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**GLOBALIZATION AND ITS SOCIAL DISCONTENTS:
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1. Introduction

Since mid-1991, India has been embarked on economic reforms which aim - in the words of its government - to liberalize and globalize the economy. Not unlike many other developing and transitional economies, the main reform initiatives were undertaken after a fiscal and foreign exchange crisis which brought India to the verge of default on its foreign loans. Besides a stabilization program, both internal and international economic activity have been sought to be de-regulated and liberalized. Internal liberalization included the dismantling of a complex industrial licensing system, opening up of a number of sectors previously reserved for the public sector to private investment, some divestment of stock in the state sector, and decontrol of administered prices. External liberalization measures included removal of non-tariff barriers to imports, reduction in import tariffs, removal of restrictions on - and active encouragement of - foreign investment, some freeing up of technology imports, and attempts to increase portfolio inflows.

As might be expected, the reform program has evoked a variety of responses. They range from euphoria about freeing a caged tiger from *dirigiste* shackles to ride the crest of free markets, to dogged mistrust about free markets among those supportive of autarkic, government-directed development. Others hold guardedly optimistic expectations for certain aspects of the reforms. Among many, a major concern about globalization and liberalization is with their “social” impact which encompasses effects on employment, poverty, income inequality, and the quality of life for the majority of people. Table 1 places diverse views about the reforms along two axes of their potential longer-term impact: economic growth and social outcomes.

Reform-minded governments and economists such as Bhagwati and Srinivasan (1993) view globalization as not only quickening growth but also promoting mass well-being. Compared with

India's *dirigiste* and autarkic policies, foreign competition and foreign direct investment are expected to improve allocative and technical efficiency. Trade liberalization, it is argued, will increase the demand for semi-skilled and unskilled workers, increase their wages, and thereby reduce poverty and improve income distribution. Higher growth will also augment fiscal resources for health, education and other social needs. The further argument is made that the reforms can release any foreign exchange or aggregate demand constraints on economic growth

**Table 1. Alternative Views on the Effects of Economic Reforms
Social Outcomes**

	Positive	Neutral	Negative
Growth Impact	Official view Bhagwati & Srinivasan (1993) Bhagwati (1994) Joshi and Little (1996) World Bank (1998)	Dreze and Sen (1995)	
	Neutral		
	Negative		Patnaik (1997)

An alternative view has it that the reforms, while desirable for promoting growth, may be largely orthogonal to the trajectory of social outcomes. Dreze and Sen (1995), for example, argue that reforms which increase growth will not automatically expand opportunities to lead a normal span of life, to live in good health, to read and write, and not to go hungry. Rather, their social impact depends on whether reform benefits are channeled to improving the conditions of the poorest, to breaking down caste and gender hierarchies, and in generating employment. They therefore argue that the “removal of counterproductive government controls may indeed expand social opportunities for many people. However, to change the circumstances (such as illiteracy and ill health) that

severely constrain the actual social opportunities of a large part of the population, these permissive reforms have to be supplemented by a radical shift in public policy in education and health” (Dreze and Sen, 1995, p. 16).

A third view, articulated by some economists and social activists, is that even if they have a positive growth effect, economic reforms will have an adverse impact in social terms. A primary concern here is that globalization will intensify the technological treadmill in Ricardian fashion: while increasing technological change and perhaps output growth, they will slow employment growth especially for unskilled labor, and thereby increase income disparities. Even the sectoral changes that are supposed to ensue from the reforms are likely to cause employment losses for the many who are ill equipped to find employment in the sectors which will expand. Second, a shift in employment towards unprotected and low-paid informal, casual, labor is feared as employers try to respond to the reforms by seeking greater flexibility in terms of labor costs. Third, if reforms shift the terms of trade towards agriculture, the rise in the price of the principal wage good will reduce the real income of the poor. Lastly, cuts in social spending which accompany liberalization and globalization will also reduce the disposable income of the poor and government services available to them.

A final view (see, for instance, Patnaik, 1997) is that the reforms are likely to have a negative effect on both growth and mass well-being. The distribution of income, as noted in the previous paragraph, will shift away from the poor and towards the rich, depressing domestic demand. Import liberalization will increase imports but not significantly affect exports, thereby reducing aggregate demand further. All this will depress industrial growth. Cuts in government spending, especially on infrastructural investment, will further reduce industrial demand, and also have adverse effects

on industrial and agricultural growth from the supply side. Agricultural growth will not respond to price incentives, especially in the absence of land reforms which are not on the reformist agenda. The liberalization of foreign capital inflows is unlikely to increase direct foreign investment inflows significantly, given the low level of development, the low educational levels of unskilled workers and political uncertainty, while portfolio flows, if they increase, are likely to increase economic uncertainty and lead to intermittent foreign exchange crises.

This paper examines the record with a view to assessing these diverse views about India's reforms. In the following section, we briefly examine the content of reforms undertaken and describe how we will explore the effects of globalization in the following sections. Section 3 looks at some macroeconomic dimensions of performance including the realized effects of openness on external transactions, on economic growth, and on trends in the rural sector which remains the mainstay of employment. Section 4 summarizes trends in employment and unemployment, and the changing commodity composition of employment and its distribution across the formal/informal divide. Section 5 delves into some controversies surrounding the assessment of changes in income distribution and poverty under the impact of reforms. Section 6 turns to government policy toward social safety nets. Section 7 concludes.

2. The Reforms, Openness and Globalization

This section provides a summary description of the reform policies, clarifies the meaning and significance of the term "globalization", and discusses the method we use to examine its consequences on the economy.

2.1 Reform Planks

India's post-colonial governments pursued determinedly interventionist and autarkic policies. Apart from high walls of tariffs and quotas, the accumulation regime rested on the twin pillars of state-led investment and state-led coordination of economic activity. The public sector grew from small beginnings to acquire a GDP share of one quarter and an investment share of one half in the late 1980s. Significant parts of the private, especially formal, sector were controlled through an industrial licensing system, financial and credit controls, price and distribution controls, and labor laws. In addition to extensive quantitative restrictions on foreign trade, foreign direct investment was heavily restricted as to both sectors and the equity share of participation.

After the crisis of June 1991, the self-professed policy of the government has been liberalization and globalization. However, this policy change was not an altogether abrupt one: throughout the 1980s, there were attempts at reducing state control and autarky. Apart from a modicum of liberalization under the Janata government which removed Indira Gandhi from power in 1977, policies turned rightwards towards further liberalization when Mrs. Gandhi returned to power in 1980. A further fillip in that direction was given by the elections of December 1984 which brought Rajiv Gandhi to power.

In July 1991, immediately following the general elections, the balance of payments crisis, and the imposition of IMF conditions, the new government of P. V. Narasimha Rao announced a radical policy overhaul in its Industrial Policy Statement¹. The changes included the removal of most non-tariff restrictions on imports of capital and intermediate goods, the broadening and simplification of export incentives, and the elimination of state trading monopolies. A negative list of restricted imports was drawn up to include items of national sensitivity (chiefly defense and health-care), and

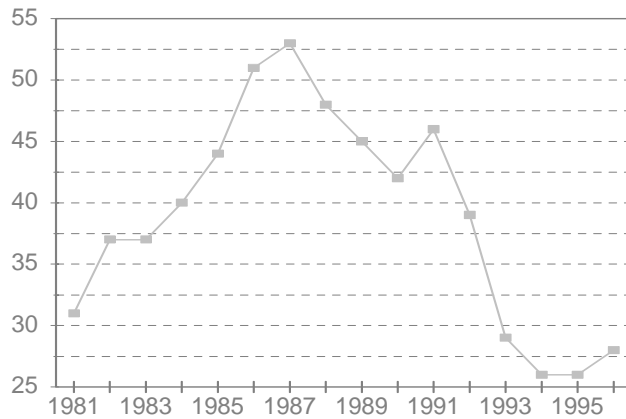


Figure 1 Import Duties as a percentage of Imports

some capital goods and most consumer goods (the number of which has subsequently been reduced) for protectionist reasons. Imports of all other goods were allowed except those still reserved for import through the government's canalizing agencies.

The percentage of products covered by non-tariff barriers, using the harmonized system of trade classification, came down from 90% in the pre-reform period to 44% by 1995 (Mehta, 1997). As for tariffs, the unweighted average nominal tariff was 125% in 1990-91, the highest rate being 355%. In 1993-94 these figures fell to 71% and 85% respectively, and have been reduced steadily thereafter. According to one estimate, the average economy-wide effective rate of protection declined from 87% in 1989-90 to 62% in 1993-94 and further to about 30% in 1995-96 (Mehta, 1997). The ratio of import duties to the total value of imports, fell from a peak of 53% in 1987 to 28% in 1996 (see Figure 1). Notwithstanding the reduction in tariffs being sharpest in respect of the highly protected capital goods sector, the dispersion in import tariffs remains high (Mehta, 1997).

The rupee was devalued by 20% against the US dollar in July 1991 and further in February 1992 when an official dual exchange market was created. Since the inflation rate was about 14% in 1991-92, the depreciation of the real exchange rate was only by 7.89%. Subsequently, a unified, floating exchange rate regime was adopted with the rupee becoming fully convertible on the current account.

Restrictions on foreign capital inflows have also been considerably reduced. Foreign equity holding of up to 51% was allowed in 34 high priority industries requiring large investments and advanced technology, departing from the earlier restriction of 40%². With a view to encouraging technology transfers from abroad, the government announced that it would provide automatic approval for technology agreements related to high priority industries within specified parameters. There has also been a deregulation of portfolio capital flows: non-resident Indians and foreign institutional investors (FIIs) were allowed to own stock in the corporate sector and larger Indian firms were allowed to obtain long-term low cost financing from the international capital markets.

Sweeping measures of internal deregulation - the virtual dismantling of the licensing system, for instance - have also been implemented. Moreover, a program of economic stabilization has accompanied the above measures: in particular, the fiscal deficit was reduced by over a third. The government has also announced intentions to bring down import tariffs to international levels, replace quantitative controls with price signals, and to make the rupee fully convertible.

2.2 Globalization and openness

Much of the literature, and common parlance in India even more, uses openness and globalization synonymously. In this paper, however, we reserve the term *openness* to refer to policies which aim to bring about economic integration with international markets, and take *globalization* to be some measure of increased external integration actually achieved³. The reason for distinguishing between the two terms, despite the close relation between them, openness may not go hand-in-hand with globalization, as defined here⁴.

The importance of openness and globalization in India's economic reforms is obvious. The

official case for the reforms relies on both positive and negative arguments. The key positive arguments are: (1) that trade liberalization will improve allocative efficiency by shifting resources from capital-intensive to labor-intensive sectors; (2) that reduced protection will raise technical efficiency by exposing Indian firms to foreign competition; (3) that lowered barriers to foreign capital inflows will speed up capital accumulation and raise productivity levels through technology upgradation and spillovers. The official case also takes aggregate demand and foreign exchange constraints on growth to be the consequences of an autarkic policy orientation, the remedy for which lies in openness and globalization; this constitutes the negative case for the reforms. Each of these arguments makes external integration - or globalization - the engine of economic growth, and openness the centerpiece of policy. As described above, the reforms also involve internal deregulation and liberalization, and the adoption of other elements of domestic policy orthodoxy. However, these are viewed as *economic pre-requisites*, or at least facilitators, for pursuing a successful policy of openness for increasing globalization and, in turn, the likely *political consequences* of a policy of openness. Therefore, openness does indeed constitute the focal point, and globalization the touchstone, of the new regime as it is perceived by its architects.

