CHAPTER-II

REVIEW OF LITERATURE

2.0. Introduction

In this chapter, researcher has presented the review of the National and international studies made related to the New Economic Reforms and its impact on manufacturing sector, organized and unorganized industrial workers and labour productivity. Various academician industrialists, researcher, economist and organization studied liberalization and its impact on manufacturing sector and labour. Section-I presents the situation of India’s economic reform, section-II presents liberalization and its impact on growth of organized and unorganized manufacturing sector in India as well as Maharashtra and Quantitative Appraisal. Section III presents the Employment, Wages, ILO’ S Key Indicators of Labour Market, Labour, Liberalization and Aggregate Demand, Employment growth, Labour Market in Rural Unorganized Manufacturing sector, Labour Demand Elasticity, Labour Quality, Labour Market Flexibility, Changing Structure of Workforce in Unorganized sector and Elasticity of Labour Productivity during the Pre and Post-reform period. A brief review of these important studies in Chronological way will enable to understand the impact of new economic reforms on manufacturing sector and labour.

2.1. Definition of Small-Scale Industries Sector

In 1977, units having investment of less than Rs. 10 lac were defined as small-scale industrial undertaking, while for ancillary units, the investment limit was Rs. 15 lac. Units with investment of less than Rs. 1 lac were defined as tiny enterprise. In 1991 (the year in which economic reforms were initiated), the investment limit for small-scale industries was Rs. 60 lac, for ancillary units Rs. 75 lac, and for tiny enterprises Rs. 5 lac. In 2000, the investment limit for SSI (small-scale industry) was Rs. 1 crore, for ancillary unit Rs. 1 crore and for tiny enterprise Rs. 25 lac. Consequent to the enactment of Micro, Small and Medium Enterprises Development (MSMED) Act, 2006, the small and medium sector has been defined as micro, small and medium enterprises with effect from October 2, 2006 (the Act defined the medium enterprises for the first time). Further, separate investment limits have been prescribed for manufacturing and service enterprises. The new definition is as follows:
A: Manufacturing Enterprises

(i) A micro enterprise, where the investment in plant and machinery does not exceed Rs. 25 lac.
(ii) A small enterprise, where the investment in plant and machinery is more than Rs. 25 lac but does not exceed Rs. 5 crore; and
(iii) A medium enterprise, where the investment in plant and machinery is more than Rs. 5 crore but does not exceed Rs. 10 crore.

B: Service Enterprises

(i) A micro enterprise, where the investment in equipment does not exceed Rs. 10 lac;
(ii) A small enterprise, where the investment in equipment is more than Rs. 10 lac but does not exceed Rs. 2 crore; and
(iii) A medium enterprise, where the investment in equipment is more than Rs. 2 crore but does not exceed Rs. 5 crore.

2.3. Review of Literature

2.3.1. Economic Reforms in India

Nagaraj (1997) in the article ‘What Has Happened since 1991?: Assessment of India's Economic Reforms’ analyzed, preliminary and partial assessment of India's orthodox reforms initiated in mid-1991 shows a mixed outcome so far, overcoming the liquidity crisis, the economy has broadly got back to the growth charted in 1980s, with a modest yet statistically significant slower growth of the secondary sector. The investment-GDP ratio has improved, however, with unfavorable compositional changes; social sector spending has been maintained as allocations for defense and economic services were cut. The fiscal correction has been mainly due to a reduction in public investment and expenditure, Industrial recovery is partial and uneven; and public sector output and profitability improved despite the policy shocks, though their sustainability seems suspect.

An assessment to be meaningful, it is perhaps necessary to appreciate the 'initial conditions' of the reforms. India's 1991 balance of payment crisis came after an 11-year period of (relatively) improved and stable growth performance, lower inflation and a steady decline in the proportion of population in poverty. The reforms were preceded by policy changes in 1980-81, associated with a $5 billion IMF credit
that India took after the second oil shock. Continuing these, in mid-1980s, there was a deregulation of industry and trade, diversification of financial sector and promotion of stock market. While this period witnessed giving up of prudence that characterized India's long-term macro-economic policy has called the 1980s as an ambitious decade that witnessed a rapid rise in revenue expenditure. Thus, in some respects, the 1991 initiatives represent continuation of the move toward greater market co-ordination of economic decision making.

The economy's aggregate investment ratio improved since the reforms, though the physical investment growth rate is 1 percent lower than in the pre-reform period. Moreover, its changed composition is certainly a cause for concern. Manufacturing sector growth recovered from the adverse stabilization effect. But the average growth rate for six years since the reforms is clearly lower than the pre-reform period. Moreover, the recovery is uneven, with a sharp decline in the growth rates of capital goods and unregistered manufacturing (accounting for about 40 per cent of gross manufacturing value added). Capital goods growth rate fell, with the fall in tariffs. But, capital goods prices have also fallen, relative to the GDP deflator. Therefore, need to weigh the price advantage against the learning effects foregone.

Author found some unfavorable developments that might have something to do with the increasingly market-oriented policy perspective in the recent years. Recent employment statistics show that in 1993-94 still nearly two-thirds of Indian workforce was in agriculture. Interestingly, intersect the oral shift in the workforce from agriculture to non-agriculture has slowed down during 1988-94, and the secondary sector's share has also come down. Since labour productivity in the non-agriculture sectors, in 1993-94, is nearly four times that in agriculture, slowing down of the workforce transformation implies an immense loss of (potential) productivity gains. This potential loss perhaps far outweighs the efficiency gains (possibly) secured by eliminating 'little triangles' of price distortions.

Bajpai (2002) in the study ‘A Decade of Economic Reforms in India: the Unfinished Agenda’ observed, most of the developing countries that have liberalized the economy in the last three decades of the 20th century, India's reforms too were preceded by a serious financial crisis. In 1990-91, the gross fiscal deficit of the government (center and states) reached 10 percent of GDP, and the annual rate of inflation peaked at nearly 17 percent in August 1991. Fiscal imbalances in India,
which assumed serious proportions since the mid 1980s, had two important facets. First, the outpacing of the rate of growth of revenues by the expenditure growth considerably reduced the resources available for public investment in the economy. The increasing use of borrowed funds to meet current expenditures rendered the latter self-propelling. Second, the increasing diversion of household savings to meet public consumption requirements not only resulted in the expansion of public debt to unsustainable levels, but also reduced the resources available for private investment.

The balance of payments came under severe strain from one liquidity crisis experienced in mid-January 1991 and another in late June 1991. On both occasions, the foreign exchange reserves dropped significantly and the government had to resort to emergency measures, such as using its stocks of gold to obtain foreign exchange, utilization of special facilities of the IMF, and emergency bilateral assistance from Japan and Germany among others. Having resorted to these measures, the government was able to avoid default in terms of meeting its immediate debt service obligations and the financing of imports. Subsequently, the government embarked upon a program of more fundamental economic policy reforms.

A decade of opening of the economy has produced new dynamism, most dramatically in the information technology sector, but in others as well. The new technologies (especially information technology and biotechnology) give new opportunities for economic and social development. The reforms implemented so far have helped India attain 6 plus percent growth, however, should India be able to implement these remaining reforms and re-orient governmental spending away from inessential expenditures towards high priority areas of health and education and infrastructure development, then it is very likely to attain and sustain even higher rates of economic growth. If India does grow consistently at around 7/8 percent per year, this is likely to push up its domestic savings in the next few years. Besides, stronger growth should attract more foreign savings, especially foreign direct investment, and thus raise the investment rate.

Jadahv (2004)³ the lecture on ‘Economic Reforms in India: A Balance Sheet’ discussed, The Indian macro-economic landscape has changed dramatically in the 1990s and thereafter. A relatively closed and control-oriented economic regime is giving way to an open market economy. In line with the process of globalization, the Indian economy is getting increasingly integrated into the world economic order.
India is well on the path of a take-off. As a nation, missed the base of the original Industrial Revolution in the 19th century and most of the repeats in the 20th century. It is therefore necessary to ensure that comparative advantage in the on-going revolution in communications and information technology is nurtured. The cutting edge of information technology, there is no denying that this is not enough to buffet an economy as large and as populous as ours. While services have so far provided an impetus for growth, the tertiary sector cannot surely expand in isolation. There is, thus, clearly need for greater investment in agriculture and industry. The need to ensure a degree of equity is central to the process of economic growth because of the social imbalances it tends to foster. The gains from the process of economic liberalization must be spread more evenly over the different strata and must especially carry disadvantaged sections of the society along with it. Public policy thus has a role to play in ensuring an equitable spread of growth. There is, in particular, a need to strengthen the process of human capital formation not only in the cities but also in the countryside.

The projections of Indian economic growth are not necessarily as far-fetched as they appear to be. The study shows that India accounted as much as 22.6 per cent of the world production as late as 1700. The Indian sub-continent, of course, sank into an abyss of poverty during the centuries of colonial subjugation and output is below 5 per cent of world production. In a sense, the very colonial subjugation itself resulted from an inability to ride the powerful forces of industrialization which had then begun to appear on the horizon.

2.3.2. Economic Reforms and Indian manufacturing Sector

Mani and Bhaskar (1998) in the paper ‘A Curmudgeon's Guide to Economic Reforms in India's Manufacturing Sector’ examined, India has embarked on a path breaking reform of its industrial sector. The paper, based largely on official sources of data, undertakes a detailed analysis of five dimensions of the manufacturing sector: the growth performance of the sector, the degree of domestic competitiveness, foreign investments, and domestic technology development and finally reforms in public sector enterprises. The analysis shows the unstructured, adhoc and sometimes contradictory nature of the reform process. IT is now very nearly seven years since India has embarked on a reform of its economy which is characterized by reducing the role of government, either explicitly or implicitly from a number of areas of economic
activity. An area where reforms have been significant from the point of view of both its depth and coverage is the industrial sector.

The reforms are required for the Indian manufacturing sector to achieve a robust rate of growth. For instance, various studies done in the 1960s, by both governmental committees and by independent economists had clearly shown that the licensing system (which is the main barrier to entry) had failed to achieve its goals. But even after its removal there is little or no evidence of increased competition between firms. This shows that there are some other barriers at play, which need to be lowered. Second in its desire to increase the supply of non debt-creating financial flows, the government is encouraging portfolio flows which can exacerbate instability not only in the stock market but also in the currency market. Thirdly there is nothing very substantial in the reform package to increase the Research and Development (R&D) activities of domestic firms and especially those importing foreign technologies. An area where reforms have failed quite miserably is in the realm of public sector reforms. Even from the narrow objective of raising resources for the budget, divestiture has fallen far short of the targets set by the government itself. Perhaps instead of divestiture, the government should put into operation other performance enhancing instruments. Given the nature and character of the Indian private sector it may not be very prudential to replace the public sector with the private sector. The end result of six years of reforms has been more instability in the growth performance of the sector. Exercise also underscores the need for and importance of a better database for monitoring the trends so that the policy makers can take more informed policy decisions. Otherwise they run the risk of lulled into a feeling of complacency that the reforms are on course.

Burange (1999) in the paper ‘Industrial Growth and Structure Manufacturing Sector in Maharashtra’ examined; Maharashtra occupies a very significant position as far as the manufacturing sector in India is concerned. However, since 1970s the share of the secondary sector in the State Domestic Product has been stagnating around 33 to 34 per cent. Further, the state is experiencing significant changes in the industrial composition wherein capital and intermediate goods industries are becoming dominant. The manufacturing sector is itself undergoing major structural changes. Over the period 1979-80 to 1994-95 the state realized a high growth rate in fixed
capital resulting in decrease in employment. The rising capital intensity and thereby substitution of capital for labour, low growth rates of output and value added, all do not indicate satisfactory performance of the state on the industrial front. However, there is a revival in the manufacturing sector in post-reform period.

The industrial scenario of India underwent fundamental change in the mid 1980s with the first round of liberalization. The new economic policy introduced in 1991 is expected to provide a further boost to the industrial sector. After 1991 many state governments have come out with policies for promoting industries, especially through foreign direct investments. However, without discerning the trends over the years at industry level, any growth strategy, propelled by private investment, may be unduly optimistic.

Maharashtra is the major contributor to the industrial sector in India. Over 1969-70 to 1994-95, however, the share of the state in the country’s industrial increasing. The composition of industries in the state is undergoing major changes. The share of consumer goods in value added declined to less than 20 per cent while the share of capital and intermediate goods industries increased to more than 80 per cent over the period of 36 years. During the 1990s the concentration of fixed capital, value added and value of output increased in the manufacturing sector. The state realized higher growth in fixed capital at the cost of employment. Non-agriculture related industries experienced better growth than the agriculture-related industries. The complementary role of capital declined in many industries and more industries have begun substituting capital for labour. As a result capital intensity in the manufacturing sector is increasing at a faster rate.

Rising capital intensity and falling employment, and substitution of capital for labour, low growth rate of value of output and value added all reflect the unsatisfactory performance of the state in industrial activity. This state of affairs may be due to insufficient infrastructure, high power tariff, industrial disputes, state policies, aggressive competition from other states, and increasing bureaucratization of the state administration. The declining law and order situation and rising extraordinary activities in Mumbai, political indecisiveness is also some of the other factors responsible for this state of affairs. However, the industrial recovery is clearly seen by the state during the post-liberalization period. Industries such as textile products (26), metal products and parts (34), machinery and machine tools (35-36)
and other manufacturing industries (38), etc, show a positive impact of economic reforms on their performance in the post-liberalization period. Nonetheless, the performance of cotton textiles (23), nonmetallic mineral products (32) and leather and leather products (29) deteriorated further during the post-liberalization period. However, the state of Maharashtra still has a comparative advantage in industrial activity. In order to accelerate industrial development in the state it has to be supplemented by competitive advantage which can be engendered, nurtured and shaped by appropriate policy initiatives by the government.

Ray (2002) the paper ‘Economic Reforms and Efficiency of Firms: The Indian Manufacturing Sector during the Nineties’ observed, Indian economy has initiated various policy reforms during the last decade. These were aimed at making the economy more resilient and less vulnerable to external shocks. In the context of industrial sector reforms, it becomes necessary to increase the competitiveness of the domestic firms so that they can withstand the pressures of global competition. In the paper look at how the reform process has helped the country improve its competitiveness by investigating the effect of such reforms on the efficiency of Indian manufacturing firms. The efficiency of a cross section of firms belonging to 27 industry groups of the Capitoline OLe database has been estimated using the DEA approach. Next, regressions have been run for each year in the period 1991 to 2001, in order to estimate the impact of various policy reforms on efficiency and outline their trends over the years. The positive impact of import liberalization on the efficiency of firms through import of capital goods and import of technology. Another policy that has been found to be successful is the easing of foreign ownership norms of firms as a part of a more market friendly industrial policy.

The liberalization process undertaken in the country has ushered in wide ranging changes. Changes have taken place in almost all the important sectors of the economy including capital markets, external sector, banking sector and the industrial sector. The Indian approach toward market liberalization resulted in the adoption of a number of pro market policies that spanned the whole economy. The reforms in the external sector included substitution of some quantitative restrictions (QRs) by tariffs in the 1980s and the abolition of all QRs in the nineties. The tariff rates were also brought down significantly during time period. Lastly, and perhaps most importantly for the industrial sector, the system of licensing
requirement for domestic production and imports was largely abolished. The most important changes for the industrial sector have been the external sector reforms and the abolition of licensing. While the external sector reforms have meant that firms could now import raw materials or even technology far more easily than before, the abolition of the licensing system has meant that very little controls remain on building capacity or expanding the productive capacity. All these effects are thought to be beneficial for the industrial sector and should lead to enhanced performance of the sector.

The changes in competitiveness of Indian manufacturing firms—through increases in efficiency from 1991 to 2001. The firm level efficiencies have been calculated using data from 27 industry groups and using the Data Envelopment Approach (DEA). Next, the significant factors affecting firm level efficiency have been identified by regressing efficiency on a number of possible explanatory variables. Regressions have been run for each year in the period 1991 to 2001 and the changes in the coefficients of explanatory variables have been analyzed to look for trends in these relationships. Found that evidence of the positive impact of import liberalization on the efficiency of firms through import of capital goods and import of technology. Another policy that has been found to be successful has been the easing of foreign ownership norms of firms, as a part of a more market friendly industrial policy. These highlight the success of these policies in enhancing the competitiveness of Indian firms in the face of global competition. As a result of such increases in firm level competitiveness, the industrial sector is bound to be more resilient to competitive shocks that are an inherent aspect of globalization.

Nagaraj (2003) in the paper ‘Industrial Policy and Performance Since 1980: Which Way Now?’ analyzed, Since 1980-81, manufacturing sector output has grown at 7 per cent per year, with economic reforms making little difference to the trend in the 1990s. But growth has decelerated over the last seven years, after peaking in 1995-96. Why is this so? The reforms have narrowly focused on policy-induced restrictions on supply, ignoring the demand constraint due to the cut in public infrastructure investment since the late 1980s, and indifferent agricultural performance in the 1990s. These issues have to be squarely addressed to revive industrial growth, and to reap the benefits of the investment boom in organized manufacturing in the last decade.
India’s manufacturing sector currently accounts for about 17 per cent of real (measured) GDP, 12 per cent of total workforce, and close to 80 per cent of merchandise exports. Over the past half century, this sector has grown at nearly 6 percent per year; at over one-and-a-half times the growth rate of domestic output - representing a major break from the colonial past. The annual trend growth rate of total manufacturing gross value added (output, for short, hereafter) during the last two decades (1980-2000) is close to 7 per cent. While this represents a turnaround compared with the preceding period of ‘relative stagnation’ (1965-1980), the record is modest in contrast to China’s (official) double-digit growth during this period, as also most other industrializing Asian economies.

