

ISID Foundation Day Lecture

**Industry and Employment:
Recent Indian Experience**

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Indian economy has experienced a long term average annual growth rate of over two percent in employment. In itself it is not a mean achievement. Not many national economies have in fact maintained such rate of employment growth over long periods. Besides, for about three decades since 1950, growth of GDP itself has been rather slow at an average of about 3.5 per cent per annum and employment could obviously have not grown more rapidly, as growth takes place both through increase in productivity and expansion of employment. A slower growth in employment than in GDP is thus not a surprising phenomenon nor should it be a matter of anxiety in an absolute sense. In the Indian context, the anxiety on the employment front arises from the fact that the labour force has been growing faster than employment than in GDP is thus not surprising phenomenon nor should it be a matter of anxiety in an absolute sense. In the Indian context, an anxiety on the employment front arises from the fact that the labour force labour force has been growing faster than employment; and thus even with a reasonably high rate of employment growth at 2 per cent per annum, backlog of unemployment has been increasing from year to year, due to an increase of about 2.5 per cent per annum in the labour force. In recent years, anxiety has got somewhat heightened because of slow down in the employment growth: the average employment growth during 1983-1987/88 has been only 1.55 per cent annum, though GDP grew at over 5 per cent per annum during this period.¹

2. The relatively unchanging composition of the occupational structure of the Indian workforce, which is generally conceived to be rather intriguing phenomenon, has also to be seen in this perspective. It is well known that the share of the primary sector has steadily and significantly declined and those of the secondary and tertiary sectors have steadily and significantly increased, in the national product; a similar change has not been observed in the distribution of workforce. In fact, it is only during the last two decades that shift from the primary sector to the secondary and tertiary sector is discernible. During this period, the share of agriculture and allied sectors in GDP declined from around 75 per cent to 21 per cent; its share in employment also increased from around 8 per cent to 11 per cent. It is often contended that the shift in employment from the primary sectors has primarily been to the services sector thus reflecting a movement of workers towards residuary and unproductive activities. But, though the share of the tertiary sector in GDP has increased from around 33 per cent in early seventies to 39 per cent in late eighties. shift in employment in favour of this sector has been less marked from around 15 per cent to 18 per cent. In fact, the shift in favour of the secondary sectors has been more significant, its share in GDP also increased almost to a similar extent, from 24 per cent to 29 per cent.

3. Thus while in the longer period of about four decades the employment structure of

¹. Estimates of growth rates of employment used in this paper are taken from Planning Commission, Employment: Past Trends and Prospects for 1990s, Working Paper, May, 1990.

the Indian economy has remained relatively stable, and a major shift in favour of the secondary sector as postulated in the initial exercises in development modelling has not been realised, a change in that direction is discernible over the last two decades, during which industrial sector has shown a relatively higher rates of growth on a sustained basis. But the more important reason for the relative absence of structural change in the workforce is to be sought in the pace of growth in population and labour force.

The historical experiences of the countries, on which the theory of structural shifts has been based, were not characterised a rapid rate of growth of population and labour force. In a situation where an overwhelming majority of the workers to begin with are engaged in agriculture, a significant shift to the secondary sector would require a very rapid expansion of industry. In the absence of such an expansion and with a rapid increase in population and labour force, most of which again takes place in agriculture, even a reasonably high employment content of industrial growth would not be able to lead to a significant change in employment structure. Thus though increment to industrial workforce has been significantly large, a rapidly increasing number of workers added to the rural labour force have continued to use agriculture as the parking lot. In recent years, with a slight slowdown in the growth of labour force and a relatively high rate of industrial growth, even with a low and declining employment elasticity, has led to a significant shift in employment in favour of the industrial sector. But with the growth of population and consequently of labour force continuing to be high, even a relatively high growth of industrial employment is not likely to produce a major structural change in employment in a short or even medium term.

4. The continuance of a relatively small share of industrial sector in employment, should thus not be viewed as a result primarily of the slow growth of employment in this sector. In fact the employment growth in the manufacturing sector has been consistently higher than the overall growth of employment. During the period 1972-73 to 1987-88, employment in the manufacturing sector has grown at an average annual rate of 3.6 per cent while overall employment growth has been around 2 per cent. No doubt certain other smaller sectors (notably construction and electricity and gas) have registered a much higher rate of employment growth, but agriculture employing over two thirds of workers, experienced a much lower 1.4 per cent annual growth in employment.