Since our purpose is to examine the consequences of globalization, we will focus mostly on import liberalization, removal of restrictions to capital flows and on technology imports - which are the main elements of greater openness. However, we will also take into account domestic policy changes - internal liberalization as well as those involving general macroeconomic policy - given that these reforms are inextricably linked to, and flow from, the logic of globalization.

2.3 Methodological remarks

In assessing the growth and social impacts of globalization, our method will be to compare trends

before and after the onset of the reforms in 1991. It is important to be forewarned of the problems of this method.

The “before/after” method is problematic because the year 1991 witnessed a harvest failure and a severe payments crisis which obliged government to undertake stabilization measures which are not necessarily part of the structural reforms. Moreover, as we have seen, the government not only embarked on external liberalization but also on reforms liberalizing domestic activities. Given that the post-1991 outcomes are likely to be affected by all of these changes, it would seem impossible to attribute the “before/after” differences solely to policy changes affecting external economic relations. We will guard against this problem by causal mechanisms linking aspects of the reform to economic performance in addition to general trends relating to growth and the social sector.

It may be thought preferable to examine the effects of “globalizing” reforms by means of a suitable computable general equilibrium model of the Indian economy and to consider the effects changes in parameters which reflect reforms in the foreign sector alone. Although this could isolate the effects of external policy changes, this method has the difficulty that it ignores the close relationship between external and domestic policy changes discussed above - not only because the requirements of consistency might force domestic policy changes to conform with external policy changes but also because elements of avowedly “domestic” policy might raise or reduce an economy’s level of “globalization”. For instance, devaluation can be thought of as a way of stabilizing the economy, but it may also make the economy more open to foreign trade. Conversely, the dismantling of the licensing apparatus, usually thought of as an internal liberalization measure, may make exports more competitive and the economy more attractive to foreign investors.

A second issue is whether 1991 is an appropriate date for our before/after comparison. It is generally accepted in the Indian discussion that the most important policy discontinuity occurred in 1991. However, some have argued that since liberalization started in the 1980s and even earlier, it is not appropriate to compare the period before and after 1991 as showing the effects of reforms. But the weight of opinion rejects this view. Not only was the liberalization of the 1980s halting and partial (indeed, some evidence indicates greater protectionism in this period than in the 1970s) but most observers attribute the higher growth of that period, especially in the industrial sector, to expansionary fiscal policies. We share this view and therefore take 1991 as the crucial divide.

A third issue concerning the before/after method is that the beneficial effects of external integration take time to be felt and too few years have passed (and fewer still for which the evidence is complete) since 1991 to judge these longer-term effects. While there is some merit in this argument, too much should not be made of it. We propose to examine both what happened immediately after 1991 and what happened thereafter and expect that this can shed some light on the short- and long-term distinction.

3. Openness and Economic Growth

In this section we examine whether opening up the economy has had any identifiable effect on economic growth and related macroeconomic indicators as compared with trends prior to 1991. We first discuss the extent to which the Indian economy has become more globalized under the new regime using alternative indicators, and examine mechanisms by which these changes affected the economy. We then turn to the overall trends in growth and other macroeconomic indicators and finally turn to the agricultural sector which is home to over three-fifths of the labor force and an

even higher fraction of the poor.

3.1 Increased Openness and Globalization

(1) Trade Flows India's foreign trade has increased substantially in the post-reform period. Foreign trade as a fraction of GDP has grown from around 15% in the 1980s to over 27% in 1995 and 1996 (see Figure 2). Whereas India's share of world exports fell consistently from about 2% in the 1950s to about 0.6% in the 1970s, and then stayed at around 0.5% from 1973 onwards through the 1980s, the share has now risen smartly to 0.8% in the post-reform period. In growth terms, the dollar value of India's exports increased annually at 12% between 1990-91 and 1995-96, which is significantly higher than the 7.5% growth rate for world trade. By any standard, this must be reckoned rapid globalization. But the aggregate trend in exports and imports conceals other elements suggesting continuity.

(i) The import-GDP ratio has risen even faster after 1991 than the export-GDP ratio, peaking in 1995 with a one-percent drop in the following year (see Figure 3). This means that the trade

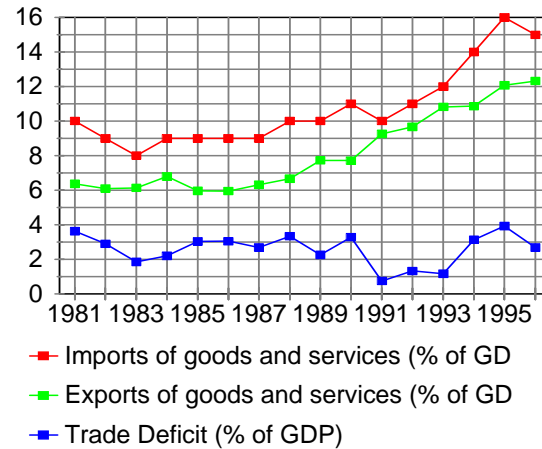
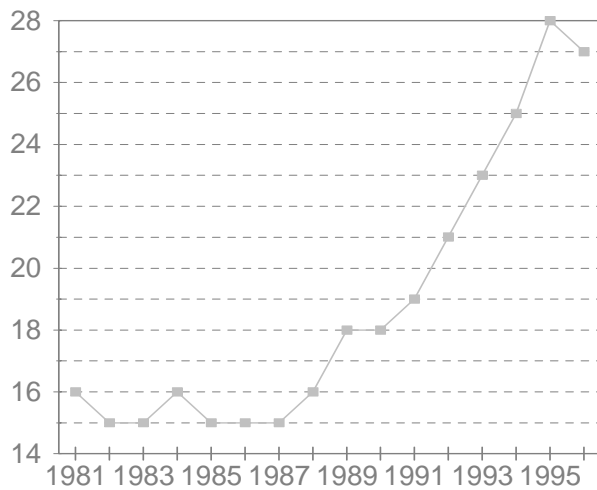


Figure 2 Foreign Trade as percentage of GDP **Figure 3** Imports, Exports and Trade Deficit (% of GDP)

deficit has worsened due to the increase in imports and despite the rise in exports, both presumably due to liberalization.

(ii) Based on a measure of structural change, it has been shown that while there was a shift in the composition of imports between 1980-81 to 1990-91, no further shift can be detected during the post-reform period (Mehta, 1997). This is surprising considering the large changes in the structure of protection. It suggests that changing trade policy measures on the relative competitiveness of import-competing sectors may have been neutralized by other policy shifts.

(iii) Econometric evidence does not support the conventional conjecture that changes in competitiveness have increased India's exports; nor do the reforms appear to have had an appreciable effect (Mehta, 1997). As with imports, Mehta (1997) finds that the composition of India's exports

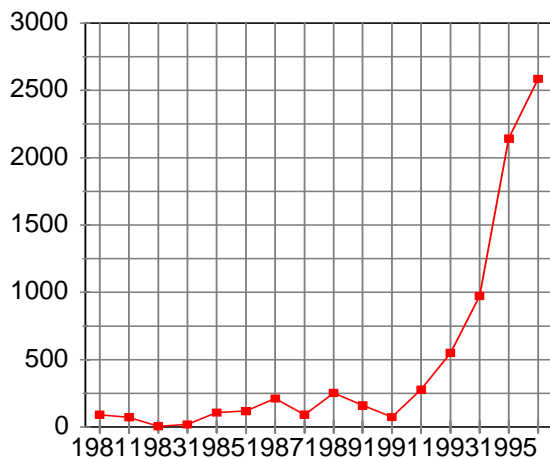


Figure 4: Net Foreign Direct Capital Inflow (current US\$ million)

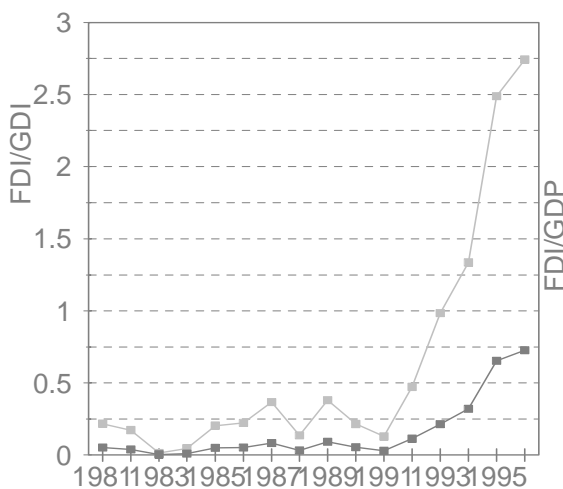


Figure 5 FDI as % of GDI and GDP

1993-94 FDI was at \$586 million, which increased to \$1314 million in 1994-95, to \$2133 million in 1995-96 and to \$3.2 billion in 1997.

Over the period when policies were restrictive, the sectoral composition of FDI stock moved in favor of manufacturing, its share rising from 40.5% in 1964 to 86.9% in 1990 (Kumar, 1995). After the slow liberalization of the 1980s, the composition changed to favor services and

has not changed significantly in the 1990s, while it did so between 1980-81 and 1990-91. India's export growth acceleration appears to have been a shift in export composition toward the Asian markets, which experienced higher rates of trade growth than the world as a whole.

(2) FDI Flows After a long period of stagnation in the 1970s, the inflow of FDI has speeded up in recent years, as shown in Figure 4. After the slow liberalization in the 1980s the FDI stock nearly tripled in that decade. Following the new policies of 1991, although approvals of FDI inflows increased spectacularly - compared to \$200 million in 1991, about \$17 billion worth of FDI proposals was approved in 1997 - actual inflows have been considerably smaller. In

infrastructure rather than manufacturing, and lower-technology rather than higher-technology sectors. Though the number of foreign collaboration approvals has been highest in core sectors such as telecommunications (25%) and energy development (21%), the actual flows by industry follow the 1980s pattern.

While FDI is supposed to contribute to economic growth in part by raising the rate of capital formation, the volume of FDI has remained very low relative to both GDI and GDP (see Figure 5). In fact, the state has remained the principal financier of local enterprises, in both public and private sectors, through the financial institutions that it controls. The share of foreign firms in fixed asset formation in the corporate sector remained unchanged at about 10% in the 1990s. Moreover, as compared to Indian firms, foreign firms used a smaller fraction of their investable resources in physical investment; during the five years since 1991-92, the ratio of gross fixed assets to total uses of funds for the foreign private sector was lower than that for the indigenous private sector by about 13% (Nagraj, 1997, citing CMIE data). Nagraj (1997) surmises that a large proportion of FDI thus represents acquisition of managerial control of existing firms, and does not represent new capital formation.

