and atomic energy remain on it.

The New Industrial Policy also did away with entry restrictions on MRTP firms. Again, the policy was notable for its unequivocal renunciation of the past approach: "The pre-entry scrutiny of investment decisions by so called MRTP companies will no longer be required. Instead, emphasis will be on controlling and regulating monopolistic, restrictive and unfair trade practices rather than making it necessary for the monopoly house to obtain prior approval of Central Government for expansion, establishment of new undertakings, merger, amalgamation and takeover and appointment of certain directors. The MRTP Act will be restructured. The provisions relating to merger, amalgamation, and takeover will also be repealed. Similarly, the provisions regarding restrictions on acquisition of and transfer of shares will be appropriately incorporated in the Companies Act." These changes are now in place.

In the area of foreign investment, the policy statement abolished the threshold of 40 percent on foreign equity investment. The concept of automatic approval was introduced whereby the Reserve Bank of India was empowered to approve equity investment up to 51 percent in 34 industries, listed in Annex 3. In subsequent years, this policy was considerably liberalized with automatic approval made available to almost all industries except those subject to public sector monopoly and industrial licensing. In 48 industries that account for the bulk of India's manufacturing output, the ceiling for approval under the

automatic route is 51 percent. In eight categories, including mining services, electricity generation and transmission, and construction of roads, bridges, ports, harbors, and runways, the automatic approval route is available for equity investments of up to 74 percent. The automatic approval of foreign direct investment up to 100 per cent is given in all manufacturing activities in Special Economic Zones (SEZs) except those subject to licensing or public sector monopoly. Subject to licensing, defense is now open to the private sector for 100 percent investment with FDI (also subject to licensing) up to 26 percent permitted.

B. External Trade

The July 1991 package also made a break from the 1980s' approach of selective liberalization on the external trade front by replacing the positive list approach of listing license-free items on the OGL list to a negative list approach. It also addressed tariff reform in a more systematic manner rather than relying on selective exemptions on statutory tariffs. In subsequent years, liberalization has been extended to trade in services as well.

Merchandise Trade Liberalization

The July 1991 reforms did away with import licensing on virtually all intermediate inputs and capital goods. But consumer goods, accounting for approximately 30 percent of the tariff lines, remained under licensing. It was only after a successful challenge by India's trading partners in the Dispute Settlement Body of the World Trade Organization (WTO) that these goods were freed of licensing a decade later starting April 1, 2001. Today, except for a handful of goods disallowed on environmental, health, and safety grounds and a few others that are canalized such as fertilizer, cereals, edible oils, and petroleum products, all goods can be imported without a license or other restrictions.

Tariff rates in India had been raised substantially during the 1980s to turn quota rents into tariff revenue for the government. For example, according to Government of India (1993), tariff revenue as a proportion of imports went up from 20 percent in 1980–81 to 44 percent in 1989–90. Likewise, according to WTO (1998), in 1990–91, the highest tariff rate stood at 355 percent, simple average of all tariff rates at 113 percent, and the import-weighted average of tariff rates at 87 percent. With the removal of licensing, these tariff rates became effective restrictions on imports. Therefore, a major task of the reforms in the 1990s and beyond has been to lower tariffs. This has been done in a gradual fashion by compressing the top tariff rate while rationalizing the tariff structure through a reduction in the number of tariff bands. The top rate fell to 85 percent in 1993–94 and 50 percent in 1995–96. Though there were some reversals along the way in the form of new special duties and unification of a low and a high tariff rate to the higher one, the long-run movement has been toward liberalization with the top rate declining to 25 percent in 2003–04.

The 1990s' reforms were also accompanied by the lifting of exchange controls that had served as an extra layer of restrictions on imports. As a part of the 1991 reform, the government devalued the rupee by 22 percent against the dollar from Rs 21.2 to Rs 25.8 per dollar. In February 1992, a dual exchange rate system was introduced, which allowed exporters

to sell 60 percent of their foreign exchange in the free market and 40 percent to the government at the lower official price. Importers were authorized to purchase foreign exchange in the open market at the higher price, effectively ending the exchange control. Within a year of establishing this market exchange rate, the official exchange rate was unified with it. Starting in February 1994, many current account transactions, including all current business transactions, education, medical expenses, and foreign travel, were also permitted at the market exchange rate. These steps culminated in India accepting the IMF Article VIII obligations, which made the rupee officially convertible on the current account. The exchange rate has been kept flexible throughout the period and allowed to depreciate as necessary to maintain competitiveness. It currently stands at approximately Rs 45 per dollar.