5. The impression that the industrial sector has failed to generate employment has been created primarily because of relatively slow growth of employment in the organised manufacturing sector. Most people has only this segment in mind when they talk of industry. It is often forgotten that most of the manufacturing employment is in the unorganised sector; and its share has, in fact increased from 67 per cent in 1972-73 to 1987-88. Employment growth in the organised manufacturing has, however, been slow, less than 1.5 per cent over this period and almost negligible during 1983-88. And in the private organised manufacturing sector, employment growth has, in fact, been negative. Employment elasticity with respect to value added has registered a decline and is estimated

to be around 0.26 during the 1980s but the value is much lower in the organised manufacturing sector at 0.01 as compared to 0.34 in the unorganised sector.

6. Why has the organised manufacturing sector experienced a steep decline in the growth rate of employment and employment content of its output growth? Representatives of industry attribute this phenomenon to labour legislation. Unions, on the other hand, contend that an indiscriminate use of high, particularly imported, technology is responsible for it. Before going into the merits of these claims, let us first examine the process of change in the industrial structure itself and their implications for employment.

7. The Indian industry has been undergoing a structural change over the past four decades by and large, in a historically well-established change over the past four decades by and large, in a historically well-established pattern. Primary raw-material based industries dominated the industrial structure initially; their predominance was somewhat reduced with the emergence and faster growth of metal based industries; and in the third phase of structural change, currently on industries using processed intermediates and inputs have emerged as important and dynamic segments of the Indian industrial structure. Transition from the first to second, and then second to third implies higher technology, increase in labour productivity and a decline in employment potential of output growth. More rapid the process of transition, faster would be a decline in employment elasticities.

8. A certain part of the slow down in employment growth in the organised manufacturing could be attributed to this structural change. But an analysis of the employment implications of the structural changes in the organised manufacturing sector in India reveals that the structural changes though significant have not been of the order that would lead to a rank reversal among the major industry groups; shifts have not necessarily been from low to high productivity groups and labour productivity has shown an increase across the board among different industry groups; and there has been an increase in the employment elasticities of some group, but it has been more than offset by a decline in others². Overall, structural changes that have taken place in terms of shifts of industry groups in employment and output have had no significant adverse affect on employment generation in the organised manufacturing as a whole.

9. The above finding leads to the conclusion that decline in employment elasticities in the organised manufacturing sector is primarily attributable to the technological change in individual industry groups. It is, not doubt, difficult to separate structural change and technological change and their effects from each other. What is seen as a technological change at a relatively aggregated level may, in fact, reflect structural change at a more desegregated level of commodity classification. Introduction of a highly capital intensive product at the four-digit level may reduce the employment elasticity at two-digit level of product classification, which if the analysis is confined to two-digit level only, would be

² T.S. Papola, "Restructuring in Indian Industry: Implications for Employment and Industrial Relations", in Gus Edgren (Ed.) Restructuring, Employment and Industrial Relations, ILO-ARTEP, New Delhi, 1989.

interpreted as a result of technological rather than structural change. The findings referred to earlier have been based on the analysis carried out both at two and three-digit levels of classification and could, therefore, be taken to account for structural changes to a large extent.

10. Technological change is an essential ingredient of industrialisation. The decision to introduce technological change would depend on various factors, employment could hardly be one of them for a private industrialist, as even for the public sector except in the short run. Two essential conditions for opting for a technological change are its physical availability and economic efficiency in terms of cost reduction. Its employment characteristic in terms of employment reducing or employment enhancing impact, would be only incidental to the decision. On this logic, technological change that has taken place in the Indian industry towards improvement in efficiency cannot be faulted simply because it has not proved to be employment friendly. On the other hand, if technological change has been introduced for extraneous reasons like the apprehensions of labour unrest and inability of management to manage a large workforce, or because some policy instruments have artificially changed the relative factor prices so as to make capital relatively cheaper, it could be regarded as leading to inefficiency both by the private and social criteria.

11. When industrialists argue that the organised sector employment has not grown primarily because of the labour legislation, the following premises are implied: One, a technology, which was more labour intensive than the one adopted, was available; Two, this technology was more efficient in so far as it produced the output at a lower unit cost; Three, yet a decision was taken to use a capital-intensive technology,

This decision as the industrialists' argument goes, is prompted by the apprehension that the workers once hired cannot be fired, if it becomes necessary in future, due to heavy protection provided by labour legislation. A faster growth of employment in the unorganised sector is often referred to as an evidence of the employers' unwillingness to expand employment in larger sized factories in which the protective labour laws are applicable and instead farm out work to smaller units.