According to one view, India's restrictive attitude towards TNCs during the 1970s and 1980s was a factor in her technology lag (Encarnation, 1989). A widely-held expectation is that the new liberalization of FDI will help upgrade India's technology, enhance product innovation and transfer management skills. But the evidence provides little support in favor of this expectation. The growth rate of productivity for industries in which the inflow of advanced foreign technology is relatively high is not significantly greater than that for industries in which the inflow of foreign technology is low (Goldar, 1993). Moreover, the sectoral composition of FDI flows noted above does not auger

well for technological change.

Finally, there is scepticism about the claim that the increase in FDI that has occurred since 1991 is due to the liberalization policy. Kumar (1998) has drawn attention to the fact that this increase occurred at a time when global flows of FDI, including that to developing countries, expanded dramatically. True, since infrastructural sectors from which India previously barred FDI accounted for nearly half of total FDI approvals in the post-liberalization period, one may conclude that at least a part of the increase is liberalization-driven. However, an examination of India's share as a host of FDI flows from Germany, France and the US do not show any significant change, suggesting that FDI liberalization has not had a major impact.

(3) Portfolio Investment and Foreign Currency Bank Deposits The opening up of the stock market to international capital flows produced a boom in stock prices in India. Total foreign portfolio investment in India expanded rapidly, from \$6 million in 1990-91 to over \$3 billion in 1996-97. Foreign currency deposits in banks have also increased rapidly.

Despite these trends, the expected growth effects of portfolio inflows have not been fulfilled. It is clear that the volatility of stock prices has increased, partly due to the growing influence of the Foreign Institutional Investors (FIIs), a direct consequence of deregulation. This rising influence also makes the markets increasingly sensitive to political uncertainty which has also risen during the 1990s. While market enthusiasts hoped that stock market stimulation from foreign inflows would help bump up the saving rate, no such connection has materialized. While the volume of household savings held in the form of shares and debentures and in units of the Unit Trust of India (a public sector mutual fund) has risen 35-fold since 1980-81, the overwhelming part of this reflects a shift

from bank deposits to stocks. After the sharp falls in stock prices mentioned above, the share of stocks has gone down again in favor of bank deposits (Pal, 1998). Moreover, a large proportion of these inflows did not contribute to fixed capital formation in manufacturing since the ratio of Gross Fixed Capital Formation to the supply of long term funds available to that sector fell significantly during 1992-96 (Nagraj, 1997). Nagraj argues that the resources were more important for intercorporate investment, financing mergers and takeovers, and to fuel the real estate boom.

The volatility of these hot money flows seen elsewhere in the world is also reflected in Indian experience since 1991. The fact that the rupee is not convertible on the capital account has shielded India from the crises which has affected East and South East Asia. Nevertheless, the volatility of these flows puts upward pressures on the rupee when inflows are high, which may erode the competitiveness of Indian products abroad, and lead to pressures on the balance of payments when outflows occur, requiring import compression and restrictive government policies which reduce the growth of the economy. Given the political uncertainty (with a minority government which is doing poorly in opinion polls and state elections), the possibility of sudden outflows cannot be ruled out, making these inflows a fickle financier of growth.

3.2 Economic Growth and Other Macroeconomic Indicators

Figure 6 shows the behavior of the annual rate of growth of the economy. Leaving out the high-growth year of 1988 and the crisis year of 1991, real GDP growth has fluctuated between 3.5% and 7.5%. Given the fluctuation, it is difficult to come to any clear conclusions about trends before and after 1991. On the one hand, the highest rate of growth of any single year occurred before the 1991 reforms. On the other hand, between 1994 and 1996 the economy grew consistently above the 7% level, a feat not achieved in the pre-reform years. This high rate of growth, however, has not been maintained in 1997-98, when it has fallen to about 5%.

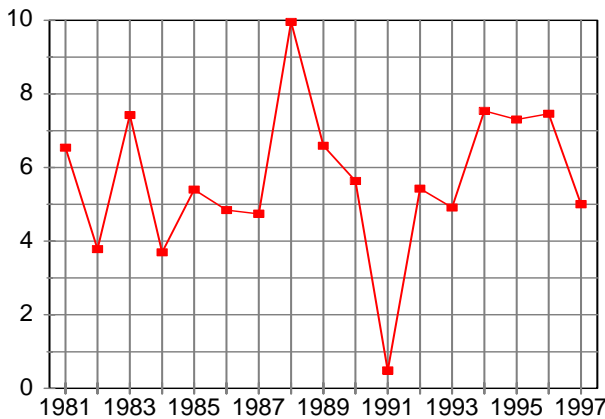


Figure 6 Real GDP growth, 1981-1997

Average and trend growths are more revealing. The average GDP growth was 5.3% for the post-reform period 1992-96 as compared to 5.7% for 1981-85 and 5.9% in 1986-91 (see Table 2). Thus the rate of growth for the post-reform period (even leaving out the low-growth year of 1997) is lower than the previous decade. Even on a

disaggregated view, one finds that the primary, secondary and tertiary sectors all grew at a lower rate in the post-reform period than in the five years immediately preceding the reforms, and only the tertiary sector grew faster than in the 1981-85 period. Using a dummy variable for the post-1991 years in log-linear trend regressions, Nagraj (1997) finds no statistically significant break in 1991 for total GDP, and for the primary and tertiary sectors, and a modest fall for the secondary sector of 0.4 % since 1991.

Table 2. GDP and Sectoral Growth Rates, 1981-96

	Primary	Secondary	Tertiary	GDP
1981-85	5.8	6.1	5.4	5.6
1986-91	3.7	7.4	7.1	5.9
1992-96	2.5	6.3	6.8	5.3
1981-96	4.0	6.6	6.5	5.7

Source: Nagaraj (1997), from *National Accounts Statistics*, various issues



Figure 7 Central Government Deficit to GDP

The fiscal deficit of the Central and State governments (measured by the excess of total expenditure, including loans net of recovery, over revenue receipts and external grants and non-debt capital receipts) averaged 9.5% of GDP during 1985-90, reaching 10.1% in 1990 just before the reforms, fell to 8.0% in

1991-92 and 7.7% in 1992-3 after the fiscal correction, and rose again to 9.0% in 1993-94 and 8.3% in 1994-95, and 7.9% in 1995-96 (Patnaik, 1997). There has been an increase in the deficit during the last year and the present, due mainly to the revenue or current account deficit which for the Central and State governments averaged 2.8% in 1985-90, increased to 4.5% in 1990-91, fell to 3.6% and 3.4% during the next two years, and climbed up again to 4.6% during 1993-94 and to 4.0% and 3.9% in the next two years (Patnaik, 1997). The interest burden on the central budget has continued to rise throughout the 1990s, its share in current expenditure increasing from 21.6% in 1990 to 27.7% in 1996. While this is the primary

source of the fiscal squeeze, another source of revenue squeeze, especially noticeable during the last 2 years, is import tariff revenue. Customs revenue as a ratio of total Central Government revenues fell from above 33% in 1991 to below 30% in 1998; in 1995 it reached about 23%. The effect of this on the government budget deficit can be seen by comparing the actual Central Government deficit to GDP ratio to what it would have been had the 1991 ratio of customs to total revenue been maintained, as shown in Figure 7.

One predictable consequence of this fiscal squeeze is that public capital formation has slowed down during the 1990s. It is widely acknowledged that one of the major explanations of India's strong growth performance in the 1980s is the increase in infrastructure investment, especially in railways and power generation (Ahluwalia, 1991: 85-87). Such investment not only has a positive supply-side effect, but there is also evidence that there is a positive demand-side effect as government investment "crowds in" by private investment, both in the industrial and agricultural sectors. There is a consensus now that between the declining fiscal capacity of the state and the unresolved regulatory complexities surrounding privatization, the infrastructure sectors loom

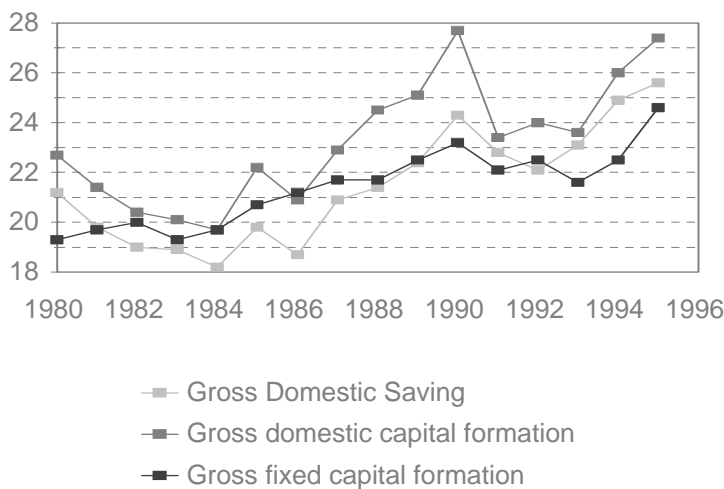


Figure 8 Saving and Investment Rates, 1980-95

increasingly large as a constraint on economic growth, especially given India's low level of infrastructure development (World Bank, 1996).

Figure 8 shows trends in domestic saving and investment rates. Savings in the post-reforms period rose from 22 per cent of GDP

in 1992-93 to 26.2 per cent in 1996-97, and aggregate investments went up from 24 per cent to 27.8 per cent. Household savings averaged 19.4 per cent, with investments in financial assets showing a marked growth. While this may be counted as a positive payoff to the financial (internal and external) liberalizations of the reform program, it has not resulted in higher growth, so that the added accumulation seems to have contributed to increased capital intensity in the economy rather than to income growth as such. Data on actual capital-output ratios confirms this: the net fixed capital to output ratio for the economy, after falling from 2.63 in 1980 to 2.38 in 1990, increased in the 1990s it increased to 2.46 in 1994. The increase has been particularly striking in the manufacturing sector, where it increased from 2.13 in 1990 to 2.57 in 1994 (EPW, 1997).

Figures 9 and 10 show trends in price indices and in bank interest rates. The sharp spurt in prices in 1991 is the combined effect of the drought, monetary restriction associated with the stabilization program, increases in administered prices and in the issue prices of government-subsidized foodgrains, and subsequently, the extraction of an export surplus from the economy. Bank rates were jacked up to curb inflation, to entice capital inflows and as part of a program of financial liberalization. While lending rates rose abruptly, the cooling of inflation helped bring them

down again. Indeed, they have fallen 2 to 3 points below where they had been prior to liberalization reflecting the massive growth of the primary issues market after 1994 and recessionary conditions



Figure 9 Inflation Rates

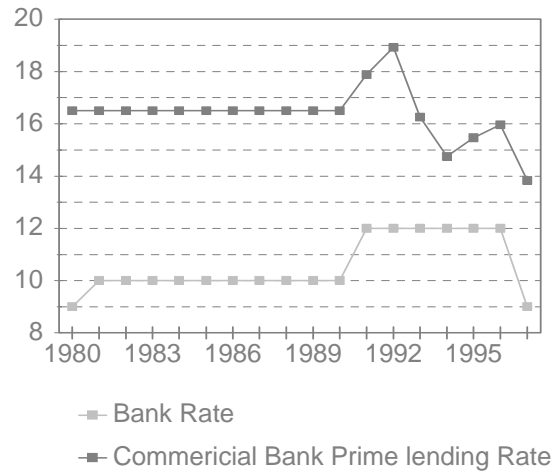


Figure 10 Interest Rates, 1980-97

in industry during the last two years.

