

Two Decades of Structural Reforms in India: A Balance Sheet

Dilip M Nachane

P R DUBHASHI PUBLIC LECTURE, 2007

GOKHALE INSTITUTE OF POLITICS AND ECONOMICS
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Professor Nachane, who has been actively involved in several important Committees and Working Groups commissioned by the Reserve Bank of India and the Government of Maharashtra, was elected as the President of the Indian Econometric Society. He was the recipient of UGC Prnavanand Saraswati Award in 2004 in recognition of his outstanding contributions to teaching and research.

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I Post-reforms Resurgence of the Indian Economy

By all the externally visible signs, the Indian reforms story has been a remarkable success. As Table 1A shows, after a long period of stagnation in the years following Independence, growth rates shifted into high gear sometime during the 1980s and in the last decade accelerated sharply, reaching undreamt of stratospheric heights (of between eight per cent to 10 per cent) in the last four years. As seen in Table 1B, high growth rates coupled with declining population growth rates have given a noticeably upward movement to per capita incomes. Further (*see* Table 1C), India's recent growth record has been bettered among the Asian countries only by China (Mainland). This growth resurgence has enabled India to move up in the world per capita (PPP-corrected) GDP rankings from 93 (out of a total of 109 countries) in the mid-1970s to 58 by 2004 (Basu and Maertens 2007).¹ On several other macroeconomic indicators, the country has been doing equally well. Investment as a proportion of GDP, for example, rose from about 10 per cent in the 1950s to about 23 per cent in the early 1980s and to about 34 per cent currently. Similarly, India today qualifies as an "open economy" with exports (as a percentage of GDP) amounting to nearly 20 per cent, as compared to less than five per cent in the mid-sixties. And finally on the forex front, we have transited from a perennially shortage situation to one that can only be described as an "embarrassment of riches". All these trends, coupled with a secular

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¹ However, Table 1D has the sobering effect of reminding us that we are well behind world levels and still have a long way to go before converging to the East Asian rate.

decline in the headline inflation rates to their current historical laws, seem to have made India a darling of the Western media, with much euphoric outpourings from a section of Western academics and the Indian intelligentsia. The Indian diaspora in particular, which has been championing the case for reforms right from the beginning, has with a great deal of pride, put itself in a self-congratulatory mode.

Table 1A: Growth Rates in India over Successive Plan Periods

Plan Period	Annual Growth Rate of GDP (Factor Cost) (%)	Average Annual Gross Domestic Capital Formation As Per Cent of GDP At Factor Cost (%)
1951-1956	3.6	10.30
1956-1961	4.2	15.40
1961-1966	2.8	15.60
1969-1974	3.3	17.00
1974-1979	4.8	20.20
1980-1985	5.6	21.90
1985-1990	6.0	25.20
1992-1997	6.7	25.40
1997-2002	5.5	25.90
2002-2003	3.8	27.51
2003-2004	8.5	29.57
2004-2005	7.5	33.04
2005-2006	9.0 (PE)	
2006-2007	9.2 (QE)	

Source: Basu and Maertens (2007).

Table 1B: Population, GDP and Per Capita GDP, India, 1960-2005

Year	Population (Million)	GDP (Billion Constant 2000 US \$)	GDP Per Capita (Constant 2000 US \$)
1960	435	76.283	175
1965	487	91.054	187
1970	548	113.606	207
1975	613	130.913	213
1980	687	152.621	222
1985	765	198.167	259
1990	850	268.023	316
1995	932	345.394	371
2000	1016	457.377	450
2005	1095	641.926	586

Source: World Development Indicators (2006).

Table 1C: Growth Rates (Per Cent) For Selected Countries in Asia, 1980-2003

Country	1981-1990	1991-1997	1998-2003
India	5.6 (5.4)	5.3 (5.7)	5.7 (5.5)
China (Mainland)	8.9 (8.8)	10.3 (10.2)	8.0 (7.8)
China (Hong Kong)	6.3 (6.2)	5.5 (5.3)	2.2 (2.4)
Singapore	6.9 (7.5)	8.4 (8.2)	2.7 (2.2)
Bangladesh	3.9 (4.0)	4.5 (4.5)	5.0 (5.0)
Indonesia	5.3 (5.4)	6.7 (6.8)	4.0 (3.9)
Korea	8.3 (8.3)	6.7 (6.8)	3.9 (5.4)
Malaysia	5.8 (6.2)	8.8 (9.0)	2.7 (3.4)
Thailand	7.6 (7.3)	6.5 (7.6)	4.7 (4.9)
Pakistan	6.0 (6.0)	4.1 (4.2)	3.5 (3.3)
Sri Lanka	4.2 (4.3)	5.1 (5.1)	3.8 (4.6)

Note: The figures in brackets represent the winsorized growth rates (i.e., calculated by omitting the highest and lowest observations over each sub-period).

Source: International Financial Statistics, IMF.

Without in any way dismissing or even belittling these achievements, it behoves Indian academics and policymakers alike to examine the entire gamut of issues emanating from these outwardly benign signals, in a dispassionate manner, bereft of ideological barnacles. The issues of course, span several dimensions, not all of which can be encompassed within the scope of a single paper. I therefore, concentrate here on some issues which I believe to be of cardinal significance.

It has now become conventional to attribute this economic surge in India (as well as, other rapidly growing LDCs/EMEs (such as Viet Nam) to the triad of marketization, democratization and globalization, though this view, of course, has also been sporadically (though fiercely) contested. I take as the starting point of my analysis, an examination of the theoretical case for market-oriented reforms (Section II). In this connection, a considerable amount of analysis has been devoted to the timing of the high growth phase in India, or in Rostowian terms the ushering in of the "take-off". We review this issue in Section III. An important prerequisite for sustainability is sound macroeconomic management and hence this issue is discussed in Section IV. The next issue (Section V) that we take up, pertains to the composition and the sources of economic growth, as this yields important insights on the welfare connotation of the growth which is occurring, as well as, the sustainability of the recorded growth momentum. Structural issues impinging on long term sustainability such as employment, poverty

reduction, inequality and the environment are treated in the subsequent three sections (Sections VI to VIII). Conclusions and prognostications are gathered in the final Section (Section IX).

II Is There A Theoretical Case for Market-Oriented Reforms?

The Neo-classical Orthodoxy

The intellectual underpinnings of reforms are deeply imbedded in the doctrines of neo-classical economics, which has over the years emerged as the unchallenged mainstream economics doctrine.

Following Lakatos (1970), a doctrine could be viewed as comprising

- (i) an immutable hard core and
- (ii) a variable protective belt.

Eggertsson (1990) identifies the hard core of neo-classical economics as a set of three axioms viz.

1. stable preferences of economic agents
2. rational choice (including rational expectations in the dynamic context) and
3. equilibrium-based interactions among economic agents, which under the additional assumption of flexible prices ensures full employment of resources.

The protective belt of assumptions comprises three aspects: (1) situational (including institutional) constraints; (2) assumptions about information available to agents; (3) types of interactions permissible among agents.

Modifications to the protective belt occur continuously but they do not constitute a paradigm shift. The latter is said to occur only when the hard core is touched. Thus the important contributions to information theory, transaction costs and externalities by Arrow, Stigler, Stiglitz, Townsend, Coase, etc. do not represent a refutation of neo-classical economics, but only its reaffirmation under more general boundary conditions.

Thus, essentially any challenge to neo-classical economics has to be based on a demonstrably convincing rejection of any of the three postulates listed above as comprising the hard core. In particular, the second and third of these axioms viz. rationality and equilibrating market relationships have been seriously challenged in the literature.

Let us begin with the criticism relating to the rationality postulate. This has been contested by numerous writers including such respected names as Frank Knight, Schumpeter and Keynes. The General Theory, for

example, focused criticism on the rationality postulate, especially as it applied to expectations. Keynes in his typical style dubbed it as “a pretty polite technique” that tries “to deal with the present by distracting from the fact that we know very little about the future”. The rational expectations revolution which has been hailed by the mainstream economics profession has virtually no foundations in psychology. Several studies of actual behaviour conducted, for example, by Tversky and Kahneman (1974) and others have shown that real life expectations are not only irrational but very little learning or “convergence to rationality” is evident. At the most fundamental level, rational behaviour has been challenged by Herbert Simon (1976), who maintains that the model of the rational man optimizing an objective function, subject to constraints hardly reflects the complex actuality of business decision-making, where survival, conventions, rules of thumb and other common business practices lead to what he calls as “bounded rationality” or “satisficing behaviour”. There is a highly developed strand of modern literature in this vein, exploring the links between behavioural psychology and economic decision making, including most notably Bertrand *et al* (2004), Mullainathan and Thaler (2001), Ariely and Wertenbroch (2002) etc.