12. Let us examine this line of argument on a logical and empirical basis. In the first instance, it is doubtful whether technological options using more or less labour per unit of output are available in the case of any significant number of production lines. Many economists now believe that most often choices are between products rather than techniques of production. Second, even if such technologies are available it is further doubtful if the cost-differences between them are only so marginal, that for some other reason an entrepreneur opts for the one with lower efficiency. If the differences are significant, choice in favour of an inferior technique - which in the present case would be a capital intensive one would not be taken at all irrespective of any extraneous factor. For, the cost of such a decision would be too high for any prudent entrepreneur.

13. In fact, it appears that the industry is taking a rational decision in opting for technological change on the basis of their own assessment of the market trends in demand and given factor price relativities; and, argument concerning labour legislation is only a

lobbying point towards further reduction of labour cost. The contention that the employers do not hire because they cannot fire and 'exit' is very difficult due to labour legislation and union and public pressure has limited validity in the face of the experience in many industries where the workforce has been drastically reduced in a short period. In Ahmedabad, about 36,000 regular full time workers were eased out of textile mills in a short period of two years³. In Kanpur, employment in the private factory sector declined by 44 per cent during a short period of five years between 1983 and 1988, the decline in actual numbers being 40,000.⁴ No detailed studies of other centres are available, but similar estimates are given by knowledgeable people in the case of several other industrial centres. Case studies in cotton textiles, automobile and consumer electronics industries conducted by the present author, as a part of a larger study on restructuring and employment in Indian industry concluded that "the employers' contention that the laws, unions and public pressure prevents them from introducing technological change seems to be valid only in some cases where initiative, and changes proposed, were sudden and drastic.

14. Quoting rapid employment growth in the unorganised sector as an evidence of organised sector employers unwillingness to expand employment and instead getting the work done from informal sector units has a similar fallacy. Unorganised manufacturing activity has always dominated manufacturing employment in India. It has not grown as a result of the inducement provided by the growth of the organised sector. Ancillarisation has made very little progress, and, in any case, most ancillary units formally so constituted will not be as small in size as to be able to avoid most labour laws. The linkage between the large sector and small units has generally been found very weak and diffused. Major part of the manufacturing activity in the unorganised sector is independent of the organised sector and produces final products for the consumer market rather than intermediate products and part of the organised sector.⁵ Wherever intermediate products, parts, and components are produced in the informal sector, that is because it is inherently more economical to produce them there rather than in large factories, irrespective of labour laws. The advantage, no doubt, lies in wage cost, not in labour protection. Relaxation of labour laws removing restriction on firing of workers difficult is not likely to enhance employment in the large factories in these cases. Hundreds of thousands of workers making shoes for Bata, or garments for large traders and exporters, styled as manufacturers, or vast mass of workers engaged in bidi making in the unorganised sector or in homes are not going to be employed as regular workers in large manufactories, even after all the labour laws are abolished!

3. B.B. Patel, Workers of Closed Textile Mills, New Delhi, Oxford and IBM Co. Pvt. Ltd. 1988.

4. Ajit Kumar Singh, Planning for Industrial Restructuring in an Industrial Metropolis: A Study of Kanpur, Interim Report of a Study sponsored by Planning Commission, Government of India, Giri Institute of Development Studies, Lucknow, 1988.

5. T.S. Papola, Urban Informal Sector in Developing Economy, New Delhi, Vikas, 1981, and T. S. Papola and R.S. Mathur: "Inter Sectoral Linkages in Metal Engineering Industry", in Susumu Watanabe (Ed.), Linkages Between Large and Small Enterprises, London, Macmillan, 1984.

15. Thus, there seems little substance in and evidence in favour of the contention that the deceleration in employment growth and decline in employment elasticity in the organised industry has caused by the highly protective labour legislation. Industry seems to have become inevitably more capital intensive more capital intensive in the wake of modernisation and emergence of high technology segments. Entrepreneurs seem to be making rational decisions in technology in response to the demand in the domestic and international market. The trend is likely to continue and, in fact, accelerate with liberalisation and opening up of the economy, as the compulsions of international competition are likely to further reduce the employment intensity partially because of the need for cost reduction; but mostly for the reason of improving the quality of the products (It is understood, for example, that an Indian made colour television set, would need to use only one-tenth of the present labour if it has to attain the same quality as of the sets internationally considered the best, For this reason, the prospects for significant growth in employment in export sectors also need not be rated high simply because a number of items are employment intensive; because the structure of Indian exports would have also to change if the exports have to grow fast.

16. Within this overall context, one cannot put the blame on the organised industry for not having generated employment at an increasingly higher rate. It would also be difficult to accept the contention of the unions that use of labour-saving technologies has been indiscriminate and often unnecessary. Over the years, however, the unions also seem to have reconciled to the irreversibility of technological change in the direction of lower employment potential. That is the reason perhaps no major incidence of industrial unrest has taken place during the recent years despite a drastic reduction in employment in certain industries and centres as indicated earlier.