We conclude this subsection by examining the contribution made to growth by different components of demand and by total factor productivity growth (*TFPG*), using two alternative approaches to growth accounting reflecting different constraints on growth⁵.

Although the concern with the role of aggregate demand as a determinant of growth has been lately drowned by the focus on supply-side cures implicit in the reforming agenda, we believe that aggregate demand issues remain highly relevant especially for non-agricultural sector, in stimulating investment, raising utilization in the oligopolistic industrial and service sectors of the formal economy, and thereby output and savings (see Dutt, 1996). The role of different components of aggregate demand - private investment, government spending and export - in stimulating growth is analyzed in Figure 11, where *X* is total supply (GDP plus total imports), *I* is private investment, *G*

is total government expenditure (including government investment), E is exports, and s , t and m are the ratios of private saving, taxes, and imports to total supply. X , I , G and E have been deflated by the GDP deflator and expressed in real terms. Following Godley and McCarthy (1997), we can take I/s , G/t , and E/m to be the contributions of investment, government spending and exports to GDP (since they show the real levels of these components multiplied by the respective “own” multipliers); X is therefore a weighted average of these three contributions. We find that government spending

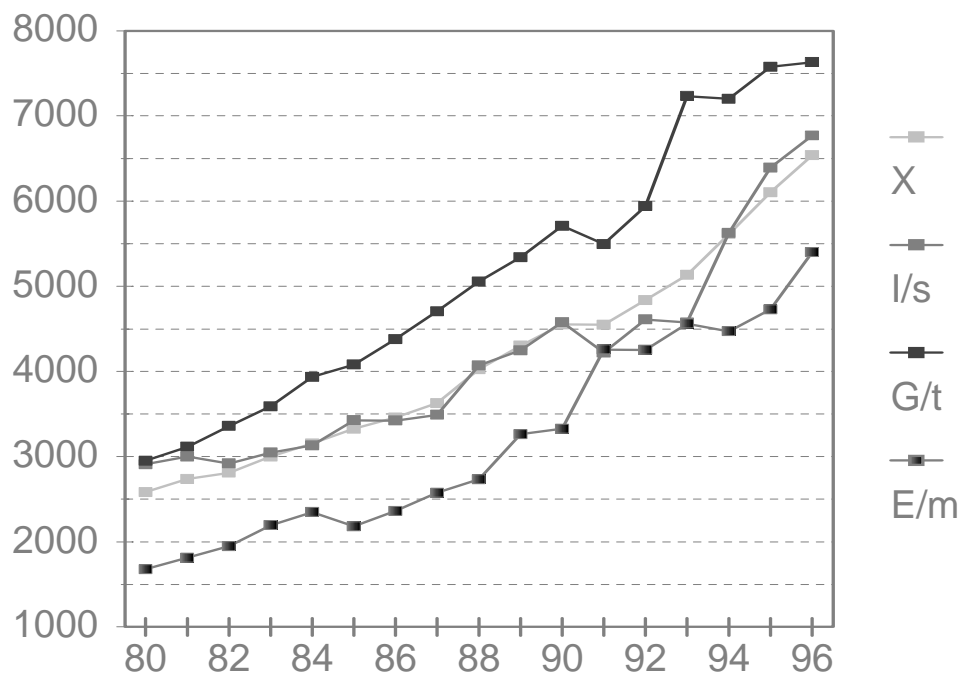


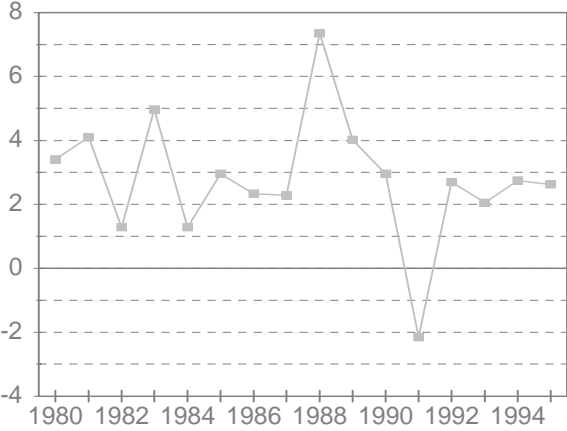
Figure 11 Contributions of Investment, Government Spending and Exports to GDP

has, since the 1980s, always been the major expansionary component of demand, since G/t consistently lies above the X line. The domestic private sector has more or less played a neutral role, since I/s has been close to X , while exports has consistently played a depressive role, since E/m is consistently below X . This pattern, strongest during the 1980s, confirms the importance of

government fiscal policy in generating growth in the 1980s. The contraction of fiscal spending during the crisis of 1991 is reflected in the data, as is the contraction in the private domestic sector and the expansion in the role of exports. However, soon thereafter we find the fiscal factor recovering its role, though leveling off in recent years as the role of the private domestic sector and exports has grown. Despite these changes, however, the basic pattern remains that of fiscal policy being the major expansionary component of aggregate demand even after the reforms. With the development of recessionary tendencies over the last 2 years, this analysis finds further confirmation in the growing clamor for fiscal boosts to the sagging growth of industry.

Turning to the supply-based approach, we use the simple and popular method of calculating *TFPG* using Solow’s residual, despite the well-known problems it has in measuring technological change. Our estimates the residual, using the equation

$$TFPG = g(Y/L) - \alpha_K g(K/L),$$



where $g(i)$ refers to the rate of growth of i , Y is real output, L is total employment, K is real net fixed capital stock and α_K is the share of capital in output, ⁶ are shown in Figure 12. As expected, *TFPG* is negative in the crisis year of 1991. Leaving aside 1991 (when *TFPG* is negative),, the average *TFPG* is 3.4 for the period 1980-90 and 2.5 for the period 1991-

Figure 12 Total Factor Productivity Growth

95, suggesting that there has been a decline in *TFPG* after the 1991 reforms compared to the 1980s.

3.3 Agriculture under the Reforms

Critics of the liberal program since 1991 have tended to maintain that it neglects agriculture. They fear that structural adjustment policies of the 1990s together with the falling trend in public investment in agriculture dating from the 1980s are undermining the basis for labor-absorbing and equitable growth. Defenders of the program argue that agriculture is a prime if indirect beneficiary due to reduced protection for industry and the (partial) removal of restrictions on agricultural exports. Further movement on this reform path, including especially freeing up the food and agricultural markets, can only further these benefits as India will then emerge as a major exporter in this sector.

But experience for the seven years since reforms began bear out the critics. Despite the highly unusual succession of ten normal monsoons that has included that seven-year period, foodgrains output growth has decelerated from 3.5 per cent in the 1980s to a mere 1.7 per cent in the 1990s the latter implying a declining trend in per capita supply. The GDP share of agriculture at 1980-81 prices has fallen from 29.96 per cent in 1991-92 to just 24.38 per cent in 1997-98⁷. While one might argue that this decline reflects a healthy process of structural change, this seems distinctly implausible not merely because trade reforms, in the liberal reckoning, greatly reduced “urban bias” but also because poverty increased at least during the early years and food consumption fell. How could it be that as a “pro-agriculture” policy took root, the share of agriculture fell off so significantly? Perhaps, the liberal diagnosis and prescription for agricultural development are flawed.

At the same time, however, the notion that there is an overwhelming discontinuity in agricultural and food policies cannot be taken at face value. On the production side, recent

governments have tried to step up outlays for public investment in agriculture while on the food consumption side, after the early years when issue prices in the Public Distribution System (PDS) had been raised sharply, those price increases have been sharply slowed or reversed. These moves are rather in keeping with the long-established understandings of the determinants of agricultural production, food consumption and poverty in India.

Moreover, the effectiveness of partly restored fiscal allocations for agriculture and its infrastructure will remain low if inertial elements in policy are not overcome. These elements include: (1) a continuing reliance on a high-input and high-capital intensity strategy that is evident in the heavy subsidisation of inputs, the failure to mobilise surplus labour on farm or for infrastructure building off the farm; (2) capital-intensive and environment-unfriendly programs to augment the effective supply of land; (3) the assumption of the immutability of the particular combination of agrarian inequalities and market failures together with government policies themselves that alone can account for the low rate of labor-absorption in Indian agriculture⁸.

External liberalisation, whereby the agricultural sector is sought to be integrated with the global market, will not only raise the key wage goods prices and fuel inflation but also holds the potential to effect a contraction in aggregate demand and employment. As Nayyar and Sen (1994) have argued, if the trade reforms are not supplemented by a supportive agricultural policy, emphasising public irrigation investment and institutional changes, medium-term stagflation may result. Empirical support for this argument is provided by the dynamic general equilibrium estimates of the effects of agricultural trade liberalisation, reported in Storm (1997), which also indicate that the reforms on their own will be distributionally regressive. The main factors underlying these results are, first, the lack of adequate rural infrastructure and second, the prevailing agrarian

structure. These factors, rather than the lack of price incentives, are the dominant constraints on private investment and the use of 'modern' inputs (see Rao, 1998b).

4. Changes in the Employment Structure

Employment and wages are probably the most important potential channels through which the social impact of increased openness and globalization are felt. In this section, besides presenting the evidence on overall employment and unemployment trends, we examine trends in formal sector employment and in informalization, and in the sectoral composition of the labor force⁹. The reader is cautioned at the outset that in an economy characterized by the preponderance of household and tiny enterprises, high rates of underemployment, a very high incidence of casual, frequently part-time, work, and widespread seasonal and gender gaps in employment opportunities in spatially dispersed, often localized, labor markets, employment statistics should be taken with a dose of scepticism.

4.1 Shrinking Formal Employment

Figure 13 shows the changes in employment levels in the "organized" sector which includes all public sector employment (mostly in industry and services), and employment in private sector units that employ more than 10 persons¹⁰. It shows that organized sector employment has grown sluggishly during the 1980s and the 1990s, and that most of this has been in the public sector while private sector employment has stagnated.