The industrial output growth during the last two decades has improved compared with the previous period of ‘relative stagnation’. But contrary to both the euphoria and apprehension, with the acceleration of reforms there has been little change in the trend growth rate of output in the 1990s compared with the previous decade. Moreover, since the mid-1990s, there are distinct signs of a slowdown in growth for seven years now. The trend growth rate of capital goods in the registered manufacturing has not declined during 1992-98 from that in 1981-91. While the capital goods sector’s share in registered manufacturing has increased by about one percentage point in the 1990s, the share in total manufacturing has virtually stagnated since the mid-1980s, clearly suggesting the negative effect of reforms on this sector. Moreover, the aggregate performance seems to hide more than it reveals. To illustrate, the number of passenger cars produced has increased at 15 per cent per year for two decades now. But the machine tool industry - making the mother machines - has barely grown with imports to consumption ratio nearly doubling in the 1990s.

The much expected restructuring of production away from domestic market orientation, and towards labour intensive manufactures and their exports has not happened at least not as yet. If anything, import competing organized manufacturing has been strengthened by the investment boom, while unregistered manufacturing suffered in the 1990s. Much of the boom went into production for the home market. Quite contrary to contention, elimination of the import substitution bias and the decline in the public sector’s role in manufacturing have not resulted in a decline in macroeconomic perversity, as evident from persistent fiscal imbalances even after a decade of economic reforms.
Balakrishnan and Babu (2003) in the study ‘Growth and Distribution in Indian Industry in the Nineties’ examined, the evolution of the Indian manufacturing sector over close to three decades found the annual average rate of growth in the nineties to have risen almost across the board at the two-digit level of industry. Nevertheless, the acceleration is not particularly impressive for what is often hailed as the most significant policy-regime shift since 1950. There is a hefty rise in investment, however, though without a corresponding increase in its efficiency. And distribution has shifted sharply with labour’s share declining. The paper attempts to link these developments in a coherent way.

A concern with the rate of profit is neutral over a range of policy prescriptions so long as one is addressing a market economy. As an example consider that an industrialization project, whether based on import substitution or export promotion, could fail on account of poor returns to private capital. For instance, the exhortation to unilateral trade liberalization ambiguous with respect to the final outcome. Where a country’s imports are largely intermediate inputs trade liberalization would unambiguously raise the rate of profit of those industries dependent upon such imports. However, where imports compete with domestic industry, trade liberalization can lead to higher profits only if there is an accompanying increase in productivity. While such an outcome cannot be ruled out, it does bear the burden of the implication that firms were not minimizing costs (ergo maximizing profits) to start with. But why this consider with the profit rate? The profit rate is important for fresh investment in the same line of production which depends upon a rise in the rate of profit. For firms entering into a line of activity hitherto closed to them, but now made open due to a policy-regime shift, no such increase in the rate of profit is necessary as incentive to invest. Entry may simply follow from the removal of barriers, so long as the relative rate of return is attractive enough relative to opportunities elsewhere in the economy. Such entry is of course more likely in the case of the abolition of licensing or the removal of specific entry barriers, say ‘de-reservation’ of the small sector in India or ‘deregulation’ of the US airline industry, rather than in the case of unilateral trade liberalization. However, here again, conceive of instances such as a hitherto scarce input being made freely importable after the removal of quantitative restrictions on trade. After that, much of the policy advices developing economy after the eighties a little obtuse in their treatment of the link between regime-liberalization and growth. Believe that the necessary links in the chain would be-in the absence of disembodied technical progress, the share of
output devoted to investment and the rate of profit. Two dimensions of profit appear here, for profit has a dual role within the system: the rate of profit governs the incentive to invest while the share of output provides the firm with the capability to devote a larger share of output to investment, thus raising the rate of growth.

In the study found that there is a faster rate of growth of output across manufacturing since 1991, but then this is by no means dramatic. As would have expected, there is also a rise in employment, though perhaps not commensurate with the increase in the rate of growth of output. However, suggestions of a jobless growth, often expressed, appear exaggerated. Principal among the proximate causes of output growth in the nineties has been investment, with the share of investment in output having increased very substantially overall and pretty much across the board in Indian manufacturing. To the extent that the share of investment reflects response to a regime change, the rise in its share signals the success of reforms in energizing the supply side of the economy. However, the quite significant rise in investment does not represent animal spirits alone. There is a rise in the rate of profit, though marginal, which provided the incentive to invest via a higher return on capital. An increase in the share of profit has eased the financing constraint for firms, a factor tending to being overlooked, even as it remains crucial for investment is contingent on finance.

Distribution as the share of profits in output enters the growth dynamic in this way. However, also investigated distribution from the perspective of the allocation of the gains from the change in the policy regime since 1991. Within manufacturing capital has gained. Even labour’s gains in terms of a rising product wage have been extinguished by a state intervening on behalf of the surplus farmers

Kumari (2003) in the paper ‘Liberalization And Sources Of Industrial Growth In India: An Analysis Based On Input-Output Approach’ analyzed, India has experienced transformation from the regime of regulated economic development to competitive regime since the liberalizations of 1991. The main thrust of these liberalizations has been on industrial delicensing and openness, that is, import liberalization and removing barriers to exports for accelerating growth. In the paper, an attempt has been made to analyze the effect of economic liberalizations on pattern of sources of growth of output of Indian manufacturing industry from a demand side perspective. The analysis has been based on Chenery’s factor decomposition approach based on input-output framework. It decomposes output
growth into its four sources: domestic demand expansion, export expansion, import substitution and intermediate demand expansion due to change in input-output coefficient. The basic data used for the study has been the input-output tables for 1983-84, 1989-90 and 1997-98. The analysis has been done separately for the pre-liberalization period, 1983-84 to 1989-90, and the post-liberalization period, 1989-90 to 1997-98, to examine the changing pattern in the sources of growth of output as a result of policy liberalization and structural reforms during the 1990’s. The nominal values of the variables have been deflated.

The study found that output growth in manufacturing industry has been mainly driven by domestic demand expansion followed by contribution of export expansion during both pre-liberalizations as well as post-liberalization period, but after liberalization the contribution of both domestic demand expansion and export expansion has increased. Further, contribution of both import substitution and intermediate demand expand to output growth, which was positive before liberalization, has become negative. At disaggregated level of industries, there has been considerable similarity with some exceptions in pattern of sources of growth of output. The pattern of sources of output growth with respect to source of dominance remains unchanged during two periods but the relative contribution of each source of growth to output growth from pre-liberalization to post-liberalization period has increased for some other industries but has decreased for some other industries. On the other hand, for some of the industries the relative contribution has changed from positive during pre-liberalization period to negative during post-liberalization period or from negative during pre-liberalization period to positive during post-liberalization period.

The change in pattern of sources of output growth may have taken place due to liberalization policies and structural reforms undertaken during the 1990s. The liberalization policies seem to have increased the consumption propensity which has been generating growth of demand reflecting the rising contribution of domestic demand expansion to growth of output. Export promotion policies over the two periods have generated increase in the contribution of export expansion to output growth. The contribution of import substitution has changed from positive to negative from pre-liberalization to post-liberalization period may be due to changing import policies, with varying focus on liberalization. The contribution of intermediate demand due to change in input-output coefficient to output growth has been mixed.
as technological policies have liberalized import of technologies over the periods. Technological changes have been material saving on one hand but capital intensive on the other hand. Technological changes have accordingly affected the input-output coefficients and their contribution to output growth.

Shastri (2003) in the Paper ‘Manufacturing Growth and Liberalization in India (1960-1999): A Demand Side Analysis’ examined, After Keynes, it has become usual to emphasize the prevalence of unused capacities across industries, sometimes even as result of deliberate microeconomic policy. The industrial growth is believed to be, by and large, demand led. External demand for manufactured products is of four types: demand for investment goods, demand for consumer goods, demand for intermediate goods for other sectors, and export demand. This paper represents these four types of demand Gross Capital Formation (GCF), Private and Government Final Consumption Expenditure (PFCE, GFCE), Agricultural output, and finally exports. Liberalization is treated as a regime change since 1991.

The trend in manufacturing has not shifted post-91. Liberalization shares in the high trend phase in manufacturing which was ushered in after 1981, which continued even after 1991. Liberalization however, seems to have changed the structure of demand responses of manufacturing output. In contrast to pre-liberalization years, after 1991, manufacturing growth seems to have become highly sensitive to growth in personal consumption expenditure. After 1991, a one percentage point increase in personal consumption expenditure seems to change manufacturing growth by nearly 2 percentage points! Liberalization also seems to have increased the responsiveness of manufacturing growth to fluctuations in growth of gross capital formation and exports. However, the increase in responsiveness to changes in export growth is not statistically significant.

Bhateja, Tyagi and Tyagi (2003) in the paper ‘Liberalization and Small Scale Industries in India’ observed, today globalization and liberalization is a major driver that has an impact on nearly every economy. No country can really exclusively on its local resources, capacities and capabilities to steer its economic growth. There is a profound need to integrate its economy with the global economy.

1. Small scale industries occupy a special place in Indian economy due to its contribution in employment, production and exports. It accounts for 95% of the industrial units.
2. 40% of output in the manufacturing sector.
3. 35% in total exports.
4. Employment of about 30 million people.

From the year 1991 SSI were facing strong competition due to globalization and economic liberalization. The government when announces budget normally concentrates on the small and medium scale enterprises. This sector is always supporting Indian economy.

Development of small scale industries has been given a lot of emphasis in India because of number of avowed objectives such as promotion of entrepreneurship, generation of employment opportunities, development of decentralized development, prevention of concentration of economic development, utilization of local resources, protection of interests of artisans, preservation of craftsmanship and heritage of country etc. Liberalization is always seen as a negative factor for the SSIs as many industries got demolished in the wave of it. Now the industry has crossed the road of infancy after liberalization government is required to strengthen it by resolving some of the basic issues which are still unanswered. The measures to strengthen this sector are:

1. Government has to see the implementation phase of developing industries in backward areas so that ancillary units can get their share.
2. Role of Panchayats has to be increased to develop the sector.
3. After railways the Rural Development Ministry has got the biggest share in budget but the expenditure is very less. The role of administration is to be seen in it.
4. The territory industry is looking forward for their share in developing this sector very antagonistically and it should be fueled in proper manner.
5. Women entrepreneurs are required to be promoted more forcefully they are playing an important role.
6. The government is required to watch out its policy of financing as it is more of exploiting in nature rather complementing it. Many other administrative issues are there which are "de-promoting" this sector whereas it has potential to increase its share in GDP.

Rani and Unni (2004)\(^\text{12}\) in the paper, ‘Unorganized and Organized Manufacturing in India: Potential for Employment Generating Growth’ examined, the impact of
economic reforms on the organized and unorganized manufacturing sectors. It also seeks an explanation for the growth trends observed by looking at specific trade and industrial policies. The analysis indicates that economic reform policies had a differential impact on various industry groups. In particular, the growth in the automobile industry and the infrastructure sector helped the growth of the manufacturing industry, especially in the unorganized segment and the generation of quality employment. The growth of value-added, employment and capital in the organized manufacturing sector in the country as a whole had surged in the initial years after the introduction of reforms. Growth in the unorganized sector, however, was observed to have peaked in the initial phase of partial liberalization (1984-90), and tapered off in the reforms period (1989-95). High growth in the organized sector was expected as these units were better equipped to deal with competitive conditions arising out of economic reforms.

Initial reform policies affected the unorganized sector adversely and employment growth was negative. The decline in employment was observed across all industries, especially in the textile industry. The reforms of the early 1990s did not help the unorganized sector to grow, and employment continued to be negative during this period. However, after the promotional policies towards small-scale industries of expanding their capacities and raising their investment limits, the unorganized segment surged forward in the 1990s. The growth also generated employment in most of the industries. The metal-based and machinery industry, which suffered badly after initial reforms, also picked up in the unorganized sector in the late 1990s. Though the employment generating potential in these industries was low, the quality of employment improved.

The infrastructure sector also contributed to the growth of the metal-based and machinery industry in the 1990s, as emphasis on this sector in the globalised era gained importance. The rapid expansion of infrastructure has triggered off construction activities, which in turn fuelled demand for many key sectors of the economy such as cement, steel, paints and chemicals, earthmoving equipment and machinery. The 1990s saw a number of projects like the nationwide National Highway Development Programmed, the golden quadrilateral project, telecom infrastructure, water supply, sanitation, and irrigation projects, which led to increased demand for these products. There was an increased demand for private urban housing in the 1990s, with a number of concessions and incentives being provided under different schemes, which also led to
the construction boom. These developments also helped the unorganized sector to grow, especially in employment. The growth in these sectors generated quality employment in the unorganized sector. The sub-sector analysis thus showed that in the liberalized era two sectors, automobile and the construction industry have actually helped the growth of the manufacturing industry, especially the unorganized segment.

Mahambare and Balasubramanyam (2005) in the paper ‘Liberalization and India’s Manufacturing Sector’ assesses, the impact of India's economic reforms initiated in 1991 on methods of financing investment and productive efficiency of the major industries in India's manufacturing sector. The 'sunrise' industries such as software and pharmaceuticals seem to have benefited from access to imported technology and the distortion free competitive environment. In general, however, the post-reform period appears to be one of turbulence and disequilibrium with most manufacturing industries recording a decline in total factor productivity growth.

The key elements of India's economic liberalization programme initiated in 1991 were the abolition of the industrial licensing system, substantial liberalization of foreign trade and foreign direct investment regimes, removal of ceilings on interest rates and associated reforms in the financial sector. The impact of the reforms on methods of financing investment and productive efficiency of the major industries in India’s manufacturing sector

There is reason to believe that the sector does respond to liberalization and the impact of the relatively large scale 1991 reforms on growth and productive efficiency should be much more robust than that of the earlier limited attempts at liberalization. These hopes were not entirely belied. The growth rate of manufacturing which had declined to -3.7 per cent in 1991-92, recovered to 4.2 per cent during the very next year. During the next four year period from 1993-94 to 1996-97 manufacturing output grew at an appreciably high rate of around 10.4 per cent per annum. This improved performance, however, appears to have ended abruptly when the economy slid into a recession in early 1997. There are a number of reasons for the decline in growth rates in the post 1997 period. Market forces set in train by the reforms appear to have worked with a vengeance. Removal of ceilings on interest rates led to the expected increase in interest rates which reduced investment and production. In addition, banks which sought to strengthen their balance sheets curtailed credit to
risky ventures. The decline in production may, in fact, be due to the demise of firms which were unable to function in the new competitive environment. In addition, infrastructure bottlenecks appear to have held back investment.

The impact of the reforms on the productive efficiency of the manufacturing sector appears to be mixed. There are signs that the reforms have had the desired effect. New firms unencumbered by the distortions of an earlier era have performed much better than the old firms. In general, the post-reform period appears to be one of turbulence and disequilibrium. Firms which have been shielded from competitive forces cannot be expected to adjust to a new era of competition in the short-term, especially so when entry for new firms is free and exit for ailing firms is blocked. The statistical results of this exercise reflect this state of flux in the Indian manufacturing sector.

\[\text{Kaur and Kiran (2008)}\] in the Paper Indian ‘Manufacturing Sector: Growth and Productivity under the New Policy Regime’ examined, the trends in output (value added) and inputs (labour, capital) as well as partial productivity and total factor productivity for all India manufacturing i.e. at aggregative level as well as at disaggregative level for twenty-two industrial groups. The period for the study is 1980-81 to 2002-03, analysis has also been done for two sub periods, period I, pre reform period 1980-81 to 1990-91 and period II, 1991-92 to 2002-03 i.e. the post reform period. The study views the changes in growth of output and inputs and productivity in the pre and post reform period. The comparative picture of pre liberalization and liberalization period depict a slower growth of manufacturing sector of India in the post reform era for aggregative as well as for disaggregative i.e. sectoral level.

In the face of intensified global competition and liberalized trade environment, productivity has emerged as a key indicator of successful restructuring and upgrading by firms and industries. Productivity growth has traditionally been regarded as one of the main sources of income growth, along with capital accumulation and the deepening of human capital development. These factors and the historically established positive relationship between productivity, employment and earnings have made productivity improvement and it is now recognized as an important policy lever for economic development. Advocates of liberalization argue that opening up local markets to foreign competition and foreign
direct investment will help to improve the productivity of domestic industry, resulting in more efficient allocation of resources and greater overall output.

At aggregative level an overall long term growth of 7.78 percent per annum in value added in manufacturing sector during 1980-81 to 2002-03 is associated with a rapid growth of capital (6.05 percent per annum) and a low growth of employment (0.65 percent per annum). Labour productivity for the whole period increased at an annual rate of 7.09 per cent per annum while capital productivity increased at a rate of 1.64 per cent per annum. Capital intensity for the entire period is 5.36 per cent per annum. The estimate of total factor productivity (TFP) growth of Indian manufacturing is 1.24 per cent per annum over the entire period 1980-81 to 2002-03. Total factor productivity growth is higher during the pre liberalization period than during the second period of the analysis i.e. Post liberalization period. Estimate of pre liberalization phase is 1.53 per cent per annum while in the post liberalization phase total factor productivity decreases to 0.44 per cent per annum. The growth of value added and labour decelerated in the post liberalization period. Growth of capital shows a higher growth in the second period of the analysis but it has not transformed into productivity growth. This increase in capital may lead to higher growth in productivity in the coming years. For total manufacturing sector both partial productivity and total factor productivity decelerate in the post reform period. So the aggregative analysis shows that the deceleration in productivity growth in the post reform period.

A disaggregative analysis is done to study the inter industry trends in Indian manufacturing. Value added is highest for Manufacture of Wearing Apparel; Dressing and Dyeing of Fur#18, followed by Manufacture of Furniture; Manufacturing N.E.C#36, Manufacture of Coke, Refined Petroleum Products and Nuclear Fuel #24 for the entire period of the analysis. Growth rates of labour are higher for fourteen industrial groups in the pre-liberalization phase, while only eight groups depict higher growth in the post liberalization phase. Growth rates of capital are higher for only four industrial groups in the pre liberalization phase while eighteen industrial groups depict acceleration in the post liberalization phase. Analysis of the partial productivities depict a higher growth of labour productivity in the second period of analysis, i.e. the post-liberalization phase in twelve out of twenty-two sectors while capital productivity is higher in the first period of analysis, i.e. the pre-liberalization phase in fifteen out of twenty-
two sectors. Capital intensity is higher for only three industrial groups in the pre-liberalization phase while nineteen industrial groups depict higher growth in the post liberalization phase. Growth rates of total factor productivity are higher for the sixteen industrial groups in the pre liberalization phase while six industrial groups depict higher growth in the post liberalization phase. So analysis at disaggregative level also show that the partial productivity and total factor productivity for Indian manufacturing sector has decelerated in the new policy regime. The results of the study are corroborated by several studies covering the period of 1991 reforms. However whatever growth is attained is far from satisfactory. So in the near future there is need for greater impetus on productivity in the India manufacturing sector for the sustainability of growth of the manufacturing sector.

