



EMPLOYMENT AND WAGES IN INDIAN MANUFACTURING A Review of Employment Trends, Trade Liberalization, Labour-Market Reforms and Wage Inequality

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ABSTRACT :

Manufacturing has a central place in the process of structural transformation because it can provide employment outside agriculture, raise productivity and create opportunities for workers with relatively low levels of formal education. This paper examines employment and wage developments in Indian manufacturing with particular attention to the period before and after the economic reforms. The analysis is based primarily on the material presented by Bishwanath Goldar on employment and wages in Indian manufacturing. It considers the expected effects of trade liberalization, the actual pattern of employment growth in organized and unorganized manufacturing, the role of labour-market regulations, the increasing use of casual and contract workers, changes in wages and labour's share in value added, and the growth of wage inequality by educational attainment. The evidence indicates that trade reforms did not produce the expected rapid expansion of employment in organized manufacturing. Instead, the industrial structure did not shift decisively toward labour-intensive activities, while technological change and changes in factor prices encouraged substitution of labour by capital. At the same time, recent years showed faster employment growth in organized manufacturing. The paper also finds that real wages grew more slowly than labour productivity, contributing to a decline in labour's share of manufacturing value added. Wage inequality increased, particularly between workers with higher and lower educational attainment. These developments underline the importance of employment-oriented industrial policy, appropriate labour-market institutions, skill formation and technological strategies that allow productivity gains to translate into broader employment and wage improvements.



KEYWORDS : Indian manufacturing; employment; wages; trade liberalization; labour-market reforms; organized manufacturing; unorganized manufacturing; contract labour; wage inequality; labour productivity.

1. INTRODUCTION

Economic development is closely associated with structural transformation. As an economy develops, workers tend to move from relatively low-productivity activities toward activities with higher productivity and better income opportunities. In India, this makes the expansion of manufacturing especially important because the sector can absorb workers moving out of agriculture while requiring, on average, less formal education than many modern service-sector activities.

The source material emphasizes that development involves shifting people from low-productivity jobs to higher-productivity employment, particularly through movement from agriculture into industrial activities. Rapid industrial growth accompanied by sizeable increases in labour demand can therefore raise incomes and contribute to structural transformation. Employment generation in organized manufacturing is consequently important not merely as an employment statistic but as an indicator of the economy's ability to provide productive non-farm opportunities.

The employment challenge is particularly relevant because a substantial share of India's young labour force has historically had low or moderate educational attainment. The source's comparison of the educational profile of youth aged 15–24 with the requirements of organized industry shows a mismatch between the education profile of young workers and the requirements of organized services and, to a lesser extent, organized manufacturing. This suggests that manufacturing can potentially play a significant role in absorbing less-educated entrants to the labour market.

The introduction of economic reforms and trade liberalization created expectations of a substantial change in the structure of Indian industry. In a developing country with abundant labour, trade liberalization might be expected to encourage expansion of labour-intensive industries in accordance with comparative advantage. Greater openness could therefore increase labour demand and employment. However, the actual experience was more complex. Import competition, technological upgrading, changes in factor prices and the use of capital-intensive production techniques could work in the opposite direction.

This paper examines these competing forces. It asks how manufacturing employment changed over time, whether reforms accelerated employment growth, how organized and unorganized manufacturing differed, why firms increasingly used casual and contract labour, and how trade and technological changes affected wages and wage inequality.

2. OBJECTIVES OF THE STUDY

- To examine the significance of manufacturing employment for India's structural transformation.
- To analyze trends in employment in organized and unorganized manufacturing.
- To examine the expected and observed effects of trade liberalization on manufacturing employment.
- To discuss the role of labour-market regulations and labour-market reforms in employment generation.
- To examine the increasing use of casual and contract labour in organized manufacturing.
- To analyze trends in manufacturing wages, labour productivity and labour's share in value added.
- To examine the growth of wage inequality between workers with different educational backgrounds.
- To identify the major policy implications emerging from the evidence.