The third postulate regarding the existence and stability of an overall economic equilibrium, is tied up to the possibility of aggregating over individual demand/supply curves to arrive at their market counterparts. Sraffa (1960) had demonstrated the futility of measuring capital independent of distribution and prices, thus, demolishing the neoclassical concept of an aggregate production function (except in the trivial one commodity “Ricardian Corn” model). Sraffa’s contribution however was not generally accepted as a refutation of neo-classical economics for two reasons. Firstly, missing in Sraffa is any theory of human agency and interaction, thus, making it a technical rather than a behavioural theory. Secondly, his criticism is confined to the aggregate neoclassical production function only, leaving intact other disaggregated versions of neoclassical theory such as the general equilibrium model of Arrow and Hahn (1971), in which capital was treated as heterogeneous.² A more devastating line of criticism had been advanced earlier by Keynes (1936) based on the “fallacy of composition” involved in the neo-classical mode

² As a matter of fact Hahn (1982) puts in a characteristic vitriolic comment “The neo-Ricardians ...have demonstrated that capital aggregation is theoretically unsound. Fine...The result has no bearing on the mainstream of neoclassical theory simply because it does not use aggregates. It has a bearing on the vulgar theories of the textbooks”.

of deriving results for the economy as a whole by assuming identical agents, acting independently of each other, and then simply aggregating individual relations at the micro level.³ This criticism has been refined and formalized through the successive writings of Debreu (1974), Sonnenschein (1972) and Mantel (1974), and goes by the name of the DSM theorem. The DSM theorem may be explained in several ways. Our exposition here is based on Kirman (1989). The foundations of neoclassical economics rest on the assumption that if individual demand functions satisfy Wald's (1936), Weak Axiom of Revealed Preference (WARP) (implying individual demand curves are downward sloping) then unique stable market equilibrium exists. The DSM theorem asserts that whereas the WARP is sufficient to ensure the existence and *local uniqueness* (of market equilibrium), global uniqueness and stability are not ensured by WARP (or by even stronger restrictions on individual demand functions).⁴ In spite of Hahn's (1975) admission that the DSM results are "most damaging to neoclassical theory", the mainstream economics profession has largely ignored these implications, (plausible reasons for this neglect are discussed in Hodgson (1997) and Rizvi (1994).

The ripostes of neo-classical economics to these criticisms are puzzling to say the least.

Firstly, as Hutchison (1984) has observed, neo-classicals sometimes adopt the defence that their assumptions are only designed as approximations to the real world and that attempts are continuously being made to relax the assumptions to fit real-world situations better. But if this is the defence, the neo-classicals have no right to make the kind of exaggerated claims for the real world applicability of some of the more extreme versions of their doctrines such as real business cycle theories and public choice theories.

A second line of defence pertains to what Hicks (1979) disapprovingly observes as a tendency to pursue economics "for no better reason than its intellectual attraction; it is a good game".⁵

³ A more recent perspective on this aspect may be had from Caballero (1992).

⁴ In this connection, it is interesting to observe that Wald (1936) had correctly observed that "there is a statistical probability that from the assumption that [WARP] holds for every household, the validity of [WARP] for the market follows". In other words, WARP at the micro level can lead to WARP at the macro level. The later neoclassicals conveniently interpreted the can as will.

⁵ Blaug (1997) is even more explicit in his condemnation of this tendency "Economics has increasingly become an intellectual game played for its own sake and not for its practical consequences for understanding the economic world.... Economics was once condemned as a "dismal science" but the "dismal science of yesterday was a lot less dismal than the soporific scholasticism of today".

This “good game” approach lies behind the unforgivably ambivalent attitude of neo-classical economists to empirical verification. Alone among the empirical sciences, neo-classical economics prods along irrespective of how compelling the econometric refutation of its assumptions or predictions are. That economics is an “imperfect” science is hardly an excuse for this ostrich-like attitude. Other imperfect sciences, especially medicine, are simultaneously more modest in their claims and much more respectful and cautious towards the empirical verification of their theories.

A strand of neo-classical economists goes even further and rejects empirical verification altogether (Stewart 1979, Machlup 1978 and Caldwell 1982). In this they possibly drew inspiration from the philosopher Paul Feyerabend whose *Against Method* (1975) downgraded the importance of empirical arguments and in particular, Popper’s falsification criterion by suggesting that aesthetic criteria and social factors play a more decisive role in the history of science than rationalist or empiricist methodology. But this kind of methodological anarchism (or “anything goes” attitude) has meant that neo-classical economics has not really countered its criticisms effectively but has rather flourished by ignoring its critics, ridiculing them or arraigning them as Marxists. This “irresistible predilection for deductive reasoning” leads economists “from sets of more or less plausible but entirely arbitrary assumptions to precisely stated but irrelevant theoretical conclusions” (Leontief 1974) and has the unfortunate consequence (Coase 1974) of a narrowing of the research focus on price determination to the virtual exclusion of the institutional arrangements underlying different markets (on this also see below).

There is however, one strand of the neoclassical approach which could be interpreted as a constructive attempt to respond to some of the criticisms viz. the induction of game theory into the analysis of markets. Instead of presuming consumers with (possibly heterogeneous) preferences acting independently of each others’ actions, it incorporates strategic behaviour into the definition of economic rationality. However, in spite of the visible enthusiasm of its practitioners, it is doubtful whether it advances mainstream economics in any significant way, still falling woefully short of providing a satisfying theoretical framework for understanding real world markets. An early criticism (by von Mises 1949) that market phenomena are not all about “outsmarting” opponents as game theory (then prevalent) seemed to presume, is still relevant against some of the more exaggerated conclusions drawn from 2-person non-

cooperative game theory (such as those in IO analysis). But even with the far more sophisticated advancements that have occurred in game theory since 1980s, certain criticisms are still germane. As argued by Foss (2000), game theory proceeds in either of two extreme frameworks. Standard game theory presumes hyper-rationality with agents having information about other players' complete preference orderings. Evolutionary game theory goes to the other extreme of assuming that agents follow rigid rules with no scope of modification through learning or discovery. Neither approach thus really captures salient features of the economic behaviour of consumers or firms. A second and related critique relates to the coordination problem of Hayek (1948). While much energy is spent on exploring existence and uniqueness of Nash equilibria in a given situation, there is virtually no indication on how agents zero in on such an equilibrium (except by a pure process of introspection) with no allowance for the process of learning, discovery, disappointments etc. so crucial in the real world.⁶ In conclusion, one can still say that in spite of some limited progress in the direction of realism, most of the major drawbacks of neoclassical economics still persist and cannot be salvaged by appeal to game theory.

How does one then explain the survival and even flourishing of a doctrine (viz. neo-classical economics) resting on such an insecure intellectual foundation? The real reasons why neo-classical economics reigns supreme and unchallenged in the world today have nothing to do with the soundness of its methodological position. Instead, they are to be located in three exogenous factors.

Firstly, it provides a seemingly infallible justification for the operation of free markets (In the next Section, I try to show that this is fallacious reasoning).

Secondly, it subtly confuses the issues of economic freedom and political liberty. An oft quoted remark of Milton Friedman is to the effect that "Underlying most arguments against the free market is a lack of belief in freedom itself". Taken literally, (as many market fundamentalists are prone to do) this would mean that everyone, from Keynes who justified public investment, to the advocates of the welfare state, to those who support public distribution schemes are all anti-libertarians! As a matter of

⁶ This is not to deny that attempts have been made to devote attention to these issues in the literature see e.g. Aumann's (1974) notion of pre-play communication, Kreps' (1990) incorporation of bounded rationality and Sugden's (1986) notion of unintended consequences.

fact, the relationship between markets and democracy is a highly complex one and examples abound of authoritarian market regimes (Singapore, and Pakistan today), as well as, democracies with state interventions in markets (India in the first four decades since Independence).

Thirdly, it is one economic doctrine which lends itself easily to the use of a fair degree of sophisticated mathematics. This use of symbols often deludes neo-classicals into believing that they have rendered the subject of economics "scientific". By its very nature, economics is a soft discipline and as A.K. Sen once put it, it is better (in economics) "to be vaguely right, than precisely wrong".

Lastly, the collapse of the Soviet type economies, and the emergence of U.S. hegemony has been heralded as a triumph of the market philosophy underlying neo-classical economic policies.

Neo-classical Influences on Policymaking in LDCs and EMEs

The intellectual pre-eminence that neo-classical economics has acquired in the last few years has had a corresponding impact on the way development issues have been viewed. The older politico-economy perspective has disappeared, as also the recognition that problems of LDCs are of a fundamentally different genre from the problems of growth in Western societies. To this belief that neo-classical economics is universal (widely prevalent among large sections of the Indian intelligentsia) is attributable the fact that the subject of Indian economics now survives only as an exotic species. As a matter of fact, the spirit of independent thinking that characterized the writings of A.K.Dasgupta, D.R.Gadgil, V.K.R.V.Rao, P.R.Brahmananda, V.M.Dandekar, and other economists of that generation has virtually disappeared from the current generation of Indian economists.

