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STRUCTURAL CHANGES IN THE INDIAN ECONOMY
Emerging Patterns and Implications

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ISID Working Papers are meant to disseminate the tentative results and findings obtained from the ongoing research activities at the Institute and to attract comments and suggestions which may kindly be addressed to the author(s).

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Acknowledgments

The Institute for Studies in Industrial Development (ISID) carried out a research programme on “Structural Changes, Industry and Employment in the Indian Economy: Macro-Economic Implications of the Emerging Pattern” during March 2009-June 2012 under the sponsorship of the Indian Council of Social Science Research (ICSSR). Over a dozen studies on major aspects of growth in the Indian economy, namely growth and structure of GDP, employment, industry, services trade and inter-regional and inter-class disparities, were undertaken by the faculty members of ISID.

The present paper highlights the major trends in these aspects of the Indian economy especially over the past three decades, primarily on the basis of the findings of the studies undertaken under the programme and also brings out their implications for sustained and equitable growth. Prepared to follow-up a suggestion by a committee that undertook a mid-term review of the programme, a draft of this paper was presented in a seminar organised to discuss the studies undertaken under the programme, during 20–21, April 2012. I am grateful to Professor K.L. Krishna who chaired the review committee and also the session in the seminar in which the paper was discussed, for his encouragement and very helpful comments. Grateful thanks are due to the participants in the seminar, specially, Professor Sheila Bhalla, Professor K.P. Kannan, Professor R. Nagraj, Dr Gerry Rodgers, Professor Alakh N. Sharma and Professor Ravi S. Srivastava, who constituted the panel for discussion on the paper, for their comments which have greatly helped in revising the paper.

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T.S. Papola[*]

*[**Abstract**: This paper highlights the major structural aspects of India's economic growth specially over the past three decades from the viewpoint of its long-term sustainability. Based primarily on the findings of a number of studies undertaken as part of larger programme, it reviews the trends in sectoral pattern of GDP growth, employment, trade, industry and inter-regional and inter-class disparities and brings out implications of these trends for a sustainable and equitable growth. The paper concludes that while attainment of a reasonably high GDP growth may not be problem in the medium term, its inequitable character is likely to pose a serious threat to its sustainability in the long run.]*

Introduction

Discussion on India's economic performance over the past two decades has often been excessively focussed on the achievement and prospects of a high rate of economic growth. Introduction of economic reforms in 1991 is seen as the turning point in India's post-Independence economic history, providing a break from the low growth trap in which the country's economy had been caught for four decades. It is emphasised that high rate of growth of GDP that was triggered off by economic reforms and has been sustained over the years has been the most important achievement of the Indian economy in recent years. Any factor or phenomenon that is likely to cause a reduction in the growth rate is viewed as a major threat to the process of economic development of the country. A high growth rate is also considered to be particularly important for India to emerge as a major economic power in the world. It may be able to achieve that objective in not too distant a future especially in the context of relatively slow economic growth in general and in the face of periodic crises of one kind or another developed countries have been facing. Achievement of the status of a global economic power seem to be viewed as coterminous with, if not more important than the objective of ensuring a reasonably high level of living for the Indian population.

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The single-minded pursuit of growth rate in study, discussion and policy suffers from serious analytical fallacies and can give rise to erroneous policy leads. Also the common premise in currency that the economic reforms in 1991 marked the sole turning point in India's post-Independence economic history providing a break from low-growth to high growth trajectory is not only factually incorrect, but can also lead to rather simplistic and misleading framework of analysis that would tend to disregard several facts and factors which have led to different economic performance in shorter periods both before and after the 1991 economic reforms.

An exclusive focus on growth rate obviously leaves out the issues relating to structural changes. These changes take place in the development process in a relatively long term perspective. But their composition and pace can be significantly affected even in the short-term by major policy-induced developments. Thus while the structural transformation of an economy from agriculture to non-agriculture is a longer term secular phenomenon, its speed could be faster in an open than in a closed economy. And whether the shift takes place towards industry or services would also very much depend on domestic policies and external economic environment during the period under reference. Economic, growth is accompanied by structural change and changes in the structure of an economy have their own implications for the rate and sustainability of economic growth. What is more important is that a given rate of economic growth can have different implications for economic development in broader terms of equity, sustainability and improvement in the livelihoods and welfare of the people, depending on the composition of growth.

Structural changes in an economy can be studies in respect of different outcomes like output, employment, capital investment and consumption. Various dimensions in which their structure can be analysed include sectors and product groups, space–rural–urban and interregional –, distribution across size of production units, income groups and consumption expenditure classes of households, technological and productivity variations across sectors and activities, different sizes and locations, and earning differences across activities, skills, gender and social groups. In other words, an analysis of structural changes accompanying economic growth brings out various manifestations of the composition and distribution of growth.

The present paper attempts to highlight some important aspects of structural changes in the Indian economy as they have been taking place over the long period and have either seen acceleration or assumed somewhat different qualitative characteristics during the last two decades but have not received sufficient attention due to an excessive focus on the growth rate of the economy. A single paper obviously cannot cover all aspects of structural changes. Scope of the present paper is further limited by the fact that it is primarily based on the findings and conclusions of over a dozen studies that were carried out as part of a larger research programme on the subject. The list of these studies is given in Appendix. They, obviously, did not exhaust all the themes and dimensions of structural changes.

Some of the important aspects of structural changes in the Indian economy which could not be covered in the set of studies undertaken and, therefore, do not find any detailed treatment in this paper include, structural changes in agriculture and rural economy, changing structure of production organisations as part of global production networks, processes and drivers of informalisation of the economy and the labour market, rural-urban migration and urbanisation and changing rural-urban linkages, gender and social dimensions of inequality and inclusion, new dimensions in dualistic economic structure in the wake of globalisation and structure of ownership and changing importance of public and private sectors[1]. While issues relating to some of them are referred to in passing, the present paper deals with the major issues examined in the studies undertaken as part of the research programme mentioned above. Main questions examined in the studies and, therefore, in this paper are as follows:

1. What kind of structural changes have taken place in national output in the post-Independence India? Have they shown a secular long term trend or have behaved differently in different periods in terms of their pace and direction? Has pace and pattern of structural changes in different periods been associated with the rate of economic growth? Have there been several breaks in growth rates and turning points in structural changes or only one coinciding with the introduction of economic reforms in 1991?
2. Has the "deviant" pattern of India's economic growth as evident in "excess growth" of services, been a phenomenon specifically of the post-reforms period or, has been a long term process since the 1950's and 1960's? What accounts for rapidly increasingly role of services before manufacturing could emerge as an important sector of the economy? How has the structure of services sector changed in recent years and what are the implications of these changes for sustaining a high rate of growth of the Indian economy.
3. How have the shares of different sub-sectors behaved within the industry and services sectors? What implications can be drawn from their behaviour for sustainability of high growth?
4. With sharply increased importance of external sector, how has the structure of India's foreign trade changed during the past two decades? Have the changes in the

[1] These were pointed out as gaps in the programme and the paper by participants in the two day National Seminar organised to discuss findings of the studies under the Programme, at ISID, during 20-21 April 2012.

composition of exports and imports been a long term process or have been different in nature and speed in the post-reforms period?