3. METHODOLOGY AND SCOPE

This is a secondary-data analytical paper based primarily on the material contained in the uploaded source, 'Employment and wages in Indian manufacturing' by Bishwanath Goldar, Institute of Economic Growth, Delhi, September 2013. The source organizes the discussion around employment generation, trade reforms, employment trends, labour-market rigidity, casual and contract labour, wages, wage share and wage inequality. The paper follows that analytical structure while presenting the arguments in a continuous research-paper format.

The paper does not introduce new econometric estimates. Numerical values and relationships reported here are those contained in the source material. Where the source discusses findings from other studies, those studies are identified as part of the literature reviewed by Goldar. The discussion therefore distinguishes between the evidence reported in the source and broader interpretation.

4. REVIEW OF LITERATURE

The source draws on several strands of literature concerning trade, employment, labour regulation, technology and wages. Wacziarg and Wallack (2004), in a cross-country study of developing countries, examined whether trade reform episodes generated intersectoral labour movements. Their conclusion, as reported in the source, was that the presumption of substantial labour reallocation following trade reform was not supported by available data. Liberalization had a weak positive effect at the three-digit industry level, but the effect was small and not robust, while evidence of trade-induced structural change was absent at the more disaggregated four-digit level.

Das and Kalita (2009) examined labour-intensive industries in India using firm-level evidence. Their work, as summarized in the source, attributes the decline in labour intensity in labour-intensive industries to the introduction of new and sophisticated technologies that were relatively more capital-intensive. This finding is important because it demonstrates that an industry may remain labour-intensive relative to other industries while still reducing its labour requirement per unit of output.

The literature on labour regulation presents competing interpretations. A World Bank report cited in the source argues that excessive rigidity in formal manufacturing labour markets created disincentives for employers to create jobs and estimates that the Industrial Disputes Act was associated with about three million fewer jobs in formal-sector manufacturing. Other literature, including work summarized from Papola, emphasizes that enforcement of labour laws differed across Indian states and that some states had already developed more flexible practices at the ground level.

Goldar and Aggarwal's work, as cited in the source, reports an increasing role of contract labour in organized manufacturing. The share of contract workers in total workers increased from 14 percent in 1995–96 to 31 percent in 2007–08. Other studies cited by Goldar find that stringent labour regulations were associated with greater use of contract workers. These findings suggest that firms may respond to regulatory constraints not only by changing total employment but also by changing the composition and form of employment.

5. IMPORTANCE OF MANUFACTURING EMPLOYMENT IN INDIA

Manufacturing occupies a distinctive position in development because it can combine productivity growth with large-scale employment. The source stresses that manufacturing workers generally require less skill than workers in many services. Consequently, expansion of manufacturing can help absorb young workers who enter the labour market with limited formal education.

This role is particularly significant when viewed against India's educational profile of youth. The source's Figure 1 compares the educational composition of working youth aged 15–24 with the educational requirements observed in organized manufacturing and organized services for 2009–10. The comparison illustrates that organized services have relatively higher educational requirements, while manufacturing has greater potential to absorb workers with lower levels of schooling.

The National Manufacturing Policy announced in 2011 set an ambitious objective of increasing the share of manufacturing in aggregate GDP from about 15 percent to about 25 percent by around 2022 and creating an additional 100 million jobs. The source notes that manufacturing employment was estimated at about 60 million in 2011–12, implying that reaching the proposed employment target would require an extremely large expansion. It also suggests that a substantial part of the additional employment would likely be generated in activities supporting manufacturing rather than inside manufacturing establishments alone.

6. TRADE LIBERALIZATION AND EMPLOYMENT: THEORETICAL EXPECTATIONS

Trade liberalization changes the competitive environment in which firms operate. Removal of trade restrictions is expected to influence the industrial structure by encouraging sectors in which the country has comparative advantage. Since India has historically had an abundant supply of labour, the standard expectation is that labour-intensive industries should expand. Such structural change would increase the demand for labour and accelerate employment growth.

Under a competitive framework, however, liberalization may also contract industries that previously benefited from protection from imports. Import-competing industries may lose market share when tariffs and other restrictions are reduced. The employment effect therefore depends on the relative magnitude of expansion in export-oriented or competitive industries and contraction in protected industries.