Dixit and Pandey (2009) in the article ‘SSIs In Indian Economy: A Quantitative Appraisal’ analyzed, The major thrust of the present paper is to evaluate the performance as well as productivity of labor and capital in the SSIs for the period from 1973 to 2006. In order to estimate performance of production, export, employment, and investment in the SSIs and number of SSI units for the period from 1973 to 2006 and keeping in view the sub-periods like 1973-80, 1981-90, 1991-2000, and 2001-06, they have employed the OLS technique based on dummy variables on time series data. In the paper an attempt has been made to estimate the marginal productivity of labor and capital employed in SSIs from 1973 to 2006. The findings of the study are quite interesting. Facts reveal that marginal productivity of labor in case of SSIs is positive and highly significant for the study period.

The micro and small enterprises (MSEs) constitute an important segment of the Indian economy, contributing around 39% of the country’s manufacturing output and 34% of its exports. It provides employment to around 29.5 million people in the rural and urban areas of the country (Economic Survey, 2005-06). The SSI sector has been the second largest employment generator next to agriculture.

Apart from other factors, it has now been realized that productivity of capital and labor plays a significant role in the process of production. This is the reason that much emphasis has been laid on productivity of capital as well as labor in the process of production. Industrial productivity, apart from other factors like technology, foreign capital, fiscal as well as monetary policy of the government, highly depends on productivity of primary inputs like capital and labor. Further productivity of these
inputs is basically governed by their marginal productivity. Thus, marginal productivity of key factor inputs plays vital role in determining the overall performance of any production process.

Measuring the productivity of labor and capital has always been interesting and fruitful from viewpoint of estimating the ultimate contribution of these two inputs in the process of production, especially in industrial sphere. The paper has attempted to estimate marginal productivity of labor and capital for SSI of Indian economy for the periods from 1974 to 2006, 1973 to 1980, 1981 to 1990, 1991 to 2000, and 2001 to 2006. The empirical evidences of the present paper have established the fact that marginal productivity of labor was highly significant in case of small scale industries. The marginal productivity of labor was found positive due to the fact that the small scale and cottage industries can be established with small investment and with local resources these can be set up quickly and can cater to the immediate needs of consumer goods within a short period of time. To sum up, SSIs need to be developed along with medium- and large-scale industries, because the role played by them in India's economic life and development is unavoidable.

Arora and Singh(2009)\(^{16}\) in the paper ‘Globalization and Indian Manufacturing Sector-An Assessment’ analyzed, Globalization an economy can bring immense benefits to countries that are able to harness the resulting opportunities to the proper development of their material and human resource endowments. Thus the recent move towards more open economic policies in developing countries after the decades of protection have sparked off live debates about prudence in terms of timeliness and economic rationale. It is generally assumed that increased globalization can improve economic performance in developing countries. India is one of the developing countries that have been implementing comprehensive economic reforms involving large scale structural adjustments and degree of economic of globalization since 1991 with the objective of increasing productivity and competitiveness of Indian manufacturing sector. The policies that have direct and indirect bearing on manufacturing sector are expected to bring about changes in Indian manufacturing sector. The dynamics of change will bring about inflow of technology, resources and both human and physical capital that are scarce or costly to procure locally in the developing economies. This will lead to rise in the productive capacity of a nation to supply increasingly diverse economic goods and services to its growing population.
India's manufacturing sector undergone a transformation from a protected environment to one of open trade and global competition but this transformation have failed to make a dent on industrial productivity as TFP growth rate decelerated in post-reform period. Thus, the reforms in the manufacturing sector failed to bring any improvement in the performance of aggregate Indian manufacturing sector. The examination of the relationship between globalization and Indian manufacturing sector vis-a-vis other major developing Asian Economies of world shows that inadequate development of Indian manufacturing sector is due to lack of basic parameters required by the industrial sector the result showed that although the Indian economy has been opened to global competition over the last decade, manufacturing sector in India is still a long way behind global standards. The slow growth of Indian manufacturing sector may be due to slow pace of reforms especially with regard to freeing government controls. Also, procedural and bureaucratic delays in approvals and decision making added to the fuel. Moreover, the results on the basis of an important indicator viz. manufacturing value added per capita showed that the per capita value added in the manufacturing sector of India was the lowest in comparison to selected developing Asian Countries. Hence, cross country comparison on direct and surrogate measures of competitiveness point towards a significant lack of competitiveness in Indian manufacturing sector. Further, WEF Ranking on selected indicators of competitiveness showed that India ranked very low in case of quality of infrastructure, base of new business, efficient product process and less flexibility in labour laws along with less pay related to productivity. Thus even in terms of average ranking with respect to selected parameters, the performance of Indian manufacturing sector is dismal. This may be due to inadequate development of key enablers like infrastructure availability, utilities and efficient processes with low level of research and development expenditure etc. Therefore, investment in industrial infrastructure, technology and human skills holds the key for Indian manufacturing sector being in a position to meet the challenges arising in the international industrial area and the sector can harness the opportunities available in the globalised regime.

The fundamental strategy of both the Indian industry and Government to meet the challenges should not be shy away from international rules and disciplines coming into vogue but to focus upon raising the efficiency and of Indian industry. Also, the competitiveness of Indian manufacturing sector can be improved only through
increasing productivity along with strengthening of Indian financial sector including security market.

\[\textbf{Siggel and Agrawal (2009)}\] in the article ‘The Impact of Economic Reforms on Indian Manufacturers: Evidence from a Small Sample Survey’ observed, there has been much theorizing on the impact of India’s economic reforms of 1991 on Indian manufacturers, there is hardly any previous study that has taken up the task of actually asking the manufacturing firms as to what the true impact of economic reforms has been on them. In the paper, report the findings of a small sample survey of manufacturing enterprises in the Delhi region regarding perceptions of the impact of economic reforms of 1990s. Most firms felt that the reforms were helpful by increasing access to foreign technology and making imports of capital and intermediate goods cheaper. They also felt that improvement in infrastructure and more flexible labour laws will facilitate further growth of India’s manufacturing sector.

An aspect that has remained relatively unclear is which policy changes within the reforms have led to which consequences for employment, incomes and poverty. There is also debate about which further policy changes are required to sustain the increased growth and to strengthen the diffusion of progress to the lower-income segments of the population. Most studies have analyzed the reform impact on macro aggregates, which leaves it unclear how different policies have worked. In the aspect it is useful to investigate at the firm level how different industries were affected by specific policy changes.

Nevertheless, the number of perceptions that dominated the responses in the survey and they form the conclusions. First, the inquiry confirmed observation that the manufacturing sector as a whole did not decline as a result of the country opening its borders to freer trade and foreign investments. The main benefits occurred to industries through the access to new products, technologies and skills, as well as lower costs of intermediate inputs. In some industries the increased competitive pressure led to shrinking profit margins, but others managed to increase profits by adjusting to the new environment. Second, the relative success of the reforms can be attributed to its timing and sequencing, as well as to the fact that they also included internal reforms amounting to reduced regulation. The timing of the trade liberalization was gradual over the 1990s and it was preceded by macro stabilization including currency realignment. Third, although the majorities
of firms in the sample were small firms and not affected directly by the existing labour laws, the need for further reforms in that area was frequently stated. Finally, most firms said that the manufacturing sector faces serious constraints in the form of infrastructure deficiencies in electricity supply, domestic transportation, sea ports, etc. And the government needs to improve the infrastructure to ensure continued future growth of the manufacturing sector.

The economic reforms of 1991 were helpful to most industries by increasing access to foreign technology and cheaper capital goods & raw materials. Most firms felt that improvement in infrastructure and more flexible labour laws will further aid the growth of India’s manufacturing sector.

°C Dimitriu and Savu (2010)° in the Paper ‘Econometric Analysis of Efficiency in The Indian Manufacturing Sector’ analyzed, Performance in the manufacturing sector, in relation to productivity growth, scale efficiency and technical efficiency in India is dichotomous in nature, depending on whether the firm in question functions in the formal or informal sector. The main differences between these two sectors and the changes over a decade are observed and analyzed, using aggregated data for the entire manufacturing sector in India. Using stochastic frontier approach, and therein the maximum likelihood models, efficiency in the two sectors is compared and verified against factors affecting the levels of efficiency obtained for each major industry category. The results are analyzed against realities on ground-level from a socio-economic perspective.

The changing demographics of the developed and developing world are causing a major shift in global manufacturing trends. The ageing population in the developed world is said to be driving the manufacturing jobs to developing countries such as India, which is expected to have the largest percentage of young working age population. In a context where the balance of global manufacturing value added is gradually shifting to developing economies, India needs to tap into this trend at full thrust, instead of being left behind by other emerging market economies like China and Brazil. Productivity-related analyses on the impact of Indian economic reforms of 1991 reveal that there has been significant growth in productivity in many of the Indian manufacturing sectors. The dramatic change in the importance of manufacturing in emerging markets has made it
critically important to understand how the Indian manufacturing sector is moving into the global economy.

The average efficiency has in fact declined in many of the broad industry groups for the unorganized sector from 1994-95 to 2000-01. This cannot be explained by considering external factors such as social unrest or political interference as no major negative measures or events took place across the country; though, some of it may be explained through the different data classification between these years. Besides, considering that the data for organized and unorganized sector between 2000 and 2005 have had the same classification structure, the extremely low average efficiencies for 2000-01 in the unorganized sector are indeed a valid comparison. Therefore, it is clear that government intervention is required to improve the productivity and efficiency of the unorganized sector. Thus, measures being taken by the Ministry of Micro, Small and Medium Enterprises (Government of India) and the National Commission for Enterprises in the Unorganized Sector (NCEUS) for bringing about improvement in the productivity of unorganized sector enterprises are well-founded and should be expanded to full-thrust. So, such measures should at the same time aim to maintain the advantages that come along with the unorganized sector activity (for instance, economies where such unorganized sectors exist do not feel the full blow of economic downturns as it was visible in the current global economic crisis).

Kathuria and Sen (2010)\textsuperscript{19} in the paper ‘Organized versus Unorganized Manufacturing Performance in the Post-Reform Period’ analyzed, the productivity performance of both the organized and unorganized segments of the Indian manufacturing sector using unit level data. Both partial and total factor productivity measures are employed. Analysis reveals that labour productivity has increased for the organized sector over time, whereas both labour productivity and capital intensity growth have slowed down in the unorganized sector during the period between 2000-01 and 2004-05. The improvement in TFP growth in organized manufacturing in the post-2000 period as compared to the second half of the 1990s across most states in India is heartening as also the fact that output growth was mostly productivity-driven in the post-reform period. However, the declining TFP and the increasing capital intensity of the unorganized sector are causes of worry and raise several important questions.
The process of economic reforms introduced since 1991 has witnessed a gradual dismantling of industrial licensing, removal of import licensing for nearly all manufactured intermediate and capital goods, tariff reduction and relaxation of rules for foreign investment. The reforms in respect to the industrial sector were intended to free the sector from barriers to entry and from other restrictions to expansion, diversification and modification so as to improve its efficiency, productivity, and competitiveness. The main objective of reforming the manufacturing sector was to improve industrial efficiency, it would be appropriate to probe how far the reforms have contributed to the productivity performance of the Indian manufacturing sector.

Author analysis reveals that labour productivity has increased for the organized sector over time whereas both labour productivity and capital intensity growth have slowed down in the unorganized sector during the period between 2000-01 and 2005-06. Production function analysis shows that capital rather than labour played a significant role in the production process in the organized and unorganized manufacturing sector. A relatively lesser role was played by labour in the production process in the unorganized sector. This is a cause for concern as this segment is a significantly larger employment provider compared to the organized sector. Total Factor Productivity grew steadily in the organized manufacturing sector while there was a decline in the unorganized manufacturing sector. The declining role of labour in the production process and the falling TFP on the one hand and the increasing capital intensity of the sector on the other, are both causes of worry and raise several important questions. Analysis also shows that the growth in Gross Value Added is mostly productivity driven, not input driven, in organized and unorganized sectors.

2.3.3. Liberalization and Industrial Workers in India

Nagaraj (1994) in the article ‘Employment and Wages in Manufacturing Industries Trends, Hypothesis and Evidence’ examined. The decline in registered manufacturing employment that took place in the 80s is widely believed to real substitution of capital for labour, as the wage rate reportedly increased rapidly because of growing rigidities in the labour market. How valid is this proposition? Without getting into the analytical differences on the relationship between labour market behaviour and economic performance, the study examines the trends in wages and (as a measure of labour
market distortions) the power of organized labour. Reassessing the postulated relationship between earnings, capital intensity and employment, the study suggests an alternative explanation for the changes in employment.

The trade theoretic perspective on the principal problem with India's industrial policy Analyzing Indian experience between 1960 and 1980, Robert E B Lucas attributes low employment growth to import substituting industrialization in general and the policy-induced rigidities in non-agricultural labour markets in particular: "..[a] rising industrial wage has been a significant factor in the observed move toward more capital intensive techniques... Since the scope and coverage of these job security laws has increased through time, it again seems likely that they have contributed to the trend towards reliance on more capital intensive techniques within many manufacturing industries"

Exploring an alternative explanation, it was argued that (i) mainly in response to the macro-economic compulsions of the 70s and the discovery of appropriate natural resources, the composition of output changed in favour of less labour intensive industries, (ii) there was a overhang of employment that had built up during the prolonged period of relative stagnation in the 70s, and, (iii) increasing competition in the product market due to domestic liberalization and increase in the cost of borrowed funds could account for the decline in employment in registered manufacturing in the 80s. It was further hypothesized that there was (a) a restriction on fresh employment in large factories so as to use the existing work force more intensively, (b) shop-floor reorganization and changes in workers' job-content, (c) contracting out of (mostly unskilled) labour-intensive services and farming out of production, and (iv) an increasing use of part-time workers in small firms permitting flexible use of labour.

Ghose (1996) in the paper ‘Current Issues of Labour Policy Reforms in India’ analysis, Should labour policy reforms be viewed as integral components of economic reforms in India? This is a question which is often asked but remains unanswered. In fact, even serious investigations are rare. The obvious reason is that the issues involved are not only complex but also politically sensitive. Yet an open debate on the issues is desirable. Nobody claims that all is well with India's labour policy. Besides, if the economic reforms are altering some basic parameters of India's development strategy, it is only reasonable to suppose that labour policy will need alterations too. And if labour policy is to be reformed, it is surely important to ensure that the costs
and benefits involved are properly understood. This is the context within which this paper considers some major issues of labour policy in India and presents some ideas for reform.

It collective bargaining institutions were fully developed; wage determination in the organized sector could be freed from regulations. Policy reforms, therefore, should be concerned with development of collective bargaining institutions. In the short run, the problem is one of introducing limited flexibility of wages without making real incomes of workers highly unstable. Four kinds of changes need to be considered. First, basic wages should be fully indexed so as to ensure stability of workers’ real incomes; this would remove pressures for frequent and generous revisions. Second, bonus should be viewed as a profit sharing scheme, at least in establishments where profit is a meaningful concept; this would both provide incentives to workers and make labour costs responsive to economic performance of enterprises. Third, periodic wage revisions should take account of growth in labour productivity. Finally, wage revisions in production enterprises should serve as norms for wage revisions in service enterprises and not the other way round; this has implications for the functioning of Pay Commissions and Wage Boards.

In the medium term, employment security regulations will need to be altered. It needs to be recognized that employment security need not be viewed as the only instrument available for guaranteeing income security to workers. However, labour market institutions for dealing with frictional unemployment (which will inevitably arise if restrictions on retrenchment are removed) will need to be developed before the regulations are altered. Policy reforms, therefore, must be concerned with development of such institutions. In the short run, restrictions on job-transfers within an enterprise or a group of enterprises can be removed without undermining workers’ income security.

Elimination of labour redundancy requires development of institutions for efficient redeployment of labour from the organized to unorganized sectors, stimulation of growth of the unorganized sectors and commitment of large resources on the part of the Government. There is, therefore, no alternative to a gradualist approach. Haste can only generate unemployment and poverty.

Gangopadhyay and Wadhwa (1998) in the paper ‘Economic Reforms and Labour’ analyzed, at the disaggregated level of 2-digit industries, the changing pattern
of labour productivity, labour costs and total factor productivity in Indian industry over the period 1973-74 to 1993-94. GIVEN the current technologies available to producers, there are many more factors than simple industrial investment that play a crucial role in a country's economic performance. Much of industrial production especially that targeted towards global markets consists of quality differentiated goods. Physical capital alone is not enough and human capital is an essential element. While physical capital and labour are often complementary inputs, this complementarily is best implemented in the presence of human capital. A manifestation of this can be seen in the growth of labour productivity in economies with trained labour. That increase in labour productivity is, therefore, an important ingredient in the current emphasis on growth through globalization. A more open economy allows access to a bigger (than the domestic) market for its products, as well as to obtain raw materials from the cheapest source. The former is, however, only possible if the country is able to compete with other potential sellers. Since most developing countries start by exporting relatively more labour-intensive products, growth in labour productivity becomes a necessary goal.

Employment growth has slowed down between 1973-83 and 1984-93 for all industries except textiles (26), leather (29), metal products (34) and other manufacturing (38). Rate of growth of wage earnings has also been falling in all industries except the four listed above. Slowing down of both employment and wage growth rates are reflected in the falling share of wages in net value added. This share fell between the two sub-periods for all industries except jute. Correspondingly, capital intensity as measured by capital per worker has been going up. Average capital per worker has gone up in all industries between the two sub-periods. What is more remarkable, however, is that the rate of growth of capital per worker is consistently higher in the second sub-period 1984-93.