5. Have the changes in the structure of trade, specially, exports been in line with the comparative advantage? How are GDP growth and export growth correlated over the longer period? How have changes in composition of exports corresponded with the changes in the structure of national product? What are the new areas of comparative advantage that could sustain exports in the long run? What has been the contribution of exports growth to growth of employment?
6. What is the role of imports in the rising volume of exports? What have been the trends in import intensity in the post reforms period? What are their implications for exports, output growth and competitiveness of Indian products?
7. What changes have taken place in the composition of services exports accompanying the fast emergence of services as items of Indian exports? What are the prospects of sustaining a high growth of their exports in future?
8. What have been the long term changes in the structure of manufacturing, in terms of its organised and unorganised segments and product structure in terms of the use based and material based classification? Have there been distinct phases in structural changes in Indian manufacturing during the pre-reforms and the post-reforms period? How far are these phases related with policy changes – domestic and trade related?
9. What changes have taken place in Indian manufacturing in terms of their technological levels and capabilities and productivity, particularly from the viewpoint of building its competitiveness in global markets?
10. Given the fact that a large part of the Indian manufacturing is in the unorganised sector, how has it performed, especially in the competitive environment of the post-reforms period? Have there been changes in the product structure of unorganised manufacturing in the post reforms years? To what extent and in what way – technology, market etc. – the small enterprises in the unorganised sector are linked with larger ones in the organised sector? Have such linkages been beneficial and helpful in the growth of unorganised sector enterprises or have primarily benefitted the larger partners in the relation?
11. With the liberalisation of domestic and foreign investment regime what kind of structural changes have taken place in India's corporate sector, in terms of sectoral composition and ownership over the past two decades?
12. How have the levels of industrial activity and product structure of manufacturing industry changed in different states? Have the variations in the levels of industrialisation declined? Have inter–state variations in growth rates of manufacturing contributed towards a 'convergence' of the aggregate growth rates of GSDP? Has industrial growth been a moderating or accentuating influence in inter- state disparity?
13. To what extent is the pattern of manufacturing industries in different states similar to or different from that of the country as a whole? How 'diversified' or 'specialised' are

industrial structures of different states? What changes have taken place in these respects? Have the states tended to specialise as was expected with liberalisation?

14. How have the two major instruments of growth in the globalised economy, namely, exports and foreign direct investment (FDI) benefitted different states? Have different states become more equal as sources of exports, thereby making exports a leveller?
15. Has there been a convergence in human development levels across states and has it also led to convergence in economic development? What explains a decline in disparity in human development but not in economic development in recent years? How do the two impact on each other in the short and long term?
16. What has been the long term and post-reforms performance of the Indian economy in respect of employment? How has employment growth been related with rate of economic growth? How have different sectors of economic activity contributed to the growth of employment, especially in relation to growth of their GDP over the years? Have economic reforms delivered on employment front as they have on the growth front?
17. What changes have taken place in the structure of employment in terms of its sectoral composition? How symmetrical or asymmetrical have changes in the shares of GDP and employment been in different sectors and what are their implications for growth, livelihoods and equity? How have the employment shares of the organised and unorganised sectors changed over the years?
18. Has the quality of employment improved with rapid rise in productivity levels in the post-reforms period? Where have most new jobs been created, of what kind – regular, casual, contract, and self-employment and with what levels of earnings and degree of social protection?
19. What are the prospects of even a relatively high (8 to 9 per cent) GDP growth being able to meet the employment challenge – both in terms of quantity and quality – with the structure of growth dominated by the services and focussed on external sector, particularly exports, and slow growth in manufacturing?
20. How have the consumption levels and pattern of different classes – 'poor', 'middle' and 'rich', changed in the period of high economic growth? Have inequalities among classes declined as expected at higher levels of per capita income, at least in respect of necessities?
21. How have factor shares behaved, particularly during the high growth period since 1993-94? Has constancy of labour share hypothesis held? If not, and there has been a decline in the share of wages in value added, what factors account for it and what are its long-term implications for macro-economic balances?

It may be noted that all these questions are not dealt with in equal depth and details in respective studies. Besides each of the studies has dealt with several other related issues and aspects which are not brought in here, as they are not directly related with the overall theme of the structural changes. On the other hand, some of the facts, findings and conclusions in this paper are not necessarily taken from these studies; they have been brought in by the author from elsewhere to complete the story and provide necessary linkages among themes and findings.

I. Long-Term Growth and Structural Changes: Breaks and Turning Points

Economic growth in post-Independence India has certainly seen several turns and twists. Accordingly, several phases with distinctive features in terms of rates of growth and structural changes can be identified. It is, however, not very meaningful to highlight short-term fluctuations in an analysis of the growth and structural changes of an economy over a long period of about six decades. At the same time, it is also of neither factually realistic nor analytically meaningful to divide the entire period just in two parts, pre and post-reforms, as is often done in most of the recent studies and analysis of India's economic growth. The year 1991, when economic reforms were introduced, is seen as the sole turnings point, providing a break from the low growth to high growth and dividing the post-Independence economic history into two clear phases: the pre-reform 'dark' phase and the post reform 'bright' phase.

Such a simplistic description of India's economic experience can easily be questioned on the basis of historical facts. A major break in history of economic growth in India occurred soon after Independence. An economy which had virtually stagnated over the past half century, growing at about 0.5 per cent per annum, started growing at over three per cent from early 1950s. State directed economic planning, presently a much maligned initiative (and not just the departure of the British!) was the reason for this turning point. Growth rate averaged to 3.5 per cent euphemistically called the Hindu rate of growth, over the next three decades though it saw a deceleration in the later part of the period, 1965-1981. The next break in terms of growth occurred in early 1980's, when growth rate of GDP accelerated from around 3 to 3.5 per cent in previous decades to between 5 and 6 per cent. In this respect, introduction of economic reform in early 1990's was not a 'break' as the growth rate in the post–reforms 1990's was not significantly higher than during 1980's. Growth rate, in fact, slowed down in the early years of 21st century, but significantly picked up after 2004. The period since 2004, even after accounting for slow down during financial crisis in 2008-09 represents a distinctive phase of high growth in the post-reforms period.

Structural changes as reflected in the changes in the shares of agriculture, industry and services have broadly followed the same time pattern as the changes in growth rate but the contents of change have varied from period to period. No doubt, the share of agriculture has continued to consistently decline over the past six decades: from 57 per cent in 1950-51 to 40 per cent in 1980-81 to 24 per cent in 1995-96, to about 16 per cent in 2009-10. Industry and services have both increased their share, but at different pace and in different periods. Accordingly, their relative contribution to the growth of and importance in aggregate GDP has varied over different periods. On the basis of the observed patterns of growth and structural changes, economic growth in post-Independence India can be divided into the following four phases, each with its distinguishing features.

Phase 1. Independence to Mid-1960s: This period saw a significant acceleration in the growth rate over the past decades marked by a high growth of industry, and a significant structural change with a large increase in the share of non-agricultural sector, especially of the industry in the national output.

Phase 2. Mid-1960's to 1980: This period was marked by a slower growth of GDP, accompanied by a deceleration in the growth of industry, a slower pace of structural shift from agriculture to non-agriculture and a very small increase in the share of industry.

Phase 3. 1980 to early 1990s: This period saw a sharp acceleration in growth rate, mainly contributed by services. Structural changes were also swift, with a large decline in the share of agriculture, but very little increase in the share of industry-services picking up the major share of the shift.

Phase 4. Easy 1990's Onwards: Growth continued at similar rate as 1980's, but declined during 2000-2004. Structural changes continued at an accelerated pace with share of agriculture sharply declining and services emerging as the major sector and with very small increase in the share of industry. Within this phase, period 2005-10 has seen a sharp acceleration in growth rate, despite a slowdown in 2008-09. Share of agriculture has declined from around 20 to 16 per cent, that of services has increased from 54 to 59 per cent and that of industry has stagnated.

Thus in the first three decades, rate of economic growth followed that of the industrial sector. Since 1980's it has been primarily services led. The share of industry has remained at almost the same level (around 25 per cent) since 1987-88. Within industry, share of manufacturing has been constant at 15 per cent; construction has increased its share mainly at the cost of mining. Contribution of manufacturing to growth of non-agriculture GDP was estimated to be 24 per cent during 1950-51 to 1979-80 and only 18 per cent during 1979-80 to 2007-08. Construction has seen a small decline in its contribution from 10 to 9 per cent. Industry including construction saw a decline in its contribution from 40 per cent in earlier period to 31 per cent in the letter.