The source emphasizes that imperfect competition complicates this simple prediction. Import competition does not necessarily force domestic industries to contract. Firms may use imported intermediate inputs and capital goods to reduce costs, improve technical efficiency and exploit economies of scale. An import-competing industry may therefore expand after liberalization if access to imported inputs improves its productivity sufficiently.

At the same time, stronger competition may stimulate technological upgrading. Firms attempting to compete on quality and cost may introduce advanced technology, automation and organizational changes. These changes can increase productivity while reducing the amount of labour required for a given level of output. Thus trade liberalization can simultaneously create employment through expansion and destroy or reduce employment through productivity-enhancing technological change.

7. TRENDS IN MANUFACTURING EMPLOYMENT

The evidence summarized by Goldar shows that employment in manufacturing grew at about 2.3 percent per year over 1975–76 to 2011–12. Importantly, the pre-reform period from 1975 to 1990 recorded a higher employment growth rate of approximately 2.7 percent per year, while the post-reform period from 1990 to 2011 recorded about 2.2 percent per year. The source therefore concludes that economic reforms did not generate a clear step-up in the overall rate of manufacturing employment growth.

The distinction between organized and unorganized manufacturing is even more important. Over the broad period 1975–76 to 2011–12, employment in organized manufacturing grew at about 1.7 percent per year, whereas employment in unorganized manufacturing grew at approximately 2.4 percent per year. The unorganized sector accounted for around three-fourths of total manufacturing employment in the period discussed in the source.

The employment composition in 2010–11 provides a further illustration. The source's Figure 3 divides manufacturing employment among own-account manufacturing enterprises (OAME), establishments in the unorganized sector, and factories. OAME accounted for about 44 percent, unorganized establishments for about 30 percent, and factories for about 26 percent. OAME were defined as units without hired workers, while establishments had one to nine hired workers.

The source also notes an important change within unorganized manufacturing. Employment in unorganized manufacturing grew by about 3.0 percent per year during 1976–77 to 2004–05 but by only about 0.3 percent per year during 2005–06 to 2011–12. NSS evidence for 2000–01 to 2010–11 indicates a decline in employment of about 0.6 percent per year. Within this sector, employment in own-account manufacturing enterprises declined by about 1.8 percent per year, while employment in establishments increased by about 1.6 percent per year.

This internal restructuring is significant. It suggests movement away from very small own-account enterprises toward somewhat larger establishments with relatively higher productivity. The shift is consistent with the idea that not all non-farm employment produces the same development benefits. The source reports gross value added per worker for 2004–05/2005–06 of about Rs. 11,800 in OAME, Rs. 36,500 in non-directory manufacturing establishments, Rs. 55,100 in directory manufacturing establishments, and Rs. 366,700 in factories. Manufacturing as a whole was reported at about Rs. 64,500 per worker, compared with Rs. 19,200 in agriculture and allied activities.

The implication is not simply that workers should move from agriculture into any manufacturing activity. The productivity gains are potentially much larger when workers move from agriculture into higher-productivity manufacturing establishments and factories. The quality of

employment and productivity of the receiving activity therefore matter as much as the quantity of employment created.

8. WHY DID ORGANIZED MANUFACTURING EMPLOYMENT NOT ACCELERATE AFTER REFORM?

The source identifies several reasons for the sluggish employment response. First, India's industrial structure did not shift strongly toward labour-intensive industries. If liberalization had produced a major reallocation of output toward textiles, garments, leather and other labour-intensive sectors, employment growth could have accelerated. The evidence presented does not show such a transformation.

Second, the composition of exports did not shift sufficiently toward labour-intensive products. The source's export table shows a rising share of petroleum products, while the shares of cotton yarn and fabrics, ready-made garments, leather and leather products, and gems and jewellery declined between the earlier and later periods shown. This export composition was therefore not strongly aligned with the labour-abundant comparative-advantage argument.

Third, labour-intensive industries themselves experienced a decline in labour intensity. The source cites firm-level evidence showing a fall in labour intensity during the 1990s and early 2000s and links this to the adoption of new and sophisticated technologies that were more capital-intensive. Thus an industry can expand output without generating proportionate employment.