Figure 14 shows that the growth rate of organized sector employment has fallen steadily over the entire period, a trend dominated by the decline in the rate of growth of public sector employment. Private sector employment growth, throughout the 1980s, was slower than public sector employment

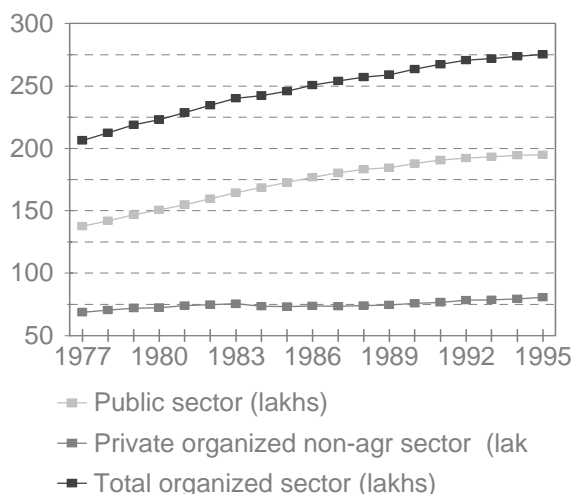


Figure 13: Employment in Organized Sector, 1977-95

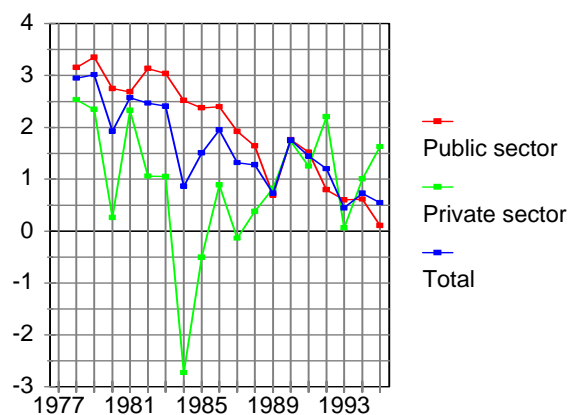


Figure 14 Growth rates of Organized Sector Employment

growth. Only as late as 1992 did it equal the latter. Thereafter, it has fluctuated at a level that has not been able to counter the decline in the growth of public sector employment, so that total organized sector employment growth has continued to fall.

While the trend in organized sector employment is suggestive, this sector accounts for only around 10% of total employment. We therefore need to examine figures for total employment, to which we now turn.

4.2 Aggregate Employment and Employment Structure

Employment figures for the economy as a whole (including the unorganized sector) are available only from the *decadal* censuses and from the periodic surveys conducted by the national sample survey (NSS) organization. Census figures available for 1981 and 1991 cannot reveal any trend changes that may have been caused by the recent reforms. NSS estimates, however, are available

for 1983, 1987-88 and 1993-94. NSS figures are disaggregated for urban and rural areas and for males and females. Considering the usual status of workers in all age groups and including people from subsidiary employment as workers, for urban areas the male worker participation rate (WPR) increased marginally from 50.6% to 52.0% between 1987-88 to 1993-94, while the female WPR also increased marginally from 15.2% to 15.4%. For rural males the increase was from 53.9% to 55.3%, the figures being 32.3% and 32.8% for females. Broadly similar conclusions obtain if we consider the daily and weekly status of workers rather than their usual status; if we exclude children rather than including them; and if we consider only people's principal employment rather than their subsidiary employment as well. The important exception is that for rural males in the 15-59 age group, for whom the daily status WPR fell from 83.5% to 80.9%.

Data on unemployment rates are also available from the NSS rounds. Comparison between the major NSS surveys of 1987-88 and 1993-94 shows that unemployment rates have gone *down* for all categories of workers, and especially so for women; the only figure which shows an increase is that for rural men by daily status, from 4.6% to 5.6%. Comparisons with 1983 also show reductions, although smaller ones in most cases (though the daily status rural male unemployment rate now shows a decline in 1993-94). However, results of additional smaller - "thin" - surveys, if taken to be roughly comparable to those of the broader surveys, show that the 1987-88 figures for unemployment are consistently *higher* than those of the next four rounds (1989-90, 1990-91, July-December 1991 and 1992) and that compared to the levels for these years, the 1993-94 unemployment rates are usually higher.

Turning next to data on the composition of employment, consider first the information on the type of employment - self-employment, regular and casual employment - shown in Table 5,

which reveals several trends. One, the share of self-employed in employment has fallen for all categories from 1977-78 to 1993-94 (the trend continuing after 1987-88), with the exception of urban males, where the proportion increased marginally. Two, there is a steady fall in the share of regular employees and a rise in that of casual labor in all categories except for urban females. Three, for urban female workers there has been a steady increase in the proportion of regular workers both in terms of principal status and for all workers; as just noted, this is the opposite of the trend for all other types of workers. Four, the trend away from regular employment and towards casual labor seems to have intensified between 1987-88 and 1993-94; indeed, for rural females 1987-88 was a peak for the proportion in regular employment.

The other important dimension of employment composition concerns its sectoral distribution. It is well known that with the process of development, economies undergo a change in the structure of employment away from lower productivity agricultural sectors to industrial and service sectors. This trend out of agriculture is observed in Table 6, especially for males in both rural and urban areas. However, the table also shows that this structural shift seems to have been stalled after 1987-88 for all categories of workers other than for urban females. Since the Census figures do not show such a stalling till 1991, Kundu (1997) argues that this has occurred in the years after the reforms of 1991.

The percentage of workers in manufacturing in urban areas has decreased since 1977, a trend that has continued apace between 1987-88 and 1993-94, while two sectors that have experienced systematic increases in employment share are wholesale and retail trade and community and other services. Kundu (1997) explains the loss of manufacturing employment in terms of jobs being subcontracted out by large manufacturing units to smaller ones which are often household units that

classify themselves as service units. While such misclassification may well occur, some of it is undoubtedly real. Since the declines are too large to be accounted for by the organized or factory sector alone, they must reflect loss of employment in household and other non-factory modes of manufacturing. This loss of manufacturing employment should be seen in the light of our earlier conclusion that, for the economy as a whole, output growth has not kept pace with investment growth, both possibly manifestations of capital deepening¹¹.

Table 5. Composition of Usually Employed Persons by Type of Employment, 1977-1994

Year	Usually Employed			All Workers		
	Self-Employed	Regular Employees	Casual Labor	Self-Employed	Regular Employees	Casual Labor
Rural Males						
1977-78	62.2	10.8	27.0	62.8	10.6	26.6
1983	59.5	10.6	29.9	60.5	10.3	29.2
1987-88	57.5	10.4	32.1	58.6	10.0	31.4
1993-94	56.9	8.5	34.6	57.9	8.3	33.8
Rural Females						
1977-78	56.3	3.7	40.0	62.1	2.8	35.1
1983	54.1	3.7	42.2	61.9	2.8	35.3
1987-88	54.9	4.9	40.2	60.8	3.7	35.5
1993-94	51.3	3.4	45.3	58.5	2.8	38.7
Urban Males						
1977-78	39.9	47.2	13.9	40.4	46.4	13.2
1983	40.2	44.5	15.3	40.9	43.7	15.4
1987-88	41.0	44.4	14.6	41.7	43.7	14.6
1993-94	41.1	42.7	16.2	41.7	42.1	16.2
Urban Females						
1977-78	42.2	30.8	27.0	49.5	24.9	25.6
1983	37.3	31.8	30.0	45.8	25.8	28.4
1987-88	39.3	34.2	26.5	47.1	27.5	25.4
1993-94	36.4	35.5	28.1	45.4	28.6	26.0

Source: Kundu (1997), from National Sample Survey Organization (1988, 1996)

Table 6. Sectoral composition of workers (principal and subsidiary status) 1977-1994

Sector	Male				Female			
	1977-78	1983	1987-88	1993-94	1977-78	1983	1987-88	1993-94
Rural								
Agriculture	80.5	77.8	74.6	74.0	86.8	87.8	84.8	86.1
Mining & quarrying	0.5	0.6	0.7	0.7	0.3	0.3	0.4	0.4
Manufacturing	6.5	7.0	7.4	7.0	6.1	6.4	6.9	7.1
Electricity	0.2	0.2	0.3	0.3	0.0	0.0	0.0	0.1
Construction	1.7	2.2	3.7	3.2	0.7	0.7	2.9	0.9
Trade, etc.	4.0	4.4	5.1	5.5	2.3	1.9	2.1	2.1
Transportation, storage etc.	1.2	1.7	2.0	2.2	0.1	0.1	0.1	0.1
Financial, insurance etc. services	0.2	0.3	0.4	0.4	0.0	0.0	0.0	0.1
Community, etc. services	5.2	5.8	5.8	6.6	3.7	2.8	3.0	3.3
Urban								
Agriculture	10.2	10.3	9.1	9.0	25.1	32.0	29.4	24.7
Mining & quarrying	0.9	1.3	1.3	1.3	0.6	0.8	0.8	0.6
Manufacturing	27.7	27.0	25.7	23.5	29.4	27.1	27.0	24.1
Electricity	1.1	1.1	1.2	1.2	0.1	0.0	0.2	0.3
Construction	4.2	5.2	5.8	6.9	2.6	3.3	3.7	4.1
Trade, etc.	21.6	20.2	22.0	21.9	9.8	9.0	10.0	10.0
Transportation, storage etc.	9.9	9.9	9.7	9.7	1.2	1.6	0.9	1.3
Financial, insurance etc. services	3.0	3.5	3.5	3.8	0.7	0.4	1.2	1.9
Community, etc. services	21.5	21.4	21.7	22.6	30.4	25.8	26.6	33.1

Source: Kundu (1997), from National Sample Survey Organization (1988, 1994 and 1996).

There is enough grist here for the reform critics' mills. First, the decreases in participation

rates for rural workers in the 15-59 age group is worrisome. It may be symptomatic of slowed employment growth in an economy long accustomed to high rates of underemployment disguised as non-participation. Second, the decline in formal employment growth (both public and private) below the rate of growth of the labor force over a period of nearly a decade when formal sector output has grown at its fastest pace in history suggests a clearly unhealthy pattern of development. When this is coupled with the increasing incidence of casual labor and the decline in self-employment, it appears that a process of *informalization* seems to have become endemic in the Indian labor markets. This has potentially serious consequences for wages, job security, inflation protection, workers' basic rights, and the future of the Indian labor movement. It is undoubtedly a symptom of the further weakening of labor vis-a-vis capital. Third, the increasing feminization of the regular labor force (recall the rise in the regular-to-casual ratio among females versus a decline in the same ratio among males) may well be a further cause of concern for the working classes. At first sight, it would seem to be a trend towards greater gender equality. But as Kundu (1997) has argued, this is probably a continuation of a trend starting in the 1980s in which female regular employment has been in low-wage, low-productivity sectors; indeed, female regular wages are often no higher, even less, than casual male wages. A final cause for concern is the stalling of changes in the sectoral composition of employment, especially in rural areas. Using some of the "thin" NSS survey data, Sen (1996) found that the share of agriculture in rural employment in 1992 increased both for men and women. In conjunction with the evidence on increases in poverty rates, he interprets this to imply a decrease in non-agricultural employment opportunities in rural areas, which pushed workers back to the lower-productivity agricultural sector characterized by the underemployment of labor.

But there is also room for debate as to whether these trends have to do mainly with the reforms or are due to other factors. One point of contention is whether the year which is usually taken as the pre-reform year, 1987-88, is suitable for making comparisons. Kundu (1997) argues that the year was a year of severe drought with higher-than-normal unemployment so that any estimate of unemployment in post-reform years compared to it is likely to be understated. Deshpande and Deshpande (1998) argue that the fact that 1987-88 was a drought year implies that unemployment and underemployment will be lower than otherwise, since drought conditions can be expected to have increased government relief employment programs and increased the share of employment in non-agricultural sectors in rural areas. While the point about the composition of employment may have some merit, it is implausible that government relief programs in response to drought conditions actually reduce unemployment rates below expected levels. Even more to the point, several of the trends, with adverse social implications, that we have found do not hinge on the choice of 1987-88 as the representative pre-reform year.