There occurred acceleration in the services growth since 1980's. In aggregate services grew at a rate of 4.6 per cent during 1950-51/79-80, 6.5 during 1979-80/1995-96 and 8.5 per cent during 1995-96/2007-08. Contribution of services to the growth of non-agricultural GDP was 78 per cent during 1979-80 / 2007-08, as compared to 69 per cent in 1950-51 /1979-80. As a result, share of services is now about 85 per cent in non-agricultural and 60 per cent in aggregate GDP. In the latter, the share used to be 30 per cent in 1950-51 and 39 per cent in 1979-80. That the growth of the Indian economy over the last 30 years has been primarily services – driven is well established. The questions that are often asked in this respect are, one, whether this represents a different growth path than historically observed and if so, what has led to this "deviation"; and two, whether such services-led growth is sustainable. In this context, it is useful to look at the composition of the services sector to see which services have contributed to the growth and dominance of the sector. It appears that four services, namely, Trade, Transport, Communication and Banking and Insurance have contributed more or less entire GDP growth in services sector during the period 1950-51 to 2007-08. Their share in GDP was 10 per cent in 1950-51, 32 per cent in 2007-08.

Acceleration in the growth of services was led by transport and communication and financial services since 1980: but trade, also joined the fast growing group in the later part of the period, 1995-96/2007-08. In community, social and personal services, public administration and defence saw some decline but other services a sharp acceleration in growth rate. Overall, transport and communication has seen a large jump in their share, trade and financial services some increase and community, social and personal services a slight decline in their shares during 1993-94/2009-10. It may be noted that these changes coincided with the increasing importance of the organised private sector and declining importance of the public sector which had contributed to the faster growth of services in 1980's.

II. The External Sector: Changes in Composition of Exports

Besides a faster structural shift from agriculture to non-agriculture and emergence of services as the dominant part of the economy, another major change that the Indian economy has seen during the past three decades, especially in the post-reform period is a sharp rise in the importance of the external sector. Exports and Imports together accounted for about 15 per cent of GDP in 1980-81. By 2009-10 the figure has gone up to 35 per cent. Significant changes took place in the structure of imports over the period of a restrictive policy regime, 1950-51 to 1980-81: the share of raw materials and intermediate products increased sharply from 37 per cent in 1950-51 to 78 per cent in 1980-81 (but that of fibres and raw cotton sharply declined); share of fertilizers increased till 1970-71 but declined during 1971-81. Petroleum products made up a small part of imports till 1970-71. Since 1980-81, the share of raw materials and intermediate manufacturer declined, while petroleum products became the most important item. Fertilizers, cereals, iron and steel and machinery which were relatively important items of imports have declined in importance while pearls and semiprecious stones have become more important since 1980-81. The import structure has thus changed in favour of energy and some new export oriented raw materials and intermediate manufacturers over the past three decades. Capital goods imports have somewhat declined in importance. What is particularly intriguing to note is that the share of labour and resource intensive products has increased while that of medium skill and technology intensive manufactures has declined.

There was very little growth of exports during 1950-51 to 1970-71, growth rate being around 3.5 per cent per annum during these two decades. Growth rate picked up to over 15 per cent during 1970-71 to 1980-81, but declined to about 8 per cent during the next decade. Growth rates of exports averaged to 13 per cent per annum in the 1990's and 14 per cent during 2000-2010. Thus the post-reforms export growth has been quite high though an increasing trend seems to have started much earlier.

The composition of India's trade at the time of Independence was 'colonial' in nature; it consisted of exports of raw material and imports of finished goods. So agriculture and allied products (of which, of course, tea was an important item), and ores and minerals together made up about one-third of exports in 1950-51 their share went up to about 42 per cent by 1970-71. Manufactured goods (of which textile fabrics, jute manufactures and leather products were the major items) accounted for 46 per cent of India's exports in 1950-51, their share marginally increased to 50 per cent by 1970-71. In 1980-81, they made up 56 and in 1990-91, 72 per cent, their share further increased to 78 per cent in 2000-01 but declined to 66 per cent in 2009-10. So the major change in the structure of Indian exports seen to have started during 1970's. By 1991, the year of economic reforms, agricultural products and ores and minerals made up less than one-fourth and manufactured products over 70 per cent of India's merchandise exports. The trend has continued in the post-reforms period: agricultural and allied products now constitute less than 10 per cent and ores and minerals 4 per cent. Manufactured products, however, seem to have also lost after rising to about 79 per cent in 2000-01, their share has seen a decline to about two-thirds in 2008-09, mainly as a result of an increase in the exports of iron ore to China and Japan.. Within agricultural products groups, it is disconcerting to note the exports of tea, a major item in 1950-51 and a significant one even in 1980-81, has paled into insignificance by 2008-09. In manufactured products, jute products which made a large share of exports, has, understandably virtually disappeared from the list; and leather products have also lost the pride of its place since 1991 (with a decline in its share from 8 per cent in 1991 to 2 per cent in 2008-09). Similar is the case with handicrafts exports which were at peak in 1991. Gems and jewellery and readymade garments are the two items that had a large spurt in their exports since 1970's. Their shares in exports increased sharply till 2000-01, but have since declined.

In spite of a setback over the past decade when their share has declined in total merchandise exports (which is mostly accounted for by an increase in the share of 'fuels'), manufactured goods have increased their importance in exports significantly over the years. Export basket has become highly diversified the number of items exported has increased from 71 in 1962 to254 in 2007, most new items belonging to the chemicals, metals and machinery groups of products. What is however, intriguing to note is that this increase has not been mainly contributed by products which are expected to utilise the country's comparative advantage of abundant availability of labour. Labour intensive products broadly defined, constituted about two-thirds of India's merchandise exports in 1991, their share has declined to about one half now. Defined more specifically as unskilled labour and resource intensive products, their share has declined from around 49 per cent in 1996 to 31 per cent in 2006. According to some other estimates, the share of unskilled labour intensive products has declined from 28 per cent in 1993 to 15 per cent in 2010 and that of capital intensive products has increased from 25 per cent to 54 per cent during this period (Veeramani, 2012). The emerging pattern of Indian exports is thus not utilising the comparative labour advantage the country is supposed to have and export growth is, therefore, not likely to fulfil the expectations regarding employment generation.

Another disturbing feature of the emerging trends in India's trade structure is that of an increasing trend in the <u>import intensity of exports</u>. Both at the aggregative sectoral level as well as in the segments of the manufacturing sector, it is found that there has been a significant increase in the import intensity of exports during 1993-94/2006-07. For the economy a whole, it has increased from 10.50 to 12.61 during this period and in manufacturing from 12.89 to 83.75. A rise in import intensity is likely to have a negative impact on export growth, output growth and competitiveness. The number of import competing sectors is found to have declined implying reduced domestic supply of imported raw material resulting in the reduction in output and export growth as well as competitiveness.

A major development in India's export scenario in recent decades has been a fast <u>growth in export of services</u>. It has not only been faster than the growth of merchandise exports, but has also exhibited greater resilience and sustainability as seen in their robust growth even during the period of crises in the global economy. Services accounted for about 20 per cent of total (merchandise and services) exports in 1990-91; their share had gone up to 37 per cent in 2009-10. And India's share in global exports of services has gone up from 0.6 per cent in 1990 to 2.8 per cent in 2008. Exports of all services, transport, travel, financial services, business services and other services have increased rapidly during this period, but banking and business services have shown the fastest increase. Growth of the latter is particularly significant as it now makes up over two-thirds of the total services exports. And in spite of competition from new and emerging outsourcing regions such as the Philippines, South Africa, East Europe and Latin America, India has retained its position as a major player mainly by graduating to what is called 'knowledge services' while others still focus on voice-based work commonly known as 'call centre services'. India accounted for 51 per cent market share of the global off shoring work in information technology (IT) and Business Processing Outsourcing (BPO) in 2010. (Gopalan and Madjd-Sadjadi, 2012).