Fourth, changes in factor prices encouraged substitution of labour by capital. When capital becomes relatively more attractive or labour costs rise relative to capital, firms have an incentive to adopt labour-saving techniques. The result can be strong output and productivity growth accompanied by modest employment growth.

The source's comparison of GDP and employment indices for organized manufacturing visually demonstrates this divergence. Output expanded much more rapidly than employment. At the same time, employment growth in organized manufacturing became faster in more recent years, reaching approximately 7 percent per year according to the evidence presented. This suggests that the post-reform employment story should not be treated as uniformly stagnant: the later period showed a meaningful improvement.

9. LABOUR-MARKET REGULATIONS AND LABOUR REFORMS

Labour-market institutions influence both the cost of employing workers and the form in which firms hire them. The World Bank report cited in the source argues that excessive rigidity in formal manufacturing labour markets discouraged employers from creating jobs. Its estimate attributes about three million fewer formal manufacturing jobs to the Industrial Disputes Act.

However, the evidence also points toward a more nuanced interpretation. Labour regulations are not implemented identically across all Indian states. The literature cited in the source indicates that several states relaxed enforcement or developed more flexible practices at the ground level. The recent acceleration of organized manufacturing employment is presented as being consistent with the possibility that greater labour-market flexibility can support job creation.

A state-level analysis presented in the source finds a positive correlation between a labour-reforms index and employment elasticity during 2003–2008. The reported correlation coefficient was 0.35, rising to 0.46 when Andhra Pradesh was excluded. The evidence is therefore supportive of the hypothesis that labour reform can raise employment responsiveness, although correlation alone should not be interpreted as conclusive proof of causality.

10. CASUAL AND CONTRACT LABOUR

One of the most important changes in Indian manufacturing has been the increasing use of casual and contract labour. According to the evidence reported in the source, contract workers as a percentage of total workers in organized manufacturing increased from 14 percent in 1995–96 to 31 percent in 2007–08. The source also cites evidence that the informal share of the manufacturing workforce increased from 78 percent in 1999–00 to 85 percent in 2004–05.

The growing use of contract labour can be interpreted partly as a response to labour-market institutions. Several scholars cited in the source argue that contract workers provide firms with a mechanism for operating around some labour-regulation constraints, particularly those associated with the Industrial Disputes Act. Econometric studies cited by Goldar indicate that stringent labour regulations contributed to greater reliance on contract workers.

This creates an important distinction between the number of jobs and the quality and security of jobs. Contract employment may allow firms to adjust their workforce more easily and may support employment growth. However, the increasing share of contract workers can also weaken employment security and bargaining power. Goldar and Aggarwal's analysis, as summarized in the source, finds that labour-market reforms tend to increase regular-job creation, while import competition tends to raise casual employment among workers with education above the primary level.

11. TRADE LIBERALIZATION AND WAGES

There are two main reasons why trade liberalization might increase wages in a labour-abundant developing country. First, if trade induces a shift toward labour-intensive production, the demand for labour should rise. Higher labour demand should place upward pressure on wages.

Second, import liberalization can increase productivity. Domestic firms facing greater import competition may become more efficient, while access to imported intermediate inputs and capital goods can enable technological and organizational improvements. If productivity rises, workers may receive higher wages, provided the productivity gains are shared with labour.

The source also identifies a negative channel. Under a restrictive trade regime, some industries may have earned economic rents that supported wage premiums, especially where workers were organized. Liberalization can reduce or eliminate these rents and therefore reduce wages in those industries. The overall wage effect is consequently industry-specific and depends on the relative strength of the positive productivity and labour-demand effects versus the loss of protected-sector rents.

12. WAGES, LABOUR PRODUCTIVITY AND WAGE SHARE

The evidence presented in the source shows that the growth rate of real manufacturing wages lagged behind the growth rate of labour productivity. This gap widened over time. As a result, labour's share in manufacturing value added declined.

The source contrasts the decline in labour's income share with the behaviour of the price-cost margin. Despite trade liberalization and domestic industrial-policy liberalization, the price-cost margin did not show a corresponding decline in the post-reform period. This indicates that productivity gains were not simply passed through to consumers in the form of lower margins; distributional changes also occurred between labour and other claimants on value added.