The capital deepening has been accompanied by gains in labour productivity. Average labour productivity measured by real output per worker went up for all industries between 1973-83 and 1984-93. The rate of growth of labour productivity was consistently higher in the second sub period. Gains in productivity have been associated with falling unit labour costs over the period. The performance of four industries stands out. These are textiles (26), Leather (29), metal products (34) and other manufacturing (38). These are the industries spearheading India's export growth.
In these industries rising labour productivity, capital deepening and falling labour costs were accompanied by a rise in the rate of growth of employment and wages.

Deshpande and Deshpande (1998) in the article ‘Impact of Liberalization on Labour Market in India What Do Facts from NSSO’s 50th Round?’ examined, to highlight the favourable and unfavourable impact liberalization of 1991 has had, in the short run, on the labour market in India. By use of simple before and after comparisons made possible by the publication of the 50th survey round of the NSSO on employment and unemployment in India, the exclusive impact of liberalization is assessed. The demand for labour increased after liberalization but the increase was not shared evenly in rural and urban India between men and women, and regular and casual workers. By and large, the demand for casual and intermittent work increased faster than for durable, regular work. The structure of employment moved away from the primary sector for rural men, but rural women lost in employment, real wages and the share of primary sector in their employment increased. Gender-based inequality in earnings of casual workers was reduced but that in the earnings of regular workers increased. Liberalization has affected casual workers, particularly the women. Casual workers are more favorable than regular workers.

1) Stabilization has been blamed for stagnation in the sectoral distribution of male workers and retrogression in that of the female workers. The criticism is largely misplaced. The drought of 1987-88 forced men and women to move out of primary (agriculture) and into secondary (construction). With normal rains in the following years public expenditure on relief works undertaken in response to the drought was reduced and men and women, particularly the latter, reverted back to the primary sector. The population census shows a ‘marginal fall in the share primary in rural male employment in between 1981-91 and a marginal retrogression in it in women's employment. In contrast, the NSSO, lauded for its relatively deeper probe by better trained investigators, shows a marked decline in primary sector's share in male and a marginal decline in female employment, between 1983 and 1993-94.

2) Liberalization affected workers defined by their current weekly status more favorably than when defined by their usual status. Employment of intermittent and casual workers increased faster than of those who reported being employed for at least the greater part of the year and much faster than for regular wage/salaried work?
(3) Liberalization of trade, industry and finance had much greater relevance to the urban than rural economy. Consequently, the demand for labour increased substantially after liberalization in cities. The workforce participation of men and women increased and rate of unemployment declined. Numbers employed of regular wage/salaried and casual workers all increased substantially and so did their real earnings. This explains why urban poverty declined faster than rural after 1991.

(4) Rural women, classified as workers by their usual status, formed a smaller share of their population after liberalization than before. Regular wage and salaried women workers in them, enumerated in the usual status, lost absolutely. Fewer of them were employed and mostly on wages that failed to buy for them the basket of goods they bought before liberalization. They formed 4.9 per cent of the rural female workers in 1987-88 and 3.4 per cent in 1993-94. The losers were few and could have been caught in a safety net if one were in place and not only on paper.

(5) Gender-based wage differentials widened among regular wage/salaried rural and urban workers. Women were paid less than men both before and after liberalization but much more so after than before. In all other types of work gender-based wage inequality was reduced. Keeping gender constant, the casual worker's wage formed a higher share of a regular's after liberalization than before. These conclusions run counter to the fears most critics of liberalization had expressed regarding its impact on the labour market.

Alam and Mishra (1998) in the paper ‘Structural Reforms and Employment Issues in India: A Case of Industrial Labour’ examines, though employment has been an issue of considerable concern to development planners irrespective of the development strategy adopted it has yet to be subjected to an in-depth analysis. The study discusses the employment and labour-market issues in the context of the liberalization of the economy and reveals a grim employment scenario marked by an alarming rise in the incidence of unemployment and deterioration in the quality of employment. It points to the need for evolving a comprehensive strategy with an inbuilt economy-employment and HRD link up through well planned policy interventions.

The current economic wisdom-embedded in structural reforms and liberalization at its core-seeks to minimize the public role in the creation of job opportunities on a large scale through various fiscal or market interventions and
expansion of public enterprises. Indeed, the ongoing reforms may as well allow the market to become a major determinant of the factor composition within the strict parameters of efficiency both price and technical and competitiveness. In sum, structural adjustment raises significant employment and labour market issues with wide ranging repercussions for the country. Some of these are listed below:

i) Displacement of certain categories of labour due to likely changes in the structure of employment,

ii) Further slowdown in labour absorption capacity of the Indian economy due to the growing flow of labour augmenting technologies and rising automation etc.

iii) Loss of direct and indirect employment due to the 'exit' liberalization and closures of sick industrial units, particularly if re-deployments do not match the magnitude of retrenchments (which is considered as more probable);

iv) Informalization of employment;

v) Likely erosion in the bargaining capacity of trade unions (TUs) in view of the 'exit' provisions—particularly in the case of unions which are smaller and have fewer members;

vi) greater intensity of skills among small industrial units due to the fast emerging micro-electronics and bio-technologies including bio-engineering, and

vii) Higher time-lag required to make adjustments between ongoing changes in the economy and the labour market due to the existing rigidities and/or poor market information system.

There is deterioration in the quality of employment. Two reasons underlie these observations: The first is based on the past trend of employment deceleration in the economy regarded mainly as the outcome of certain pre-liberalization policies, investment decisions, factor price distortions, trade union activities, labour laws, rigid market mechanism, etc., which have had the combined effect of severely curtailing labour absorption in most sectors of the Indian economy. This is clearly visible from the successive decline in sectoral employment elasticity’s. The second is that deceleration in the use of labour has not remained confined to large-scale industries; but is observed in the small sector.

The problem of unemployment arising both from lapses in the earlier policy regime and for the current reforms is likely to aggravate if the exit provisions become fully operational. These provisions, described more explicitly comprise measures to gradually withdraw state support to unprofitable public enterprises, closure of sick
industrial units under certain conditions, and retrenchment of excess/obsolete workers on efficiency considerations. While these measures are indeed justifiable on economic grounds their effect, both in terms of redundancies and labour vulnerabilities, may be enormous. Given a very high incidence of (non-viable) industrial sickness-up to over 80 per cent in the small-scale sector alone their closure might cost more than two million redundancies. The paper further argues that the training needs for re-deployment of only a fraction of those retrenched or likely to become unemployed due to the closures may not be easy to meet. Several factors ranging from the training cost and its sharing among different beneficiary groups to the employers' willingness to impart training and employee’s propensity to skill adaptability would need to be considered for meeting this requirement.

The level of unemployment in India remained stubbornly high with prospects of its growing further (especially if the growth of GDP remains slow over the coming years), certain observations are made about their possible implications for the labour market and its clearance mechanism. The need for labour market adjustments and flexibilities also discussed. There are perhaps three possible options for handling the situation:

i) To follow an approach similar to that in the past which allows for the labour market imbalances to persist,

ii) To leave the entire employment issue to market forces with the possibility of excess labour getting absorbed in agriculture or agro-based and other low quality informal economic activities, and

iii) To evolve a strategy with an inbuilt economy-employment-HRD (particularly skill formation) link up with the help of certain well planned policy interventions.

The last option which requires: (i) an industry mix favouring employment generation, (ii) manpower and skill formation consistent with the emerging requirements in the labour market (expansion of IT education may be one example), (iii) improvements in the quality of technical and other higher education and (iv) modifications in certain labour laws to ensure higher productivity and work discipline.

Nambiar, Mungekar and Tadas (1999)\(^{25}\) in the paper ‘Is Import Liberalization Hurting Domestic Industry and Employment?’ assesses, the theory says that freer trade encourages economic activity and hence raises production and employment. Is
this true in the Indian case? This article examines statistical evidence to answer this question. It finds that since liberalization, trade has shrunk India's manufacturing base both in terms of value addition and employment. The intermediate and capital goods industries have suffered more. Manufacturing is also shifting from high-skilled and capital intensive production to low-skilled and labour intensive production. Existing wage disparity between skilled and unskilled workers has worsened.

The adverse impact of import liberalization is more pronounced on intermediate and capital goods industries than on the consumer goods industries. Again, between the two affected categories the capital goods sector is worst hit. Since the intermediate and capital goods industries have relatively large income and employment generating linkages, their erosion would have a direct negative effect on value added and employment. Further, their erosion also implies the erosion of India's industrial base.

High-skilled workforce in the manufacturing sector claims a relatively larger share in the manufacturing wage-bill at the cost of semi-skilled/unskilled workers. Among other things, this is widening the existing high wage disparity. Most of the debate on economic reforms, economists, policy-makers and industry associations in India are sharply divided on the desirability and pace of import liberalization. However, tend to argue that with respect to import liberalization 'yes' or 'no' positions are equally damaging. There is no denying the fact that India's pre-1991 industrial policy, was unduly protectionist more so prior to 1980s. Though such policy, among other things, helped the country to lay a sound industrial base, it cannot be disputed that it created a sheltered market for Indian industries, exempted them from foreign competition, brought a sense of complacence and ultimately resulted in 'high cost' and 'poor quality' industrialization. This 'high protection-high cost-poor quality' syndrome needed to be corrected by import liberalization. But the important question is about the nature and pace of import liberalization and the areas of import liberalization. This calls for a strategic approach towards trade and industrial policy to secure a sustained increase in industrial output and employment as also to protect India's industrial base without sacrificing efficiency.

Goldar (2000) in the paper ‘Employment Growth in Organized Manufacturing in India’ analyzed, Employment in organized manufacturing sector in India was stagnant during the 1980s, but grew in the 1990s. The article analyses ASI data to find that this
growth was due to the change in the size structure in favor of small and medium industries and the slow-down in the growth in real wage.

Employment in the organized manufacturing sector in India remained eventually stagnant in the 1980s. In sharp contrast, there has been a substantial increase in employment in this sector in the 1990s. Between 1980-81 and 1990-91, employment in organized manufacturing grew at the rate of only 0.53 per cent per annum. In the next five years, 1990-91 to 1995-96, the growth rate was much higher at 4.03 per cent per annum, comparing favorably with the growth rate achieved in the 1970s (about 3.8 per cent per annum between 1970-71 and 1980-81). In the period 1990-91 to 1997-98 (the last year for which data are available), the growth rate of employment in organized manufacturing was 2.69 per cent per annum, well above the growth rate achieved in the 1980s and higher than the growth rate of the labour force.

The new liberal economic policy regime marked by increased competition on the one hand and greatly improved access to foreign technology and imported capital goods on the other should create among the industrial firms a drive towards the adoption of advanced technology which is likely to lead to increasing capital intensity of production. Also, as competition intensifies, industrial firms may try to save cost and become more competitive by cutting down employment, especially those firms (e.g., public sector units) which had, at the time the reforms began, a good deal of overstaffing. It needs to be emphasized that these adverse effects may be quite strong and may even outweigh the favorable effects of economic reforms on industrial employment.

The growth rates of output and real wages had a significant effect on employment growth. The finding of a significant negative relationship between growth rates of real wages and employment, as also between changes in the growth rates of these two variables, indicates that the decline in the growth rate of real wages in the 1990s was one of principal causes of the acceleration in employment growth. As regards mandays per employee, no significant relationship is found between this variable and employment growth. It appears therefore that the growth in mandays per employee was not a major cause of the stagnation in employment in organized manufacturing in the 1980s, nor can it provide an adequate for the acceleration in employment growth in the 1990s.

While employment in organized manufacturing sector remained virtually stagnant in the 1980s, there has been a marked acceleration in the growth of
employment in the 1990s. Acceleration in employment growth is found both at the aggregate level and for most industries. This may partly be explained by changes in the size structure in favour of small and medium-size factories. Another important explanation for the acceleration in employment growth seems to lie in a slowdown in the growth in real wages.

Unni (2002) in the paper ‘Economic Reforms and Labour Markets In India: Organized and Unorganized Sectors, examines, the notion of flexibility was endorsed by the Washington consensus with its focus on economic growth, mainly gross domestic product, and the improvement of resource allocation, through trade liberalization, privatization and stabilization. The emphasis on adjustment policies under this consensus had relegated the discussion on inequality to the sidelines, notwithstanding a greater concern for poverty in the 1990s. One view was that the best way to tackle poverty is to grow out of it. The other regarded measures to reduce inequality detrimental to growth and therefore not warranted during the periods of adjustment when the emphasis was on reviving growth.

Labour market policies in a country have three goals: improving the allocative efficiency or matching demand and supply of labour; improving the dynamic efficiency or improving the quality of the labour force; and improving or maintaining a sense of equity and social justice among labour force participants. Labour market policies emphasized only the allocative function of the labour market and ignored the dynamic, equity and social cohesion functions. The consequence was that in many developing countries, the reform policies put great strain on the workers. The theoretically expected decline in income inequality between low-skill and high-skill workers did not take place and frequently human capital investment to improve skill levels decreased.

The period after the introduction of economic reforms was a period of rapid growth in the Indian economy. In more recent years, however, recessionary conditions are being felt in the economy. Since 1995-96 the growth of the tertiary sector has actually helped to buoy up the growth of GDP while recession in the economy hit mainly the manufacturing industry. In such a situation the growth of final trade services and entertainment services such as modern retailing, hotels and tourism related services and other services like education and health become important. These
economic activities are not dependent on the manufacturing sector and have logic of growth of its own.

A dynamic element was introduced in the economy with reforms in an effort to achieve more flexibility in the system. The introduction of flexibility in the labour market led to some displacement of labour and an informalization of the labour force. It also led to increasing divergence in the labour productivity and earnings in the aggregate. Thus, overall there was an increase in differentials in both labour productivity and earnings indicating deteriorating labour market conditions in the economy as a whole.

In the manufacturing sector some positive linkages have observed between the organized and unorganized sectors. The possible led to relatively less divergence in labour productivity and increasing convergence of wage differentials in the recent period. This provides some preliminary evidence that the benefits of growth were better distributed between the organized and unorganized segments in the manufacturing sector. The industry groups within the tertiary sector however, did not show any evidence of such convergence. Modern trade, hotels and other service industries in the organized sector did well in the reforms period, to the exclusion of the unorganized sector.

Deogirikar (2002) in the paper ‘Employment in Unorganized Sector in Maharashtra State’ analyzed, employment pattern in the post-reforms period, have charged in one way or other. The population structure of the country is general and labour force in particular seems to be affected, influenced in regard to economically, or socially, in minor or major degree. The liberalization process has witnessed an upsurge in increase in foreign as well as domestic investment in the industries in India. All the states have been benefited through that investment. Maharashtra state has been significant beneficiary of that process. More investment leads to more and better utilization of resources which also means diversified employment all around. That process of liberalization has already given impetus to be rapid industrialization of the state. Up to August 1999, there were 8283 projects involving an investment of Rs.1, 74, 119 crore to be set up in Maharashtra have been registered with the Government of India. The estimated employment by these projects will generate about 14, 84,520 jobs in Maharashtra. About 47 percent projects will be in Konkan,
region followed by Pune region (24%) and Nasik region (11%) and remaining will be in Marathwada and Vidarbha region.

The industrialization and urbanization in Maharashtra State has accelerated economic development and due to this more and more people migrated from rural areas urban centers, both better income prospects. Author identified another aspect of Industrialization in Maharashtra i.e. employment in unorganized sector. Based on NSS data, it is observed that the three industry groups’ viz. Food products and beverages, wood and wood products and wearing apparels were important in rural areas. These enterprises provided 62.5 per cent employment in rural areas. Secondly, about 57.1 per cent enterprises in urban areas are providing about 52.7 per cent employment in unorganized sector. It is also observed that more than 60 per cent of rural employment in unorganized sector is located in agro based industry group.

It is observed that 97 per cent enterprises were providing employment to only 1 worker in rural area. The percentage of enterprises providing employment to 1 to 2 workers was 60.3 per cent in urban area. Average productivity in urban areas (Rs. 3287 lac) is higher than in rural area (Rs. 1341 lac). Overall observation shows that only three industry groups in rural areas have average productivity more than the state average.

← Goldar (2002) in the Paper ‘Trade liberalization and manufacturing employment: The case of India’ analyzed, from the standard trade theory, based on the Heckscher-Ohlin model, one would expect a favorable effect of trade liberalization on manufacturing employment in developing countries. One would also expect trade liberalization to lead to a lowering of wage inequality in the manufacturing sector of developing countries, as the gap between the wage rates of skilled and unskilled labour gets narrowed. That is because freer trade should induce developing countries to move towards specialization in labour-intensive manufactured products, in which they have a comparative advantage, and shift away from the production of capital- and skill-intensive, manufactured products. Inasmuch as the former type of industrial production uses more unskilled labour than the latter, the changes in the industrial structure brought about by trade liberalization will lead to greater demand for unskilled labour and a fall (or relative fall) in the demand for skilled labour. In consequence, the wage rate ratio of unskilled to skilled labour will rise and lead to a reduction in wage inequality.
The export-oriented industries have been less capital-and skill-intensive (more labour intensive) than import-competing industries. India’s trade with developing countries appears to reflect the same kind of comparative advantage as its trade with developed countries. It is found that: (a) export-oriented industries had a significantly higher proportion of women workers (13%) than import-competing and non-trading industries; and the “food, beverages and tobacco products” industry group had an even higher proportion (26%) of women workers; (b) the wage rate in export-oriented industries was lower than that in import-competing and non-trading industries, but the lowest was in the food, beverages and tobacco products industry group. The wage rate in this group was about half the average wage rate of the export-oriented industries, which itself was lower than the average for the manufacturing sector.

An analysis of trends in real wages/emoluments revealed that there was a significant slowdown of growth in real wages in the 1990s (which contributed to accelerated employment growth). The growth rate of real wages per worker fell from 3.15 per cent per annum during the 1970s and 1980s to 1.16 per cent per annum during the 1990s. For real emoluments per employee, the growth rate fell from 2.53 in the 1970s and 1980s to 1.9 per cent per annum in the 1990s. There was also a fall in the growth rate of the real product wage. The slowdown in the growth of real wages was not due to a declining growth in labour productivity; rather, it was caused by a fall in the ratio of wages to productivity. The analysis also showed that the slowdown in growth of real wages in the 1990s was not due to changes in labour composition. One possible explanation could be that the competitive pressures on the economy resulting from trade liberalization and other accompanying economic reforms tended to eliminate the rents associated with the earlier protective trade and industrial policy regime.