Increasing importance of services in exports made a significant contribution to the structural changes in the Indian economy. The period 1990-2010 has seen a rapid increase in the share of services both in GDP and exports. Growth in services is primarily accounted for the growth of communication and business services. While the former is based on domestic demand, the latter seems entirely export driven (Nagaraj, 2008). The same is, by and large, the case with the overall structural changes in the economy and exports. Manufacturers made up about 75 per cent of merchandise exports in 1990-91, their share declined to about 66 per cent in 2009-10. Their share in GDP stood at about 15 per cent; in both the years. Agriculture saw a decline in its share in GDP from about one-third to 15 per cent its products made up 19 per cent of exports in 1990-91 and only 9 per cent in 2009-10.

This symmetry in the growth rates and changing shares between national output and exports does, however, not hold once the analysis is carried out at the disaggregated level. Among services, for example, the four major sub-groups, trade, transport, financial services and community, social and personal services hold almost equal share, of between 14 to 16 per cent each, in aggregate GDP, but exports primarily consist of business services and travel. Within industry, construction and utilities, consisting essentially of non-tradable, do not have their presence in exports, while manufacturing, constituting the largest segment of industry accounts for a much larger share in exports than in the gross domestic product. Within the manufacturing sector the asymmetry between the share in output and exports is much larger once the comparison is made with respect to more disaggregated groups. The fastest growth of output has been registered, over the past two decades, by beverages, non-metallic mineral products, basic metals and transport equipment; export growth has been the fastest in the case of engineering goods particularly machinery, readymade garments, gems and jewellery, chemicals and petroleum products.

III. Growth and Structure of Manufacturing Industry

Growth of manufacturing industries has undergone four distinct phases in the post Independence India. The early years (1951-65) saw acceleration in industrial growth from around 3 per cent during 1939-51 to 6.5 per cent. During 1965-80 growth rate slumped to 4 per cent. The next decade saw a revival to the earlier rate of about 6.5 per cent, which more or less continued also in the first decade after economic reforms. Growth rate accelerated to about 8 per cent during 2000-2005 and further to 10 per cent during 2005-2010.

Share of manufacturing in GDP increased during the first three decades but has remained virtually unchanged since then. It increased from 9 per cent in 1950-51 to 15 per cent in 1979-80 and has remained at that level since then, in spite of a significant acceleration in growth rate, because the growth of services sector has been much faster during this period. In spite of the stability in its share in GDP, the manufacturing sector has undergone significant structural changes both in pre- and post-reforms period. Using a simple two-way technology based classification, the 'traditional' industries have progressively declined and 'modern' industries have gained in importance. Traditional industries accounted for 73 per cent and modern 27 per cent of manufacturing GDP in 1950-51, their shares changed to 62 and 38 by 1969-70 and 27 and 73 per cent respectively in 2007-08. Thus their shares have reversed in 2007-08 from that in 1950-51. The shift towards 'modern' industries has, of course, been faster in more recent period. The change has been similar in the unregistered (unorganised) and the registered (organised) segments of manufacturing. In the case of the organised segment, the share of the modern has increased from 32 per cent in 1950-51 to 79 per cent in 2007-08. Corresponding change in the unorganised segment has been from 23 to 56 per cent. It is important to note, however, that the share of the organised sector has steadily increased in manufacturing GDP, at a faster rate in recent years than in the first three decades after Independence. It accounted for 42 per cent of manufacturing GDP in 1950-51, its share increased to 55 per cent by 1979-80 and 70 per cent by 2007-08. Thus the organised segment is now predominant in manufacturing, though its contribution to employment is only 18 per cent. Yet another facet of the structure of manufacturing is the change in the share of public and private sector: public sector accounted for 7 per cent of manufacturing output in 1960-61, its share went up to 26 per cent by 1980-81. It has seen a decline in the post-liberalisation period: in 2009-10 public sector was estimated to contribute about 22 percent to manufacturing GDP.

Growth story of the manufacturing sector is thus characterised by the ascendancy of the organised sector over the decades. Its growth rate has been faster than of the unorganised sector in all the periods: it was around 6.5 per cent during 1951-65 and 4 per cent during

1965-80; but jumped to 8 per cent during 1980-91 and after a slow down during 1991-94, revived to 8 per cent during 1994-2000 and have been higher at about 10 per cent in the post-2000 period. The long term changes in the output structure have been in favour of intermediate products and capital goods. The period 1951-1966 saw emergence of intermediate products like chemicals, petroleum and non-metallic mineral products. Capital goods like steel and other basic metals and machinery dominated industrial growth in the next period of two decades though this period was characterised by slow industrial growth and large under-utilisation of built up industrial capacity. Consumer goods declined in importance during these decades. Growth was relatively much more diversified during 1981-91: high growth was experienced in all sectors, but chemical products, petroleum products, non-electrical machinery, food and beverages and printing and publishing led the acceleration in growth rate, raising their importance in the product structure of organised industries.

The post-reforms period has witnessed some major changes in the structure and characteristics of organised manufacturing. Agro-and material based industries like textiles, food products, paper and paper products, food products and beverages have declined in importance while capital intensive industries like coke and petroleum products, motor vehicles and basic metals have sharply increased. On the whole, capital goods have maintained their share, the share of consumer goods has increased and that of intermediates has declined, due probably to liberal imports of parts, components and accessories.

There have been sharp changes in technologies and technological composition of manufacturing output in the organised sector in the post-reform period. The share of capital intensive industries has increased rapidly and that of labour intensive industries declined. Capital intensity even of labour intensive products has also sharply increased. Labour productivity has increased rapidly and capital productivity has sharply declined. While these developments may be necessary to improve competitiveness of Indian manufactures in the global markets, they are not very helpful in generating employment. Organised manufacturing registered an absolute decline in employment during 1997-2005 and only marginally increased during 2005-08 despite a relatively high growth in output during the whole period. With these trends in technology and product-composition, generation of new jobs would be increasingly difficult in the organised manufacturing industry.

Does unorganized manufacturing hold any better prospects for employment generation? In absolute terms the answer may be positive as enterprises in this segment have lower capital intensity. But they also have lower productivity per worker not only relative to organized sector, as they employ 82 per cent of workers but produce only 30 per cent of value added but also very low in absolute terms: Value added per worker in the unorganized manufacturing was estimated to be as low as Rs. 17,900 per annum as against about Rs. 3, 00,000 in the organized manufacturing in 2005-06. Therefore, output in unorganized enterprises will have to grow fast in order both to create more jobs and raise productivity. And also that structure of enterprises should move towards more modern and more productive sectors.

As per the data from NSSO surveys, unorganized manufacturing enterprises have increased at 1.6 per cent; employment by 1 per cent, gross value added by 4.3 per cent and fixed assets by 10.9 per cent per annum during 1994-95 to 2005-06. Among enterprises, the number of own account enterprises has grown faster than establishments (units using hired labour), though there is a decline in the number of the former during 2001-06. Dividing the enterprises units between agro-based and non-agro based industries it is found that the number in the former has increased at a rate of 4.4 per cent per annum, that in the latter category have declined: the former has registered a growth of 4.8 per cent in employment, but employment in the latter has stagnated. Gross value added has increased by about 6 per cent in both, but fixed assets have increased much faster in agro-based than other industries.

Productivity, in terms of value added per worker has increased at a rate of 3.3 per cent per annum, 1.4 per cent in own account enterprises and 3.9 per cent in establishments; and 2.6 per cent in agro-based and 6.2 per cent in non-agro industries. Capital intensity (fixed capital per worker) has increased by almost 10 per cent per year, more in non-agro than in agro-industries. Capital productivity (i.e., value added to fixed capital ratio) has sharply declined at a rate of about 6 per cent per annum, primarily because of a decline in agro-industries while it has increased in non-agro industries. These trends provide a rather mixed picture of the performance and prospects of growth and employment in the unorganized manufacturing. But the fact that this segment of manufacturing has not only survived, but has grown reasonably well in the post-reform competitive environment shows their resilience and potential for growth.