The neo-classical paradigm of development economics traces a benevolent causal (theoretical) link from the existence of free markets to high growth rates in LDCs and EMEs. But this causation cannot be supported unless each link in the following chain of deductive arguments is validated.

1. Any move towards free markets is welfare improving.
2. A policy of free markets leads to an optimal static allocation of resources.
3. That this optimum is scientific in the sense of being value-free.
4. A series of static optima can be strung together to yield a dynamic optimum for the economy.

5. The resultant optimal path does not run up against resource constraints.

I will not go into a detailed refutation of each of these propositions. The refutation of the first principle forms the substance of the so-called "second-best theory" of Lipsey and Lancaster (1956) which to date holds its own. The invalidity of the second and third points follows from modern welfare economics (e.g. Little 2002). As a matter of fact, this footnote from Little (*op. cit.*), (by no means a Marxist economist) makes interesting reading.

"The laissez-faire model, given enough assumptions, could bring about the "optimum" distribution of resources, as well as, the socialist "blueprint". The socialist blueprint model is "superior" at the logical level in that it requires fewer postulates. It does not require the postulate of either a rising cost curve, or a perfectly elastic demand curve".

So far as point (4) is concerned, this is a rather technical point but its invalidity is well-known to optimal growth theorists. Finally, the invalidity of point (5) is intuitively obvious and has been emphasized in the "Limits to Growth" literature (which was banished from academic discourse mainly because it came into conflict with the neo-classical orthodoxy). Thus while the refutation of any of the single links in the above schemata suffices to invalidate the presumed causal nexus between markets and growth, one can perform an "overkill" by showing each of these links to be invalid.

The purpose of this extended discussion has been simply to underscore a vital but neglected point viz. that the presumed theoretical case for economic reforms simply does not exist. Whether freer markets will promote growth or otherwise is essentially an empirical issue to be determined by rigorous data analysis. This point seems obvious to the layman. However, pro-reform thinkers, government advisers and policy makers in LDCs & EMEs often seem to proceed as if the "benevolent link" alluded to above was a settled issue, beyond any theoretical doubt,⁷ when in fact the issue is far more complicated and the benevolence or otherwise of the link between freer markets and economic development

⁷ If proof is needed, just turn to any page of any Indian financial newspaper on any date (in the past decade). Somebody of some consequence will be quoted as making a pro-reforms statement.

(and social welfare in general) is crucially conditioned by the institutions and historical circumstances of each individual country.⁸

In the Asian region, in the past three decades, nations with market-friendly policies do seem to have fared much better on many economic indicators than nations with socialistic orientations, but especially on growth rates (*see* Table 1D). On the African continent, by contrast, reforms have hardly achieved much (with the exception of South Africa), at best perpetuating the status quo. Thus the empirical experience clearly points out that whereas selective and well-planned liberalization of markets can produce beneficial results on certain occasions, a blind foolhardy rush in the direction of markets is beset with some dangers and not always desirable. Several important issues need sorting out, even if one agrees on the necessity of reforms, and even the most basic list of such issues, would minimally include the following: (i) the pace at which reforms should be introduced; (ii) the sequencing of reforms; (iii) the political feasibility and social justice aspects of reforms; (iv) the revised role of important State institutions (like the Central Bank and Planning Commissions) and the public sector generally; (v) the likely strains on the federal polity in the wake of reforms; (vi) the reconciliation of affirmative action policies with market principles and (vii) above all the issue of whether and to what extent markets should be allowed to evolve naturally and to what extent their development must be supervised and guided by the state itself. Certainly on these details, in an ideal scenario, each country would work out its own road map, using nationally available expertise (i.e., economists and other social scientists thoroughly familiar with local conditions). Instead what has happened is the emergence of a uniform reforms blueprint prepared under the aegis of multilateral institutions, based on the so-called Washington Consensus (and its several *avatars*), which is designed as a standard sized hat "to fit all heads".

⁸ The force of this statement becomes evident, when we review the varied Latin American experience. Chile by all accounts, is usually rated as the most successful reformer in the region. Over a six-year period beginning 1987, approximately 1.5 million people emerged from the poverty trap, with the proportion of people below the poverty line declining from 46.6 per cent to 30 per cent. Simultaneously, unemployment was drastically curtailed from 10.8 per cent in 1987 to about 5.3 per cent in 1992 (Barrera 1998). The Argentine story marks a sharp contrast, however. Here, ever since the inception of liberalization in 1975, income inequality and poverty have markedly deteriorated. The poorest 30 per cent of the population received 11.4 per cent of the national income in 1975 but only 8.9 per cent in 1993. Correspondingly, the share of the richest decile rose from 46.6 per cent to 51.6 per cent (Starr 1999). The Mexican case also replicates several key aspects of the Argentine case (Lustig 1992).

Table 1D: Selected Comparisons of India's GDP Per Capita (Constant 2000 US \$) with Other Regions

Year	India	Sub-Saharan Africa	South Asia	East Asia & Pacific	World
1965	187	485	197	145	2843
1970	207	536	220	176	3316
1980	222	577	234	273	3974
1990	316	520	326	481	4555
1995	371	484	377	735	4748
2000	450	504	446	952	5237
2004	538	537	522	1254	5516

Source: Basu and Maertens (2007).

In the early years of liberalisation in India, some serious thinking seemed to have been evident in guiding the economy in a particular direction. However, the frenzy of privatisation, financial liberalisation and opening up to multinationals which has been witnessed in recent years in India, hardly bears the impression of a carefully thought out long-term strategy guided by national interest, but seems a hastily put up patchwork quilt, with at least one eye on what will be acceptable to the IMF and the World Bank.

Several key factors enter the reckoning, when one considers the question of whether economic reforms in any particular country, are likely to be associated with greater social welfare. Of the myriad of these factors, the most relevant in the Indian context, appear to be the following:

- (i) the sustainability of the growth momentum;
- (ii) likely impacts on poverty and employment;
- (iii) rising inequality;
- (iv) possible adverse impact on the environment;
- (v) natural resource constraints;

Each of the above issues is now taken up for discussion.

Apart from these issues, the perennial issue of corruption has always been with us, and contrary to the pious expectations of the reform advocates, corruption has not diminished with the move towards markets and has actually become more deeply entrenched (*see* Nachane 2006). Newer issues are also emerging in the current Indian context such as the degree of "autonomy" of domestic policy, the freedom of the press from vested interests, the quality of public opinion and socio-political stability. However, without denying the importance of these broader issues, I keep them outside the purview of the present paper.

III Timing of the Structural Break

One of the issues which has attracted a great deal of attention from “India watchers” revolves around the timing of the growth miracle. This is not of mere statistical interest, for if the vital structural break is located in the 1990s then a major role in the growth spurt could be assigned to the reforms, whereas earlier breaks would, in some measure, emasculate their contribution. Econometrically speaking, the most dependable study seems to be Wallack (2003), which locates the sole significant break in Indian GDP as early as 1980.⁹ However, even if the growth acceleration dates back to the 1980s, as is well known, the growth impulses during this decade proved abortive. A number of explanations have been advanced as to why this growth phase proved transient. A popular explanation (especially favored by the liberalization advocates of the 1990s) is the view emphasized by DeLong (2001) and Panagariya (2004) that the growth impulse of the eighties decade was fragile and unsustainable, because the reforms undertaken lacked depth and did not go far enough. A more plausible explanation runs in terms of a constellation of unfavorable circumstances emerging at the end of the 1980s including the poor agricultural performance in two successive years (1986-1987 and 1987-1988), fiscal slippage (gross fiscal deficits in excess of seven per cent from 1984-1985 to 1990-1991), an over-valued exchange rate and a current account deficit which coursed through the three per cent (of GDP) barrier in 1990-1991, leading to the well known currency crisis of 1991. The contra-factual question as to whether the macroeconomic imbalances could have been avoided if the reforms had been more extensive, remains an issue for further investigation.