Liberalization of Trade in Services

Since 1991, India has also carried out a substantial liberalization of trade in services. Traditionally, services sectors have been subject to heavy government intervention. Public sector presence has been conspicuous in the key sectors of insurance, banking, and telecommunications. Nevertheless, considerable progress has been made toward opening the door wider to private-sector participation, including participation by foreign investors.

Until recently, insurance was a state monopoly. On December 7, 1999, the Indian Parliament passed the Insurance Regulatory and Development Authority (IRDA) Bill, which established an Insurance Regulatory and Development Authority and opened the door to private entry including foreign investors. Up to 26 percent foreign investment, subject to obtaining license from the Insurance Regulatory and Development Authority, is permitted.

Though the public sector dominates in the banking sector, private banks are permitted to operate in it. Foreign direct investment (FDI) up to 74 percent in the private banks is permitted under the automatic route. In addition, foreign banks are allowed to open a specified number of new branches every year. More than 25 foreign banks with full banking licenses and approximately 150 foreign bank branches are in operation presently. Under the 1997 WTO Financial Services Agreement, India committed to permitting 12 foreign bank branches annually.

The telecommunications sector has experienced much greater opening to private sector including foreign investors. Until the early 1990s, the sector was a state monopoly. The 1994 National Telecommunications Policy provided for opening cellular as well as basic and value-added telephone services to the private sector with foreign investors granted entry. Rapid changes in technology led to the adoption of the New Telecom Policy in 1999, which provides the current policy framework. Accordingly, in basic, cellular mobile, paging and value added service, and global mobile personnel communications by satellite, FDI is limited to 49 percent subject to grant of license from the Department of Telecommunications. FDI up to 100 per cent is allowed with some conditions for Internet service providers not providing gateways (both for satellite and submarine cables), infrastructure providers providing dark fiber, electronic mail, and voice mail. Additionally, subject to licensing and security requirements and the restriction that proposals with FDI beyond 49 per cent must be

approved by the government, up to 74 percent foreign investment is permitted for Internet service providers with gateways, radio paging, and end-to-end bandwidth.

FDI up to 100 percent is permitted in e-commerce. Automatic approval is available for foreign equity in software and almost all areas of electronics. One hundred percent foreign investment is permitted in information technology units set up exclusively for exports. These units can be set up under several schemes, including Export Oriented Units (EOUs), Export Processing Zones (EPZs), Special Economic Zones (SEZs), Software Technology Parks (STPs), and Electronics Hardware Technology Parks (EHTPs).

The infrastructure sector has also been opened to foreign investment. FDI up to 100 percent under automatic route is permitted in projects for construction and maintenance of roads, highways, vehicular bridges, toll roads, vehicular tunnels, ports, and harbors. In construction and maintenance of ports and harbors, automatic approval for foreign equity up to 100 percent is available. In projects providing supporting services to water transport, such as operation and maintenance of piers, loading, and discharging of vehicles, no approval is required for foreign equity up to 51 percent. FDI up to 100 percent is permitted in airports, with FDI above 74 percent requiring prior approval of the government. Foreign equity up to 40 percent and investment by nonresident Indians up to 100 percent is permitted in domestic air-transport services. Only railways remain off limits to private entry.

Since 1991, several attempts have been made to bring private sector, including FDI, into the power sector but without perceptible success. The most recent attempt is the Electricity Bill 2003, which replaces the three existing power legislations dated 1910, 1948, and 1998. The bill offers a comprehensive framework for restructuring the power sector and builds on the experience in the telecommunications sector. It attempts to introduce competition through private sector entry side by side with public-sector entities in generation, transmission, and distribution.

The bill fully delicenses generation and freely permits captive generation. Only hydro projects would henceforth require clearance from the Central Electricity Authority. Distribution licensees would be free to undertake generation and generating companies would be free to take up distribution businesses. Trading has been recognized as a distinct activity with the Regulatory Commissions authorized to fix ceilings on trading margins, if necessary. FDI is permitted in all three activities.

