

Trend of Employment in India, 1990-2012: Is There a Diverging Trend?

Nikhil Kumar Mandal

Assistant Professor,
Department of Economics,
Chakdaha College,
Nadia, India.
nikhilmand@gmail.com

Structured Abstract:

Purpose: This study explores the trend of employment in organized sectors in India during 1990 - 2012. In this study an attempt has made to focus on public and private sectors employment in organized sector for the same period. It also investigates the trend of employment in organized sectors by sex.

Design / Methodology / Approach: The author has selected the latest time period from 1990 to 2012 for the purpose. This paper is supported by the secondary data which is collected from various years of economic survey of India. There are nine heads under the secondary data by the industry - i. Agriculture, hunting etc.; ii. Mining and quarrying; iii. Manufacturing; iv. Electricity, gas and water; v. Construction; vi. Wholesale and retail trade; vii. Transport, storage & communications; viii. Finance, insurance, real Community; and ix. Social & personal services estate, etc. The estimation of growth rates of parameters has been designed by the statistical package SPSS in version 20.

Findings: The growth rate of employment in the private sector is more (1.6%) compared to (-) 0.5% in public sectors in India during 1990-2012. The growth rate of male employment is more in private sector (1.2%) than public sector (-0.8%) in India. The average annual growth rate of combined sectors is 2.1% for female compared to - 0.2% for male in all India for the period 1990 to 2012. The reasons for deceleration in employment include both policy level and technological changes in the production process over the last several years.

Research Limitations / Implications: This study is not possible to extend up to 2018 due to unavailability of data after 2012. All causes for deceleration growth rate of employment in organize sector in liberalization era cannot be explained in this study

Originality / Value: People may accept the research findings which can help them to find the better employment opportunity.

Keywords: Growth rate of employment, Organized sector, Public and Private sectors.

Introduction

There is no doubt among the scholars about a significant acceleration growth in the post reform period in India. Average GDP growth increased to 6.2 per cent per annum from 1992-93 to 2003-04, from 5.6 per cent per annum during the period 1980-81 to 1990-91 (Alakh N Sharma, 2006)

After liberalization in India, many scholars focus on the jobless economy with increasing GDP growth rate by statistical analysis. The rate of growth of the gross domestic product (GDP) has increased significantly in India. It was estimated around 8% in 2005-06. Although this growth has been led by services, there has been considerable improvement in industrial activity, and international competitiveness is seen in some Indian industries (e.g., automobiles and pharmaceuticals), in terms of both cost and quality. Now question arises regarding the status of employment in India in the recent years. Employment as a whole which had experienced a steady growth of around 2 per cent from 1961 to 1990 (when the growth of GDP was only around 3.5 per cent), declined sharply to 1.5 per cent during 1990-92 and further to around 1 per cent during 1993-2000. The deceleration in employment growth during the 1990s took place along with acceleration in the GDP growth rate. Thus, the employment content of growth deteriorated, as reflected in the substantial decline in employment elasticity from 0.41 during 1983-94 to 0.15 during 1999-2000. The results of the employment and unemployment survey, 1999-2000 have generated considerable debate among scholars and policy-makers with regard to the trends in employment and unemployment in the 1990s.

The development of employment in organized sector is neglected by the researchers in recent years. Therefore, the present paper deals with the trends in employment in the organized sector in India for the period 1990 to 2012.

Review of Literature

Subhanil Chowdhury (2011) found that the 66th round National Sample Survey Organisation data (2009-10) on the employment situation paints a grim picture of a limited creation of jobs between 2004-05 and 2009-10, widespread withdrawal from the labour force (especially by women) and slow growth of employment in the non-agricultural sector.

K P Kannan, G Raveendran (2010) observed that the average annual growth of employment in the manufacturing industries during the period from 1981-82 to 2004-05 was 0.78%. During the pre-reform period from 1981-82 to 1991-92, the employment growth rate in

manufacturing industries was 0.40% while it marginally increased to 0.63% during the post-reform period from 1992-93 to 2004-05.

Alakh N Sharma (2006) showed that this is adequately evident from the cotton textile and garment sectors wherein workers were retrenched on a massive scale during the 1980s and from the loss of more than one million jobs during the latter half of 1990s in the organised manufacturing sector.

Seema Joshi (2004) found that the primary and tertiary sector witnessed deceleration in growth rates of employment during the post-liberalization period (1994-2000). In case of the latter, it was mainly due to the sharp deceleration in employment growth in community, social and personal services to 0.55 per cent in the post-liberalisation period as against 2.90 per cent in the pre-liberalisation decade.