While few would question that the growth rates experienced in the reforms phase (post –1991) were historically high (by Indian standards), a section of opinion maintains that the rates could have been even higher. The view most favored by international multilateral agencies is that Indian reforms did not go far enough and (by implication) higher growth in the future is contingent upon accelerated reforms—a view enthusiastically espoused by the McKinsey Report on India (2001). Balakrishnan (2005) by contrast, faults the high real interest rates over the period 1995-2000

⁹ A later break (1992-1993) is discerned for two important components of the GDP viz. (i) trade, transport, storage and communications and (ii) public administration, defense and other services.

and the decline in budgetary support to capital formation in agriculture, for what he regards as a lackluster growth performance.¹⁰

Table 2: Real Interest Rates in India

Year	Inflation (%)	Nominal Interest Rate (%)	Real Interest Rate (%)
1996-1997	9.4	11.84	2.44
1997-1998	6.8	9.00	2.20
1998-1999	13.1	9.00	-4.1
1999-2000	3.4	10.00	6.6
2000-2001	3.8	9.79	5.99
2001-2002	4.3	10.58	6.28
2002-2003	4.0	7.41	3.41
2003-2004	3.9	6.10	2.20
2004-2005	3.8	5.44	1.64
2005-2006	4.4	5.43	1.03

Note: Inflation is measured as the annual point-to-point change in the CPI (Industrial Workers), while the interest rate is taken as the annual gross redemption yield on 15-year dated government securities.

Source: Handbook of Statistics on the Indian Economy (Reserve Bank of India) 2005-2006.

The failure of macroeconomic policies, especially on the fiscal front, when supplemented with an older explanation (Khan 1994) emphasizing governance problems as sources of low growth in the South Asian region, could provide a reasonably satisfactory explanation of why the 1990s did not witness a "Rostowian take off" into a high self-sustained growth phase. The McKinsey prescription is only a partial one and could be fraught with the danger so tellingly underlined by Rodrik and Subramanian (2004) "... it is important for India to avoid the mistakes that Latin America made in the 1990s by hastily embarking on an overly ambitious agenda of economic liberalization and privatization that runs ahead of the supporting institutions or the productive ability of the economy" (p. 1596). But the debate on the timing of the take-off still remains an open issue. Sen (2007), for example, dates the break in the mid-1970s, when private capital investment increased noticeably, driven by the impetus of financial deepening, public investment and the declining

¹⁰ The second part of Balakrishnan's explanation seems acceptable, but the first part about high real interest rates (or what he calls as missing monetary policy) is sensitive to the particular interest rate he has taken as representative of the cost of credit viz. the PLR (prime lending rate of banks). The PLR moves sluggishly and is often out of alignment with market interest rates. Besides, since 1994, it has served a minimum lending rate only for loans upto Rs. 2 lakhs. For loans above this limit, no minimum lending rates apply and a substantial amount of credit is made available at sub-PLR rates. Balkrishnan's conclusions (about real interest rates) do not carry over when other rates are used (see Table 2).

relative price of machinery. All in all, however, it is difficult to deny a firm nexus between liberalization and growth. The issue is really whether this nexus is self-perpetuating or likely to collapse once liberalization has proceeded to a certain level and further, whether the nexus is conditioned by the specific contents of the liberalization design. These aspects directly lead us to the issue of sustainability of the current high growth phase in India.

IV Macroeconomic Risks of Liberalization

The issue of growth sustainability in India has been examined from several distinct angles, none of which of itself can offer a complete explanation, but taken together the overall picture that emerges is that there are formidable arguments against the “elephant’s trot” (to borrow Sen’s (2007) expression) continuing indefinitely, due to a constellation of (short-run) macroeconomic features and (long-run) structural features inherent in the liberalization path that India seems to be chalking out for itself. Let us begin with the macroeconomic features first.

In Nachane (2006), I had sought to interpret the upward growth movement as a consumption boom, riding on the back of the newly acquired prosperity of a metropolitan upper middle class. Because of the perception of the current government (and especially the finance ministry) that the high growth rates were part of a secular trend rather than purely cyclical, appropriate anti-cyclical measures were not put in place on time. Abundant liquidity at historically low interest rates have fuelled this boom, which spilled over into a spurt in bank financing of durable consumption goods, stock markets and real estate. In 2006-2007 credit grew by 28 per cent in annual terms, whereas the corresponding nominal income growth was 15.2 per cent. As a rough calculation, one could then say that about 13 per cent of the increase in credit (or about 10.87 per cent of the increase in GNP in that year) found its way into the asset markets. Government policies such as an income taxation curve with zero progressivity at the top income scales,¹¹ and low corporate taxes¹² are increasingly placing incomes in the hands of the very affluent classes, which is spilling over into the asset markets. However, in my opinion (*see* Nachane 2007), it is the accelerated liberalization of the capital account in

¹¹ All incomes above Rs. 8.5 lakhs per year are taxed at the same rate of 30 per cent (plus a 10 per cent surcharge and education cess). This is lower than the US rate of 35 per cent for the top income bracket.

¹² Effective corporate taxation rates are 33.99 per cent for Indian corporates and 41.2 per cent for foreign corporates. The US rates are about 35 per cent.

the past few years that has been the major cause of the massive bubbles building up in the stock and realty markets.

The problem becomes particularly sensitive with the real estate market. In countries experiencing demographic, as well as, urbanization pressures (such as India), there is a chronic shortage of urban housing. Hence it is a safe bet that real estate prices have a strong upward trend. Foreign capital on the lookout for capital gains finds housing investment an attractive option. Until March 2005, only NRIs and PIOs (persons of Indian origin) were permitted to invest in the housing and real estate sectors. In March 2005, the government allowed 100 per cent FDI in the construction business of commercial and residential real estate sectors. The government also actively encourages the setting up of Real Estate Mutual Funds (REMFs) and Real Estate Investment Trusts (REITs) to launch exclusive funds targeting the Indian real estate sector. With these developments FDI in the real sector rose from US \$0.11 bn. in 2003-2004 to (approx.) US \$ 2.1 bn. in 2006-2007, a nearly twenty fold increase. Thus capital account liberalization means that NRIs and PIOs (but not other foreigners) can acquire commercial and residential property in India but all foreigners can invest in property development.¹³ That NRI purchases of property push up domestic real estate prices would be obvious. Equally obvious is the fact that the poor and middle-class domestic buyers (whose salaries would be indexed, if at all, to a price index which does not incorporate housing prices) would find themselves rapidly priced out of the housing market. What is not so obvious is the fact that even foreign investment in real estate development does not really relieve this distress but actually aggravates it as this estate development essentially involves commercial complexes and residential condominiums that cater to tastes (and budgets) of the upper segments of the society (and of course non-residents).¹⁴ As a matter of fact, such estate development very often blocks off any increase in the supply of effective housing space for the poor and the middle-class. This phenomenon is rampant in most LDCs and EMEs and India constitutes a prime example.

Financial liberalization and growing cross-border flows have posed other problems of macroeconomic stabilization. The most important of

¹³ Such investments are regulated as per RBI notification No. FEMA 21/2000 dated 3 May 2000.

¹⁴ It is debatable whether the recent repeal of the ULCRA was undertaken at the initiative of foreign real estate developers and funds. But the effect of this measure is also expected to be similar.

these, pertains to the conduct of monetary policy. In the Indian context, this genre of problems have been discussed extensively in Rangarajan (2000), Reddy (2005), Mohan (2007), Nachane and Raje (2007) etc. There has been in evidence a general movement away from a heavily managed exchange rate system of the 1980s and early 1990s towards a more flexible policy of letting the exchange rate gravitate towards its equilibrium value (as determined by market fundamentals). Today the concerns over exchange rate management are limited to short-term considerations such as the need to smoothen out excessive volatility and foreclose the emergence of destabilizing speculative activities and are usually subsumed under the rubric of "overall financial stability". Even though the RBI does not have a target exchange rate band in mind, it has not hesitated from pro-active intervention to prevent undue nominal exchange rate intervention. However such episodes of "leaning against the wind" are becoming increasingly less frequent now as the economy is showing signs of a robust growth and successful integration with the international economy. But, as the following quotation from Mohan (2007) illustrates, India's exchange rate policy is in a state of evolution and may undergo a substantial transformation in the foreseeable future.

".. the Dutch disease syndrome has so far been managed by way of reserves build-up and sterilization, the former preventing excessive nominal appreciation and the latter preventing higher inflation. However, the issue remains how long and to what extent such an exchange rate management strategy would work given the fact that we are faced with large and continuing capital flows apart from strengthening current receipts on account of remittances and software exports."¹⁵

The Indian exchange rate has appreciated (*vis a vis* the US \$) by about 11 per cent in the last year. This is partly attributable to the weakness of the dollar itself but more basically to the burgeoning capital inflows. This nominal exchange rate appreciation has resulted in a real exchange rate appreciation of about 7.5 per cent over the same period (based on the 36- currency trade weighted index). But this real appreciation is possibly a serious underestimate, as it fails to account for the substantial upward movement in real estate and other immovables. All evidence points to this factor as becoming an important retardant of Indian exports. The current account deficit (latest available estimate) stands at

¹⁵ The introduction of the Market Stabilization Scheme (MSS) in April 2004 assumes significance in this context as an important tool for short-term liquidity management.

1.56 per cent but this is widely expected to rise to about 2.1 per cent by the end of the next fiscal.