Another point of contention is whether or not the reforms or rather, the bad harvest of 1991 coupled with the stabilization program following the foreign exchange crisis, were responsible for the employment problems immediately following 1991. We will return to this issue when poverty later; here it suffices to note that we have not made use of data immediately following 1991 to examine trends in employment and unemployment, but rather data for 1993-94.

5. Income Distribution and Poverty

Growing income inequality has been a nearly ubiquitous concern about globalization in both rich and poor countries. In India, absolute poverty has traditionally received overwhelming attention in

both academic research and policy debate long before the “globalizing” reforms of 1991, and this tendency has continued after the reforms. The neglect of relative inequality may not be entirely, perhaps even mainly, a matter of social priority; it may also be seen as resting on the remarkable stability of the expenditure distribution over several decades. But as with employment statistics, income distribution statistics too leave much to be desired. In what follows, we will try to tease out some conclusions about trends in poverty and inequality from such numbers as are available and attempt to link these with the reform process.

5.1 Income Distribution

India’s income distribution as measured by the Gini coefficient of consumption expenditure (which undoubtedly understates *income* inequality) shows little change over the years. Table 7 shows that in both rural and urban areas this coefficient has fluctuated without a clear trend. However, it may be noted that both rural and urban inequality increased between 1990-91 and 1991-92, but then improved in the next year.

There is anecdotal evidence on rapid rates of increase in the incomes of highly-skilled workers and managers in the 1990s, especially in transnational corporations. These increases are especially among those who are graduates of leading management and technology institutes, suggesting increases in the skilled-unskilled wage differential. However, we know of no aggregate data confirming this trend.

Table 7. Gini Coefficient of Consumption Expenditure Distribution

Year	Rural	Urban
1960-61	0.322	0.348
1970-71	0.283	0.326
1977-78	0.339	0.345
1983-84	0.298	0.330
1987-88	0.298	0.354
1988-89	0.290	0.338
1989-90	0.278	0.350
1990-91	0.272	0.331
1991-92	0.287	0.367
1993-94	0.282	0.339

Source: Hashim (1998), estimated from NSS Consumer Expenditure Distribution, Government of India, *A Technical Note to the Eighth Plan of India, 1992-97*, 1995.

5.2 Poverty

As defined by the Indian Planning Commission, the all-India poverty line equals a per capita monthly expenditure of Rs. 49 for rural areas and Rs. 57 for urban areas at 1973-74 all-India prices. Between 1951 and 1975, the proportion of people below the poverty line (the headcount ratio) showed sharp fluctuations but no long-run trend. Table 8 shows trends in three measures of poverty incidence from the mid 1970s using this definition. These numbers have been refined to correct for price level variations across states and survey period following the 1993 recommendations of the Planning Commission's Expert Group on Poverty Estimation (World Bank, 1998). As the Table shows, the

Table 8. Poverty in India, 1977-1994

NSS	Survey	Head	count	index	Poverty	gap	index	Squared	poverty	gap
Round	period	Rural	Urban	Total	Rural	Urban	Total	Rural	Urban	Total
28	Oct 73-Jun 74	55.72	47.96	54.10	17.18	13.60	16.43	7.13	5.22	6.73
32	Jul 77-Jun 78	50.60	40.50	48.36	15.03	11.69	14.28	6.06	4.53	5.72
38	Jan 83-Dec 83	45.31	35.65	43.00	12.65	9.52	11.90	4.84	3.56	4.53
42	Jul 86-Jun 87	38.81	34.29	37.69	10.01	9.10	9.79	3.70	3.40	3.63
43	Jul 87-Jun 88	39.23	36.20	38.47	9.28	9.12	9.24	2.98	3.06	3.00
44	Jul 88-Jun 89	39.06	36.60	38.44	9.50	9.54	9.51	3.29	3.29	3.29
45	Jul 89-Jun 90	34.30	33.40	34.07	7.80	8.51	7.98	2.58	3.04	2.69
46	Jul 90-Jun 91	36.43	32.76	35.49	8.64	8.51	8.61	2.93	3.12	2.98
47	Jul 91-Dec 91	37.42	33.23	36.34	8.29	8.24	8.28	2.68	2.90	2.74
48	Jul 92-Dec 92	43.47	33.73	40.93	10.8	8.82	10.35	3.81	3.19	3.65
50	Jul 93-Jun 94	36.66	30.51	35.04	8.39	7.41	8.13	2.79	2.42	2.69

Note: Poverty line = Rs. 49 per capita per month at Oct 73-Jun. 74 rural prices

All poverty measures are expressed as percentages

Source: World Bank (1998)

headcount ratio fell rapidly and fairly steadily from the mid 1970s to the late 1980s, the average annual rate of decline being 2.4% (World Bank, 1998). These patterns hold for both the rural and urban areas, and the trends are also reflected in the two other widely-used measures of poverty, the poverty gap (which measures the average distance below the poverty line and thus estimates the depth of poverty) and the squared poverty gap (which raises the individual poverty gaps to a power of two and therefore is a measure of the severity of poverty). After 1986-87 the poverty measures started fluctuating again, and registered increases after 1991, the headcount ratio rising from 36%

in 1990-91 to 41% in 1992. For rural India, Sen (1996) estimates that over 60 million people were added to the rolls of the poor during the first 18 months after the initiation of reforms. But note also that the head-count ratio fell back in 1993-94.

The poor in India are concentrated among the landless, especially landless wage laborers, among members of scheduled castes and tribes, and households in which all members are illiterate (World Bank, 1998). These are not disjoint groupings. The vast majority - 74 % - of the Indian poor make their living in the rural, still mainly agricultural, economy.

India's progress in the fields of education and health has been similarly tardy. At the last census, 1990-91, the literacy rate among women and men aged 7 and above was 39% and 64% respectively, up from 30% and 56% in 1980-81. Life expectancy at birth was 59.2 years in 1990-91 compared to 50.4% in 1980-81. Estimates for these measures after 1990-91 suggest that the upward trend is continuing. Although the improvements compared to 1950-51 (when the female and male literacy rates were 9% and 27%, and life expectancy at birth was 32.1%) are notable, India lags far behind other developing countries, including some Asian neighbors.

It is useful to examine the general determinants of trends in poverty before we turn to a consideration of the particular effects of globalizing reforms. One route to reducing poverty is agricultural growth. Using time series data on agricultural poverty which they obtain by modifying NSS data, Datt and Ravallion (1996) find that trends in poverty are explained mainly by agricultural growth. According to their estimates, overall growth in the economy accounts for most of the reduction in the headcount poverty measure - 80% for the entire period and almost 100% since 1970. The evidence across states, according to Datt and Ravallion, shows that poverty reduction has occurred fastest in states that have experienced rapid rural growth with strong infrastructure

development (such as Punjab and Haryana) and in those that have relied on human resource development (such as Kerala). By contrast, Sen (1996) finds that, for the period after the Green Revolution, there is a rather weak link across states between the rate of per capita agricultural growth and reduction in rural poverty.

A second route to reducing poverty is through labor-intensive industrial or non-agricultural growth in urban or in rural areas. While Datt and Ravallion find no empirical support for this view, Sen (1996) reports that increases in non-agricultural incomes tend to reduce poverty in both rural and urban areas. Of particular importance in this respect is the role of increases in non-agricultural employment in rural areas not merely because it may reduce unemployment and underemployment but also because, as a number of authors have noted, it is strongly associated with rising real wages in agriculture during the 1980s. This rise in real wages seems to discredit the view that increases in rural non-agricultural employment were due to the distress needs of those pushed out of labor-shedding agriculture. It has seemed natural to suppose instead that the association between rising wages and rising non-farm employment must reflect the pull of demand. Sen (1996) has argued that rising government expenditures in rural areas, on revenue and capital account, have provided a major impetus for the growth. This view is compatible with the further observation that non-farm employment growth is broadly unrelated to the rate of agricultural growth across states¹².

A paradox of the 1980s experience is that the sharp decline in rural poverty and a rise in rural real wage rates occurred despite the very slow growth of urban organised sector employment and the slower growth of agricultural employment than that of the labor force. An alternative hypothesis, which departs from the assumption of full employment, and relies on an exogenous rise in rural wage rates (due perhaps to increased bargaining power of labourers) helps to explain this

paradox (see Rao, 1998b). Such a wage rise can explain both the falling ratio of employment to output within agriculture as also the concomitant fall in poverty rates. A relative rise in non-farm employment can still occur provided labor demand also increases due to increased government expenditure (as argued by Sen), but also because of the rise in the wage share (Sen produces evidence that real wages increased almost twice as fast as labor productivity in agriculture), given a higher marginal propensity to consume (in general and for non-agricultural goods in particular) out of rural wages than out of non-wage income, increases the demand for non-agricultural rural products.

A third determinant of poverty which has attracted much attention is the price of food¹³. It has been argued, consistent with all available evidence, that an increase in the price of food increases poverty by reducing the real incomes of wage earners for whom wages do not keep up with food prices. The fact that this holds for rural areas as well as urban areas is not a puzzle because most of India's rural poor (and even some of the non-poor) are net purchasers of food. Ravallion (1998), however, argues that the correlation between the two variables is actually spurious. He finds that the movement in both the poverty rate and the relative price of food are the result of changes in a third variable, agricultural output: a bad harvest can be expected to increase the relative price of food and also increase rural (and total) poverty. Pooling time-series data for 1960-61 to 1993-94 across states, Sen (1996) finds, however, that a rise in the relative price of cereals increases poverty even if agricultural output per worker is included as a variable.

Ravallion's argument that a food price change affects poverty via its impact on mean rural consumption but not on the distribution of rural consumption (or income) rests on erroneous inequality measures. His measures of inequality are premised on the assumption that the cost of

living index is undifferentiated for the rural poor and non-poor which, in fact, does not hold. While his conclusion that price changes have statistically zero distributional effects applies to the nominal inequality of rural incomes, the same data nevertheless imply a worsening of real inequality (see Rao, 1998a). This last conclusion leads us directly back to the established understanding that food price increases hurt the poor through the mechanism of (real) inequality increases. It also follows that price reforms incur the risk of both transitional and permanent reductions in real wages and corresponding increases in poverty.

Many analysts have attributed the rise in poverty in 1992 to the economic reforms but this remains a contentious issue. In absolving the reforms, Tendulkar and Jain (1995) attribute the rise in poverty to a weather-related supply shortfall which simultaneously raised open-market food prices, reduced rural employment and incomes and cut down rural foodgrain availability. Critics of the reforms have attributed it instead to the PDS issue price increases, the consequent open market price rise and the curtailment in supplies¹⁴. The part of food subsidies actually accruing to consumers has fallen since 1991 through a combination of price increases and quantity reductions (Swaminathan, 1996). Indeed, over the seven-year period of the reforms, both open market (wholesale) prices and about issue prices through the PDS have nearly doubled. That this has most likely had an adverse effect on poverty can be seen from Sen (1996), which adds a relative price of food term to what is essentially the Ravallion-Datt (1996) equation discussed above, and finds that this modified equation is able to explain the increase in poverty after 1991.