The source's figure on the income share of labour in registered manufacturing from 1973–74 to 2007–08 shows a pronounced downward trend, particularly after 1991. The decline is consistent with the widening gap between labour productivity and real wage growth.

Several factors are identified in the source as contributing to the decline in wage share: reduced bargaining power of trade unions, increasing capital intensity, higher mark-ups combined with a rise in the ratio of materials to wages, and labour-saving technical change. These factors reinforce the argument that productivity growth by itself does not guarantee proportional growth in workers' incomes.

13. WAGE SHARE BEYOND MANUFACTURING

The downward movement in labour's income share is not limited to manufacturing. The source provides a sectoral comparison between average wage shares in 1993–94 to 1995–96 and 2007–08 to 2009–10. The reported figures show declines in agriculture, mining, manufacturing, construction, trade, hotels and restaurants, other transport, storage, and financial/business services. In contrast, electricity, gas and water supply, rail transport, post and communication, and other services recorded increases.

Sector	1993–96 Avg. (%)	2007–10 Avg. (%)	Difference (pp)
Agriculture	54.2	53.0	-1.1
Mining	32.1	24.4	-7.7
Manufacturing	33.3	22.2	-11.1
Electricity, Gas, Water	33.4	54.2	+20.7
Construction	76.0	46.2	-29.8
Trade	28.8	18.7	-10.1
Hotels & Restaurants	45.7	14.2	-31.4
Rail Transport	58.5	69.7	+11.3
Other Transport	64.7	43.6	-21.1
Storage	69.8	47.0	-22.8
Post & Communication	31.1	53.5	+22.4
Financial/Business Services	36.4	24.5	-12.0
Other Services	79.0	83.4	+4.4
All sectors	53.5	43.5	-10.0

Source: figures reported in the uploaded Goldar material. The comparison indicates that the decline in manufacturing wage share of about 11.1 percentage points was substantial, although some other sectors experienced even larger declines.

14. WAGE INEQUALITY BY EDUCATIONAL ATTAINMENT

Standard trade theory based on the Heckscher–Ohlin framework and the Stolper–Samuelson theorem would suggest that increasing integration of a labour-abundant developing economy into world markets should raise the relative wage of unskilled labour and reduce the wage gap between skilled and unskilled workers. The evidence presented in the source points in the opposite direction.

The manufacturing wage data reported for rural and urban male workers show a clear increase in the wage advantage associated with higher educational attainment. For example, in one manufacturing series, the ratio of the wage of the highest educational category to the average of the bottom two categories rose from 2.18 to 2.28 for rural males between 1993–94 and 2009–10. For urban males, the corresponding ratio rose from 2.36 to 3.42.

A second manufacturing series shows an even stronger increase. The rural male ratio rose from 1.91 to 2.52, while the urban male ratio increased from 2.66 to 4.69. These figures indicate that the returns associated with higher educational attainment increased relative to the wages of workers with the lowest levels of education.

Group	1993–94	2009–10	Ratio: Top / Bottom-two Avg.
Manufacturing (1) – Rural male	29.0–71.4	125.6–275.9	2.18 → 2.28
Manufacturing (1) – Urban male	42.3–108.3	152.1–508.5	2.36 → 3.42
Manufacturing (2) – Rural male	42.6–91.6	149.9–364.6	1.91 → 2.52
Manufacturing (2) – Urban male	46.3–135.7	120.6–726.7	2.66 → 4.69

Note: ranges summarize the lowest-to-highest educational wage figures reported in the source. The ratios are reproduced from the source's table.

The source highlights two major explanations for the increase in wage inequality: skill-biased technical change and increasing use of contract and casual labour. Skill-biased technology raises the

relative productivity and demand for workers who possess the skills needed to operate and complement new technologies. At the same time, expansion of less secure employment arrangements can weaken wage growth among workers with lower bargaining power.

15. DISCUSSION AND ANALYSIS

The evidence as a whole suggests that the relationship between openness, productivity and employment is not automatic. Trade liberalization can create conditions for higher productivity and greater competitiveness, but the employment consequences depend on the structure of production and the technologies adopted by firms.

