Chapter V
Concluding Remarks and Policy Suggestion
The key questions examined in this thesis are: What are the employment and wage rate trends across Indian manufacturing industries classified based on trade orientation? What are the trends and patterns of different types of employment such as men-women, regular-contract and skilled and unskilled workers in Indian manufacturing industries based on trade orientation? What are the trends and patterns of level of wages and wage rate of types different workers like men-women, regular-contract and skilled-unskilled workers in Indian manufacturing industries based on trade orientation of industries? How does trade affects level of employment and wage rate in the Indian manufacturing sector? Does the geographical origin of imports or destinations of exports matter for employment and wage outcomes in Indian manufacturing industries?

**Aggregate Manufacturing**

In the post reform era, Indian manufacturing sector has witnessed the so-called ‘jobless growth’ where output growth rate increased and employment growth rate decreased. This study explores further this phenomenon and finds that employment has reported highest growth in import competing industries, whereas export oriented industries have also reported positive but marginal growth rate. At the same time, employment in export oriented, export oriented-import competing and low trade dependent industries have reported increasing growth rates between 1989-90 and 1994-00; but during the period 2000-01 to 2005-06 these trade oriented industries have reported declining growth rates.

Furthermore, employment across the export oriented industry groups depicted that knitted and crocheted fabric, leather product, refined petroleum and chemical industries reported increasing trends over the last two decades. Whereas, in case of import competing industries TV, radio, video and optical instruments-photograph equipment have shown a consistently rising growth rates over the last two decades.

In case of labour productivity at aggregate level there was a strong growth reported in labour productivity in the early 1990s. After that the labour productivity fell steadily in 2000-01 and 2005-06. It is found that the labour productivity in Indian manufacturing augmented during 1989-90, peaked in 1994-95, declined in 2000-01 and fell further in 2005-06.

**Male and Female Employment**

This study also finds that women employment in export orientated industries hold the highest share of women employment (30 percent) than other trade linked industrial
groups e.g. import competing, export oriented-import competing, and low trade dependent. The distribution of women and men employment, the highest share of men employment (94 percent) has found in the import competing industries.

**Regular and Contract Employment**

In addition, it is observed that share of contract workers has increased during the period of 1999-00 to 2011-12. It is reported that around 34 percent of contract workers engaged in Indian organised manufacturing. A high degree of concentration of contract workers is seen for the year 2011-12. The gap between regular and contract workers have widened after the trade liberalisation, as the share of contract worker increased from 22 to 34 percent over the last decade.

**Skilled and Unskilled Employment**

This study finds that as unskilled workers is low-cost and abundant in India, in majority of Indian manufacturing industries unskilled workers still involve of a sizable chunk in total Indian manufacturing. It is also important to note that unskilled workers intensive industries are mainly low technology industries were lower price derived from use of cheap labour source of competitive advantage in the market place. It is reported that around 79 percent of unskilled workers engaged in total manufacturing, followed by highest share of unskilled workers are engaged in low trade dependent industries.

This study estimates the impact of international trade on level of employment and employment growth in Indian manufacturing. With regards to the panel analysis using fixed effect model, suggested that imports have a positive impact on the employment. On the contrary, export is observed to be negatively impacting the level of employment. As far as creating employment opportunities is concerned, international trade seems to have an overall negative impact on different types of employment viz. male and female, regular and contract and skilled and unskilled workers, while considering import. The available literature provides partial support for the argument that technology has a gender-bias and skill bias in the Indian manufacturing sector. While, R&D intensity did not have any adverse effect on employment; capital intensity, on the other hand, has mostly significant with negative relation.

The empirical results on FDI found to have a positive role on the contract employment patterns in Indian manufacturing. It shows entry of foreign firms can be seen to increase the employment opportunities for contract workers. The findings suggest that foreign
firms do not have any adverse effects on the manufacturing employment in India as compared to their domestic counterparts while they significantly pay relatively higher wages to their workers. Therefore, this study tends to imply that labour in fact had benefited from foreign investment in India.

**Real Wages in Indian Manufacturing**

An analysis of trends in real wage found that there was a substantial deceleration of annual average growth in real wages in the 1990s. The average annual growth of real wages per workers fell from 3.51 percent per annum during the 1990 to 2000 to 2.26 percent per annum during the 2001 to 2011. This slowdown in real wage growth has been widespread across industry groups based trade orientation. Industries that are both export-oriented and import competing have seen the sharpest decrease in the annual average growth rate of wage between 1990s and 2000s, followed by import competing industries. It clearly industries facing increasing import competition are witnessing steep fall in workers real wage possibly due to severe competition from cheap imports. Among trade linked industries, it is the export oriented group that has also seen fall in wage rate but relatively a lower extent. The low-trade dependent group has the lower decline in wage growth of workers.

**Wage Rate of Male and Female Workers**

The real wage rate in this group around one-third average wage rate of export oriented industries. This study finds that as for comparison of employment opportunities between men and women across industry, a high level of employment disparities is found were employment women contribute by one-fourth. Only few industries participation of women employment in industry process are relatively better i.e. footwear, watches and clocks, food products, tobacco products, wearing apparel and dressing and dyeing. This indicates that reduced differences between the real wages of men and women workers; the evidence suggests that the average wage rate has grown faster in those industries which employ a comparatively higher proportion of women than in industries which employ few women. Furthermore, this disparity has increased among trade linked industries viz., export oriented, export oriented and import competing and low trade dependent industry groups which are supposed to exhibit nearly more equal wages among men and women workers. Interestingly, in case of real wage rate in export
oriented industries has lower than in import competing and other tradable groups, but lowest was the food product and beverages product industry group.