C. Impact of Liberalization

Trade liberalization had a much more visible effect on external trade in the 1990s than in the 1980s. The ratio of total exports of goods and services to GDP in India approximately doubled from 7.3 percent in 1990 to 14 percent in 2000. The rise was less dramatic on the import side due to the fact that increased external borrowing was still financing a large proportion of imports in 1990, which was not true in 2000. But the rise was still significant from 9.9 percent in 1990 to 16.6 percent in 2000. Within ten years, the ratio of total goods and services trade to GDP rose from 17.2 percent to 30.6 percent.

Liberalization also had a significant effect on growth in some of the key services sectors. Overall, the average annual growth rate in the services sector shifted from 6.9 percent during 1981–91 to 8.1 percent during 1991–2001. As Gupta and Gordon (2003) document systematically, this growth was mostly due to fast growth in communication services, financial services, business services, and community services. Given substantial deregulation and opening up to private participation in at least first three of these sectors, the link of this acceleration to reforms can hardly be denied.

The most disappointing aspect of the 1990s' experience, however, has been a lack of acceleration of growth in the industrial sector. The average annual rate of growth in this sector was 6.8 percent during 1981–91 and 6.4 percent during 1991–2001. Given that many of the reforms were particularly aimed at this sector, this outcome is somewhat disappointing. There are at least three complementary reasons. First, due to draconian labor laws, industry in India is increasingly outsourcing its activities so that growth in industry is actually being counted in growth in services. Second, due to some key binding constraints in areas of labor laws, small-scale industries reservation, and power, large-scale firm are still unwilling to enter the market. Finally, large fiscal deficits continue to crowd out private investment.

The lackluster performance of industry to date is the principal cause for at most a marginal acceleration of the growth rate in the post-1991 reform era. In the last remaining substantive section below, I emphasize this point comparing the growth rates in India and China. I argue that the only way India can push its growth rate to the levels experienced by China in the last two decades is by freeing conventional industry of several continuing restraints.

VI. Looking Ahead: Why India Lags Behind China

This paper has provided evidence refuting the basic claim of the skeptics that the 1991 reforms have failed India. Nevertheless, it must be acknowledged that the response of the economy to liberalization has been an order of magnitude weaker in India than China. Exports of goods and services grew at annual rates of 12.9 and 15.2 percent during the 1980s and the 1990s, respectively, in China. Imports exhibited a similar performance. Consequently, China's total trade to GDP ratio rose from 18.9 percent in 1980 to 34 percent in 1990 and to 49.3 percent in 2000.

On the foreign investment front, differences are even starker. FDI into China has risen from $.06 billion in 1980 to $3.49 billion in 1990 and then to a whopping $42.10 billion in 2000. China was slower to open its market to portfolio investment but once it did, inflows quickly surpassed those into India, reaching $7.8 billion in 2000. Even if we allow for an upward bias in the figures as suggested by some China specialists and downward bias in the figures for India, there is little doubt that foreign investment flows into China are several times those into India.

While some differences between the performances of India and China can be attributed to the Chinese entrepreneurs in Hong Kong SAR and Taiwan Province of China, who have been eager to escape rising wages in their respective home economies by moving to China, a more central explanation lies in the differences between the compositions of GDPs in the two countries. Among developing countries, India is unique in having a very large share of its GDP in the mostly informal part of the services sector. Whereas in other countries, a decline in the share of agriculture in GDP has been accompanied by a substantial expansion of the industry in the early stages of development, in India this has not happened. For example, in 1980, the proportion of GDP originating in industry was already 48.5 percent in China, in India it was only 24.2 percent (Table 8). Services, on the other hand, contributed only 21.4 percent to GDP in China but as much as 37.2 percent in India.

In the following twenty years, despite considerable growth, the share of industry did not rise in India. Instead, the entire decline in the share of agriculture was absorbed by services. Though a similar process was observed in China, the share of industry in GDP was already quite high there. As a result, even in 2000, the share of services in GDP was 33.2 percent in China compared with 48.2 percent in India.