6. Aspects of Social Policy

Past experience suggests that government policy regarding the “social sector” has an important

influence on the incidence of poverty, the distribution of income, and the social opportunities availability to the mass of the population. Given India's low level of achievement in terms of poverty alleviation and in expanding social opportunities, and given the likely adverse socio-economic impact of the globalizing reforms discussed above, government policy has an important role in the future. In this section, we examine trends in government social spending and the robustness of existing social safety nets in the face of these reforms.

6.1 Trends in Government Expenditure

Several studies have argued that the reforms had adverse effects on government spending on the social sector (see Guhan, 1995): for instance, expenditure on rural development and social services declined by 0.4% of GDP between 1990-91 and 1992-93. Considering a longer span of time and including both central and state governments, Nagraj (1997) finds that government final consumption expenditure as a percentage of GDP (at factor cost) has declined from an annual average of 11% for 1986-91 to 10.1% during 1992-95. However, the expenditure on health, education, housing and social services - which include, but are not confined to, spending on items which benefit the poor - stayed the same over the two periods at 2.9% of GDP, and was in fact higher than the 2.4% level for 1981-85. Defense and economic services bore the brunt of the cuts. For the same two periods, government current expenditure as a percentage of GDP fell from 19.4 to 17.9%, and government capital expenditure fell from 7.5% to 5.7%. Here, current expenditure on health, education, housing and social services as a percentage of GDP fell slightly, from 6.1 to 6.0 per cent, but capital expenditure stayed the same; the losers again were defense and economic services.

These budgetary figures show that government social spending did not decrease as a

percentage of GDP except immediately after the crisis. However, this does not imply that the benefit the poor received did not fall since this depends on the effectiveness of the programs funded by these expenditures, the extent to which the poor actually benefited, and changes in relative prices affecting the real delivery of services (this is considered below). Nor does it imply that globalizing reforms had 'no effect' if the counterfactual would have allowed increases in these expenditures from increased revenue mobilization rather than the fiscal compression that was actually pursued. The need for increased social expenditures and their potential for raising both living standards and economic growth may be judged rather from the evidently low levels of social opportunity both before and after the reforms. The tradeoff imposed by globalizing reforms arguably consists in the failure to cultivate this complementarity between growth and social opportunity.

6.2 Social safety nets

Recognizing social security as an obligation of provincial and central governments, the Indian Constitution calls upon the state, within the limits of its capacity, to make effective provision for 'public assistance in the case of unemployment, old age, sickness, and disablement, and in other cases of undeserved want' and for maternity relief. Since independence, social security legislation has been extended in several directions by acts relating to retirement funds, maternity benefits, family pension schemes, deposit-linked insurance schemes, and medical, disability and, employment injury benefits (see Guhan, 1992). Organized labor is covered under these various enactments, and public and quasi-public employees are covered by nonlegislated directed benefits. Social security expenditures are estimated to be less than 3 per cent of GNP (see Guhan, 1992).

However, social security for over 90 per cent of workers, who are in the unorganized sector

or are self employed, is extremely meagre, being confined to some 'means' tested old-age pension, and accident, group life and hut insurance schemes for specific groups. Moreover, the legislation suffers from shortcomings which thwart the effectiveness of the programs, allowing evasion by employers in providing contributions. Areas in which benefits are provided by state governments show enormous differences in coverage. No western-style unemployment relief is offered in India, which is a severe problem for self-employed and unorganized sector workers for whom no employment security exists. Some relief from unemployment, particularly in drought-affected regions, is offered in rural areas through schemes of employment creation to which we now turn.

6.3 Employment Generation Schemes

The highly successful Maharashtra Employment Guarantee Scheme, which was established to provide relief during severe droughts in rural Maharashtra in 1970-73, has become a country-wide model. The scheme had a wide coverage (its daily attendance reaching a seventh of the total rural population at its peak, was well targeted (since the very cash wage allowed the program self-select the poorest), and it had the clear objective of providing (Joshi and Little, 1996, p. 235). Given its success in reducing widespread misery, starvation and death, the scheme continued beyond the droughts, but with the wage increasing steadily and with reduced funding, it became progressively less successful, and the amount of employment it generated declined.

All-India public employment generation schemes are similar to the Maharashtra. The biggest of these schemes, the Jawahar Rozgar Yojna (JRY), was established in 1989 by merging two previous programs. Its main aim was to create additional employment for the unemployed or underemployed below the poverty line who lived in rural areas, but its additional aim was to create

rural assets, especially those which would benefit scheduled castes and tribes. Among the program's stimulations was that the wage could not be below prevailing legal minimum wage rates. Portions of the JRY are confined to backward areas. The JRY and its various components take up as much as 60% of the central government's budget on rural development and social expenditures.

The JRY provides an average monthly employment of five persondays per beneficiary family. However, the employment provided in the larger poorest states was much lower. Moreover, its ability to reach the poor within states is also limited. In 1992, 57% of participants were from families above the family poverty line and only 18% fell in the category of the very poor or worse (partly because the higher wage removed the self-selection advantage enjoyed by the Maharashtra program) The net transfer to the poor, taking into account the fact that other work is reduced, has been estimated at only about 14% of expenditure (Joshi and Little, 1996, p. 238).

6.4 Education policy

Despite the stated objective of providing free and compulsory education up to the age of 14 (one of the directive principles of the Constitution urged the state to provide such education by 1960!), compulsory education has not been implemented anywhere in India. As noted above, literacy rates are low, lower than in China, lower than in many east and south-east Asian countries more than thirty years ago, lower than in the average for low-income countries other than China and India, and no higher than in sub-Saharan Africa. There are great disparities in literacy rates by regions and by sex. The student teacher ratio for the 6-10 age group is 58, drop out rates are extremely high, and public expenditure on education remains low by international standards with a strong bias against primary education. Some improvements in the 1980s seems to have gone to higher emoluments, not to

increasing the number of teachers. Structural adjustment measures in the 1990s slowed down education expenditure growth and even caused a decline in the number of primary and upper-primary school teachers between 1991-92 and 1992-93 (Dreze and Sen, 1995, 111-23). These trends, however, have subsequently been partially reversed.

6.5 Public Distribution System (PDS) for Foodgrains

This is a public safety-net program which buys agricultural products from farmers to protect them against excessive losses in periods of surplus production and sells them to consumers to protect them from high prices during years of shortage. The PDS distributes rice, wheat, edible oil, kerosene and sugar at subsidized prices through a network of 400,000 shops in urban and rural areas all over the country. The implicit subsidy under the PDS has been stable at around 0.5 per cent of GDP. Retail prices are fixed by each state government taking into account local distribution costs and retailer margins, besides the issue price fixed by the Food Corporation of India, and some states provide additional subsidies.

The ability of the PDS to provide effective protection and help to the poor has been questioned. It has been found that States making the greatest use of the PDS are not necessarily the poorer ones. The poor are not more likely to consume basic foodgrains distributed through the PDS than are the non-poor. It has been estimated that only about 40% of the total quantity of wheat and 47% of rice supplied through the PDS are consumed by the poorest 40% of the population (World Bank, 1998, Joshi and Little, 1996, p. 233). Moreover, the costs of administering the program are high for a number of reasons, including pilferage and inefficiency.

After 1991 the issue price of food has been increased and the spread between purchase price

and sale price has been reduced (Sen, 1996). In December 1991, the issue price of rice was raised by 30% and that of wheat by 21%, and procurement prices were also increased in 1991 by 12.% for rice and 22.2% for wheat, and raised again (in part to contain the effects of a cut in fertilizer subsidies). Other changes include making available additional amounts of cereals at a reduced issue price for 1,775 blocks in backward areas.

It has long been implicitly understood in India that the stabilisation of cereal price dynamics is the most important form of `social safety net' available. It is also the closest thing to an `incomes policy' that a poor country can wield. While orthodox stabilisation concerns itself with lowering the rate of inflation, orthodox structural adjustment in relation to agriculture and food consists in market liberalisation which, many believe, will lead to a rise in the relative price of food. Had actual liberalization of agricultural prices taken place, the increase in the relative price of food would have been even higher. If wholesale agricultural trade liberalization and other aspects of a "getting agricultural prices right" program, presently on policy-makers' anvil, are carried through in full, the adverse impact on poverty can be expected to be high. Even if there is a net efficiency gain from such reforms (a more than doubtful proposition given the weak supply efficacy of prices and the continuing importance of infrastructure investment), it is hard to see how a compensation of the (poor) losers can be arranged without confronting the deficiencies of the existing PDS, let alone jettisoning the PDS altogether. And if genuinely equitable agricultural growth and rapid rural poverty alleviation are to be achieved, this will require a substantial step-up in public investment in rural infrastructure and thorough-going reforms in land relations and credit delivery. There is little room to believe, however, that such a program can be pursued without producing major contradictions within the existing fiscal, economic and, ultimately, political priorities of the reform

regime presently in place.

7. Conclusion

The aim of this paper has been to assess the effects of the economic reforms undertaken in India since the crisis of 1991. The assessment pays particular attention to the impact of reforms, both directly and via economic growth, on mass well-being. We have argued that openness, in the sense of policies which aim at increased economic integration with international markets, has been the focal point of the reforms whilst globalization, which we take to mean the increased external integration actually achieved, has been the touchstone of the new policy regime as perceived by its architects. Our main conclusion can be summarized as follows.

1. There has been an increase in globalization in respect of both international trade and capital transactions. But while the rate of increase in trade has been remarkably high, the increase in capital inflows - especially foreign direct investment - has been small by international standards. Moreover, the trade deficit has worsened due to the increase in imports and despite the rise in exports, both of presumably due to liberalization. The composition of imports as well as of exports reveal no noticeable changes as compared to the pre-reform period.

2. Although economic growth has maintained its momentum, increased openness has not led to higher rates of GDP growth. For the economy as a whole, output growth has not kept pace with investment growth, reflecting an increase in the capital-output ratio. The conventional index of total factor productivity growth shows a definite decline between 1980-90 and 1991-95 contrary to the liberal expectation of increased resource use efficiency from globalization.

3. Agricultural growth has slowed down markedly and the GDP share of agriculture has

declined sharply despite the liberal claim that the reforms favor agriculture by removing price biases against it. Rather than the lack of price incentives, this deceleration is due to the lack of rural infrastructure and the distortions produced by the prevailing agrarian structure. At the same time, liberalizing reforms have not produced sharp discontinuities in agricultural policies.

4. The labor force has experienced increased rates of casualisation and informalization. This has potentially serious consequences for wages, job security, inflation protection, workers' basic rights, and the future of the Indian labor movement. The loss of urban manufacturing employment, which may be partly due to the process of informalization disguised as employment growth in services, suggests loss of employment in household and other non-factory modes of manufacturing.

5. Immediately following the reforms, there was an increase in both poverty and inequality reflecting policy-directed increases in food prices and cutbacks in public expenditure. These developments were reversed subsequently as policy responded to the political reaction that followed. It is clear that globalization has not served to reduce poverty and inequality but, to the contrary, seems to have slowed the declining trends of the 1980s. If the reforms go through in full force, there may be further adverse consequences on income distribution and poverty. In particular, the failure to carry agricultural price liberalization to its logical conclusion has limited the damage so far.