Unorganised segment accounts for, as noted earlier, 82 per cent of employment but only 30 per cent of GDP of manufacturing sector. The ratio of per worker productivity between unorganised and organised segments is thus about 1:17. In absolute terms, productivity per worker in the unorganised sector is estimated to be very low: even if all of the value added (in 2005-06) went to the worker it would amount to Rs. 1500 per month only! Improvement in the levels of productivity and earnings of the large mass of workers engaged in unorganised enterprises needs high priority both for improving livelihoods and sustaining economic growth.

It is generally observed that the small and informal enterprises that are linked with larger enterprises have higher productivity and better growth prospects. It is in this context that small-large linkages assume an important dimension of the analysis of the structure of the manufacturing sector. Measuring linkages in terms of ancillarisation, it was found that extent of linkages was very low. In 1994-95, only 3.3 per cent of the unorganised sector enterprises worked as ancillaries to other larger enterprises. Among registered small scale enterprises, the proportion was found to be as low 0.52 per cent in 1987-88, but increased to 5 per cent in 2000-01. Taking sub-contracting work as the measure of linkages, the extent was found to be 12 per cent in 1987-88. Comparable data from NSSO surveys reveal that about 28 per cent of unorganised non-agricultural enterprises worked under sub-contracting arrangements in 1999-2000; their percentage marginally increased to 31 per cent in 2000-01 and to 32 per cent in 2005-06. This cannot be considered to be a high enough extent of large-small linkages to ensure a higher degree of integration that could ensure improvement in small enterprises through market assurance and technological upgradation.

What is particularly disturbing is that even the limited extent of linkages that exist do not seem to necessarily benefit the unorganised enterprises. Per worker productivity was found to be lower among enterprises working as sub-contractors than those without such arrangements. Estimates were Rs. 18440 and Rs. 23,670 for the two categories of enterprises respectively for 2005-06. Those registered as ancillary, however, seem to be doing better; output per worker in their case was one and a half times higher than those small enterprises working independently.

Marketing linkages are among the most predominant linkages between large and small enterprises. Most small enterprises having linkages with large ones found the "assured market" as the most important advantage of these linkages. Linkage, however, seem to end at that: other forms of linkages which could enhance the size and capability of small enterprises are rare. Technological links in terms of providing design and visit for supervision by technical personnel often exist, but actual transfer of technology though machinery and equipment hardly takes place. Financial and input supply linkage was also rare. On the whole, thus, linkages benefit the small enterprises only to a limited extent.

The major changes in industrial and investment policies in terms of delicensing discontinuation of reservation of several sectors for public sector and liberalisation of foreign investment introduced over the past three decades especially since 1991, have led to several important changes in the structure of Indian corporate sector. First, the non-government joint stock companies have acquired the dominant position in terms of paid up capital, raising their share from a little over one-fourth in 1989-90 to three-fourths in

2009-10. Second, the percentage of private companies engaged in manufacturing fell from about three-fourths to 36 per cent during this period. Third, the shift has been primarily in favour of finance, insurance, real estate and business services. The private corporate sector has followed the pattern of change of overall economy towards the services sector. The share of service sector companies in total assets increased from 11 per cent in 1989-90 to 37 per cent in 2009-10. There was a decline in the share of manufacturing. Fourth, dereservation of sectors earlier reserved for the public sector has led to sharp rise in the participation of the private corporate sector in them. So, in electricity its share increased from 4 to 7 per cent; most important, in telecom, its share increased from nothing to 33 per cent; in information technology from 2.3 per cent to 13 per cent. Construction and real estate, ports and engineering construction are the other sectors where private corporate sector has increased its presence significantly.

Significantly, the dominance of large houses seems to have declined in terms of their share in total assets of the sample companies: it declined from 73 per cent in 1989-90 to 49 per cent in 2009-10. The number of both large house owned companies and foreign companies fell significantly. While part of this change may reflect delisting and fresh listing and mergers and acquisitions, a good part is explained by the emergence of new companies and new entrepreneurs.

Different types of companies showed different pattern of activities. New companies were more in services; foreign companies also diversified their activities into services. Large house companies were hardly in high tech manufacturing; they were more in resource based industries. Older companies also were mostly in these industries. Foreign companies were more often in high-tech industries. A significant development with long term implications is that the Indian promoters are losing their hold in pharmaceutical industry which is being increasingly taken over by foreign companies. A significant part of, the 'dereserved' sector of telecommunication has also gone to the foreign companies, but new Indian companies and larger houses have also got an important foothold in this sector.

IV. Inter-State Variations in Development: Industrial Growth, Exports and Human Development

Inter-regional disparity in the levels of development has always been an important concern of Indian development thinking and policy in India. There have been different periods of increase and decline in disparity; increase in the initial one and a half decades of Independence, a decline during the next two decades and increase again, especially in the post-reforms period. It is particularly interesting to analyse the trends in inter-state disparities since the Indian economy graduated to a higher growth path in 1980's and especially after the economic reforms towards globalisation in 1991. There have been conflicting hypotheses and expectations about inter-regional disparities in the deregulated and globalised economic environment. A high aggregate growth rate is generally accompanied by increasing disparity. A deregulated policy regime can lead, on the one hand, to an increase in disparities as the developed regions have a competitive advantage and government policies favouring poorer regions are no longer in operation, while, on the other hand, disparities may also decline as the regions get opportunities to freely utilise their comparative advantage.

It is, however, found that inter-state disparities in rates of GSDP growth increased during the 1990's over 1980 and disparity was more marked in the growth of per capita income. Gini Coefficient of inter-state inequality in per capita SDP increased from 0.152 in 1980-81 to 0.161 in 1987-88 and to 0.225 in 1997-98 (Ahluwalia, 2000). In the period after 2000 while some of the poorer states have experienced a faster than average growth, growth of some of the developed states has slowed down. As a result, the Gini Coefficient of inequality in per capita income has stood at around 0.24 during 2000-01/2008-09, though it is still much higher than it was before the reforms (Ahluwalia, 2011).

Inter-state variations in rates of GSDP growth are found to be strongly associated with the pace of industrial growth during 1981-2009. All states underwent structural changes in terms of a decline in the share of agriculture, but that does not seem to have been accompanied by a decline in inter-state disparities. But the extent of shift towards manufacturing seems to significantly influence the inter-state variations in income. Large structural shifts away from agriculture in different states are more often associated with faster industrial growth and larger shift to industry than with growth of and shift to the services. Growth rates of manufacturing GSDP have been quite divergent during this period, particularly since 2001. Growth rates were not necessarily correlated with the initial levels of industrialisation during 1981-2001, but during 2001-09 states with higher levels of industrialisation have registered high growth in manufacturing and vice versa. Thus industrial growth in recent years has led to increasing divergence contributing to an increase in disparities in growth of GSDP. But, disparities in the extent of industrialisation as well as in the share of different states in the national manufacturing GDP have somewhat declined during the longer period 1981-2009.

Organised sector contributes major part of manufacturing GSDP in all the states except West Bengal. Its share has been increasing over the past 30 years in all the states except in West Bengal, Gujarat, Haryana and Punjab. Organised and unorganised manufacturing are distributed in similar pattern across the states: states with a larger share of all–India GDP in one segment also have higher share of the other. The same is true of the agro-based and non-agro based segments of manufacturing. Agro based industries have generally declined in importance, except in Kerala, Karnataka, West Bengal and Punjab. Punjab is the only state where higher than 50 (57) per cent of manufacturing GSDP is derived from agro-based industries (Incidentally, it is also the only state with over 30 per cent of GSDP still contributed by agriculture in 2009-10). Punjab is also the only state where agro-industries have higher per worker productivity than the other industries.