A recent issue of *The Economist* (17 November 2007) has brought this issue sharply into focus. In an article clearly intended to caution investors in EME stock-markets, the magazine has ranked 15 countries based on an indicator derived from macroeconomic parameters such as consumer price inflation, credit growth, budget deficit, current account deficit etc. Going by this indicator, India emerges as the riskiest destination in the 15 country sample. The Economist reinforces this conclusion by looking at the P/E ratios in the various countries' stock-markets. The ratio stands at 22.6 for India, highest among all the 15 EMEs, and nearly 1.6 times that of the average for EMEs. Some Indian analysts have been quick to dismiss these fears as baseless and Cassandra like.¹⁶ But the starkness of the above figures, when coupled with the foregoing analysis, puts some force in their (The Economist's) conclusion that "India shows dangerous signs of irrational exuberance".

The resemblance to the Japanese consumption boom of 1986–1992 is also most striking, and it is a surprise that most analysts have seemed to overlook this facet. Thus overall there are strong instability risks attached to the high growth strategy (and its concomitant emphasis on foreign capital) currently being pursued, with a very real threat of a prolonged asset deflation (as in the Japanese aftermath which extended over 1992-2003).

V Sources and Composition of Economic Growth

An important dimension of the medium term sustainability of the growth momentum pertains to the sources and composition of economic growth. Let us first delve into the sources of economic growth. Unel (2003) estimated an average annual growth rate of 1.8 per cent in Total Factor Productivity (TFP) for Indian manufacturing over the period 1980-1991, accelerating sharply to 2.5 per cent over 1992-1998.¹⁷ Other studies by contrast report declining TFP growth rates as between the two periods (Trivedi *et al* 2000, Goldar and Kumari 2003, and Goldar 2004). Goldar (2004), for example, records a decline in the TFP growth rates from 0.92 per cent (1982-1991) to 0.65 per cent (1992-2000). Using slightly

¹⁶ The same analysts, lest it be forgotten, are quick to swear by *The Economist*, whenever it has anything to say in their support.

¹⁷ A study done by Tata Services (2003) is also broadly in agreement with Unel's results, though it posts slightly lower TFP growth rates of 0.68 per cent (1982-1993) and 0.97 per cent (1994-2000).

different methods, Bosworth *et al* (2006) note a significant decline in the contribution of TFP to manufacturing growth in the post-reforms period (1993-2004) as compared to the decade (1983-1993), while for the services sector an exactly opposite trend is in evidence. Of the other major studies, the conclusions of Sivasubramonian (2004) are broadly in agreement with those of Bosworth *et al* (2006) and Goldar (2004), while Sengupta's (2005) study attributes a major role to the foreign trade effect in explaining the high post-reforms growth phase (p. 5).

Apart from the sources of growth, the composition of growth has also received a fair amount of attention in the literature. One of the most remarkable features of India's recent growth experience relates to the spectacular showing by its service sector. During the last decade (1994-1995 to 2004-2005), this sector has recorded an average annual rate of growth of 7.9 per cent, much in excess of those recorded in the agricultural sector (3 per cent) and the industrial sector (6.5 per cent) (*see* Banga 2006).¹⁸ Today, the share of the services sector in India's GDP is around 55 per cent, with much of this increase being at the expense of the agriculture sector's share. Opinion on the long-term prospects of such service-led growth differs sharply. Critics of the services-led growth thesis in India have included Mazumdar (1995), Arunachalam and Kumar (2002) and most notably Acharya (2002). The criticism focuses on three special aspects of services growth viz. its dependence on growth in the other sectors (especially manufacturing), its low employment potential and its concentration in a few selected sub-sectors (construction, hotels & restaurants, communication, finance, insurance, real estate and business services).¹⁹ Hansda (2002) is probably the most systematic analysis of service-led growth sustainability in the Indian context, using an input-output framework. Based on Rasmussen linkage indices, he finds substantial backward linkages of the services sector with the rest of the

¹⁸ To avoid confusion, it may be useful here to list the major components of the Industry and Services sector. Industry comprises (i) mining & quarrying; (ii) manufacturing and (iii); electricity, gas & water supply, while Services comprise: (i) construction; (ii) trade; (iii) hotels & restaurants; (iv) transport (railways & other); (v) storage; (vi) communication; (vii) finance, insurance, real estate and business services and (viii) community, social and personal services.

¹⁹ In addition there is a fourth aspect which does not seem to have attracted much attention in the Indian context viz. that increasing tertiarisation can trigger an aggregate productivity slowdown in the economy, due to what Baumol (1967) has termed the "cost disease" effect, whereby productivity lags wages in the services sector. Evidence in support of this phenomenon for the U.S. economy is reported in Triplet and Bosworth (2000).

economy, though the forward linkages are only moderate.²⁰ The strong backward linkages reflect the crucial dependence of sustained growth in the services sector on the rest of the economy (especially manufacturing) growing in tandem.²¹ The fact that infrastructure services constitute an important component of the services sector (*see* endnote v), when taken in conjunction with the strong backward linkages and modest forward linkages alluded to above, while not in conflict with the frequently voiced concern in India about infrastructure being a bottleneck to growth, serves to underline the limited growth potential of a strategy of building infrastructure ahead of demand (as in the frequently cited U.S. railroad experience of 1870-1910).

So far we have focused on examinations of the sustainability issue from a purely economic perspective. But the issue may also be viewed in a broader framework. If growth is not broad based, if it has little impact on poverty, if it pays insufficient attention to the long-term issues such as environment and natural resource limitations, and if the benefits of growth are increasingly cornered by a minuscule section of the population, the consequent social tensions and political instability will inevitably frustrate the growth process. It is to an examination of some of these broader issues that we now turn.

VI Unemployment and Poverty

The ultimate touchstone of reforms is the success it has in making a dent on the deeply entrenched poverty in India. The measurement of poverty is a complex issue, and up-to-date estimates on reliable poverty measures are rarely available. International comparisons of poverty levels are fraught with even more serious problems. The standard concept of poverty is the percent of population below a threshold (poverty line), usually based on a minimum level of nutrition in a benchmark year with allowance for some non-food expenditure and deflated by an appropriate cost of living index. Poverty estimates in India are based on the consumer expenditure surveys

²⁰ As is well known, these concepts were introduced into the development literature by Hirschman (1958). Backward linkages reflect the demand for inputs of a given activity, while forward linkages reflect output utilization (i.e., the extent to which outputs from a given activity will be used as inputs in other activities) (*see* Drejer 2002).

²¹ This conclusion is more in conformity with the view expressed by Acharya (2002) and others above, rather than the contrary view espoused in OECD (2000) that it is manufacturing activity that flows to countries with adequate services infrastructure.

carried out by the National Sample Survey Organization (NSSO).²² After the reforms, three quinquennial surveys have been carried out viz. the 50th NSS Round (1993-1994), 55th NSS round (1999-2000) and 61st NSS Round (2004-2005). As a benchmark pre-reform comparison point, we use the results from the 43rd NSS Round (1987-1988). Results are presented in Table 3.²³

Table 3: Poverty Measurement – Head Count Ratio (HCR)

	(Per cent)			
	1987-1988	1993-1994	1999-2000	2004-2005
Rural	39.1	37.3	27.1	22.0
Urban	38.2	32.4	23.6	21.6
All-India	38.9	36.0	26.1	28.0

Source: Sen and Himanshu (2004), Tendulkar (2006), Radhakrishnan and Panda (2006).

The fact that all-India poverty ratio has increased as between 1999-2000 and 2004-2005 is largely a reflection of the fact that the results of the 55th NSS Round are not comparable with the results of the 50th round. The methodology of the 61st Round is however comparable to that of the 50th Round (and hence not with that of the 55th Round). Thus the dent on poverty is nowhere comparable in the post-reforms period to what reforms enthusiasts were prone to claim earlier. Instead of declining by nearly 10 per cent over a six year span, it has actually declined only by eight per cent over an 11 year span. Thus the average annual decline in the poverty ratio is a meager 0.7 per cent, and not 1.6 per cent as thought before. Considering that the rate of population growth in the last decade has been around 1.8 per cent, the decline in the poverty ratio translates into an annual addition to the absolute number of the chronically poor by about 0.2 per cent (roughly two million people over the post-reforms period). So much for the “trickle down” effect, much touted in the official pronouncements!

²² These are annual surveys based on a thin sample of four households per village/urban block as also the quinquennial surveys based on a thick sample of eight to 10 households per village/urban block.

²³ The poverty line used in the Table is as per the recommendations of an Expert Group set up by the Planning Commission in 1993. It uses a base poverty line of per capita consumption of Rs. 49 per month (rural) and Rs. 57 per month (urban), based on the recommended daily intake of 2400 calories (rural) and 2100 calories (urban). Adjustments are made to this base by using the CPI for agricultural workers in case of the rural line and the CPI for industrial workers for the urban poverty line.