On the issue of wage inequality, trends indicated that instead of an increase in the ratio of the wage rate of unskilled labour to that of skilled labour in the post-reform period, it seems to have declined in the 1990s. Overall, inequality in labour remuneration seems to have increased in the period of trade liberalization. But, the initial industrial labour market conditions in India were such that reforms could not have had a particularly favourable effect on the wage rate of unskilled labour which would have reduced wage inequality. If the growth in employment in manufacturing continues at its present pace, it could lead to a tightening in the industrial labour market, resulting in a reduction of wage inequality. At the same
time, it is heartening to note that there are indications of reduced differences between the earnings of men and women workers; the evidence suggests that the average wage rate has grown faster in those industries which employ a relatively higher proportion of women than in industries which employ few women.

Ramaswamy (2003)\(^3\) in the paper ‘Globalization and Industrial Labour Markets South Asia: Some Aspects Of Adjustment In A Less Integrated Region’ investigates the impact of globalization on industrial labour markets in South Asia, study suggests that the impact of globalization on industrial labour markets is mixed. South Asia experienced insignificant sectoral shifts in labour allocation with positive net employment growth in manufacturing; informality in the manufacturing sector did not undergo any substantial change in 1990s. A marginal increase in the proportion of low quality jobs through informalization is observed. Real wages in formal manufacturing sectors declined. Within the formal sector, contrary to expectation, employment growth was positive import substituting industries. The overall wage inequalities increased thereby widening the gap between skill and unskilled labour. That indicates an increasing premium for skill in these countries. The overall evidence suggests that industrial labour markets in South Asia have shown sufficient resilience to adjust to globalization trends.

The study of South Asia would be instructive for two important reasons; firstly, labour markets are segmented into formal and informal sectors. Studies of the impact of liberalization on in formalization are limited. The labour market institutions and interventions are similar across South countries. Moreover, they have not been subjected to reform during the period. This provides an opportunity to study the labour market outcomes of trade reforms in the absence of labour reforms. Focus attention on the manufacturing sector, as it has been the leading sector in the process of globalization. It is also the sector that is most subjected to tariff and import liberalization measures in these countries. Focus attention on aggregate employment effects, and on trends in informalization in order to assess the quality of employment created and wage inequality in the formal sector during the period of globalization.

The outcomes in South Asia are strongly linked with the growth of world trade in textiles and clothing. Access to developed country markets and the growth of world trade in textiles and clothing remains overwhelmingly significant for South Asian labour markets. One need only to remember that, Bangladesh enjoyed unrestricted
access to EU markets during the 1990s. The 1990s, when trade liberalization was carried out in South Asia, also signify the period during which world trade in manufactures slowed down. Market access issues remain critical for South Asia and its labour markets.

Secondly, one has to consider the resilience of labour markets to adjust to changing market conditions. Downward adjustment of real wages was observed in all the five countries of South Asia. Labour market regulations are more restrictive in Sri Lanka than in India with Bangladesh has relatively flexible firing regulations. Informalization did not show a rapid rise in Sri Lanka and in the Indian clothing industry with fast growing exports. The formal private sector in Sri Lanka continued employment expansion. In India, formal sector firms responding strategically with greater employment of contract workers. The results are consistent with the viewpoint that labour markets are observed to work tolerably well under different more conditions.

Thirdly, labour market outcomes are sensitive to the labour intensity of sectors attraction and receiving foreign direct investment (FDI). Sri Lanka appears to conform to standard textbook predictions with rapid labour-intensive exports, employment growth and declining wage inequality. FDI in Sri Lanka has been export-oriented. India represents a contradictory outcome with slower export growth, employment growth in import substituting industries are growing wage inequalities. India seems to have attracted relatively more of market-sector rather than efficiency-seeking FDI. Putting in place policies to attract more of efficiency seeking FDI remains a challenge for South Asia.

Fourthly, South Asia needs investment in education to counter the growing skill was gap. Globalization has definitively contributed towards wage inequalities between skilled and unskilled labour. Investing in education to augment the supply of skilled labour and enabling, it to catch up with demand is critical to be labour market performance.

⇒ Mitra (2003)\textsuperscript{31} in the paper ‘New Technology and the Indian Labour Market’ analyses the impact of mechanization, globalization and computerization on the Indian labour market. Mechanization is shown to have a positive effect on real wages but adverse effect on wage dispersion, which varies in sign from industry to industry. It has a positive effect on the number of working hours and a welcome negative effect
on the injury rate. Labour turnover rates have not increased in India with mechanization. This might be due to the increasing muscle power of labour unions. Computerization and mechanization also facilitate stability of leadership in the workforce, an increase in participation by women in the workforce as well as easier and cheaper job search.

Computerization and mechanization also affect the workforce in different ways by increasing the productivity of labour, increasing the potential number of working hours because of the use of electricity, and leading to practices such as Internet surfing at work. It must be acknowledged that the last factor is not very significant for a developing country like India. The average number of hours in a work week has increased by around 20 minutes from 1982 to 1998. The regression of length of the work week on power consumption per capita reveals that an increase in power consumption per capita by 100 KHz leads to an increase in the work week by around 20 minutes. The impact of mechanization and globalization on labour turnover is usually expected to positive, but in India labour turnover has declined significantly over the last two decades. This can be attributed to the increasing muscle of labour unions, as revealed by a sharp increase in their real expenditure.

There are other qualitative changes at the workplace, which can be attributed to mechanization and computerization. The boss in a firm can always remain in touch with his staff providing stability of leadership. Job search has become easier, cheaper and quicker because of the Internet. One of the most important consequences of computerization is the possibility of working from home. This is very important in the Indian context where women are expected to give first priority to child-rearing and house-keeping. The possibility of working from home might lead to an increase in the participation of women in the workforce and an increase in the overall size of the workforce.

As far as mechanization, computerization and globalization are concerned, the Indian economy is still in its infancy. India consumes barely 5 per cent of the power consumed per capita in the US and less than 7 per cent of the commercial energy per capita. The percentage of Internet users in India is one-sixtieth of that in the US. Expect large increases in mechanization and computerization in the future and more.

Mazumdar and Sarkar (2004) in the article ‘Reforms and Employment Elasticity in Organized Manufacturing’ examined, Three periods may be
distinguished showing large variations in employment elasticity in Indian manufacturing. The first period (1974-80) with an elasticity close to unity, the second (1980-86) with a negative employment elasticity (jobless growth'), and the third (1986-96), the `reform period' when employment started to recover along with an enhanced rate of growth of output, although employment elasticity did not reach the levels of the first period. The causes of the varying elasticity’s are diverse, but the decomposition analysis reported in the paper can throw some light on the relative importance of different factors affecting the variable.

The expansion of industrial manufacturing alone cannot be expected to solve the unemployment and underemployment problem in most developing countries. A manufacturing sector employing 20 per cent of the labour force would need to increase employment by 15 per cent per year merely to absorb the increment in a total workforce growing at an annual rate of 3 per cent. The required rate of increase of manufacturing output is even greater than 15 per cent if increases of labour productivity were taken into account. In the light of these orders of magnitude, the contribution of the industrial sector to employment growth over the last decade has been disappointing in many developing economies. In a number of countries in Latin America and Africa, despite significant investments in manufacturing, employment in the sector grew less rapidly than population, and in some cases even declined in absolute terms

The share of manufacturing output in GDP has grown from 10 per cent in 1951 to 33 per cent in 1991, in which the share in employment has grown from 11 per cent to 16 per cent. The issue of low employment elasticity takes on added significance because India, like many countries in Africa and Latin America, has undertaken serious deregulation of the economy. While the growth in output and productivity that often accompanied these reforms has been welcomed, the low level of job growth has generated skepticisms regarding allocation of the benefits. This is specially so because the wages in the modern manufacturing sector are already so much above those in the household, informal manufacturing and service sectors. If labour absorption continues to be slow in the high wage sector, population growth is bound to increase this gap as new job seekers increasingly press for absorption in the informal sector.

The reform period saw a much higher growth rate of output. But the rate of growth of the real wage bill was diminished by (a) the continued/adverse movement
of the DRER and (b) by a significant fall in the share of wages. Nevertheless both employment and real wage growth were significantly positive, but the trade-off had clearly swung to employment growth. A remarkable development was a change in the size structure of industry with the share of SMEs increasing at the expense of the large sector employing 1,000 or more workers. This shift in employment to smaller enterprises seems to have taken place across the board in most industry groups. Author applied the decomposition analysis to different size groups separately. Wage growth was favoured more than employment growth in the smallest and the largest size groups. This outcome probably has separate explanations for the two classes of firms. The wage growth bias in the small (10-49 workers) firms is partly the result of increase alternative earnings of labour in the informal sector (and perhaps also efficiency wage considerations as some of these enterprises began to access higher quality markets), while the largest enterprises (1,000+) continued to show the power of ‘insiders’. It is found that there was inversely related to enterprise size groups, so that the most significant fall in the share of labour was witnessed in the two largest size groups (500-1000 and 1,000 + workers). This was a contributory factor in reducing employment elasticity in these firms. Thus taken in conjunction the bias towards wage growth in the 1,000 + enterprises the growth rate of employment was actually negative in this group.

The reasons for the decline in the share of wages, particularly pronounced in the larger enterprises, require more detailed research based on firm level surveys. The contrast in the experiences of the 500-1,000 and the 1,000 + groups - with the wage-employment trade off tilting to employment growth in the former, but wage growth in the latter, suggest that the phenomenon might not have originated entirely in changes in the labour market. There were important developments in the market for capital and finance. The high investment ratio which followed these developments might have induced a fall in the wage share, and would have affected the larger firms more strongly.

Aggarwal (2004) in the paper ‘Labour Quality in Indian Manufacturing: A State Level Analysis’, provides the educational composition of manufacturing workers in 18 states of India during the last four NSSO rounds on employment and unemployment, covering the period 1983 to 1999-2000. It finds that manufacturing workers are more literate today than they were in 1983. It also presents a labour
quality index based on the Jorgenson, Gallop, and Fraumeni methodology for both the rural and urban sectors of the states. The labour quality indices show that quality changes have been quite slow and there is a lot of variation among states in both the rural and urban sectors. The association of the labour quality index with the state's characteristics is found to be weak, but the urban labour quality index has stronger links with the human development index of the states, urban poverty ratio of the state, number of ITIs, and the intensity of industrialization.

With the opening of the economy to external competition, the foreign direct investment (FDI) and the phasing out of the quantitative restrictions (QR) regime, the achievement of a higher level of competitiveness in the Indian manufacturing sector has assumed major significance. In order to attain higher economic growth, each state in India is vying for the attention of investors, both domestic and foreign. However, investors generally tend to march towards those states where a higher level of physical infrastructure and skilled manpower, which is adequately educated and trained in the latest developments in technology, is available. Manpower is considered as one of the most fundamental resources. High education and skill levels have become essential factors in attracting investment from external sources; such as multinational corporations (MNCs). The quality of labour and its composition is also a matter of concern in the context of productivity measurement, as it provides not only a more accurate indication of the contribution of labour to production, but also of the impact of compositional changes on productivity. It would be thus desirable to combine the changes in the number of workers and their composition so as to measure the labour input more accurately.

The results of the analysis for the states clearly indicate that, generally, manufacturing workers were more literate in 1999-2000 than in 1983, but a lot of variation is found among the states - both in rural and urban areas. One also notices that, as expected, urban manufacturing workers are more literate than their rural counterparts. Similarly regular/salaried workers are generally more literate than casual and other workers. The labour quality index for rural and urban sectors also provides evidence that the quality of manufacturing workers has improved over the period. However, the quality changes have been quite slow. The index reveals that except the two smaller states of HP and Goa, the index has consistently increased for all other selected states. During the period, the states of MP, TN, Gujarat, UP and Orissa have achieved high ranks in labour quality changes. But at the other extreme is the case of
Punjab, West Bengal, Maharashtra, Goa and AP that have been low in quality rankings. Also find that while some states like Haryana, Himachal Pradesh, TN, Kerala, Maharashtra and Gujarat in the case of rural workers and Karnataka, Delhi, TN, AP, UP, MP and Rajasthan for urban workers showed remarkable improvements. The others like Assam, Punjab and West Bengal could not make much headway. A comparison of the rural and urban quality index of states also shows that the improvement in quality index is more in the urban sector for the states of AP, Goa, Karnataka, MP, Punjab and Rajasthan.

RoyChowdhury (2004) in the paper ‘Globalization and Labour’ analyzed; the discourse on labour in the era of globalization has gone in several directions. A central question has been ignored by this literature: in a period of mercerization, labour is disempowered on several dimensions: the numerical decline of the organized workforce; weakening trade unions; and, frequently, the politically right-ward turn of social democratic parties which shift to neo-liberal, market oriented policies. This essay provides, in brief outline, a discussion of some important shifts in labour's position in the current era when the economic policy framework has been pulled gradually, but definitively, towards greater measure of integration with markets, both domestic and global. In particular, the focus here is on the shrinking of the organized sector, the world of informal labour, inadequacy of social security nets, and the changing dynamics of trade union functioning.

Indian labour and globalization present a complex scenario. The essential question is the state's relationship to labour. It is, however, important to remember that in the pre-reform era as well, organized labour constituted a miniscule percentage of India's massive labouring classes. The state was bound to this small organized sector by a plethora of laws and institutions, which guaranteed organized labour's rights to job security, regular wage revisions, retirement and other benefits. The vast unorganized sector was unprotected in these terms. The cluster of welfare provisions - education, health care, housing, public distribution system and so on - through which a state can aid working classes who do not have guaranteed access to continuous employment and minimum wages was absent in the pre-reform era as much as in the post-reform era.

Indrakant and Kumar (2005) in the paper ‘Impact of Economic Reforms on Industrial Workers’ observed, Economic Reforms were introduced in India in early 90's
to overcome the economic crisis faced by the country at that time by improving the
efficiency of the economic system and by introducing an element of competitiveness
into the system. The available evidences indicate that the short-term objectives at least
partially seem to have been achieved. Concerns have been voiced regarding medium
and long-term implication of reforms. It is feared that reforms may adversely affect the
conditions of people belonging to the lower rung of the society and this may widen the
existing inequalities between the rich and the poor. In this context it is worthwhile to
examine the impact of reforms on the industrial workers in terms of employment
opportunities and emoluments.

The economic reforms have not had any negative impact on the growth rate of
employment for industrial workers and supervisors. Wage rates for both categories
have also grown in real terms. In the post-reform period the salaries of the supervisors
have grown marginally slower when compared to the wages of the workers. However,
due to the lower base of wages, the absolute difference in the earnings of supervisors
and workers has grown. An interesting funding has been that there are large inter-
industry differences in all the variables described above. The wage rate of workers has
been positively and significantly affected by the rise in the wholesale price indices
and the labour productivity.

In days to come, the distinction between organized sector and unorganized
sector is likely to disappear. Even in organized sector, the workers (including bank
employees) are hired on daily wage basis. This trend would become stronger in the
days to come. It is true that no economic system can bear the burden of
inefficiency forever. For the growth of a system, efficiency must be rewarded and
inefficiency must be penalized. Objective criteria must be ensured a reasonable
income (which serves as a base) and the increments in salary must be linked to
performance.

The negative impact of reforms can be minimized with strong social security
system. Reforms without social security are more harmful than no reforms.
Therefore, it is the responsibility of the state to build a strong social security
system along with the economic reforms.

Banga (2005) 36 in the Paper ‘Impact of Liberalization on Wages and Employment In
Indian Manufacturing Industries’ estimated, the impact of liberalization on labour
markets, and examines the impact of foreign direct investment (FDI), trade and
technology on wages and employment in Indian organized manufacturing industries in the post reforms period. To capture labour market rigidities that exist in India, i.e., lack of flexibility in wage setting and rigid hire and fire policies, the study estimates dynamic panel data (DPD) model using generalized method of moments (GMM). The analysis is undertaken for 78 three-digit level industries. The impact of technology is captured through three components, which are research and development intensity, import intensity of capital goods and import intensity of soft technology. An index for technology acquisition is also constructed using principal component analysis to estimate the impact of technological progress. The results show that FDI, trade and technological progress have differential impact on wages and employment. While higher extent of FDI in an industry leads to higher wage rate in the industry, it has no impact on its employment. On the other hand, higher export intensity of an industry increases employment in the industry but has no effect on its wage rate. Technological progress is found to be labour saving but does not influence the wage rate. Further, the domestic innovation in terms of research and development intensity has been labor utilizing in nature but import of technology has unfavorably affected employment. An immediate policy direction that emerges from the study is that to improve the employment potential of the economy trade should be encouraged and higher incentives should be generated for attracting FDI into export-oriented sectors. As the economy opens up, cost adjustments become increasingly important and flexibility labour laws are required to facilitate cost adjustments.

The cross-industry analysis shows that FDI, trade and technology have differential impacts on wages and employment. Higher FDI in an industry does not lead to a higher employment levels but has a significant positive impact on the wage rate of the industry. On the other hand, higher exports in an industry improve its employment levels though have little impact on the wage rate. While, higher extent of technology acquisition in an industry is found to have an unfavorable impact on the employment levels and no impact on wages. The results are arrived at by controlling for industry-specific effects.

The study shows that, to improve the employment level in the organized sector efforts are needed to attract FDI in the export-oriented industries. That will also help in improving the skills of the workers in this low-skilled sector. FDI can be encouraged in this sector by reducing the relative cost of production of foreign firms.
in this sector. Provision of better infrastructure like cheap electricity and better transport & communication can go a long way to reduce cost of production for foreign firms and that may put India into their value-chain of production. However, one of the obstacles in attracting FDI in the export sector is the rigid labour laws that do not allow employment-wage rate relationship to work in the Indian organized sector. With relaxed labour laws and higher education and training of labour in India, higher FDI is expected to flow into the export sector.