17. Organised industrial sector is thus not likely to contribute to employment generation in a significant way. Employment growth in this sector would depend on the interplay of growth of its output and changes in employment elasticity. And since the employment elasticity in this sector is not likely to increase -- it may, in fact, even further decline -- the outcome would primarily depend on how high its output growth would be. In view of the compulsions of the market, as indicated earlier, it is doubtful if any policy instruments, either in the realm of labour policy or financial and fiscal policy, would be effective towards faster employment generation in this sector. But there is some evidence to suggest that the instruments like fiscal and financial concessions, particularly the latter, have tended to make the modern small scale industry sector, more capital intensive than necessary. Cheaper capital has encouraged some units to overborrow and then prefer to use less labour in their production process. The evidence suggests that they could have perhaps used more labour-intensive methods in the absence of concessional finance. It would be desirable to review the situation and if concessions are necessary, they could be more directly related to the employment criterion, rather than going by the assumption that all small scale units are necessarily intensive.

18. A rather limited employment potential of the manufacturing sector, however, does

not mean that the industrial sector as a whole would not play a significant part in employment generation. Organised manufacturing sector, accounting for about one-fourth of the manufacturing employment, contributes only about 2.6 per cent of the total workforce. Unorganised sector which accounts for the major part of the manufacturing employment has shown significant potential for employment growth. A fact that is not very well recognised is that about 53 per cent of the employment in the manufacturing sector is located in rural areas and almost all of it is in the unorganised sector. It has registered an employment growth of around 4 per cent annum during 1972-73 - 1987-88. An assessment of the recent trends in this sector brings out two significant facts: One, the rural manufacturing activity no longer consists only of traditional and agro-based products, non-traditional and intermediate product based product groups are assuming increasing significance in the rural industrial structural. Two, employment growth in this sector is demand based and at reasonable levels of earnings, and not merely an outcome of push compelled by overcrowding in agriculture.⁶ It is true that a significant part of it is in the form of casual employment, and growth in it accompanied by a decline in the self-employment, and growth in agriculture, But the available evidence suggests that this shift represents a positive improvement in employment in terms of earnings, and not a deterioration in quality of employment as is often associated with the phenomenon of 'casualisation'.

19. In the urban areas, too, the unorganised sector contributes the major part of the manufacturing employment and has registered a significantly high, over 5 per cent, growth in employment. It has been observed that the smaller sized urban settlements, towns with a population between 20 to 50 thousand have registered the fastest growth of employment.⁷ There seem to be emerging a trend towards a relative shift of small manufacturing activities from the larger to these smaller towns. There is also evidence to suggest that the economics of size, technology and market are leading to a shift of certain rural industrial activities to these towns.⁸ This 'shift' is not a mere relocation, but has significant additive component. These activities could not have growth as fast either villages or large towns, as they have done in these smaller towns.

20. A significant scope for expansion of productive employment opportunities in the manufacturing sector thus seems to be developing in the small sized enterprises in the rural areas and smaller towns. This potential needs to be recognised and positively encouraged by providing adequate and suitable infrastructural support and fiscal and financial

⁶. T.S. Papola, "Rural Non-Farm Employment: An assessment of Recent Trends", paper presented at National Seminar on Rural Development, Lucknow, April 26-27, 1991.

⁷. R.C. Sinha, and G. S. Mehta, Urbanisation and Urban Employment Growth, a study prepared for the National Commission on Urbanisation, Giri Institute of Development Studies, Lucknow, 1987.

⁸. T.S. Papola, "Rural Industrialisation and Agricultural Growth: A Case Study on India" in Rizwanul Islam, Rural Industrialisation and Employment in Asia, ILO-ARTEP, New Delhi, 1987.

inducement. So far, the fiscal and financial concessions meant for the small scale industries have only reached the relatively large units in the small scale industry sector. And development of infrastructure in small towns and of a rural-urban continuum has not received adequate attention. Steps to meet these gaps in public investment and policy are now necessary to expand employment opportunities in the secondary sector and accelerate a shift in employment structure away from agriculture.

21. It must be recognised that agriculture cannot continue to provide residuary employment and function as a parking lot for large number of workers indefinitely, due to lack of any other gainful outlet. The employment structure must diversify into non-agricultural activity and particularly into industrial activities. At the same time, the emerging constraints resulting from the technological compulsions of the domestic and international markets have also to be recognised. Therefore, the approach in this presentation has been to realistically assess the limitations and possibilities as they are emerging; and accepting the constraints, point out the positive trends that could be fruitfully promoted.