Chen and Ravallion (2004) in their well-known comparative study on world poverty, using the international poverty line definition (\$1.08 a day per person at 1993 PPP), obtain significantly higher estimates for the HCR than shown in the above table (for the year 2001 for example their HCR is 34.7 per cent). Poverty in India has been consistently higher than that in South Asia generally, whether measured by the HCR or by Poverty Gap Indices.²⁴

The aggregative measures of poverty do not enlighten us about important issues such as:

- i. The intensity of poverty,
- ii. Its concentration in particular regions,
- iii. Its distribution by occupation, sex, caste and religion.

Only very detailed studies can throw light on such issues which are fraught with tremendous social and political consequences. Attempts to deal with these aspects are only now commencing (e.g. Radhakrishna and Ray 2005, and Radhakrishna and Panda 2006).

Juxtaposed with the issue of poverty is that of unemployment. Possibly, unemployment is ultimately likely to prove the Achilles' heel of the reforms process. It is now unequivocally accepted that the move to market friendly policies globally, has reduced the employment elasticity of growth (per cent increase in employment for a one per cent increase in growth rate), in LDCs, in ex-socialist countries, as well as, the OECD group of countries. Even in China spectacular growth has co-existed with an urban unemployment problem. The aggravation of the unemployment problem occurs through several channels, the main ones for the LDCs being the following:

- 1) A decline in the terms of trade (ratio of export prices to import prices) owing to the low level of demand for LDC exports in the advanced countries.
- 2) Corporate restructuring and mergers and acquisitions.
- 3) Rapid growth of labour-saving technologies, mainly introduced into LDCs by multinationals.
- 4) The global spread of new technologies has brought in its wake a new underclass of "the learning-disabled" consisting of the least educated older workers. This class is not only unemployed but also

²⁴ The Poverty Gap Index refers to the proportionate shortfall of income of all the poor from the poverty line as expressed in per capita terms (for the entire population).

"unemployable" - in the globalised world there is no room for the totally unskilled worker.

Advocates of the free market, typically contend that although new technology displaces labour, it also lowers costs and prices, and hence expands the demand for labour in the long run. But it should be emphasized that with each successive wave of technology, the new demand is going to be for increasingly skilled workers. In the absence of a suitable education and training policy, the already displaced labour cannot be absorbed - only a skill-job mismatch situation develops with an excess demand for highly skilled workers co-existing with a vast army of the long-term unemployed.

Empirical analysis of unemployment in India is beset both by data problems, as well as, a multiplicity of measurement concepts. At least four concepts are currently in use viz. Usual Principal Status (UPS), Usual Principal and Subsidiary Status (UPSS), Current Weekly Status (CWS) and Current Daily Status (CDS).²⁵ The unemployment rates (unemployed as a fraction of the workforce) are presented in Table 4 below, whereas employment growth rates of select sectors is presented in Table 5 (with a breakdown between the organized and unorganized sectors).

Table 4: Unemployment Rates Per Cent (CDS BASIS)

	1983	1993-1994	1999-2000
All-India	8.30	5.99	7.32
Rural	7.96	5.61	7.21
Urban	9.64	7.19	7.65

Source: NSSO Various Rounds.

Both tables underscore the failure of the Indian reforms process to tackle the unemployment issue with any success. The unemployment rate (all-India) shows an appreciable decline over the pre-reform period (1983 to 1993-1994), but then rises again very sharply over the post-reforms period (1993-1994 to 1999-2000). The conclusion applies with similar force to the rural unemployment rates, and also (but with considerably less force) in the urban case. The sectoral story mirrors the broad pattern exhibited by the aggregate unemployment rates. Employment growth (in both the organized and unorganized sectors) has decelerated sharply in the aftermath of reforms. As in the decade prior to reforms, the unorganized

²⁵ For detailed explanations of the various concepts involved, please see Hansda and Ray (2006).

sector continues to grow faster than the organized sector in the post-reforms period.²⁶ This growth has been accompanied by an increasing *casualization* of labour (see Deshpande and Deshpande 2001).

Table 5: Sector-wise Employment Growth (CDS Basis)

Sector	Organized		Unorganized	
	1983-1994	1994-2000	1983-1994	1994-2000
Agriculture	0.02	-1.00	2.23	0.03
Mining & Quarrying	-1.91	-1.30	3.68	-2.40
Manufacturing	2.58	0.87	2.26	2.95
Electricity, Gas & Water Supply	-3.55	0.51	5.31	-17.00
Construction	5.21	-0.69	4.18	5.85
Trade, Hotels & Restaurants	5.72	1.43	3.80	5.79
Transport, Storage & Communications	5.53	0.21	3.35	7.59
Finance, Insurance, Real Estate & Business Services	5.40	1.27	4.60	8.30
Community, Social & Personal Services	-2.08	0.8	3.85	-3.56
All Sectors	1.07	0.56	2.67	1.12

Source: Planning Commission (2002), Hansda and Ray (2006).

From a futuristic perspective what is a dangerous portent is the declining employment elasticity of growth across sectors. This is evident from Table 6, which shows a steep fall in the employment elasticity in the post-reforms period in all sectors except transport, storage and communications, and finance, insurance, real estate and business services. In the remaining sectors (accounting for nearly 94 per cent of the total employment) employment elasticities have registered moderate to steep declines. If the overall employment elasticity of 0.13 (obtained over the period 1993-1994 to 1999-2000) is taken as obtaining in the near future then even an eight per cent rate of growth will increase employment by a mere one per cent.²⁷

²⁶ According to one estimate, the unorganized sector accounted for 91.66 per cent of the total employed labour force in 1999-2000.

²⁷ Or putting it more graphically since the work force is growing at about 1.2 per cent annually, a 9.5 per cent growth is necessary to keeping the growing workforce employed, without adding to the existing unemployment backlog.

Table 6: Sector-Wise Employment Elasticities (CDS)

Sector	Share of Employment (1999-2000) (Per Cent)	Pre-Reform Period 1983-1984 to 1993-1994	Post-Reform Period 1993-1994 to 1999-2000
Agriculture	56.70	0.48	0.01
Mining & Quarrying	0.67	0.61	-0.49
Manufacturing	12.11	0.32	0.20
Electricity, Gas & Water Supply	0.34	0.48	-0.52
Construction	4.44	1.27	1.00
Trade, Hotels & Restaurants	11.15	0.67	0.38
Transport, Storage & Communications	4.05	0.55	0.56
Finance, Insurance, Real Estate & Business Services	1.38	0.49	0.68
Community, Social & Personal Services	9.16	0.63	0.02
All Sectors	100.00	0.36	0.13

Source: Planning Commission (2002).

VII Inequality

Inequality is possibly one of the most neglected dimensions of the liberalization programme. It becomes one of the crucial factors determining long-term sustainability of the reforms programme, because of the following three features (Birdsall 2005):

1. Inequality not only inhibits growth in countries with weak markets and governments, but could even contribute towards making both (governments, as well as, markets) weak in the first place,
2. It undermines good public policy, by undermining collective decision making and social institutions critical to healthy societies (the so-called “vanishing middle class” syndrome),
3. A cross-country correlation analysis reported in Birdsall (2005) indicates a low but positive correlation (0.33) between inequality (as measured by the Q5/Q1 index- the ratio of the income accruing to the bottom 20 per cent and top 20 per cent of the population) and the poverty headcount ratio (\$ one per day threshold).²⁸

In a large federal set-up such as India’s, inequality has at least two major dimensions viz. regional inequality between states and interpersonal inequality.

The study by Ahluwalia (2002) (covering 14 major states) showed a sharp increase in the Gini coefficient from 0.175 (1991-1992) to 0.233

²⁸ Since this is a cross-country study, one cannot take the evidence as supportive of any causal nexus between inequality and poverty. It does however, show up that poor countries are also likely to be highly unequal societies.

(1998-1999), based on the State Domestic Product (SDP) per capita.²⁹ Deaton and Dreze (2002) reiterate similar conclusions but based on per capita consumption across states. Thus the process of economic reforms in India does seem to have had a noticeably adverse impact on regional inequality. This has the potential to create political tensions in a society where regional loyalties have traditionally been powerful. There is already in evidence a marked reluctance on the part of the advanced states towards the concept of equalizing fiscal transfers to backward states, via the mechanism of the Finance Commissions.

Interpersonal inequality has attracted a great deal of attention from policymakers and academics alike. For India, the central features from major studies such as Mundle and Tulasidhar (1998), Ravallion and Datt (1999) and Jha (2000) are that in the 1990s there has been a moderate rise in both rural and urban inequality (in contrast to the two previous decades when inequality remained constant), accompanied by a decline in urban poverty, but the widening of the rural-urban income gap has implied a significant increase in overall inequality.