Product structure of manufacturing industries has significant similarity among states in so far as most industries (2 digit) are found in practically all the states; and many of them also hold similar relative importance in the industrial structure of different states. Degree of specialisation is rather low (Co-efficient of specialisation is lower than 0.30 for 13 out of 17 major states) except in small states and UTs. Most industries are quite ubiquitous in terms of their presence in different states. But overall, industrial base of most of the states is rather narrow vis a vis that of the country as a whole: there are only a few industries with a larger share in the manufacturing SDP of state than in that of the country which together account for an overwhelmingly large part of the state's industrial sector. Degree of specialisation, seems to be increasing, while, at the same time, industrial base of several, especially larger, states appears to be widening in the post-reforms period. These processes are also likely to lead to a reduction in inter-state differences in productivity which are significantly large, particularly in the organised sector where they are primarily caused by differences in industrial structure and technology.

On the whole, growth of and structural changes in manufacturing seem to have made a positive contribution towards reducing differences in the growth and structure of state economies. The overall trends towards convergence or divergence are, however, shaped by the rate and pattern of growth in other sectors, especially services. Growth of services sector has been more uneven and has, been generally higher in the better developed states, particularly during 2000-01/2008-9 thus resulting in increasing divergence among states in their levels of economic development.

What is the impact of economic reforms towards globalisation on economic growth of different states and consequently on interstate economic disparities? There are basically two instruments which have a direct bearing on this question: one, Foreign Direct Investment (FDI) a state has attracted and, two, the extent to which a state has been able to participate in export growth. Available data on state-wise distribution of FDI are somewhat confusing in so far as they often reflect the location of the registered offices of the companies rather than of the investment activity. Further, data for the more recent period are available by regional office, not by state. Some broad pattern can still be drawn from these data. During the period 1991-2004, four states, Maharashtra, Tamil Nadu, Karnataka and Gujarat accounted for about 44 per cent of approved FDI. Three large states Bihar, Madhya Pradesh and Uttar Pradesh together accounted for about 6 per cent (Rao and Murthy, 2010). Data for more recent period, 2004-2011 also reveal similar pattern. Mumbai office alone claims 35 per cent, Delhi, (covering Delhi, part of UP and Haryana) 10 per cent, Ahmedabad and Bangalore, 6 per cent each, Chennai 5 per cent and Hyderabad 4 per cent. Jaipur office covering Rajasthan claimed 0.4 per cent and Patna office covering Bihar accounted for 0.005 per cent of FDI received over the period 2000-2011. Thus FDI could not have contributed to a reduction in regional disparities, if anything it is likely to lead to an increase in inter-state disparities in development.

How have different states performed in exports? By and large, the states which have been the major contributors to India's exports in the past, have also experienced faster growth in exports in recent years. Of the total exports reported by the 15 major states, Maharashtra accounted for 25 per cent, Tamil Nadu 20 per cent, Gujarat 19 per cent, Kerala 14 per cent, West Bengal 9 per cent, Andhra Pradesh 7 per cent and Karnataka 4 per cent in 2001. Shares of other states were rather insignificant. Only Punjab had a more than one per cent share. During the decade 2001-2010, some of the poorer states seem to have registered faster growth of exports. As a result, UP has improved its share to over 4 per cent and Rajasthan from 0.2 per cent to 1.4 per cent. But so has Gujarat from 19 to 23 per cent. Despite some poorer states taking advantage of the export growth, the overall contribution of exports to reduction in disparities cannot be considered to be significant. If anything, it might have contributed to increase in inter-state disparities as the developed states have continued to be the major beneficiaries of the export growth.

Against the background of large and even increasing inter-state disparities in various economic indicators of development, it is encouraging to note that the indicators of human development have shown a converging trend over the past three decades. HDI values ranged between 0.237 and 0.50 in 1981, between 0.367 and 0.638 in 2001 and between 0.419 and 0.910 in 2009-10, Bihar being with the lowest and Kerala with the highest figure in all the three years. Differences in literacy rates, gross enrolment ratio as well as life expectancy at birth have declined. There is also a decline in the gap between rural and urban areas within states. At the same time, inter-state disparities in human development indicators, continues to be much higher in rural than in urban areas.

Ranking of states by HDI, of course, did not change much, though some states have changed position within the high HDI or low HDI groups. Kerala, Punjab, Maharashtra, Haryana and Gujarat made the top five states in that order and Bihar, Madhya Pradesh, Uttar Pradesh, Rajasthan and Orissa, the bottom five states in that order, in 1981. In 2009-10 Kerala, Maharashtra, Punjab, Haryana and Tamil Nadu (6^{th} in 1981) are at the top in that order and Bihar, Madhya Pradesh, Uttar Pradesh, Assam (10^{th} in 1981), and Orissa are at the bottom. The degree of inter-state differences in different indicators of human development and HDI, however, have shown significant decline.

It is observed that the various dimensions of human development improve with a rise in per capita income, but at a declining rate. This finding along with that relating to a decline in rural-urban gap in human development indicators goes to suggest that beyond a threshold income, capabilities and entitlements are available at more or less similar levels despite divergence in per capita income. It implies that per capita income growth will lead to a faster improvement in human development indicators in the case of less developed states than in more developed states thus resulting in reduction in inter-state disparities in human development. It is expected that this will eventually lead to a decline in disparities in economic growth as well.

V. Employment Growth, Structural Changes and Emerging Challenge

Employment has always featured as an important subject of discussion both in academic and policy making circles. It has become a matter of intense debate in recent years due particularly to a rather disappointing employment performance of the post-reform economic growth – "jobless growth" of 1990's and "zero employment growth" with the highest ever GDP growth during 2004-05/2009-10. Increasing informalisation. casualisation and contractualisation, have also raised the questions about the quality of most of whatever new jobs are being created. And a disconnect between unemployment and poverty and between employment generation and poverty reduction has added another rather intriguing dimension to the employment debate.

Indian economy has registered a long-term employment growth of around two per cent per annum. This rate has been maintained, with some short-term fluctuations, irrespective of the rate of GDP growth. If anything, a higher economic growth in the post-reforms period has been accompanied by a slower growth in employment. Employment growth, in fact, has declined with the acceleration of the growth rate of GDP. Thus employment grew at around 2.4 per cent during 1972-73/83, 2.0 per cent during 1983/1993-94, and 1.84 per cent during 1993-94 – 2004-05 and only at 0.22 per cent during the shorter period of 2004-05/2009-10. For 1999-2000/2009-10, the rate works out to 1.5 per cent. GDP growth during the first four periods was 4.7, 5.0, 6.27 and 9.8 per cent per annum, during 1999/2000/2009-10 it average to 7.5. As a result, employment elasticity has steadily declined over the years. It was 0.52 during 1973-83, 0.41 during the next ten year period, 0.29 during 1993-94/2004-05 and 0.20 during 2000-2010.

Economic reforms have not delivered on employment front as they have on the GDP front. The reason primarily lies in the slower growth of employment intensive sectors. Among the broad sectors, for example, growth of manufacturing which has consistently shown high employment elasticity has registered a relatively slower growth than services which have low and sharply declining elasticity. Construction, no doubt, has registered high growth in GDP, as also of employment; but given low productivity of this sector, its high employment elasticity (often higher than one) needs to be read with caution – a decline in employment elasticity will, in fact, be desirable here. In services, communication and business services have been the fast-growing sub-sectors, both of which have low and declining employment intensity. As noted earlier, the rapid increase in exports has also not contributed much to employment growth due to a decline in the share of labor intensive products in India's merchandise experts.