India's experience illustrates the importance of the distinction between output growth and employment growth. Organized manufacturing experienced strong growth in GDP or value added while employment grew much more slowly for a substantial period. This divergence is consistent with rapid productivity growth and capital deepening. From the perspective of aggregate income, productivity growth is desirable; from the perspective of employment policy, however, the challenge is to ensure that productivity growth is accompanied by enough new jobs.

The evidence also suggests that the informal or unorganized sector cannot simply be treated as a residual category. It has historically employed a very large share of manufacturing workers. However, the very low productivity of own-account enterprises limits the extent to which movement from agriculture into such activities can reduce poverty. The reported productivity differences between OAME and factories are large. This strengthens the case for policies that help small enterprises move toward larger scale, better technology, formal markets and higher productivity.

Labour-market institutions are another important part of the explanation. If formal employment is costly or difficult to adjust, firms may choose contract employment or automation rather than expanding their regular workforce. Yet labour flexibility alone is not sufficient. The evidence that labour reforms are associated with greater employment elasticity should be interpreted alongside the evidence on wage share and inequality. A labour market that creates more jobs but increasingly shifts workers into insecure employment may improve employment quantity while leaving employment quality unresolved.

Finally, the wage evidence raises an important distributional question. Productivity gains are valuable only partly because they increase total output; they also matter because they can raise living standards. When real wages grow substantially more slowly than productivity, labour receives a declining share of the gains from production. The increasing wage premium for more educated workers further indicates that the benefits of technological change have not been distributed evenly.

16. POLICY IMPLICATIONS

Promote labour-intensive manufacturing: Industrial policy should encourage sectors with substantial employment potential, particularly where India can compete internationally. Expansion of labour-intensive production can help absorb workers with limited formal education.

Support productivity-enhancing enterprise growth: Policies should help very small manufacturing units move toward larger and more productive establishments through access to finance, technology, infrastructure, markets and managerial capabilities.

Balance labour flexibility with worker protection: Labour-market reforms should reduce unnecessary barriers to formal job creation while maintaining basic protections, predictable rules and fair employment conditions.

Improve the quality of contract employment: Where contract labour is used, policy should focus on transparent employment relationships, fair wages and appropriate social protection so that flexibility does not become a mechanism for systematic insecurity.

Encourage employment-friendly technological upgrading: Technology policy should recognize that productivity-enhancing technology can also be labour-saving. Firms and policy makers should seek technologies and organizational practices that raise productivity while creating complementary employment where feasible.

Strengthen skills and education: Because wage inequality is increasingly related to education and skill, investment in secondary education, vocational training and industry-relevant skills can help workers participate in technology-driven growth.

Link productivity gains with wage growth: A sustainable manufacturing strategy should seek mechanisms through which productivity improvements are reflected in real wage growth and better employment conditions.

Focus on structural transformation, not only job numbers: The objective should be movement toward higher-productivity manufacturing activities rather than simply movement from agriculture into very low-productivity own-account enterprises.

17. MAJOR FINDINGS

- Manufacturing is strategically important for structural transformation because it can absorb workers with lower educational attainment than many modern service activities.
- Manufacturing employment grew at about 2.3 percent per year over 1975–76 to 2011–12, with slower growth after reform than before reform according to the source's comparison.
- Organized manufacturing employment grew more slowly than unorganized manufacturing over the long period examined.
- Unorganized manufacturing contains substantial employment but large productivity differences exist among own-account enterprises, establishments and factories.
- Trade liberalization did not produce a decisive shift of industrial structure toward labour-intensive activities.
- Technological change and capital substitution reduced labour intensity even in some labour-intensive industries.
- Recent years nevertheless showed faster organized-manufacturing employment growth, around 7 percent per year in the period highlighted by the source.
- Contract labour became increasingly important, with its share rising from 14 percent in 1995–96 to 31 percent in 2007–08.
- Real wage growth lagged behind labour productivity growth, contributing to a decline in labour's share of manufacturing value added.
- Wage inequality by education increased, especially among urban male manufacturing workers.
- Skill-biased technical change and increasing use of casual/contract labour are identified as important explanations for rising wage inequality.