Three explanations have been advanced to explain the re-emergence of income inequality in the 1990s in countries embarking on neo-liberalization programmes, viz:

- (i) **Traditional Causes:** A reinforcement of traditional causes of inequality such as land concentration and unequal access to education and health,
- (ii) **Technological Change:** This explanation of inequality lays stress on the differences between wages of skilled and unskilled workers, emerging in the wake of technological progress. Technical progress generates scarcity rents for skilled workers, thus increasing the wage spreads (between the skilled and unskilled). However, every major technological innovation creates a new class of skilled workers, rendering part of the older skilled workforce, semi-skilled,
- (iii) **Domestic and External Liberalization:** A great deal of literature has emerged around the disequalizing impact of liberalization and globalization. Since this process has several facets, we discuss each of them briefly.

So far as trade liberalization is concerned, the so-called Wood thesis (based on standard factor price equalization assumptions) leads us to expect a narrowing of wage differentials in LDCs & EMEs (*see* Wood

²⁹ The Gini coefficient is a measure of inequality, with higher values of the coefficient indicating greater inequality.

1994), a conclusion hardly borne out by the empirical data available. One plausible explanation of this phenomenon revolves around the inappropriate choice of technologies in LDCs. The import of First World technologies in LDCs often leads to a scarcity rent for skilled labour, aggravating wage inequality (*see* Lindert and Williamson 2001). Rodrik (1997) stresses an alternative line of explanation in terms of the political economy of distribution in a world of mobile capital and immigration inflexibilities.

In assessing the distributive impact of globalization on LDCs, a key factor is not usually accounted for. This refers to the domestic policy changes (including labour market reforms, tax reforms and privatization) which have to be initiated to render the country an appealing destination for foreign investors.

Labour market reforms typically involve relaxation of safety norms, reducing job security, and weakening of collective bargaining mechanisms. These have obvious impacts on wage dispersion (though once again we encounter a consistent dearth of quantitative estimates).

Tax reforms have been characterized by a rolling down of corporation taxes and taxes on trade, with a corresponding rise in indirect taxes. This has been accompanied by a reduction in the progressivity of direct taxes, especially at the top end. While there is no denying that the excessive marginal tax rates on high incomes and wealth obtaining in the 1960s and 1970s had a dampening impact on effort incentives, the current flat rate of 30 per cent for the top income slabs (with a surcharge of 10 per cent) has had adverse impacts on social equity. The savings from the top income brackets seem to have largely flown into asset markets (equities, bullion, and real estate), which are currently experiencing a long upward swing. The rising real estate prices in particular (they rose by about 40 per cent last year alone) are putting a squeeze on the urban middle class and poor, where mortgages often account for about 35 per cent of a median family's income.³⁰

Privatization, where it has occurred on a significant scale, has often led to rapid concentration of national assets in the hands of a small elite, high service charges by the privatized utilities, employment restructuring and erosion of regulatory control. Such a combination of factors has considerable potential for an unfavourable distributional impact.

³⁰ Because of the lack of availability of reliable data on the real estate sector in most LDCs, these figures should be treated as indicative.

Domestic financial sector reform tends to raise the share of financial services in the GDP. In the last decade or so, there has also been a marked relative rise in financial sector salaries as compared to salaries in the manufacturing sector (even after correcting for standard conditioning factors such as education levels, hours worked, non-salary incentives, etc.). This relative rise is partly in the nature of quasi-rents to finance specialists (in a situation of a rapidly evolving financial system and financial instruments), and partly an internalization of unprotected intellectual property rights for financial innovations.³¹ Another factor contributing to inequality is the redistributive impact of the budget which in a largely deregulated financial environment could transfer labour incomes to holders of state bonds.

The liberalization of cross-border direct investment flows, as well as, bank loans and portfolio investments, has three potential consequences for inequality. Firstly, there is the “disciplining” effect on domestic policy, involving tax reforms and restraints on organized labour, which have already been discussed above. Secondly, capital inflows are likely to lead to real exchange rate appreciation, which shifts resources to non-tradeables sector and encourages sub-contracting and wage cuts in tradeables sector to preserve profit margins (*see* Taylor 2000). Thirdly, increasing openness of the capital account increases the vulnerability of the domestic economy to financial crises (Caprio and Klingebiel 1997). These crises have pronounced disequalizing effects, especially in countries with weak institutions and social safety mechanisms.³²

Empirical evidence on inequality is extremely scanty in the Indian context. It would have been interesting to examine whether *a priori* expectation (in view of the above discussion) of an increase in inequality consequent to reforms is borne out by the data. The only evidence of this nature that seems to be available is that due to Radhakrishna and Panda

³¹ Mohan Rao, in a private communication, has suggested that the high levels of relative pay may be accounted for by the fiduciary role that finance managers play with regard to huge financial assets, so that large salaries are in the nature of side payments to restrain moral hazard and thievery. While I am grateful to him for this very valuable insight, I am not sure how well this argument applies to the Indian situation, where because of strong regulation and supervision of the financial system the scope for moral hazard is severely circumscribed.

³² Galbraith and Lu (1999) for example, document that in Latin America financial crises raised inequality by 73 per cent and in the Asian crisis inequality rose by 62 per cent. Diwan (2000) also notes the marked permanent decline in labour shares following financial crises.

(2006) but this is limited to four Indian states. Nevertheless as seen in Table 7, our *a priori* expectations are only partially borne out. The Gini index (measured in terms of the monthly per capita expenditure) shows an increase for the urban sector in two of the four states, while there is a noticeable decline for the rural sector in all four states. Needless to say, unless supplemented by data on more states, much cannot be read into these conclusions. Additionally, an explanation of the observed trends in terms of underlying causal factors is also awaited.

Table 7: Gini Ratios for Four States (Based on Monthly Per Capita Expenditure)

States	1983-1984		1993-1994		1999-2000	
	Rural	Urban	Rural	Urban	Rural	Urban
Bihar	0.256	0.301	0.221	0.309	0.208	0.318
Orissa	0.267	0.296	0.243	0.304	0.242	0.292
Rajasthan	0.343	0.304	0.260	0.290	0.209	0.281
Tamil Nadu	0.325	0.348	0.308	0.344	0.297	0.398

Source: Radhakrishna and Panda (2006).

VIII Environment and Natural Resources

Environment is an issue, which has received relatively little attention in India as yet. Environmental degradation in India, is proceeding apace at an alarming rate, as is happening elsewhere in the LDCs.

Ray and Chaudhury (2004) have identified 17 major dirty industries in India,³³ which between themselves account for about 13 per cent of the total industrial units in the country and for about 5.65 per cent of national income. Globalisation is likely to accentuate the process further owing to the following factors:

- I. There is some evidence of shifting of some "dirty industries" (i.e., pollution creators) to South Asia. The significantly lower environmental standards in this region (than those obtaining in developed countries), create an implicit incentive for MNCs to locate their high polluting units here (the so-called regulatory moral hazard problem). Further, most LDC governments in South Asia, in their anxiety to attract FDI may not be fully sensitive to this problem and the Indian government is no exception to this tendency,
- II. The intense lobbying for transgenic crops in India could also be a potential environmental hazard, the full impact of which is not known yet,

³³ Seventeen industries include aluminium, caustic soda, cement, copper, distillery, dyes, fertilizers, pesticides, leather, iron & steel, pulp & paper, sugar, zinc, chemicals, plastic, wood & wood products, and electricity.

III. As we have noted earlier, there has been a marked growth in the unorganised sector. While pollution is a common feature in both organised and unorganised units, the latter are far more difficult to monitor and control, and may often lack the resources to initiate pollution abatement measures (*see* Ray and Chaudhury 2004).³⁴ The WTO has introduced several environmental measures in the last Round (1994). The standard LDC grouse against these measures is that they can often be used as a protectionist measure by developing countries against their exports.³⁵

Thus, whereas several aspects of globalisation seriously threaten the environment of LDCs, the WTO measures in this regard are not only inadequate to handle these threats, but are often misapplied by the developed countries themselves as new protectionist barriers.

On the natural resources front, the situation is to say the least alarming. To illustrate the looming crisis in this vital dimension of long-term social welfare, let me take up the issue of water. As per international norms (*see* Report of National Water Commission 2002) a country is deemed water-stressed if annual per capita water availability falls below 1700m³ and water-scarce if this availability goes below 1000m³. In India, the latter threshold was breached in 1991, when annual per capita availability fell to 816m³. Since then the availability has been declining precipitously, falling to 672m³ in 2001, and projected to fall to 495m³ by 2025. What makes the situation a frightening one to contemplate is that access to water is extremely unequal, so that the per capita figure is hardly reflective of the privations experienced by innumerable underprivileged households across vast tracts of the country. Urgent measures to overcome this situation are needed (*see* Kumar *et al* 2005), but would need a sharp reorientation in the priorities of the present government.