It concludes that the different components of liberalization may have differential effects and they may not necessarily lead to higher social costs. In order to minimize the social costs involved, developing countries like India need to undertake labour market reforms and remove artificial rigidities that exist in their labour markets.

Bhandari and Heshmati (2005) in the paper ‘Labour Use and Its Adjustment in Indian Manufacturing Industries’ examined, an empirical investigation of the adjustment process of labour in Indian manufacturing industries, which evolved through structural transformation in the era of globalization. The analysis is based on a dynamic model applied to a panel of 22 two-digit manufacturing industries for the time period of 22 years covering 1980-81 to 2001-02. Assume that as competition increases industries adjust their employment to a desired level which is both industry and time specific. The results indicate that the manufacturing sector has shown a considerable dynamism in adjusting its workforce. The long run labour demand responds greatest to the output, followed by capital and least by wages. It is observed that Indian manufacturing is not inefficient in labour use as modest speed of adjustment has led employment size closer to the optimal level.

The impact of structural reform on labour is a contentious issue. The advocates of reform believe that the removal of legislative and institutional constraint has helped in achieving labour market flexibility and also increased employment potential. The antagonist of reform associates economic reform with employment loss because of large scale restructuring of enterprises to achieve competitive advantage. Overall the employment generating potential of the organized manufacturing industries witnessed a significant drop over the past three decades, although it recovered to some extent after the reforms were undertaken. There was a marked acceleration in the employment growth during the first half of 90s, which might be thought as a
result of economic reforms. Total share of manufacturing workers to the entire workforce recorded a decline from 16.8% in 1977-83 to 15.3% in 1983-88 and then declined further to 8.5% in 1988-94. In contrast, between 1994 and 2000 (reform period) employment share has bounced back to 13.9%.

The results show that the mean labour demand elasticity is greatest with respect to output followed by capital and least by wages. Own price labour demand become more elastic in the post reform period, which can be explained by growing informalization of the workforce through casualization and contract recruitment, resulted in weakening bargain power of labour unions particularly in the labour-intensive sectors. Increased labour demand with respect to output implies that larger output growth generates larger employment opportunities. Capital and labour have complementary relationship in manufacturing industries. Declining capital elasticity implies that fewer jobs were created over time with the increase in capital stock. Lowering up of tariff rates after liberalization lowers relative price of capital, which leads firms to use more capital than labour in the formation of new production capacity. The rate of technical change is capital using and labour saving in nature. But technical change is more progressive in the post reform period. Opening up of the economy have forced firms to adopt modern technology to pay more attention on quality, price etc.

The issue of labour use efficiency and labour market flexibility is described by the speed of adjustment and the optimality ratio respectively. Results indicate that, overtime, including both pre and post reform periods, employers were capable of adjusting their employment size closer to the optimal level. The speed of adjustment is marginally higher in the post-reform period compared to the pre-reform period, while value of output based estimation suggests labour market become more flexible in the post reform period. Increased speed of adjustment is an indication of high flexibility in labour use. Labour size of Indian manufacturing remains closer to the optimal level in both pre and post reform periods, which indicates that there is no problem of inefficiency in labour use. It is an important signal to the policy makers about how employers evolve its own path of adjustment despite the presence of labour regulations. It seems that there is virtually no impact of job security regulations on employment dynamics. Therefore, the perform rigidities and its effect on the adjustment of labour use are not tenable. Alternatively, in the absence of tight job security regulations the speed of adjustment could have been much higher.
Sharma (2006) in the article ‘Flexibility, Employment and Labour Market Reforms in India’ observed, there is intense debate on labour market reforms in India today. It is argued that but for restrictive labour laws that create inflexibility in the labour market, the Indian economy would have experienced a higher growth of employment. On the other hand, that view is vehemently contested by trade unions and many other economists. The Indian labour market is quite flexible despite so-called restrictive labour laws. However, at the time period, Indian labour laws are so numerous, complex and even ambiguous that they promote litigation rather than the resolution of problems related to industrial relations. A comprehensive view on labour market reforms is required, one that addresses the needs of both employers and workers. The author recommends simplifying and rationalizing the complex and ambiguous extant pieces of labour legislation into a simple code that allows for labour adjustment with adequate social and income security for the workers.

The burgeoning employment in the informal sector, along with its low productivity, low wages, fragile employment and income insecurity, necessitates the regulation of this sector in such a way as to create organized sector-like conditions of higher productivity, better employment and wages. The prevalent abysmal conditions of employment have made the modern informal sector competitive. In the absence of unionization of workers and the enforcement of even minimum labour standards, this sector is inevitably caught in the conundrum of low productivity and low wage equilibrium. This equilibrium needs to be disrupted by ensuring a floor of labour standards in this sector, irrespective of the size of employment of enterprises so that innovation in productivity devices is the only option left for staying competitive in the market. These enterprises may also be protected through other means such as cheap supply of raw materials and an assured market, but not at the cost of productivity and labour standards.

Thus, there is need for a cautious and balanced approach towards labour market flexibility; too much flexibility may be as bad as too much rigidity. The challenge before the Indian industrial relations system therefore is to devise a framework, which combines the efficiency of the enterprise with the interests of the workers. The problem with the entire debate on labour market reforms is that an integral view of labour market regulation is missing. The Industrial Disputes Act, 1947 and Contract Labour (Regulation and Abolition) Act, 1976 appears to rivet the attention of both the employers and labour too strongly to enable them to take a holistic view of
labour market regulation. It goes without saying that labour laws are too voluminous and ambiguous to be effective from the point of view of either labour or capital. This only promotes costly litigation and corruption in the labour departments of state governments. A simple concept of wage has as many as eleven definitions in the corpus of Indian labour legislation. Each piece of labour legislation that needs to be enforced requires the maintenance of a separate register and submission of annual returns to the authority designated in the Act and its rules, which not only costs valuable time and money but also adversely affects the implementation of labour standards, besides ironically making the cost of compliance higher than the cost of violation. Accordingly, a rational businessman would prefer to violate labour laws at the lesser cost of bribing the inspector or paying the measly fine imposed by the courts. In view of the abundant flexibility of the labour market in India.

Sharma and Dash (2006) in the article ‘Labour Productivity in Small Scale Industries In India: A State-Wise Analysis’ examined, based on the latest available NSS (56th round) and ASI data for 2000-01, the paper “examines the structure and composition of Small Scale Industry (SSI) and the productivity differences between the small and large scale enterprises. The paper also explores the correlates of labour productivity in the SSI sector. Moreover, it discovers strong inter-linkages between SSI and large scale manufacturing. Labour productivity in the unorganized manufacturing sector is seen to have an inverse relationship with poverty; implying that measures to raise labour productivity can bring about poverty reduction. Therefore, there is a need for capital investment and technological upgradation in the SSI sector. Analysis reveals that a large number of enterprises in this sector are technologically backward and a substantial number of workers underemployed. Availability of credit has been found to have significant positive impact on labour productivity, especially in urban areas. The paper also finds that the existence of sub-contracting phenomenon does not have much impact on labour productivity; and therefore it is only a short-term measure to raise employment and number of enterprises. Hence, a sustainable level of employment and productivity could be achieved if the state initiates policies to provide social security, marketing facility, technological upgradation, training and skills to workers and above all the infrastructural support to the millions of tiny enterprises in the SSI sector.
The manufacturing sector in India (of which SSI is a major component) has a vital role to play in the overall economic development of the country. It shows percentage share of manufacturing sector in terms of employment has varied between 11 to 12 per cent from 1983-84 to 1999-2000 whereas its contribution to GDP has steadily increased over the years from 4.9 per cent in 1983-84 to 16.8 per cent in 1999-2000 at 1993-94 prices (GOI, 2004). But increase in jobs in the manufacturing sector has not kept pace with the overall growth in the sector which raises some concern. There is a need to devise some strategies, which can reverse the slowdown in growth of employment in the manufacturing sector. Such a strategy becomes more relevant at a time when one of the main challenges before the country is the problem of unemployment, particularly disguised unemployment.

It is because of the role of SSI in employment generation and rural development that this sector has continued to attract attention of the policy makers from the heydays of planning. The role of SSI has been production focused because of the policy makers pre-occupation with employment generation. In the era of liberalization and WTO regime, it is the quality production and efficiency rather than mass production that matters. Promotional and protection oriented measures regarding the SSI have always targeted augmenting employment regardless of productivity of the workers. In terms of industrial safety, pollution control and labour law, the unorganized sector is doing miserably as compared to the organized sector. The country’s industrialization process, however, still has a long way to go before the budding entrepreneurs of today get transformed into big industrialists of tomorrow.

It is seen that overall economic development and policy initiatives of a state tend to influence the composition of small scale industries. In relatively less developed states like Andhra Pradesh, Bihar, Himachal Pradesh, Jammu & Kashmir, Kerala, Madhya Pradesh, Orissa, Rajasthan, Uttar Pradesh and West Bengal the UMS is predominantly concentrated in rural areas. Further, a large number of enterprises in these states are concentrated in the OAME sector. But, in developed states like Gujarat, Karnataka, Maharashtra, Punjab and Tamil Nadu, UMS is mainly concentrated in the urban area and the enterprises in these states are mostly in the DME sector. Analyzing partial productivities and capital intensity it is found that unorganized manufacturing in comparison with organized manufacturing has low labour productivity, high capital productivity and low capital intensity. Further, the results show that labour productivity varies directly with capital intensity and
inversely with capital productivity in most of the states. Relative efficiency of unorganized manufacturing sector is abysmally low in most of the states as compared to the organized manufacturing sector. An increase in labour productivity in this sector can definitely alleviate poverty in rural as well as urban areas of the country. With the help of correlation it is found that labour productivity varies directly with the size of the enterprise and fixed capital. In urban area a positive correlation between fixed capital per enterprise and employment per enterprise shows possibility of employment generation, if capital investment is raised, as they are working as complements in the process of raising labour productivity. It confirms our hypothesis that there is no trade off between employment and productivity in the unorganized manufacturing sector. If the underemployed and disguised unemployed of agricultural sector can be taken care of by way of adequate training, credit facility, latest technology and environment to work, productivity and employment can grow simultaneously. Labour productivity is significantly influenced by availability of banking facilities. A positive correlation though not significant, exists between labour productivity and percentage of enterprises working under contract at combined (rural plus urban) level, positive and insignificant correlation in rural areas, and negative and insignificant in urban areas. Subcontracting phenomenon has, therefore, an insignificant impact on labour productivity. Further there is a need to strengthen the inter-linkages between the two sectors of the manufacturing so as to neutralize the relative efficiency differences between them. To make the SSI productive and efficient in future, policy measures need to be directed towards ancillarization of industries development of clusters, and availability of credit. Finally, it is for the government to take care of marketing and technological constraints of these small enterprises and provide them with the necessary infrastructural support, which has been neglected so far, especially in rural areas.

Rath (2006) in the paper ‘Labour Productivity Determinants in Indian Manufacturing: A Panel Data Analysis’ assesses, the aims at identifying various determinants of labour productivity using a panel data analysis for 15 major states of India over the period 1979-80 to 2000-01. The evidence shows that labour productivity is largely determined by capital-intensity, firm size, skilled manpower capacity utilization and real wage rate. The positive impact of capital intensity on labour productivity signifies the degree of mechanization. The wage rate has a
positive effect on labour productivity, which acts as a powerful incentive for the labour to contribute greater efforts and skills. In turn, states with higher labour productivity range have strong financial strength to offer better wages and finally it leads to better standard of living of the workers. Capacity utilization of the industry has a significant positive effect on labour productivity, which implies that given input resources have been used at the optimum.

The productivity of the labour is one of the important factors in determining the investment decision. However, measuring labour productivity is a difficult task while the factors that determine labour productivity vary with changing industrial environment in different regions. The inter-state disparities in labour productivity are due to a number of quantitative and qualitative factors such as output growth, capital intensity, wages, degree of plant utilization, degree of internal competition, quality of inputs supply, infrastructural facilities, inflation, expected interest rate, expected rate of growth of income, etc.

In the state level study data used to estimate the determinants of labour productivity for the period 1979-80 to 2000-01. The evidence from two ways fixed Effect Model indicates that all the factors are statistically significant with expected sign. It notices that firm size, skill manpower, capital intensity, capacity utilization, and wage rate are found to be essential factors for augmenting regional labour productivity. In the light of empirical results, a need arises to restructure the labour reforms to improve the performance of labour input.

There are several directions in which the current work can be extended. The first is to add some of the important indicators like inflation rate, interest rate, man-days lost, degree of entrepreneurship; then, analyze to what extent these factors influence labour productivity both at disaggregated industry as well as at state levels. Second, instead of taking the absolute figure, the growth rate figures of all the indicators might give better insight into the growth of labour productivity in the long run. Finally, also saw the impact of economic reforms on the determinants of labour productivity in the regional context.

Palo (2006) in the paper ‘ILO’S Key Indicators of Labour Market In Post-Reform India, analyzed, comments on labour market changes consequent upon economic reforms in India by means of twenty key indicators of labour market as recommended by the ILO. Both functional and dysfunctional bearings of economic reforms for the
Indian working class are evident, but the dysfunctional bearings surpass the functional ones.

The labour market conditions in India have changed conspicuously because of privatization, liberalization and globalization policies of the Government of India. The sanguine sides of the change are increasing literacy rate of the workforce, labour productivity, average earnings, etc. However, the menacing sides include declining rate of employment growth, increasing casualization, growing wage inequality index, and many others as mentioned above.

Economic policy changes have imbibed competition into the market for which business corporations are constrained to rummage around new resources and new sites to bump up productivity, diminish cost, and upsurge the bottom line. On the one hand, this new-fangled business approach in conjunction with new economic forces and technological diffusion have created volatility and involvedness in maintaining the employability of large segment of the country's labour force possessing low skills. On the other hand, they do provide room for manoeuvering economic growth and employment expansion. This burgeoning propensity is expected to be fortified in future. Accordingly, the trends are that low skill workers will have to scuffle to acquire a job, highly skilled workers will gain from the increase in the demand for their skills, and that others will have to be retrained to outfit to the emerging demands of the labour market. Since about 44 per cent of the workforce in the country is still illiterate and only 5 per cent has necessary vocational skills, this eventually casts doubt as to how to prepare the labour force of the country to take advantage of the opportunities and encounter the growing demands of globalization and technological changes. No wonder identifies three key issues in this connection, i.e. education, learning, and training.

Therefore, education and training policies in the country are to be given precedence over other issues. A strong correlation between education, productivity and earnings has always been found, and even these new economic forces cannot alter that veracity. In addition, macro policies need to be on target towards building up and developing skills (mainly marketable skills), and designing systems of economic and social security in the country. Even though sarcastic and vituperative of the impact of globalization on lives and economies in the upcoming period, what is irrefutable is that all have to brace ourselves to stumble upon its challenges.
Majumder (2006) in the paper ‘Employment and Wages In The Liberalized Regimes A Study of Indian Manufacturing Sector, assesses, expansion of earning opportunities and increment in earning levels are dual objectives of policy makers in developing countries. The structural adjustment of programme in India tried to ensure both through higher growth targets and manufacturing sector has seen the most sweeping changes. The paper attempts to outline the trends in employment and earnings in manufacturing sector over the nineties, analyze the factors affecting them, and enquire how SAP has affected such associations. It is observed that most of the employment expansion has been in the unorganized sector. Real wages in the factories and micro enterprises have declined, but increased in the mid-sized units. Capital and labour are substitutes for the SMEs, while for the larger firms and factories the relation is complementary. Wages are determined mainly by productivity levels, at least in the larger firms. Rise of the mid-sized units has been most encouraging, implying that proper mix of labour flexibility, resource availability, and scale economies would bring dynamism in the sector.

The manufacturing sector is more crucial than what simply its share in employment and GDP would suggest, and it is pertinent to study the dynamics of this sector, especially after introduction of SAP. The changes have obviously affected output, employment, productivity, profitability, and competitiveness of the sector and while employment and earning opportunities were expected to expand, concerns have been raised over issues like retrenchment, closure, and excess capitalization in face of global competition, and / worsening earning opportunities for workers in this sector. Due to the central position of the sector, such shifts do not remain confined to that sector alone and causes ripple in the economy as a whole, making it the focal point of economic and political tussles. To understand the wage-employment issue in the economy, it is therefore crucial that understand what has been happening in the manufacturing sector, which has the largest share of regular wage employees. With that in mind, in this paper try to outline the trends in employment and earnings in the manufacturing sector in India over the nineties, analyze the factors affecting wages and employment in this sector, and enquire how SAP has affected such associations.

While the emerging linkage between the organized and the unorganized sectors is welcome one should carefully monitor the nature of the relationship. More often than not, such linkages tend to be exploitative where the profits are usurped by the organized units. Instead, policy makers and administrators should evolve
mechanisms so that the linkages bring benefit to both. The expansion of the OAMEs has also to be carefully analyzed, as most of it seems to be of distress nature with resource crunch, low productivity and low wages. Measures for productivity improvement and resource mobilization in the segment alone will not be able to do the trick unless the continuous influx of workers can be stemmed. This requires immediate attention towards revival of the agricultural sector and rural infrastructure creation so that labour displacement from agricultural and related activities does not become disproportionately large. Recently launched National Rural Employment Guarantee Scheme may be one of the instruments to do so. The dynamics of the factory also warrant policy rethink as one must carefully look at the relative real costs of labour and capital and also whether recent shifts towards capital intensive technology in a labour surplus economy is really because of high labour costs as alleged or due to availability of cheap capital to the organized sector. In this regard the non-availability of capital for the SMEs those who could have created more employment are also to be highlighted. Perhaps the most encouraging aspect has been the rise of the mid-sized units, implying that proper mix of labour flexibility, resource availability, and scale economies would bring dynamism in the sector. This experience should mould the future policies for the manufacturing sector. In addition, issues of regional disparity within the manufacturing sector and its close link with regional development levels should also be looked into, especially as growth of the SMEs seems to be following such spatial patterns. On the contrary, dynamics of the large factories have been more industrial activity oriented and hence policies for them should me more industry specific.