18. CONCLUSION

The experience of Indian manufacturing demonstrates that economic reforms, trade openness and productivity growth do not automatically translate into rapid employment generation or equitable wage growth. Manufacturing remains a crucial sector for development because it offers a bridge between agriculture and higher-productivity non-farm employment and can absorb workers who may not meet the educational requirements of many service-sector jobs.

The evidence reviewed in this paper shows that employment growth did not accelerate immediately after the reforms. The industrial structure did not move decisively toward labour-intensive sectors, export composition did not become sufficiently labour-intensive, and technological change reduced labour requirements in a number of industries. At the same time, later years recorded a substantial improvement in organized manufacturing employment growth, suggesting that employment outcomes can change as firms, institutions and markets adjust.

The unorganized sector remains central to manufacturing employment, but the large productivity gap between own-account enterprises and factories highlights the importance of improving the productivity and scale of smaller enterprises. Simply moving workers from agriculture into low-productivity own-account manufacturing is unlikely to generate the full poverty-reducing benefits of industrialization.

The wage evidence adds a strong distributional dimension. Labour productivity increased more rapidly than real wages, reducing labour's share in manufacturing value added. Wage inequality by educational attainment also increased, contrary to the simple expectation that globalization in a labour-abundant economy would reduce the skilled–unskilled wage gap. Skill-biased technological change and the spread of contract and casual employment provide important explanations.

A successful manufacturing strategy therefore requires more than openness or investment alone. It must combine productive industrial expansion, employment-oriented technological upgrading, appropriate labour institutions, skill development and mechanisms that allow workers to share in productivity gains. The central policy challenge is to achieve manufacturing growth that is not only faster, but also more employment-intensive, productive and inclusive.

19. REFERENCES

- Ahsan, A. and Pages, C. (2008). Work cited in the source discussion on labour regulation and contract employment in India.
- Das, Deb Kusum and Gunajit Kalita (2009). "Do Labor Intensive Industries Generate Employment? Evidence from Firm Level Survey in India." ICRIER Working Paper, June 2009.
- Felipe, Jesus and Utsav Kumar (2010). "Technical Change in India's Organized Manufacturing Sector." Levy Economics Institute Working Paper No. 626.
- Goldar, Bishwanath (2004a). Work cited in the source on trade unions and declining wage share.
- Goldar, Bishwanath (2004b). Work cited in the source on increasing capital intensity and wage share.
- Goldar, Bishwanath and S. Aggarwal (2005). Work cited in the source on bargaining power and wage share.
- Goldar, Bishwanath (2009). "Impact of Trade on Employment Generation in Manufacturing in India." IEG Working Paper.
- Goldar, Bishwanath (2011). "Growth in Organized Manufacturing Employment in Recent Years." Economic & Political Weekly, February 11, 2011.
- Goldar, Bishwanath and S. Aggarwal (2012). Work cited in the source on casual/contract labour and employment.
- Goldar, Bishwanath, Mitra and Kumari (2008). Work cited in the source on gross value added per worker in unorganized manufacturing.
- Gupta, Hasan and Kumar (2008). Work cited in the source on labour regulation and contract workers.
- Maiti, Saha and Sen (2009). Econometric evidence cited in the source on labour regulation and contract workers.
- Maiti, S. and Mitra (2010). Work cited in the source on the informal share of the manufacturing workforce.
- Papola, T. S. (ed.) (2008). Labour Regulation in Indian Industry, Vols. 1–10. New Delhi: Bookwell Publishers.
- Ramaswamy (2003). Work cited in the source on contract labour and labour regulations.
- Sen, Saha and Maiti (2010). Econometric evidence cited in the source on labour regulations and contract employment.
- Sharma (2006). Work cited in the source on contract workers and labour regulations.
- Shastry and Ramana Murty (2003). Work cited in the source on mark-ups, materials and wages.
- Virmani and Hashim (2009). Work cited in the source on labour-saving technical change.
- Wacziarg, Romain and Jessica Seddon Wallack (2004). "Trade Liberalization and Intersectoral Labor Movements." *Journal of International Economics*, 64, 411–439.
- World Bank (2010). *India's Employment Challenge: Creating Jobs, Helping Workers*. New Delhi: Oxford University Press.