Uma Rani and Jeemol Unni (2004) found that growth in the early 1990s had employment generating potential in some consumer goods industries but this potential tapered off in the late 1990s. Machinery and metal-based industries did not have labour absorption capacity during the reforms period in the organised sector. They observed 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 unorganised segment and the generation of quality employment.

Ruddar Datt (2002) observed from his sector wise analysis that the growth rate of primary and tertiary sector are deceleration growth rate in the post reform period (1994 to 2000). This growth rates are 1.6% to -0.34%% for primary sector and 3.53 to 2.42% for tertiary sector respectively for the period 1983-94 to 1994 - 2000. However, the overall growth rate of the secondary sector improved from 2.90 per cent in the pre-liberalisation decade to 3.14 per cent in the post-liberalisation period because of the combined effect of the valid growth of the manufacturing and construction sectors.

Bishwanath Goldar (2000) investigated the growth rates of employment in public and private for three periods: 1973-74 to 1980-81, 1980-81 to 1990-91 and 1990-91 to 1997-98. He showed employment grew rapidly in both public sector and private sector factories in the 1970s. There was a sharp deceleration in employment growth in the 1980s in both public sector and private sector factories. In the 1990s, the growth rate of employment in public sector factories has come down further. It was only 0.4 per cent per annum between 1990-91

and 1997-98. By contrast, the growth rate of employment in private sector factories has recovered and surpassed the growth rate prevailing in the 1970s with the consequence that almost the entire increase in employment in organised manufacturing that has taken place in the 1990s is accounted for by private sector factories.

This paper has been organized as follows. Section 1 analyses introduction. Section 2 discusses scope, objective and methodology. Section 3 deals with analytical result. Finally, Section 4 focuses the summary and conclusions.

Scope, Objective and Methodology

1 Scope and Objectives: This is the background against which this paper examines the performance of employment in the organized sector. The present study explores the trend of employment in organized sectors in India during the globalization era (1990 to 2012). In this study an attempt has made to focus on public and private sectors employment in organized sector for the same period. It also investigates the trend of employment in organized sectors by sex.

2 Methodology: The present paper is concerned with the growth rate of employment in organized sector in India in the post reform period. The time period is considered in this study from 1990-91 to 2011-12. This paper is supported by the secondary data which is collected from various years of economic survey of India. There are nine heads under the secondary data by industry - i. Agriculture, hunting, etc.; ii. Mining and quarrying; iii. Manufacturing; iv. Electricity, gas and water; v. Construction; vi. Wholesale and retail trade; vii. Transport, storage & communications; viii. Finance, insurance, real Community; and ix. Social & personal services estate, etc. The author used the statistical package SPSS under version 20 for estimation of growth rates.

2.1 The methodology to estimate the parameter (growth rate) of the equations 1 is taken from Bhattacharyya and Bhattacharyya (2007). The equations have been explained in following paragraphs.

1. Simple Exponential Equation

Here, the linear form equation is $\ln Q_t = a + bt \dots(1)$ where Q_t = output, t = time, b = coefficient on time, and a = constant. The coefficient on time, b , is the continuous rate

of growth. By the definition, growth rates is, $\frac{1}{y} \frac{dy}{dt} = g_t, \dots(2)$, differentiating Q_t

with respect to t , it gives $\frac{1}{Q_t} \frac{dQ_t}{dt} = b, \dots(3)$ from equation 1. Therefore, from

equations 2 and 3, the estimate of b is presented as an annual growth rate. It is presented as regression coefficient (RC, henceforth) in tables 1, 2 and 3.

2. Useful Term Associated with Econometrics Analysis

i. The “R” is the correlation coefficient between the two variables. The “R²”, indicates the amount of change in the dependent variable that can be attributed to our one independent variable. The R² of 0.734 indicates that 73.4% (100 x 0.734) of the variance in the public employment for organized sector in India can be explained by the time (independent variable).

ii. He considers the equation for goodness of fit which is sufficiently large adjusted R² tested by F test, iii. Author has selected the equation with highest R² bar as the best fit equation for estimation of parameters, iv. In tables 1, 2 and 3 show * significant at 1 % level can accurately explain variation in the dependent variable and v. Finally, the parenthesis in before number indicates negative sign and after number marks as standard error.