While concluding that the impact of SAP on manufacturing sector and the latter's role in job creation and income generation has thrown up new challenges in the recent times, blanket solutions to which are neither possible nor advisable. Integrated yet sector specific policies, encouraging both flexibility and scale economies, removing rigidities while preserving workers' rights, and developing synergic bonds between segments of the manufacturing sector as also between it and the rest of the economy, is the need of the hour.

Dutt (2006) in the paper ‘Labour, Liberalization And Aggregate Demand’ analyzed, contrasting views about the liberalizing reforms in India in general, and about labour markets and their reform in particular, follow from alternative visions of
the development process. The neoclassical vision leads to a favorable view of the result of the reforms and argued for greater flexibility of the labour market. An alternative Keynesian vision, which stresses the role of aggregate demand, is argued to be theoretically more plausible and empirically more relevant for India. This view implies that the reforms, while having some positive effects, have adverse consequences as well and that labour market flexibility may well exacerbate these problems.

Labour occupies a central role in the development process being both a means to and an end of, development. It is little wonder, then, that labour lies at the heart of recent debates about the nature of Indian economic development. These debates have focused on the effects of the recent liberalizing reforms which have occurred in the economy, especially since 1991. One view states that the economic reforms have increased the rate of economic growth in India up from the 'Hindu rate', but this effect would be stronger and more sustained if the labour market could be reformed in a way that makes it more flexible. An opposite view has it that the reforms have worsened the position of workers in the economy by bringing about the informalization of the labour market, worsening income distribution, and by slowing down the process of poverty reduction. These two contrasting views on the balance between positive and negative effects of liberalization on the economy are not necessarily empirically contradictory, since the acceleration of growth can be associated with worsening distributional problems. Nor do they necessarily reflect different views on the goals of development: reform proponents argue for efficiency and growth but also for improvements in "social" indicators, while opponents want distributional improvements as well as growth. What really distinguishes the two views would argue, is that they are implicitly based on contrasting visions of the process of development in general and of labour markets in particular.

The paper has contrasted two views on the effects of liberalizing reforms on the Indian economy, in particular the role of labour markets in the reform process. One is the neoclassical view which focuses on efficient resource allocation and argues that liberalization removes distortions in the economy and recommends greater flexibility of labour markets to increase the benefits from the reforms. The alternative view is the Keynesian one which focuses on aggregate demand and its role in determining output and growth, and which takes liberalizing reforms can have some
benefits for the economy, but some adverse consequences as well, and which implies that labour market flexibility may well exacerbate the negative effects.

Most proponents of liberalizing reforms explicitly or implicitly adopt the neoclassical view. In this they are echoing the views of mainstream growth theorists who take the view that in the long run, full employment prevails and growth is determined by supply-side factors such as saving and technological change, even if in the short run aggregate demand may play a role. This paper has argued that there is little that justifies such optimistic views in terms of macroeconomic theory, so that aggregate demand issues may well be of great relevance for long-term growth. Moreover, unlike what was initially thought to be the case for Low Developed Countries, such issues are relevant for these countries, especially semi-industrialized ones. It also presents a body of empirical evidence to show that aggregate demand plays an important role in India's economic growth experience. Finally, it argues that if take aggregate demand seriously as need to view labour markets and labour reforms differently from the mainstream neoclassical approach. In particular, the exclusive focus on productive efficiency and profitability, and the fascination with labour market flexibility, may well be misguided. Economists concerned with labour issues in India will do well to guard against such mistakes by taking aggregate demand seriously.

Sen and Dasgupta (2006) in the paper ‘Labour in India's Organized Manufacturing Sector’ analyses, dwells on the issue of labour in the organized manufacturing industries in India in the post-reform period. The employment conditions of labour are explored by linking them up to the growth of respective industries. Categorizing industries as high and low growth ones, the paper relates wage, employment pattern (permanent as well as contractual), technology, wage-profit shares as well as labour productivity to the changing structure of industries between the pre and post reform periods. The analysis corroborates in a way the "jobless growth" syndrome in the Indian manufacturing in the post-reform period. On the other hand, rise in capital labour ratio in certain industries has helped displacing labour in the age of globalization. Volatility in employment growth in the post-reform period has also been perceptible. The empirical findings of the study show growing vulnerability of labour in Indian manufacturing industries.
Issues regarding the job-related status of labour concern their means of livelihood. These include, apart from the employment status of the working population, wages and other benefits/costs as are related to the job contract, along with the social sector support they are able to receive from the State, the community as well as the family. Examples of job-related benefits include bonuses, social security (including housing, medical and transport facilities), provident funds, paid leave, and job tenure as well the expectations of getting alternative jobs in the market. The economic and social status of labour is also considerably influenced by the support-system, to the extent available, from state and/or from the social network. For those without a firm job, supports as above remain the sole means of sustenance.

Concerns for labour under market flexibility and related unemployment are often expressed by those who, as opposed to the neo-liberal school, treat the phenomenon as antithetic to what is acceptable and humane in a democratic Society. In addition to that such situations are not economically viable, not only from the angle of sustainability of the labour force but also from the point of view of self-reliant-growth which takes place with expansion of domestic demand.

Labour employed in the organized manufacturing sector of the economy needs to be differentiated from those employed in unorganized activities. The latter relates to agriculture, a sizeable part of manufacturing and most of the services sector. Deal in the paper with labour in the organized manufacturing sector of the Indian economy. Reasons as above have led us select this segment for further analysis, notwithstanding the fact that labour in the organized sector covers as little as 1.6 per cent of the total labour force in the economy. The above segment of the working population can be expected to have a symbolic presence in the economy in terms of labour power vis-a-vis capital and the state. The organized manufacturing sector provides a test case for judging the impact of labour market flexibility since the inception of economic reforms as has been initiated in India during the early 1990s. As an explanation point at the existence of large-scale and old type of industries in this sector with labour better organized and with labour legislation which principle is adhered to. In addition, activities in the manufacturing sector of the economy are relatively integrated with the rest of the world in terms of exportability of their products as well as in providing the target destination of FDIs. Both, as it can be expected, affect the status of labour vis-a-vis capital in the domestic economy. A study of labour in the organized manufacturing sector can thus be of help in throwing light on the status of labour in
the market-led flexibilization regime in the new economy of India over the last decade.

Employment growth has generally lagged far behind output growth, both in industries with high annual average growth rates exceeding 20 per cent and low growth rates at less than 5 per cent. Fluctuations in output levels, which have been common with most industries, are matched by similar fluctuations in employment, often moving in the same direction. Volatility of employment has been prominent even in industries with negative growth rates, an aspect which indicates the extreme precariousness of the job situation. Lags in employment relative to output growth are also reflected in the stagnating wage shares to output, both for the high and the low growth industries. At the same time capital-labour ratios are in the up-trend in most industries, with tendencies to use labour displacing techniques in Indian manufacturing industry. While the lag in employment growth is larger in some of the highest growth industries, share of high growth industry group in manufacturing employment is much less than the corresponding shares of the group of industries with the lowest growth rates. Thus, high output growth industries not only have failed to generate employment growth at the same rate but also have contributed less as their share in total industry employment, as compared to what is contributed by the low growth industries.

Labour flexibilization, as reflected in the share of contractual labour, is high in most industries. Results from primary survey statistics, reflect the prevalence of a growing number of workers with a purely temporary status. In terms of a set of regression results, the predominance of the rising capital-labour ratios as a determining variable for labour productivity. However, the above goes with a negative impact on both output and employment. Thus, technological upgrading, while improving growth rates in labour productivity, failed to raise employment growth. Growth in output as took place, including those in the High Growth industries, resulted from higher fixed investments and the rise in labour productivity. The process has been responsible for keeping wages low as is reflected in the stagnating share of product wages in most industries.

Nanda and Kaur (2008) in the paper ‘Impact of Globalization on The Labour Market In India: Evidence From The Manufacturing Sector’ examine, the impact of trade liberalization on the labour market in terms of wage inequalities in the
Manufacturing Sector’ and its constituent industries during the post-reform period (1990-91 to 2005-2006). The study reveals that wages have increased at a lower rate as compared to exports and imports in all manufacturing industries during the post-reform period. The analysis supported the hypothesis that exports exert upward pressure on wages but rejected the hypothesis that imports exert downward pressure on wages. The hypothesis that export-intensive/firms pay more wages as compared to import-competing firms has also been rejected the inter-industry openness ratio has positively as well as significantly increased while wage inequalities have decreased significantly. However, the trade liberalization has further reduced wage inequalities, though insignificantly, during the post-reform period. Import-competing industries have gained in terms of a wage increase as a result of trade liberalization. These industries are found to be intermediate capital using technology, technology-intensive and skilled labour industries.

Globalization, measured in terms of trade liberalization, is considered an effective tool for Economic development, poverty and income inequalities reduction. Trade equalizes factor as well as product prices. Despite economic gains from trade liberalization, concerns have been raised over the effects of trade liberalization on the labour market in terms of employment and wages because during the process of adjustments, some will be losers and some will be gainers. The direction of job creation depends on comparative advantages relative to the scope for relocating production and jobs. Further, wage formation also depends on the trade position of the country. Empirical evidence shows that export opportunities tend to improve labour market prospects, while the import threat does the opposite. Further, trade liberalization firstly reduces wage inequalities and then increases wage inequalities and as a result, the relationship between openness and wage inequalities is observed as a U-shape relationship.

The study reveals that wages have increased at a lower rate as compared to exports and Imports in all manufacturing industries during the post-reform period. Of the nine industries considered, chemicals, metals and metal products, and the machinery industries continued to constitute a high share in exports, import and wages during the study period. However, as compared to 1991-92, the chemicals and non-metallic industries gained importance in exports as well as in imports in 2005-06, while in terms of wages, the chemicals and the textiles industries gained importance. Simple regression results indicated that exports as well as imports have
significantly and positively affected wages in all industries except the metals and metal products industries (thus supporting the hypothesis that exports exert upward pressure on wages but rejecting the hypothesis that imports exert downward pressure on wages). The hypothesis that export-intensive firms pay more wages as compared to import-competing firms has also been rejected. The inter-industry openness ratio has positively as well as significantly increased while wage inequalities have decreased significantly. Broadly, due to relativity more wages paid by import-competing industries. However, trade liberalization has reduced wage inequalities but non-significantly during the post-reform period. Import-competing industries have gained in terms of a wage increase as a result of trade liberalization. These industries are found to be intermediate capital-using technology, technology-intensive and skilled labour industries.

Bathla and Sharma (2009) in the paper ‘Labour Market In Rural Unorganized Manufacturing: Its Growth, Disparities and Determinants During The Post-Reform Period In India’ examines, using the National Sample Survey (NSS) data (the paper attempts to examine the state level trends and regional disparities in rural unorganized labour markets during the post-reform period and analyses whether there has been any significant change in the determinants of labour demand, wage rate and labour productivity. The analysis reveals that only OAMEs, which occupy an overwhelming share in the number of enterprises, workers and value addition, have experienced a decline in the workforce and continue to be caught in a low productivity trap. The growth performance in rural unorganized manufacturing thus is attributable primarily to DMEs, and at best, to NDMEs. While there have been significant changes in employment, wage rate and labour productivity across all types of enterprises, along with an increase in regional disparities, the analysis does not show much change in the nature of the relationship among the explanatory variables.

The study indicates a phenomenal increase in the number of rural manufacturing enterprises and employment during the period 1994-95 to 2000-01, followed by a negative growth in both during the period 2000-01 to 2005-06, but only in family/self-operated OAMEs. While a downtrend in the OAME workforce is explained by low capital, low income and hence the closure of enterprises or perhaps a shift to NDMEs/DMEs, an increase in the number of workers in NDMEs and DMEs, that too in the agriculturally advanced and better-off states, is related to their
steady performance over the years. However, the most disturbing feature is that these rural OAMEs continue to be caught in a low productivity trap in the situation of either an increase or decrease in the number of workers, besides having an inadequate capital base. Further, the rate of growth of real wages and labour productivity is positive but the pace of growth has got decelerated, raising concerns about the future prospects of manufacturing sector. Moreover, regional disparities have also increased, except in wages, which may be explained by a higher concentration and an uneven pattern of distribution of enterprises and workers, infrastructure and technology the states. The states which are adversely affected include AP, Punjab, Karnataka, Maharashtra, Tamil Nadu, Jammu & Kashmir, Bihar, West Bengal, Orissa, Uttarakhand and UP. The results show that a move to GAME in each state could be related to stagnation in agricultural growth, and is hence distress-driven. But a shift of workers to NDMEs and DMEs, especially in the high/ per capita income states, may be borne out of choice and better opportunities. The result, carried out at real prices for 20 major states, separately in each round and also pooled over the entire period, indicates that employment in rural unorganized manufacturing is significantly correlated with a mix of factors, viz. the wage rate, size, capital intensity, the number of enterprises per ten thousand of population, the agricultural wage rate, agricultural labour productivity, per capita income and rural poverty. The regression analysis provides better results when carried out separately for each of the enterprises, implying significant variations in the nature and growth patterns across these. It indicates that employment in rural manufacturing is significantly determined by the wage rate and income (size of the firm); the wage rate by labour productivity and capital intensity, only in the case of DMEs, and labour productivity by income and capital intensity. The coefficients of dummies in the pooled regression are also statistically significant, implying considerable differences over the period and also across three types of enterprises. Despite significant changes in the growth in employment, wage rate and labour productivity in rural unorganized manufacturing, the empirical analysis does not show much change in the nature of the relationship among the explanatory variables. Overall, the analysis reveals a lopsided development in the sector, indicating that enterprises, mainly the DMEs, have shown improvement during the post-reform period and hence generated higher estimates, which gives rise to the possibility that these units are capable of adopting innovation to be able to efficiently face competition at both the national and international levels.
Goldar (2009) in the paper ‘Trade Liberalization and Labour Demand Elasticity in Indian Manufacturing’ examined, the hypothesis that trade liberalization raises labour demand elasticity is tested for Indian industries, and inter-temporal changes in the elasticity during 1973-74 to 2003-04 are analyzed. Econometric results indicate that trade liberalization in India had a positive effect on the labour demand elasticity. However, the estimated elasticity for the post-reform period (1991 onwards) is found to be lower than that for the pre-reform period. A closer examination reveals a marked upward trend in the labour demand elasticity after the mid-1990s, which seems attributable, among other factors, to trade liberalization, weakening of trade union bargaining power and labour market reforms.

The trade liberalization leads to an increase in labour demand elasticity? This is traceable to a substitution effect and a scale effect. Under competitive conditions, the elasticity of demand for labour of a firm depends on: (a) the elasticity of substitution between labour and other inputs, (b) the price elasticity of demand for the products produced by the firm, and (c) the share of labour cost in total cost of production. Trade liberalization is expected to raise the elasticity of substitution between labour and other inputs since more and better intermediate inputs become available. Opening up the domestic markets to imports is expected to raise the price elasticity of demand for products of domestic firms since there is greater availability of substitutes for any product. Accordingly, one would expect the labour demand elasticity to increase with trade liberalization. This, however, need not always happen. Trade liberalization may lead to a lowering of the cost share of labour because semi-finished or unassembled products may be imported by industrial firms for their use in the production process instead of manufacturing from the raw materials stage, and this may neutralize the effects of increased elasticity of substitution among inputs and increased price elasticity of demand for the products of domestic industrial firms.

Trade liberalization had a positive effect on the labour demand elasticity in Indian industries, the estimated elasticity for the post-reform period is found to be lower than that for the pre-reform period. A closer examination of the data reveals that there was a downward trend in the labour demand elasticity in Indian industries in the pre-reform period, which continued for some years even after the initiation of reforms. It appears that the downward trend in the labour demand elasticity was arrested and reversed since the mid-1990s. Probably the effect of trade reforms
occurred with a lag or the effect became stronger from the mid-1990s. It seems reasonable to conclude that the observed increase in the labour demand elasticity in the period after the mid-1990s is attributable in a significant measure to trade liberalization. Also, other factors such as weakening of the bargaining power of trade unions and easing of labour regulations may have contributed to the hike in labour demand elasticity after the mid-1990s.

Guha (2009) in the article ‘Labour Market Flexibility : An Empirical Inquiry Into Neoliberal Proposition’ observed, There have been proposals to make the Indian labour market more flexible by amending the Industrial Disputes Act, 1947 and Contract Labour Act, 1970. But the Indian labour market has already achieved a substantial degree of flexibility by the contractualization of factory workers. This paper critically investigates the claims made in favour of introducing greater flexibility in the labour market. The analysis is done through an empirical inquiry into the proposition that casualisation of labour leads to higher output and employment growth. Employment and output growth do not have a statistically significant dependence on labour market flexibility in Indian organized manufacturing.

As a result, there is an increasing presence of temporary workers in regular work. That is actually providing a means through which the factory owners have reduced the scope of permanent employment. That tendency has not only liquidated the rigidities in the labour market due to the Contract Labour Act, but has also liquidated partially the rigidities in the IDA. So without changing these two laws, a substantial degree of labour market flexibility has already been achieved in the Indian labour market. To capture the extent of these labour market flexibilities have indexed them as the ratio between workers employed through contractors and the total number of factory workers. The rising trend of contracting out the production process to the informal sector by the formal sector is another way of liquidating the rigidities in the labour market, which arise out of IDA, 1947. Though the labour market flexibility index does not capture that, the index reasonably indicates the current degree of labour market flexibility.

The exception of a few years in the mid-1990s, the total numbers of workers employed are more or less stagnant throughout the whole period 1986-87 to 2003-04, whereas the actual manufacturing output at constant prices of 1993-94 has a monotonically increasing trend with the exception of 1998-99. The average wage rate
at 1982-83 prices has fluctuated within the narrow band of 15 to 20% of the average wage rate. In the mid-1990s the average wage rate was highest. And, in late 1990s and thereafter, it was lower than in the late 1980s and early 1990s. The share of wages in net value addition has steadily declined from a little more than 30% in 1986-87 to 15% in 2003-04. The decline is at a much faster rate in the last three years. On the other hand, the profit share in net value addition has increased from 18% in 1986-87 to 45% in 2003-04. Here also seen a marked jump in the increase of the profit share from the mid-1990s onwards. All these trends together indicate that even when there is a substantial growth in manufacturing output, the workers are not benefiting. The capitalist class is reaping the larger benefits of the output growth. This is being done through the combination of adopting capital-intensive technologies and greater labour market flexibility. Therefore, more labour market flexibility has no influence on output, employment growth, apart from making a redistribution of income in favour of the capitalist class.