Why does this matter? Because typically, under liberal trade policies, developing countries are much more likely to be able to expand exports and imports if a large proportion of their output originates in industry. Not only is the scope for expanding labor-intensive manufactures greater, a larger industrial sector also requires imported inputs, thereby offering greater scope for the expansion of imports. In India, the response of imports has been just as muted as that of exports. This is demonstrated by the fact that the Reserve Bank of India has had to purchase huge amounts of foreign exchange to keep the rupee from appreciating in recent years. And even then, it was unsuccessful and had to let the currency appreciate 5 to 7 percent in nominal terms recently. Imports have simply failed to absorb the foreign exchange generated by remittances and relatively modest foreign investment flows.

This same factor is also at work in explaining the relatively modest response of FDI to liberal policies. Investment in industry, whether domestic or foreign, has been sluggish. Foreign investors have been hesitant to invest in industry for much the same reasons as domestic investors. At the same time, the capacity of the formal services sector to absorb foreign investment is limited. The information technology sector has shown promise but its base is still small. Moreover, this sector is more intensive in skilled labor than physical capital.

Therefore, the solution to both trade and FDI expansion in India lies in stimulating growth in industry. The necessary steps are now common knowledge: bring all tariffs down to 10 percent or less, abolish the small-scale industries reservation, institute an exit policy and bankruptcy laws, and privatize all public sector undertakings.

VII. CONCLUSION

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

In contrast, growth during the 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 $100 billion exceed the currency in circulation. Indeed, in a recent careful examination of India's vulnerability to external crises, Ahluwalia (2002b) 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.

The acceleration of growth during the 1980s *relative* to that in the preceding decades was not achieved without important policy changes. In contrast to the isolated ad hoc policy measures taken to release immediate pressures prior to the 1980s, the measures in the last half of the 1980s, taken as a whole, constituted a significant change and an activist reform program. For example, by 1990, approximately 20 percent of the tariff lines and 30 percent of the imports had come under OGL with significant exemptions on tariffs accruing to the OGL products. Import licensing on many other products was also considerably eased up.[19] As regards industrial licensing, 31 sectors had already been freed from it by 1988 with 27 sectors remaining subject to it. By 1988, significant liberalizing steps had also been taken toward freeing up the large-sized firms by raising the asset limit defining the MRTP firms fivefold and opening a number of avenues for the license-free entry of MRTP firms in many sectors. The increase in the asset limit freed 90 out of 180 large firms from the MRTP restrictions altogether. The 1980s' reforms and their success provided crucial first-hand evidence to policymakers that gradual liberalization can deliver faster growth without causing disruption. In turn, this evidence gave policymakers confidence in undertaking the bolder and more far-reaching reforms in the 1990s.

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[19] There is a tendency on the part of the analysts such as Das (2000) to ignore the changes made in the 19980s and attribute them to the July 1991 reform. When one considers the facts that 20 percent of the tariff lines were already under OGL, that another 30 plus percent tariff lines including all consumer and agricultural goods were not freed until the end of 1990s, and that the top tariff line was still 110 percent, the July 1991 reform by itself seems less sweeping than it may seem at first blush.

While the changes in the 1980s were undoubtedly small in relation to those in the 1990s, they were quite significant when compared with the regime prevailing until the 1970s. In part, this fact explains why the economy, particularly industry, exhibited such a strong response. A key message of the theory of distortions is that the larger the initial distortion, the greater the benefit from its relaxation at the margin. 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 it must be acknowledged that the response would have been short-lived in the absence of more concerted reforms.

DeLong's contention that we lack hard evidence to support the view that the 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 the 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.

The key to explaining why India nevertheless continues to lag behind China is the slow growth of conventional industry. The policy implication is that India must free industry of continuing restraints if it is to maximize the benefits of what has been done to date. Given a virtual ban on exit and retrenchment and reassignment of workers, continuing reservation of most of the labor-intensive industries for small-scale firms, the absence of effective bankruptcy laws, and continuing high protection, Indian industry cannot match the performance of its Chinese counterpart. In some ways, given the advantage India enjoys in the information technology sector over China, its overall prospects for growth are even better than those of China but only if conventional industry is given a fair chance.