3. Limitation

The deceleration in employment growth during the 1990s took place along with acceleration in the GDP growth rate. The time period in this study is not possible to extend up to 2018 due to unavailability of data after 2012. All causes for deceleration growth rate of employment in organize sector in liberalization era cannot be explained in this study. Therefore, researchers are encouraged to test the other factors further.

Analytical Result

This section of the present study deals with the trend of employment in organized sector in India for the period 1990 to 2012. The growth rate of employment in organized sector is very poor (0.2%) for the same period which is presented in table 1(see Appendix for tables and graphs). The growth rate of employment in the private sector is more (1.6%) compared to (-) 0.5% in public sectors for the period 1990-2012 in India. The macroeconomic policies which

are adopted by the Government of India in 1991. The reasons for deceleration in employment include both policy level and technological changes in the production process over the last several years. Consequently, a significant component of GDP growth came from productivity growth and increasing capital-intensity of the economy. This particular disjunction is crucially related to the economic policy regime, which has involved a substantial degree of internal and external liberalization, especially in terms of more open trade and capital accounts. There are reasons to believe that the pattern of manufacturing growth under an open economic regime tends to be such that the responsiveness of employment growth to the growth in output declines. It is worth noting that the combination of high output growth and low employment growth is a feature that has characterized both India and China during the years when they have opened their economies to trade and investment (Joyati Ghosh and C. P Chandrasekhar, 2006).

The graph 1 shows that the public sector employment is increasing trend up to 1997 and after that it is declining one. While the private sector employment is less number person placement comparison to public sector employment, but it is increasing trend from 1990 to 2012. After 2004, this trend is galloping increasing rate in private sector.

The table 2 deals with sector wise growth rate of employment for male in India. The growth rate of male employment in organized sector is - 0.8% for public category compared to 1.2% for private sector in India during 1990 to 2012. But growth of employment in combined sectors for male people, it is characterized by negative one (-0.2%) with statistically significant at 1% level during the same period which is shown in table 2. This result of negative growth rate in employment has been happened for the introduction new economic policy to adopt the Government of India. In other words, it is a factor of liberalization policy, has been taken by Government of India. Joyati Ghosh and C. P Chandrasekhar (2006) found that aggregate employment in the organised manufacturing has fallen in absolute term since 1997. Beside public organised employment has been falling since the early 1990s. But private organised employment grew between 1993 and 1997, thereafter has also fallen.

The graph 2 presents the trend of employment in organized sector for public male and female during 1990-2012. It is clear that trend of employment for public male is declining but for female it is increasing one from 1990 to 2012.

Table 3 presents the growth rate of employment for female in organized sector for period 1990 to 2012. The performance of this rate for female is better than that of male which are shown in tables 2 & 3. The average annual growth rate of combined sectors is 2.1% for female compared to – 0.2% for male in all India for the period 1990 to 2012 in table 3. The growth rate of female employment in private sector is more than double (3%) compared to 1.4% in public sector for the same period. It may be happen declining investment amount in the reform period. The graph 3 shows that the trend of employment for private male is steady increasing up to 1998 and again declines up to 2005, after that it is increasing one. On the other hand, for female, the trend of employment is broadly increasing one for the period 1990 to 2012.

Summary and Conclusion

This study has attempted to explore the trend of employment in organized sectors in India during the 1990 to 2012. The growth rate of employment in the private sector is more (1.6%) compared to (-) 0.5% in public sectors for the same period in India. The performance / growth rate of male employment in private sector (1.2%) is better position than public sector (-0.8%) in India. The reasons for deceleration in employment include both policy level and technological changes in the production process over the last several years. . The average annual growth rate of combined sectors is 2.1% for female compared to – 0.2% for male in all India for the period 1990 to 2012. It might have happened due to the declining investment amount in public sector in the reform period. The deceleration in employment growth has been accompanied by increasing informalisation of the workforce.

References

- Bhattacharyya, Maumita., & Bhattacharyya, Sudipta. (2007). Agrarian impasse in West Bengal in the liberalisation era. *Economic & Political Weekly*, 42(52), 59-71.
- Chowdhury, Subhanil. (2011). Employment in India: what does the latest data show? *Economic and Political Weekly*, 56(32), 23-26.
- Datt, Ruddar. (2002). Economic liberalisation and its implications for employment in India. In Ashok Mathur & P. S. Raikhy (Eds.), *Economic liberalisation and its implications for employment in India*. Deep and Deep Publications: New Delhi.