6. The Indian economy continues to be severely constrained on the fiscal account. While significant fiscal compression was carried through during the first five years after 1991, there have been significant reversals thereafter. The continuing rise in the interest burden and the decline in trade tax revenues, both related to globalizing reforms, have been major factors behind the high levels of the revenue account deficit. It is acknowledged now on all hands that between the declining fiscal capacity of the state and the unresolved regulatory complexities surrounding one or another

form of privatization, the infrastructure sectors loom increasingly large as a constraint on economic growth. This also seems to be the chief factor behind the agricultural slowdown, the rise in economy-wide capital intensity and the deceleration in productivity growth.

7. Public expenditures on social safety nets have not suffered a decline despite the fiscal cutbacks following reforms. This does not mean, however, that policies to improve social opportunity for the masses can be pursued independently of economic reforms aimed at globalization. One aspect of the tradeoff between the two is apparent in the adverse consequences in terms of employment, food prices and poverty noted above. Nor does it imply that globalizing reforms had 'no effect' on social expenditures if the political-economic counterfactual would have allowed increases in these expenditures from increased revenue mobilization rather than the fiscal compression that was actually pursued. The need for increased social expenditures and their potential for raising both living standards and economic growth may be judged rather from the evidently low levels of social opportunity both before and after the reforms. Policymakers preoccupied with the mantras of openness and globalization, and the political and fiscal constraints that these impose, are liable to neglect important changes which can improve income distribution and living standards for the majority - through land reform, improvements in education and health, and infrastructural investment. The social-economic tradeoff imposed by globalizing reforms consists chiefly in the political failure to cultivate the complementarity between economic growth and social opportunity.

Notes

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1. See Government of India (1993) for further details.

2 Also, trading companies engaged mainly in exporting activities were allowed up to 51% foreign equity while 100% foreign ownership has been allowed in the power generation sector.

3 See Rao (1998c) for further discussion and a cross-country empirical attempt to separate openness from globalization as related to trade.

4. To illustrate, openness with respect to FDI implies policies which reduce restrictions and controls on foreign direct investment, while globalization may be measured by increases in the FDI/GDP ratio. On the one hand, openness may not increase globalization, as the experience of a number of LDCs - including Bangladesh - shows, due to the problems of low growth, low levels of education of the labor force and labor unrest; on the other hand, countries which have been quite restrictive in their policies towards TNCs, including Taiwan and Malaysia, have been able to increase FDI inflows, because of their high rates of growth (Dutt, 1998).

5. Another potential constraint on growth is the balance of payments. If the economy's rate of growth is constrained by the availability of foreign exchange, or if the economy is exchange constrained in the sense that of being subject to period shocks due to foreign exchange shortages, the rate of growth of the economy on average will be determined by its balance of payments position. Following stabilization and reforms, there is little evidence of this constraint being effectively binding although a return to exchange shortage can by no means be ruled out.

6. Employment and real output data is taken from World Bank data, and net real fixed capital and the share of operating surplus in NDP from EPW (1997). Two adjustments were made for the operating surplus share. First, India has a large share of income (around 50%) which falls in the category of mixed income of the self employed. We used the assumption that the capital share for that income is the same as the share for the rest of the economy to find the share of capital stock (operating surplus) for the economy as a whole. Second, data on income shares was available for the years 1980-81 to 1993-94; we computed the figures for the next two years using ordinary least squares on a time trend.

7. Economic Survey 1997-98 cited in Devarajan (1998).

8. The New Agricultural Strategy's relative success in achieving food self-sufficiency in the three decades since the food crisis of the mid-1960s has masked the economic, social and environmental costs of that Strategy. Low labor absorption is perhaps the chief of these costs.

For elaboration of this thesis, see Rao and Storm (1997).

9. The growth of rural non-farm employment and the role of government employment programs will be discussed separately in connection with their effects on poverty in a later section.

10. The organized sector corresponds roughly with commonly accepted notions of formal employment.

11. Kambhampati, Krishna and Mitra (1997) have taken annual estimates of total and manufacturing labor force and found that the reforms have had little effect on employment at a macroeconomic level. The total labor force expanded steadily from 1987 to 1993 from 298 to 341 million workers. The number of workers in manufacturing increased steadily as well, though at a faster rate. But there were no significant changes in trends after 1991. Since the annual labor force figures are presumably no more than rough estimates, it is not clear how much credence to attach to these propositions.

12. Sen (1996) rejects the view that agricultural growth provided an impetus to rural non-agricultural employment (as a result of an increase in the demand for non-agricultural goods), and that the evidence overwhelmingly supports the hypothesis that non-agricultural growth has occurred due to factors outside rural areas, including an expansion in government expenditure.

13. Dharm Narain made the pioneering contribution which has spawned a large literature on this (see Mellor and Desai, 1986).

14. See Suryanarayana (1996) for a critique which shows that there were roughly symmetric declines in cereal availability in both rural and urban areas and that the reforms were responsible for the adverse effect on poverty.

References

- Ahluwalia, Isher J. (1991). *Productivity and Growth in Indian Manufacturing*, Delhi: Oxford University Press.
- Bhagwati, Jagdish (1994). *India in Transition. Freeing the Economy*, Delhi: Oxford University Press.
- Bhagwati, Jagdish and Srinivasan, T. N. (1993). *Indian Economic Reforms*, New Delhi: Ministry of Finance, Government of India.
- Deshpande, Sudha and Deshpande, Lalit (1998). "Impact of Liberalisation on the Labour Market in India. What Do Facts from the NSSO's 50th Round Show?" *Economic and Political Weekly*, May 30, L31-L39.
- Devarajan, P. (1998). "Economic Data - What the Survey Does Not Say", *Business Line*. June 1.
- Dreze, Jean and Sen, Amartya (1995). *India. Economic Development and Social Opportunity*, Delhi: Oxford University Press.
- Dutt, Amitava K. (1996). "The role of Keynesian policies in Semi-industrialized economies: Theory and Evidence from India", *International Review of Applied Economics*, 10(1), January, 127-40.
- Dutt, Amitava K. (1998). "Globalization, Foreign Direct Investment and Southern growth: Evidence from Selected Asian Countries", J. R. Chen, ed., *Economic Effects of Globalization*, Avebury, 1998, p. 45-96.
- Economic and Political Weekly Research Foundation (1997). *National Accounts Statistics of India, 1950-51 to 1995-96*, Mumbai: EPW Research Foundation.
- Godley, Wynne and McCarthy, George (1997). "Fiscal policy will matter", unpublished, Jerome Levy Institute, Bard College, New York.
- Goldar, B. N. (1993). "Impact of Technology and Productivity Growth in Indian industry", *Productivity*, 34(1), April-June, pp. 87-90.
- Guhan, S. (1992). "Social Security in India: Looking one step ahead" in B. Harriss, S. Guhan and R. H. Cassen, eds., *Poverty in India. Research and Policy*, Bombay, Oxford University Press.
- Guhan, S. (1995). "Social Expenditures in the Union Budget: 1991-96", *Economic and Political Weekly*, May 6.

Joshi, Vijay and Little, I. M. D. (1996). *India's Economic Reforms, 1991-2001*, Oxford: Oxford University Press.

Kambhampati, Uma; Krishna, Pravin; and Mitra, Devashish (1997). "The effect of trade policy reforms on labor markets: evidence from India", *Journal of International Trade and Economic Development*, 6(2), 287-97.

Kumar, Nagesh (1998). "Liberalisation and Changing Patterns of Foreign Direct Investments. Has India's Relative Attractiveness as a Host of FDI Improved?" *Economic and Political Weekly*, May 30, 1321-29.

Kundu, Amitabh (1997). "Trends and Structure of Employment in the 1990s. Implications for Urban Growth", *Economic and Political Weekly*, June 14, 1399-1405.

Mehta, Rajesh (1997). "Trade Policy Reforms, 1991-92 to 1995-96. Their Impact on External Trade", *Economic and Political Weekly*, April 12, 779-84.

Mellor, John W. and Desai, Gunvant M. (1986). *Agricultural Change and Rural Poverty: Variations on a Theme by Dharm Narain*, Oxford: Oxford University Press.

Nagaraj, R. (1997). "What Has Happened since 1991? Assessment of India's Economic Reforms", *Economic and Political Weekly*, Nov. 8, 2869-79.

National Sample Survey Organization (1996). *Key Results on Employment and Unemployment, 50th Round*, Department of Statistics, New Delhi.

Nayyar, Deepak and Abhijit Sen (1994). "International Trade and the Agricultural Sector in India", in G.S. Bhalla (ed.) *Economic Liberalisation and Indian Agriculture*, New Delhi: Institute for Studies in Industrial Development.

Pal, Parthapratim (1998). "Foreign Portfolio Investment in Indian Equity Markets. Has the Economy Benefited?" *Economic and Political Weekly*, March 14, 589-98.

Patnaik, Prabhat (1997). "The context and consequences of economic liberalization in India", *Journal of International Trade and Economic Development*, 6(2), 165-78.

Rao, J. Mohan (1998a). "Food Prices and Rural Poverty: Liberalisation without Pain?", *Economic and Political Weekly*, 33:799-800.

Rao, J. Mohan (1998b). "Food, Agriculture and Reforms: Change and Continuity," *Economic and Political Weekly*, 33:1955-1960.

Rao, J. Mohan (1998c). *Openness, Inequality and Poverty*. Background Paper prepared for the

Human Development Report (1999). New York: UNDP.

Rao, J. Mohan and Servaas Storm (1997). "Distribution and Growth in Indian Agriculture", in T. J. Byres (Ed.), *The Indian Economy: Major Debates Since Independence*, Delhi: Oxford University Press.

Rao, V. M. (1998). "Economic Reforms and the Poor: Emerging Scenario", *Economic and Political Weekly*, July 18, 1949-54.

Ravallion, Martin (1998). "Reform, Food Prices and Poverty in India", *Economic and Political Weekly*, January 10, 29-36.

Sen, Abhijit (1996). "Economic Reforms, Employment and Poverty. Trends and Options", *Economic and Political Weekly*, Sept., 2459-77.

Storm, Servaas (1997). "Agriculture Under Trade Policy Reform: A Quantitative Assessment for India", *World Development*, 25:425-436.

Suryanarayana, M. H. (1996). "Economic Reforms, Nature and Poverty", *Economic and Political Weekly*, 31:617-624.

Swaminathan, Madhura (1996). "Structural Adjustment, Food Security and System of Public Distribution of Food", *Economic and Political Weekly*, 31:1665-1672.

Tendulkar, Suresh D. and L. R. Jain (1995). "Economic Reforms and Poverty", *Economic and Political Weekly*, 30:1373-1376.

World Bank (1996). *India. Five Years of Stabilization and Reform and the Challenges Ahead*, Washington D. C.: The World Bank.

World Bank (1998). *India. Achievements and Challenges in Reducing Poverty*, Washington D. C.: The World Bank.