Changes in the various dimensions of the structure of employment have been rather slow. Employment has grown much faster in urban than in rural areas throughout the period since 1972-73, yet the dominance of rural areas has continued in the employment structure: they account for 72 per cent of employment in 2009-10, though their share has seen some decline from 80 per cent in 1983. Within rural areas, there have been significant structural changes: non-farm sector has grown in importance though not so much in employment as in output. The non-farm sector contributed 28 per cent of rural NDP in 1972-73; the share has increased to almost two-thirds now. Employment share of non-farm activities has increased from about 15 per cent in early 1970's to 32 per cent in 2009-10. Questions have often been asked about the nature of employment diversification in rural areas – whether it has been demand–induced or distress-driven. Situation may vary across regions as also in different years but dominant secular trend is found to be positive. More workers are attracted to non-farm activities, as they offer more stable and better paying employment than agriculture. Larger share in output than in employment, of the non-farm sector and consistently higher wages in non-agricultural than agricultural activities strongly support this pro-position. (Bhalla, 2005, Papola, 2010).

In aggregate, structural changes in employment have not been as large as in GDP. Services have increased their share in GDP from 36 per cent in 1972-73 to 45 per cent in 1993-94 and to 59 per cent in 2009-10, corresponding increase in employment share has been much slower: from 15 per cent to 21 per cent and to 27 per cent. A much larger decline in the share of agriculture in GDP than in employment is, however, a major cause of concern. With 41 per cent share in GDP and 74 per cent in employment, average output per worker in agriculture was already only about one-third of that in non-agriculture in 1972-73. In 2009-10 with its share in GDP reduced to 15 per cent with over 51 per cent of workers still in agriculture, the gap has widened to 1 to 6. Continuation of this pattern of structural changes has serious implications not only for equity, but also for the sustainability of a high growth rate as well.

Some other changes in the structure of employment are also disconcerting. Organised sector employment did not grow for most of the post-reform period: in fact, there was a continuous decline in it during 1997-2004. So practically all the new employment was in the unorganized sector where productivity and earnings are low. And even within the formal sector, the proportion of 'informal' workers has steadily risen, due to the most new employment being in the nature of casual or contract employment. (See NCEUS, 2009, Kannan 2011). The share of the self-employed, as expected, has declined over the years from 61 per cent in 1972-73 to 55 per cent in 193-94 and to 51 per cent in 2009-10, thus raising the share of the wage and salary earners in total employment. But in that group, the share of casual workers has increased from about 23 per cent in 1972-73 to 32 per cent in 1993-94 and to 33 per cent in 2009-10. The share of regular employees, considered to be qualitatively better in terms of earnings and job and social security, has remained constant at around 15 per cent.

These qualitative dimensions, in fact, pose a greater challenge, than just the quantitative expansion of employment. While in the earlier years, a two per cent employment growth was insufficient to take care of the growth of labour force at about 2.5 per cent, a decline in the rate of growth of labour force in recent years to almost 1.6 per cent has apparently reduced the magnitude of the quantitative challenge. But a high degree of under employment among several groups of workers and the fact that a large number among the employed is earning much less than the poverty line income, and therefore, needing alternative employment, suggest that the number of new jobs required to be generated will be much larger than what is indicated by the number of unemployed and additions to labour force. Employment opportunities will need to grow at over 3 per cent per annum during the 12th Plan to provide work to all by the end of the Plan period. This may be possible with a 9 per cent GDP growth and employment elasticity of 0.33. To improve productivity, especially in the informal sector, so as to meet the quality deficit, employment elasticity, could, however, decline further to about 0.25 or even 0.20. In that case, the required rate of GDP growth would be rather unrealistically high at 12 to 15 per cent. A restructuring of growth would be necessary to achieve the goal of employment for all and that too only in a medium term (10-15 years) perspective. At the same time, it also needs to be noted that a faster expansion of employment opportunities with higher growth of sectors and sub sectors with higher employment intensity will contribute to enhancement of the income dimension of the quality of employment through raising demand for labour and tightening the labour market; but the other quality dimension of employment, namely, provision of social protection will need pro-active initiatives on the part of the state.

VI. Some Aspects of Equity and Distribution

The issues relating to the pattern of income distribution are important not only from the viewpoint of equity and justice, but also of the sustainability of economic growth itself.

Unequal distribution of rapidly rising income leads to high rate of savings and investment, but the high growth that it can lead to may get constrained by lack of effective demand. Non-availability of data constrains direct estimates of the trends in income distribution. But available evidence on consumption expenditure pattern, factor shares and other aspects of equity and distribution clearly suggests that there has been a significant increase in inequality in income distribution, especially in the post-reforms period.

Analysis of consumption expenditure data with respect to three broad consumption classes – 'the poor', 'middle' and 'rich' – during 1993-94 to 2006-07 suggests emergence of a certain degree of polarization in urban areas where percentage of people within the middle class has declined and that of the poor and the rich has increased. In rural areas, a leveling seems in operation in so far as there has been a downward shift of some of the rich and upward shift of some of the poor, resulting into a swelling of the 'middle'. In other words, it implies an increase in disparity in the urban and decline in it in the rural areas. This also appears to be reflected in differential rise in consumption expenditure of different classes in rural and urban areas. In rural areas consumption expenditure increased by 94 per cent among the 'poor' and 84 per cent among the 'rich', during 1993-94/2006-07. In urban areas, the 'rich' had a higher (134%) increase than the 'poor' (114%).

Differential changes in the consumption basket present some interesting patterns. One, contrary to the common expectation that inequalities in consumption at least of necessities across income classes decline with increasing levels of per capita income, does not seem to hold in the Indian case. In fact, the disparities between the 'rich' and 'poor' have increased, even in real consumption expenditure on basic needs, during the period of high growth resulting into over 6 per cent annual growth in per capita income. There has been no decline in the consumption disparity in respect of food items like cereals, pulses, and vegetables, but there is a clear trend of increase in disparity in consumption of meat and fish. Second, there is also an increase in disparity in expenditure on education, durable goods and health. Third, the poor in rural areas seem to be spending proportionally less on education and more on health, probably as a result of declining role of public and increasing role of private sector in health. On the whole, the expected decline in consumption disparity across expenditure classes has not happened. In several important items of expenditure, disparity has increased.

Trends in income share of factors, which represents the relative change in incomes of labour and other classes, are obviously clear indicators of changes in income distribution with implications for changes in the levels and composition of effective demand. Changes in factor shares as they have taken place over the longer period and particularly during the past three decades, tend to clearly suggest that income disparity between the wage earners and those deriving income from capital and property has sharply increased.

The structure of the Indian economy makes it difficult to have direct and precise estimates of factor shares in national income. But available data clearly show that labour share, as reflected in the compensation to employees, has declined particularly sharply since 1980's. Overall, the share of compensation to employees declined from 37 per cent in 1980-81 to 35 per cent in 2009-2010. In some fast growing sectors the fall has been very sharp; for example, in transport and communication it has declined from 80 per cent to 43 per cent. The share of the mixed income which represents the incomes of the self-employed and largely reflects labour incomes has shown much larger decline from 54 per cent to 45 per cent. And share of profits as measured in terms of 'operative surplus' has increased sharply from 8 per cent to 21 per cent.

Very sharp decline in wage share is observed in organised manufacturing. It declined from 27.9 per cent of gross value added in 1979-80 to 12.3 per cent in 2004-05. Within the employee compensation, the share of compensation to workers (wages) has declined while that of other employees — directors, managers and supervisors – has increased. The share of profits increased from 19 per cent of GVA in 1979-80, to 31 per cent in 2003-04.

The limited evidence from these two exercises, the one on consumption expenditure and the other on factor income shares, is sufficiently indicative of the increasing inequality, particularly during the period of high economic growth. More detailed analysis and also of the more recent years will most likely strengthen these findings. Implications of these trends for equity and sustainability of economic growth are quite obvious. They are likely to not only cause greater socio-economic distress to a large mass of people, but also weaken the sustainability of a high rate of economic growth by posing demand constraint.