**Wage Rate of Regular and Contract Workers**

Real wage earned by contract workers than regular workers shows there has been an indication of declining wage differential ratio in contract wage relative to regular over the last period. It finds that there is significantly higher wage difference in EOIC industry group between the regular and contract workers. In this case, regular workers’ real wages have been decreasing and contract workers has increasing significantly over the period. while, EO, IC and LTD group show that there is increasing trend in real wages by contract workers in Indian manufacturing but they are least paid compared to regular workers.

**Wage Rate of Skilled and Unskilled Workers**

It finds that across industry groups growth of real wages for unskilled workers in the low trade dependent industries has showing increasing growth compare to skilled workers, while EOIC industries followed by considerable growth. Interestingly, IC industries growth of real wage has recorded declining as compare to skilled workers and in case of EO industries there is marginally increasing growth of real wages for both skilled and unskilled workers during 2007-2011.

Although, few industries the growth rate of real wages for unskilled employment are relatively high compare to skilled workers in few industries i.e. other chemical products, knitted and crocheted fabrics and articles, medical appliances, instruments and appliances, special purpose machinery, other textile, wire and cable and manufacturing n.e.c. while, few industries where real wages of unskilled workers of growth has register very low i.e. office, accounting and computing machinery, watches and clocks, aircraft and spacecraft, television and radio transmitters and dressing and dyeing.

At aggregate level, the unskilled workers are receiving real wages around one-fourth compare to skilled workers. The finding suggests that post-trade liberalisation period there has been a spreading wage inequality between skilled and unskilled workers. It is noticeable, trade liberalisation augmented demand for unskilled workers but slight effect on its real wages because of excess supply condition.
As concerned with wage and wage rate of employment empirical findings show the effects of trade openness. The estimated fixed effects model indicates that export and import of an industry has a positive impact on wage rates. Higher exports and imports in an industry lead to higher wage rates in Indian manufacturing. In case of developed and developing countries classifications, only import from developed countries turned out to be significantly and positively related to the wages and wage rates. It also finds that foreign direct investment has a significant positive impact on level of wages and wage rates in Indian manufacturing. This indicates higher levels of foreign direct investment is related to higher wage rates. Capital intensity and net value added of industries comes out with a statistically significant positive impact on wage rates. It would appear that firms in Indian manufacturing using capital intensive technologies pay relatively more to their workers owing to the nature of factor-substitutions. Import weighted tariff does not have any effects on wages and wage rates.

As a concerned with two trade variables i.e., export and import negative impact on wages and in case of wage rates import has positive and significant effects. This suggests that the wages of gender pattern of employment seems to be insensitive to the exports and imports channel of trade. This indicates that gender wages cannot be limited to women standing relative to men, but that the level and direction of change in male wages are equally relevant. Capital intensity observed to have an adverse effect on wage rates of men and women employment. It suggests that higher fixed capital per workers has led to a lower wages gender employment. Foreign direct investment has a significant negative effect on wage rates of gender employment.

Export has a positive effect on wage rates of contract workers and import has a significant positive effect on wage rates of regular workers. This result suggests that trade variables are negatively affects the level of wages but also positively effects the wage rates in Indian manufacturing. Foreign direct investment has a significant negative impact on level of wages and wage rates in Indian manufacturing. R&D have a positive and significant related to wages of regular and contract employment. It suggests that technological activities in the form of research and development tend to provide little increases wages and employment opportunities for both regular and contract workers.

The relationship between international trade and wage rates of skilled and unskilled employment is observed to be negative. Both the import and export comes with a negative effects on level of wages. Interestingly, imports has a statistically positive
impact on wage rates for skilled and unskilled employment. Higher imports in an industry are found to have increases wage rates. However, the foreign direct investment has a significant adverse impact on level of wages and wage rates of skilled and unskilled employment. This indicates that foreign direct investment may ultimately decrease wage gap both skilled and unskilled workers.

**Policy Implications**

Export oriented sector displacing unskilled labour by skilled labour, it is important that government should target the skill development programme and provide training to the workers who have lost their job in the export oriented industries, they need to retune high skilled. Increasing the skills for unskilled workers is the best way to ensure the employment opportunities for the unskilled workers.

The important policy implications related to import policy, growing liberalisation of the trade and increasing competition, played an important role in increasing economic growth, but the same positive effect is not visible in the case of employment generation in Indian manufacturing. The absence of positive effect of export on employment may be due to the slow growth of labour intensive exports. The labor-intensive manufacturing sector expansion in India is constrained by the rigid labour laws.

Keeping in consideration that the government plays the prominent role in wage determination in the manufacturing sector, trends in wages and employment show that wage movements in Indian manufacturing sector seems to have discouraged employment growth by encouraging growth of capital intensity. As the economy opens up, cost adjustments become increasingly important and wage flexibility clearly facilitate cost adjustments.

In order to improve the employment level efforts are needed to attract FDI in the export-oriented industries. This 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.