If the situation, as during the period of the substantial positive growth of the manufacturing sector, then it is obvious that during a recession a substantial portion of the adjustment burden of the production process will be shifted to the workers. In mainstream economic theory, capitalists earn profit in return for taking risk. The Indian capitalist class, in this process of taking risk in business, wants to grab the profits in the good times but do not want to take the burden of adjustment in the business, when it goes through bad times. They want to shift the burden of adjustment on to the workers.

Sharma and Mishra (2009)\(^49\) in the paper ‘Infrastructure and Labour Productivity: Panel Co-Integration and Dols Evidence From The Indian Manufacturing Sector, analyzed, using data on the Indian manufacturing sector, which cover the years 1994 to 2006, the study assesses the labour productivity elasticity with respect to public infrastructure. Since earlier studies have merely examined the effect either on the total factor productivity (TFP) growth of the manufacturing sector or on the national income of the country, and widely neglected direct effects on the labour productivity of the manufacturing sector, the present study is an attempt to fill this gap. Second, study tests the panel variables for unit roots and shows that they exhibit the unit root process. That is a highly significant finding because most investigators have applied Ordinary Least Square (OLS) or Generalized Least Square (GLS) to non-stationary
(panel) variables, thereby generating spurious results. Finally, in contrast to most of the previous studies, that article utilizes the methodologically sound Dynamic OLS (DOLS) procedure to generate consistent estimates of the relevant panel variables in the co-integrated production function. The analysis suggests that infrastructure does affect labour productivity in India. Its effect on labour productivity is positive, nonetheless very small. Finally, the labour productivity is found to be more sensitive to private capital than to public capital.

In India, much of the debate on developmental issues starts and ends with a discussion on infrastructure bottlenecks. The miserable and under-developed state of the infrastructure is usually held responsible for the poor performance of other sectors of the economy and it finally hampers the overall growth of the economy. It is a well-recognized fact in the extant literature that infrastructure provisions have an important link with productivity, economic growth and finally the well-being of the people. Since 1991, when the economic reforms were initiated in India, the government has been undertaking a variety of reforms measures to improve the size and efficiency of the infrastructure sector. The most important factor in the reform process is said for building, operating and maintaining the entire range of infrastructure facilities in the economy. However, during recent years, it has become very difficult for the government to slowly provide infrastructure services as the requirement and demand for infrastructure have increased substantially due to the rapid growth that the economy has witnessed in the recent past. Therefore, the government has started allowing Foreign Direct Investment (FDI) and private participation in many infrastructure sub-sectors to meet the rapidly growing requirement and to improve the overall availability of infrastructure facilities. As a result of these initiatives, some of the infrastructure sectors have witnessed tremendous improvement.

The Indian manufacturing sector, which covers the years 1994 to 2006, the study, assesses labour productivity elasticity with respect to public infrastructure. The results suggest that labour productivity is positively affected by developments in infrastructure, though not very strongly. In contrast to previous studies that have examined the effect on either the TFP growth of the manufacturing sector or on the national income of the country and widely neglected the direct effect on labour productivity, particular that study assesses the effects in these areas too. Second, study tests the panel variables for unit roots and shows that they exhibit a unit root (that is, they have evolved as non-stationary processes). This is a highly significant finding.
because most investigators have applied OLS (or GLS) to non-stationary (panel) variables, thereby generating spurious results. Finally, in contrast to most extant (panel) studies, this article utilizes the methodologically sound DOLS procedure to generate consistent estimates of the relevant panel variables in the co-integrated production function. From a policy perspective, findings are extremely relevant and imply that further reform is needed in the infrastructure sector. For instance, private firms can be involved in a larger way in building and maintaining infrastructure projects in the country through the public-private partnership (PPP) mechanism. Second, findings also suggest that labour productivity in the manufacturing sector is highly sensitive to private capital but less sensitive to public capital (infrastructure). Therefore, in order to improve labour productivity, the government should encourage private investment in the manufacturing sector, which would lead to a higher capital-labour ratio, which, in turn, would perhaps be translated into a higher labour productivity with an elasticity of 0.83). In addition, investment in infrastructure would stimulate it further as labour productivity responds to such an investment positively.

Sankaran, Abraham and Joseph (2010)\(^{50}\) in the paper ‘Impact of Trade Liberalization on Employment: The Experience of India’s Manufacturing Industries’ analyzed, with the Indian economy having entered a phase of high growth in recent years, "after a long period of low growth, the concern of policy-makers now seems to have shifted towards making the growth inclusive - a process wherein employment is at the core. The available evidence, however, tends to indicate that the high growth has been accompanied by low employment growth in the organized manufacturing sector. Various reasons have been put forward in the literature to explain the observed jobless growth. This includes, but is not limited to, labour market rigidity, growth of the number of man-days worked, growth in wage rate, and others. But the observed jobless growth coincided with an unprecedented increase in the rate of integration of the Indian economy with the world market through trade liberalization. Yet, it is surprising to note that the impact of trade liberalization has not received the attention it deserves in explaining the observed jobless growth. The study explores the underlying factors behind the poor performance of-the organized sector in terms of employment generation in the context of trade liberalization.

The global integration of a developing country like India and the resultant production restructuring based on comparative advantage could have labour market
implications. A country richly endowed in labour is likely to specialize in labour-intensive industries and is expected to increase employment. However, studies that have examined the issue of 'jobless growth' have remained within the closed economy framework and this issue has not been studied in the context of globalization. Against this backdrop, the present paper aims to examine the impact of trade liberalization on employment in India's organized manufacturing sector during the post-reform period.

Employment generation, particularly in industries, is considered as one of the ways of achieving inclusive growth. However, the organized manufacturing sector, which could provide well-secured jobs, has been facing jobless growth in recent years. The phenomenon of jobless growth in a closed economy framework it is important to note here that jobless growth in the organized sector, especially after 1996, coincided with India's unprecedented integration with the rest of the world through trade and the initiation of further trade liberalization induced by WTO. The effect of trade liberalization on employment during the post-reform period in India's organized manufacturing sector. The aggregate industrial analysis shows that trade seems to be having a negative effect on employment, which is contrary to the H-O theory. The results of the study suggest that import penetration in the Indian economy is not generating a favourable climate for employment generation through enhanced exports. The expectations of inclusive growth through trade stem from the argument that, like the East Asian economies, wherein low import tariffs had bolstered exports, which, in turn, raised the scale effect of aggregate output and employment in these economies, India would also experience the large-scale effects of low import tariffs. And even if there were some substitution effects, the large-scale effect would ensure that employment growth continues to be substantial. While the scale effect on employment through exports had remained minimal, by and large due to the relatively slower growth of exports, the substitution effect had been stronger with the import intensities and capital intensities increasing. However, these results are aggregate in nature. Some of the arguments need to be tempered with further detailed studies. For instance, while it has been argued that probably it is the labour-intensive industries in the export sector that have declined.

Goldar (2011) in the article ‘Growth in Organized Manufacturing Employment in Recent Years’ observed, Employment in India’s organized manufacturing sector has increased in recent years at the very rapid rate of 7.5% per annum between 2003-04
and 2008-09. The impression of jobless industrial growth prevailing for some time is therefore not valid any more. What could possibly account for this high rate of job creation in organized manufacturing since 2003?

In the years from 2004-05 to 2007-08, the growth rate of industrial output was relatively high. Between 2003-04 and 2007-08, real value added in organized (or registered) manufacturing grew at the rate of nearly 12% per annum. Taking a longer period, 2003-04 to 2008-09, the rate of growth in real value added in organized manufacturing was about 10% per annum. The growth rate of employment attained by organized manufacturing in this period was about 7.5% per annum, i.e., about three-fourths of them growth rate of real value added. This may be contrasted to the growth experience of organized manufacturing between 1992-93 and 1996-97. This is the previous phase of high growth in Indian manufacturing. The growth rate in real value added in that period was about 13% per annum, while the growth rate of employment was only about 2.8% per annum, less than one fourth of the growth rate in real value added. The growth rate in real value added in organized manufacturing between 1980-81 and 1989-90 was about 8.6% per annum, while the growth in employment was only about 0.3% per annum. Clearly, the period 2003-04 to 2008-09 was special and different from the two previous phases of high industrial growth in India in that high rates of growth in organized sector industrial output were accompanied by large increases in industrial employment.

The rate of growth in organized manufacturing employment show that job creation in organized manufacturing in different Indian states may be positively related to the extent of labour reforms undertaken reproduces an indicator of labour reforms undertaken by various states taking the top five states in terms of the labour reforms index, the growth rate of employment in the organized manufacturing achieved by these five states combined is found to be 7.5% per annum. Taking the bottom five states in terms of the labour reforms index, the corresponding figure is 3.7% per annum. This is consistent with the idea that labour reforms undertaken by the states had a favourable impact on growth of industrial employment. It may be added that the correlation coefficient between the labour reforms index and employment elasticity is 0.35, and if Andhra Pradesh is dropped the correlation coefficient increases to 0.46, which is statistically significant. It seems, therefore, reasonable to argue that the substantial increase in the organized manufacturing
employment that has taken place since 2003 is traceable to a large extent to the labour market reforms that Indian states have undertaken.


The analysis begins with a theoretical probe into the reasons why social costs arise in the course of stabilization and structural adjustment and the extent to which labour market reforms can help minimize these costs in the specific context of India. This report focused on three major issues of labour market assessment in India that is wage policy, employment security and labour redundancy.

(a) Economic Reforms and the Labour Market

About labour market and economic reforms, the report observed that the economic reforms give rise to social costs for a number of reasons. First, stabilization policies are contradictory in nature and usually lead to sharp slowdown in economic growth. This has the effect of worsening employment conditions. Second, stabilization policies often lead to decline in domestic saving and investment rates. Third, structural adjustment especially in today's context of globalization, calls for rapid changes in the composition of output techniques of production, particularly in the modern, organized segment of the economy. This leads to labour redundancy in the short run and very slow growth of employment in the medium term. In some cases, as in India, a stock of redundant but employed labour is carried over from pre reform days and the economic reforms threaten to transform this disguised unemployment into open employment if economic growth remains sluggish because of declines in saving and investment rates, social costs can very substantial.

In case of India, the study observed that stabilization involves increasing the prices and reducing the quantities of imports. The contradictory effects of these on the import dependent modern industry cannot be countered by wage flexibility of any degree. In the short run, social costs can only be minimized through appropriate safety net programmes. In India social costs of economic reforms have been higher because of inadequate attention to safety net programmes. In the medium term too, labour reallocation in India is likely to be hindered not by the absence of wage differentials but by the existing employment security regulations, increasing labour market flexibility primarily involves removal of the constraints posed by these regulations.
However, wage flexibility is also necessary for a different reason. Structural adjustment policies will induce price competition and will thus generate pressures for cost adjustment. Wage adjustments can clearly help achieve cost adjustments and thus minimize disruptions in production.

Labour market flexibility is therefore relevant but only in the medium term. This is fortunate since labour market flexibility cannot be increased overnight. Labour market reforms involve institutional innovation. Lastly attempts to reform the legal framework without creating institutions, appropriate for a new regulatory regime will themselves generate social costs and are likely to create anarchic conditions in the labour market. A programme of labour policy reform has to be formulated with these considerations in view.

(b) Wage Policy

The striking feature about the wage formation process in India is that while government interventions have influence on wages in the organized sector, they have had virtually no effect on wages in unorganized sectors. Thus, government policy on the one hand but failed to offer protection to workers who need it must and on the other hand, has left very little space for collective bargaining to play a role in wage determination in the organized sector. The government sought to influence wages in unorganized sectors through the instrument of statutory minimum wages. However, the analysis in this report shows that statutory minimum wages have been largely ineffective in influencing actual wages. More importantly, the analysis also shows that no conceptually sound and operationally meaningful basis for fixing minimum wages for unorganized sectors was really defined. On the other hand, the government's wage policy in the organized sector involved fixing of minimum wages and these were much higher than statutory minimum wages. The effect of all this was institutionalization of labour market dualism.

In the organized sector, given the role of the pay commissions, the wage Boards and other government agencies in wage revisions and the indexation and bonus payment rules, wage growth was basically exogenous. The consequences were as follow:

Downward adjustments in real or product wages occurred only during the periods of high and accelerating inflation; wage productivity relationship was shaped by adjustment in productivity through technological change and profitability had no
bearing on wages. The wage system, therefore, lacks the kind of flexibility that is
needed to facilitate cost adjustments by enterprises in the face of price competition.

(c) Employment Security

The employment security system in India has been built on three premises that
industrial workers in modern large-scale enterprises are potential victims of
exploitation, that protection against exploitation has to be provided through
government regulations rather than through promotion of effective workers
organizations and that income security of workers can be ensured only through
employment security. Given these premises, the central focus of the employment
security system, which has come to be established, has been on preventing
retrenchment in large industrial enterprises through legal and administrative
restrictions.

In practice, it has not been possible to limit the coverage of the system to
industrial enterprises alone. Indeed as the analysis in this report shows that the system
has been least effective in protecting industrial workers. A large majority of the
protected employees are in fact in services, mostly controlled by the government. The
proportion of protected industrial workers in all protected employees, moreover, has
been declining over the past decade. Industrial sickness has been growing and many
workers in sick industries have employed security only in theory. Employers' search
for escape routes has led to greater use of causal and contract workers. Moreover,
growth of industrial employment has decelerated quite sharply because of growing
emphasis on capital-intensive technologies.

There is a little reason to doubt that the employment security system is partly
responsible for the slow growth of industrial employment. By making labour
adjustments difficult and costly, the system effectively made labour costs for higher
than wage costs. Where costs were passed on to prices, growth of markets in
industrial products was restrained. High labour costs also made capital relatively
cheap and hence encouraged growth of capital intensity.

The employment security system also had the effect of turning all labour
adjustment issues into political issues. This had the effect of preventing development
of healthy industrial relations. Employers and workers organizations had more to gain
by functioning as political pressure groups than by promoting mutual interaction and
undertaking.
The economic reforms have made the system virtually unsustainable. With the growth of price competition, it will be increasingly difficult to pass the costs of employment security in prices. Moreover, the process of restructuring engendered by liberalization / globalization will be obstructed by the system. Reform has clearly become necessary.

(d) Labour redundancy

The organized sector accumulated surplus labour over the years partly because the public sector regarded employment generation as a social responsibility and partly because the government undertook to subsidize non viable enterprises in order to prevent job losses. Even a conservative estimate suggests that more than 16 percent of the employees in the organized sector are actually redundant. Moreover, only a quarter of this redundant labour appears to be in the industrial sector, the rest are in the services, mostly controlled by the government.

The economic reforms have reduced the capacity of the public sector enterprises and the government to carry the stock of surplus labour. Growth of competitive pressures in the economy and the need to maintain fiscal discipline on the part of the Government are among the factors, which threaten to transform hidden unemployment into open unemployment. The government’s response to this threat has been the establishment of a National renewal Fund (NRF) that is meant to finance voluntary retirement schemes, programmes for counseling retraining and redeployment of the workers accepting voluntary retirement.

The progress in the implementation of these programmes has been rather poor so far. The area regeneration schemes have not been implemented at all and the other programmes have targeted only the industrial enterprises owned by the Central Government. These account for less than 9 percent of all redundant workers in the organized sector. So far, only 78 thousand worker (which is just over 20 percent of all redundant workers in centrally owned industrial enterprises) have accepted voluntary retirement, 7.5 thousand have received counseling, 1.5 thousand have been retrained and 234 have been redeployed.

This report analyzed that there are three basic reasons for this poor performance. First, the funds allocated to the programmes have been pitifully inadequate. Second, the institutional framework necessary for successful implementation of the programmes is not yet in place. Finally, it has been implicitly
assumed incorrectly, that those accepting voluntary retirement can be redeployed within the organized sector.

(e) Future Policies

The weaknesses of the labour policies pursued in India, as diagnosed above, them suggest some central objectives, which have to be set for a reform programme in this area. At the same time, it must be borne in mind that labour policy reforms are meant to minimize and not add to social costs of structural adjustment. The reform polices advocated in this report derive from a perspective defined by these judgments.

Four basic principles underlie the suggested reforms in the area of wage policy. First, statutory minimum wages should a set a minimum price of labour in the economy in such a way that a wageworker is able to attain minimum acceptable standard of living, second, while labour market dualism exists and will undoubtedly persist for quite a while, state policies must not legitimize and institutionalize this. Third, in the organized sector, ways must be found to link wages with productivity and profitability without rendering labour incomes highly unstable. Finally, collective bargaining must be assigned an important role in the wage determination process.

In the area of employment security, the reform proposals derive from the judgment that income security of workers needs to be and can be delinked from employment security. However, development of an income security system involves development of new labour market institutions. This is why employment flexibility can only be a medium term goal. It is important, however, to set the reform process in course immediately.

The problem of labour redundancy carried over from the past is to be distinguished from frictional unemployment that is expected to arise in the normal course of industrial growth. The redundant labour, accumulated over the past years, cannot be redeployed within the organized sector. The National Renewal Fund programmes need to be redesigned with this basic fact in view. Given the nature and magnitude of the problem there is also an urgent need to increase the resources allocated to these programmes very substantially.

Summary

The studies reviewed from the literature shows that economic reforms in general and the impact on labour market in particular, has been a reject of study many
researchers. All the studies have highlighted the pros and cons of the reform with reference to the labour market. The conclusions are derived based on the field study as well as analyzing the secondary data. It is worth mentioning that there are studies which have used advanced econometric method for analyzing various proportions of labour market and reforms. The studies reviewed in the present chapter that that as on late no confirmed conclusion can be drawn regarding the reforms and labour market. Further analysis is required to conclude whether the reforms have been beneficial or not for the industrial labour in particular.

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