Table 1: Annual Growth Rates of GDP, 1951–03

Year*	Growth Rate	Year	Growth Rate	Year	Growth Rate
1951–52	2.3	1969–70	6.5	1987–88	3.8
1952–53	2.8	1970–71	5.0	1988–89	10.5
1953–54	6.1	1971–72	1.0	1989–90	6.7
1954–55	4.2	1972–73	-0.3	1990–91	5.6
1955–56	2.6	1973–74	4.6	1991–92	1.3
1956-57	5.7	1974–75	1.2	1992–93	5.1
1957–58	-1.2	1975–76	9.0	1993–94	5.9
1958–59	7.6	1976–77	1.2	1994–95	7.3
1959–60	2.2	1977–78	7.5	1995–96	7.3
1960–61	7.1	1978–79	5.5	1996–97	7.8
1961–62	3.1	1979–80	-5.2	1997–98	4.8
1962–63	2.1	1980–81	7.2	1998–99	6.5
1963–64	5.1	1981–82	6.0	1999–00	6.1
1964–65	7.6	1982–83	3.1	2000–01 (P)	4.4
1965–66	-3.7	1983–84	7.7	2001–02 (Q)	5.6
1966–67	1.0	1984–85	4.3	2002–03 (Q)	4.4
1967–68	8.1	1985–86	4.5		
1968–69	2.6	1986–87	4.3		

*India's fiscal year goes from April 1 to March 31. Thus, 1951–52 refers to April 1, 1951 to March 31, 1952.

Source: Author's calculations based on Table 1.2 of Economic Survey, 2002–03.

P: Provisional Estimate; Q: Quick Estimate.

Table 2: Average Annual Growth Rates During Selected Periods

Period	Growth Rate
Prior to the Shift in Growth Rate	
1951–52 to 1973–74	3.6
Pre-1991 reform Period	
1981–82 to 1990–91	5.7
1981–82 to 1991–92	5.3
1977–78 to 1990–91	5.1
Memo	
1974–75 to 1978–79	4.9
1978–79 to 1987–88	4.1
1981–82 to 1987–88	4.8
1988–89 to 1990–91	7.6
Post-1991 reform Period	
1992–93 to 2001–02	6.1
1992–93 to 2002–03	5.9

Source: Calculated from Table 1.

Table 3: Five-yearly Variance of Growth Rates: Major Sectors and GDP

Period	Variance	Ratio to Variance in 1990s
1981–82 – 1991–92	6.1	4.1*
1980–81 – 1990–91	4.6	3.1**
1981–82 – 1990–91	4.8	3.3**
1977–78 – 1990–91	12.5	8.5***
1992–93 – 2002–03	1.5	--

Source: Calculated using growth rates in Table 1.

* Significant at 2.5 percent level [$F_{0.025\ (10,\ 10)} = 3.72$].
** Significant at 5 percent level [($F_{0.05\ (10,\ 10)} = 2.98$; $F_{0.05\ (9,\ 10)} = 3.0$].
*** Significant at 1 percent level [$F_{0.01\ (12,\ 10)} = 4.71$].

Table 4: Average Annual Growth Rates of Non-oil Merchandise Exports and Imports in Current Dollars

Year	Exports	Imports
1970–71 – 1974–75	16.2	17.8
1975–76 – 1979–80	13.7	12.3
1980–81 – 1984–85	1.2	7.1
1985–86 – 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 5: 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 RBI Statistical Handbook, 2001. RBI cites its source of the trade data as the Directorate General of Commercial Intelligence and Statistics (DGCIS).

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).

Table 7: Fiscal Indicators: 1980–81 to 1989–90
(As percent of GDP)

	Average 1980–81 to 1984–85	1985–86	1986–87	1987–88	1988–89	1989–90	1990–91	Average 1985–86 to 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

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

*CSO Estimates.

Table 8: Composition of GDP (Percent)

	1980	1990	2000
China			
Agriculture	30.1	27	15.9
Industry	48.5	41.6	50.9
Manufacturing	40.5	32.9	34.5
Services	21.4	31.3	33.2
India			
Agriculture	38.6	31.3	24.9
Industry	24.2	27.6	26.9
Manufacturing	16.3	17.2	15.8
Services	37.2	41.1	48.2

Source: World Bank, Basic indicators.

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