IX Face of the Future

The recently released Approach Paper to the XIth Five-Year Plan (henceforth AP for short) provides an indication of the long-term

³⁴ As an illustration, it may be mentioned that thousands of small units in metropolitan centres burn scrap material at night, emitting semi-toxic gases, a phenomenon which the local authorities are helpless to control.

³⁵ Thus, for example, the EU bans imports of furs from animals caught with leg-hold traps and the U.S. bans imports of tuna and shrimp on the grounds that trawlers routinely kill protected species such as sea-turtles and dolphins.

economic strategy of the current government. Three distinct features emerge from this document:

- (i) aggressive thrust towards market-oriented policies,
- (ii) an expression of belief in the demographic dividends theory,
- (iii) recognition of the fact that growth needs to be made more inclusive.

Each of these points is elaborated below.

Market Orientation

The market thrust of the current government has never been in doubt. In recent months, however, several measures have been proposed, designed to operationalize this thrust. The AP assigns a crucial and hitherto unprecedented role to private investment (and FDI)³⁶ in the country's future growth, and lays great stress on the concept of Public Private Partnership in those sectors where public presence is inevitable. Shortly after the publication of AP, the decks were cleared for the freer movement of foreign capital with the Second Capital Account Convertibility Committee announcing a move towards convertibility by 2009. Finally, in what is viewed as a major step towards attracting private investment, a new policy initiative on Special Economic Zones (SEZs) was announced. As we have seen in the earlier part of the paper, the move towards markets has resulted in a significant improvement in the growth performance, but has made little impact on poverty, and has aggravated inequality (both interregional and interpersonal). A large part of the reason could be that while the advocacy of reforms has based itself on the professed merits of markets and competition, actual economic policy has been pro-business rather than pro-markets (i.e., one in which state actively intervenes to protect and promote entrenched business interests, rather than one in which efficiency, competition, free entry and consumer interests dominate) (*see* Kohli 2006 and Rodrik and Subramanian 2004 for the Indian case and Rajan and Zingales 2004 for a more general discussion).

Demographic Dividends Theory

The AP makes an explicit reference to the demographic dividend laying stress on “.. the important potential strength arising from our demographic trends”. While it is not uncommon in India to hear some strong votaries of liberalization waxing enthusiastic on the demographic

³⁶ Of the projected investment rate of 32 per cent (of the GDP) over the fifth Plan period, 22.2 per cent is supposed to come from the private sector and only 9.8 per cent from the public sector. FDI is expected to be around 2.4 per cent of the GDP.

dividends theory, this is the first time one finds an official endorsement of this doctrine.

The theoretical framework for this doctrine lies in the neo-classical models of the Solow-Swan vintage, with additional factors like human capital, education and training grafted on Barro and Sal-I-Martin (1995). Bloom and Williamson (1998) tested this model econometrically for East Asia, concluding that East Asia has enjoyed a long demographic dividends phase over the years 1960-2010, which is now drawing to a close. They also project that this boom will shortly commence in South Asia. Proponents of this theory in India conveniently forget three important qualifications to this theory. Firstly, that the neo-classical nature of the underlying model presumes labour to be a binding constraint.³⁷ One is not sure whether such labour supply optimism can apply universally irrespective of the specific labour market dynamics characterizing each country. Secondly, there is also a potentially negative impact of population growth on capital intensity. A rapidly growing population needs large investments for supplying basic needs (such as housing, roads, schools etc.), so that (unless the supply of machinery is assumed infinitely elastic) capital intensity in industry is likely to decline at least in the short-run. Thirdly, one cannot ignore Bloom and Williamson's (1999) warning that "this effect was not inevitable: rather it occurred because East Asian countries had social, economic and political institutions and policies that allowed them to realize the potential created by this transition". The contrast between East Asia and Latin America, where economic performance has differed sharply in spite of similar demographics, is a telling manifestation of this caveat (Bloom and Canning 2004).

If the demographic dividends doctrine signals a back-peddalling on the population policy front, then it is a cause for serious alarm. Future employment growth is going to rely increasingly on skilled labour (under the current liberalization policies), and the human resource requirements of imparting such skills are formidable. With the trend towards exploitation of scale economies and increased capital intensity in manufacturing, and the move to get India Inc. on a big scale into traditional sections of the unorganized service sector, it may prove difficult even to preserve the existing levels of employment, so the question of absorbing huge unchecked additions to the potential labour force simply does not arise. According to a study reported in the *Business*

³⁷ Even in more sophisticated neo-classical models with equilibrium unemployment, the demographic dividend can only be transitional.

Standard (16 August 2006), 30 per cent of India's 716 million labour force is likely to be unemployed in 2020, and about 85 per cent of these unemployed are likely to be in the 19-25 years group. Even the most sanguine official projections envisage a growth of only 10 million jobs every year, implying about eight million annual additions to the unemployment pool. Coupled with the emerging severe constraints on natural resources (*see* the discussion on water above) the so-called demographic dividends theory is nothing more than a prescription for disaster.

Inclusive Growth

One heartening feature of the AP has been a tacit recognition about the urgency of tackling unemployment and poverty. Chapter 5 of the Paper (rather poetically titled "Bridging Divides: Including the Excluded") offers several palliative measures of which two seem most appealing viz. paying special attention to labour intensive manufacturing sectors and the National Rural Employment Guarantee Programme (NREGP). However, it is in evaluating these solutions that the sectoral composition of growth assumes importance. One needs to distinguish between sectors like construction and tourism, which have considerable employment and income generating potential, but which do not produce basic consumption goods, and sectors like food processing and textiles which partake of both features. But for a pro-poor growth strategy, merely placing additional incomes in the hands of the poor is not enough, the production of basic goods needs to be strengthened too. A strategy of income generation for the poor decoupled from increased basic goods production, could most likely lead to inflation and/or trade deficits. If one looks at the very recent period (2003-2005) the fastest growing sectors have been construction, hotels and restaurants, communication, finance, insurance, real estate and business services, none of which would figure prominently in the poor man's consumption basket.

The AP accords key roles to Civil Society Organizations (CSOs) and Panchayati Raj Institutions (PRIs) in rural development and poverty alleviation. There is no denying that, in principle, the idea is indeed appealing as a step in the direction of decentralization. Equally undeniable is the fact that several CSOs have had an excellent track record. Yet, given the wide differences in the scope of activities, levels of commitment, ideological affiliations etc. of the CSOs, without an effective regulatory and coordinating mechanism (and perhaps also a rating mechanism) how the system will work in practice is anybody's guess. Even more

fundamentally, there is a creeping suspicion that entrusting CSOs with the major part of the responsibility for social and community welfare, is an escape route for the government to abdicate its traditional role in this regard. Needless to say such an abdication would be premature and fraught with serious long-term social consequences. Thus, in conclusion, the Indian reforms story is far from being the unalloyed success, that it is often painted to be, in official circles and in sections of the media and academia. While there is certainly room for comfort in the fact that Indian growth rates have exhibited certain buoyancy in recent years, there is hardly any ground for complacency. It is also true that the Human Development Index (HDI) has risen from 0.438 in 1980 and 0.513 in 1990 to 0.602 in 2003. But this improvement fails to impress, when the HDI level and Rank (127) is compared with the levels in other countries (for the same year) such as China (HDI 0.755, Rank 85), Mexico (HDI 0.814, Rank 53), and Singapore (HDI 0.907, Rank 25). As we have exhaustively discussed above, there are fundamental problems on the poverty, inequality and unemployment fronts, which the government has not only failed to address, but on which the government does not even have a well-planned long-term strategy. Past experience has shown the futility of expecting a mere acceleration of economic reforms to alleviate these problems in any significant manner. The trickle down effect in particular seems to be both protracted and slow. If bold and imaginative initiatives are not undertaken at this stage to address these issues, rising societal tensions and political compulsions will inexorably force backtracking on reforms, as has happened in some Latin American countries in the recent past. Another worrisome feature is that the long-term has become a serious casualty in the way reforms have been conducted in India in the last few years. On the one hand, the government is reluctant (for ideological reasons) to invoke the older methods of perspective planning, and on the other it is finding it difficult to devise a market based pricing strategy for natural resources usage that will correct for the inherent present consumption bias. It is therefore, more than probable that the current splurge may not continue for ever and the future could well turn out to be considerably less happy and more tumultuous, for a majority of Indians, than what hard-lined reformers in the government, financial press and academics would have us believe. After all (in spite of what Keynes once famously said, and which our current policymakers seem to have wholeheartedly accepted in the literal sense) not all of us dead are in the long run.

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