VII. Macro-economic Implications of Structural Changes

Indian economy has been undergoing structural changes that generally accompany economic development over a longer period since independence; acceleration in growth rate gave an impetus to these changes during the 1980's, and they have taken place at a faster rate in the post-reforms period. The major characteristics of growth over the last three decades which distinguishes it from the experience of the earlier three decades, consist not only a significantly higher rate, but also few other important departures from the earlier pattern. Emergence of services as the major contributor to growth in GDP and eventually as the predominant sector of the economy is one such feature. Growing importance of the external sector, with rapid growth both of imports and exports is another. Decline in the share of agriculture in GDP which has been taking place in earlier decades as well, took place at a much faster rate. And, employment content of growth has seen a steep decline during this period.

These and other trends in structural changes, described earlier in this paper, obviously have far reaching implications for the future growth and overall development of the economy. We highlight some of them here.

First, there is the question whether the growth with the current structural characteristics will at all be sustainable in the medium and long run. It is commonly feared that economic growth primarily derived from services may not be sustainable in a developing country without attaining a significant degree of industrialisation. India has registered a reasonably high growth over a rather long period primarily sustained by services growth. Whether this could continue in future would depend on the composition of growing services in terms of whether they contribute to the capacity of the economy to develop, specially in the commodity producing sectors of agriculture and industry. To the extent services growth is led by sectors like transport and communication, a relatively large subsector of services, it can sustain high overall growth, in the medium term. In the long run, however, the infrastructure services would have to induce faster growth in industry to sustain a high aggregate growth.

Apprehensions are also expressed about the sustainability of growth with a large dependence on exports, especially in the volatile global economic environment. India's exposure to the global markets is still not very large, but it has significantly increased over the past two decades. Its exports, both of merchandise and services, have grown fast, the latter much faster, in recent years. International crises of 2008 and 2011 did adversely affect Indian exports, but both because of their still rather small share in GDP and a smaller slow down in their growth primarily due to resilience of services exports, the impact on the growth of GDP was somewhat limited. This experience suggests that exports will continue to play a significant role in India's economic growth and export dependence may not significantly affect growth in times of global slowdown.

Thus, it appears that growth rate of GDP in itself may not be a major worry for the Indian economy and in spite of some 'unusual' structural changes; a growth rate of around 7 to 8 per cent can be achievable on a sustained basis in the medium term. It is the distributive outcomes of the current pattern of growth that are likely to pose the major problems not only in terms of equity but also for sustaining a reasonably high rate of economic growth, in the long run. As evidenced by the findings of various studies, summarised earlier in this paper as well as several other studies, inequalities, bothhorizontal and vertical, have shown a sharp rise over the past two to three decades due primarily to the structure of economic growth during this period. Growth has not been 'inclusive' enough to reduce inequality. No doubt, most people have gained, but some have gained much more than others. Economic inequality to a large extent is found to be coterminus with inequities in social structure and in so far as the socially disadvantaged groups like Scheduled Castes, Scheduled Tribes and Muslims, already at the lowest rung of the economic ladder have had lower gains in incomes and, therefore, slower decline in poverty, in the period of rapid economic growth, inequalities based on 'social exclusion' have continued to grow (NCEUS, 2008, Kannan 2011, Thorat and Dube 2012).

Then, there are inequalities arising out of occupation and location specificities which have also increased. The share of agriculture has substantially declined in GDP but not in workforce, so agriculture-non-agriculture disparity in per worker income has sharply increased. Incomes of wage earners have grown at much slower rate than of the owner of capital. Rising share of the organised sector in output but not in employment has further widened the already large income disparities between those engaged in the two sectors. Inter regional disparities, in spite of some poorer regions doing better lately, continue to be large. Increasing disparities are no doubt, likely to be a source of social discord, but will also threaten the sustainability of high economic growth, as increasing income inequality would result in a demand constraint. May be, it would still be possible to attain a high growth rate primarily based on exports. It is doubtful if that is feasible. But even if it is, will a high growth with such a pattern in which the national production is basically geared to cater to the external demand while a large part of the population of the country lives in relative deprivation because of the lack of purchasing power, be desirable and politically acceptable? Also, it must be noted that the high and increasing inequalities leading to growing dualism, for example, between agriculture and other sectors and between organized and unorganized sectors, with large differences in productivity, would also lead to supply side constraints to growth in terms of availability of wage-goods and inputs and intermediates for production in the formal sector.

Slower growth of poorer states is an important part of the overall story of increasing inequalities. Despite the fact that some states (e.g. Bihar, Orissa and Rajasthan) have experienced faster growth in recent years, overall disparity among states in terms of per capita income has increased. What is particularly interesting to note is that growth derived from manufacturing has been more evenly distributed across states while that originating from services is more unequally distributed (despite the fact Bihar ranks number one in growth of services during 2005-10!). And in so far as growth continues to be service-led, inter-state inequalities may continue to rise. Globalisation has not helped reduce inter-state disparities as poorer states have hardly benefitted from FDI and exports. Service-led and globalization induced growth thus is unlikely to be regionally equitable.

Increasing asymmetry between income and employment shares of agriculture is likely to pose a serious problem for growth as well as livelihoods. If the continuing decline in the share of agriculture in GDP is not accompanied by a significant decline in workforce share, it will not only lead to widening of disparities and stagnation in purchasing power with large mass of rural population, but can even lead to an absolute decline in incomes of agricultural workers, if agricultural growth is negligible or negative. Here, while raising agricultural growth and productivity is, no doubt, very important, the need to shift a large part of agricultural workforce to non-agricultural activities is rather urgent.

Linked with the structural transformation of workforce is the larger issue of employment. The post-reform economic growth has failed to deliver on employment front inspire of its being highly successful in delivering on GDP front. A high growth has not been able to generate employment even at a rate achieved with less than half GDP growth rate in the past. Part of the reason lies in technology which has become less employment intensive across economic activities and product groups. But a good part of the reason lies in the structure of growth. Most services, especially those which have dominated India's economic growth in recent years, are highly capital intensive and India's exports have become increasing less labour intensive because of the compulsions of international competitiveness to use more efficient capital intensive technology. Most growth has been derived from sectors and activities that have low employment potential. A service-led and export-led growth is highly unlikely to improve the employment intensity. A faster growth of the manufacturing industry along with a greater domestic orientation of production is, therefore, necessary for growth to ensure a reasonably high rate of employment growth.

Appendix

Studies undertaken under the ICSSR Sponsored Programme on
Structural Changes, Industry and Employment in Indian Economy: Macro-Economic Implications of Emerging Pattern'

1. Growth and Structural Changes in Output since Independence—*Surajit Mazumdar*
2. Structural Changes in India's Foreign Trade—*T.P. Bhat*
3. Import Intensity of Exports: Impact on Employment and Output—*Mahua Paul*
4. Structural Changes in Indian Industry: Organised Sector—*T.P. Bhat*
5. Structural Changes in Indian Industry: Unorganised Sector—*Ajit Jha*
6. Linkages Between Small and Large Industries: Implications of Sub-contracting for Small Enterprises—*Jesim Pais and Partha Pratim Sahu*
7. Changing Structure of Large Private Corporate Sector—*M.R. Murthy and K.V.K. Ranganathan*
8. Growth and Structure of Services—*Jesim Pais*
9. Inter-Regional Disparities in Industrial Growth and Structure—*T.S. Papola, Nitu Maurya and Narendra Jena*
10. Role of States in Exports—*Mahua Paul*
11. Trends and Patterns in Consumption Expenditure: A Review of Class and Rural-Urban Disparities—*Satyaki Roy*
12. Changing Factor Incomes in Industries and Occupations: Review of Long-Term Trends—*Satyaki Roy*
13. Growth and Structure of Employment in India: Long Term and Post Reform Performance and the Emerging Challenge—*T.S. Papola and Partha Pratim Sahu*
14. Regional Disparities in Growth and Human Development in India—*Satyaki Roy*

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