- Goldar, Bishwanath. (2000). Employment growth in organised manufacturing in India. *Economic and Political Weekly*, 35(14), 1191-1195.
- Government Report: Economic Survey of India in various issues.
- Joshi, Seema. (2004). Tertiary sector-driven growth in India: impact on employment and poverty. *Economic and Political Weekly*.
- Kannan, K. P., & Raveendran, G. (2010). Growth sans employment: a quarter century of jobless growth in India's organised manufacturing. *Economic and Political Weekly*, 44(10), 80-91.
- Rani, Uma., & Unni, Jeemol. (2004). Unorganised and organised manufacturing in India potential for employment generating growth. *Economic and Political Weekly*, 39(41), 4568-4580.
- Sharma, Alakh N. (2006). Flexibility, employment and labour market reforms in India. *Economic and Political Weekly*, 41(21), 2078-2085.

Appendix: Analytical Tables and Graphs

Table 1: Growth Rate of Employment in India, Organised Sector by Simple Exponential method for the period 1990 to 2012.

Sector	R	R ²	Adj R Squared	Standard Error	Constant	t-value	RC	t-value	F-test Value
Public	0.857	0.734	0.721	0.02046	5.230(.004)	1225.81*	(-)0.005(.001)	(-)7.608*	57.88*
Private	0.871	0.759	0.748	0.06317	4.482(.013)	340.32*	0.016(.002)	8.14*	66.19*
Total	0.485	0.235	0.199	0.02677	5.620(.006)	1006.78*	0.002(.001)	2.541*	6.46*

Note: Total = Public +Private; RC = Regression Coefficient & * indicates statistically significant

Graph 1: The trend of employment for Public and Private in organized sector from 1990 to 2012

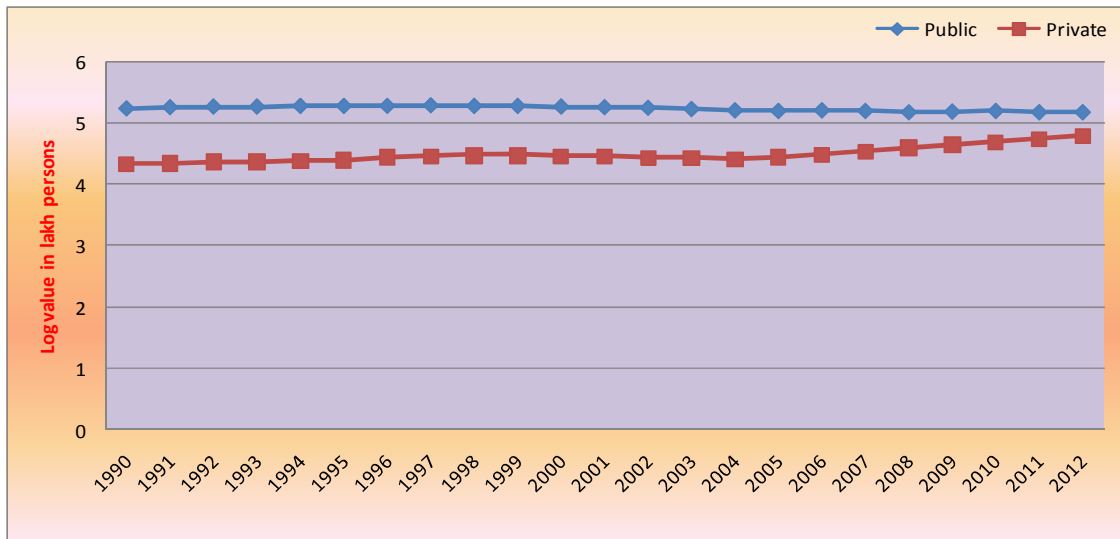


Table 2: Growth Rate of Employment for Male in Organised sector by Simple Exponential method for the period 1990 to 2012.

Sector	Variables	R	R ²	Adj R Squared	Standard Error	Constant	t-value	RC	t-value	F-test Value
Public (I)	Male	0.938	0.881	0.875	0.02102	5.066(.004)	1155.73*	(-)0.008(.001)	(-)12.450*	155.01*
Private(II)	Male	0.762	0.58	0.56	0.07276	4.224(.015)	278.46*	0.012(.002)	5.385*	28.99*
I+II	Total	0.398	0.159	0.118	0.02754	5.427(.006)	944.87*	(-)0.002(.001)	(-)1.989*	3.96*

Note: Total = Public +Private; RC = Regression Coefficient & * indicates statistically significant

Graph 2: The trend of employment in organized sector for public male and female during 1990-2012

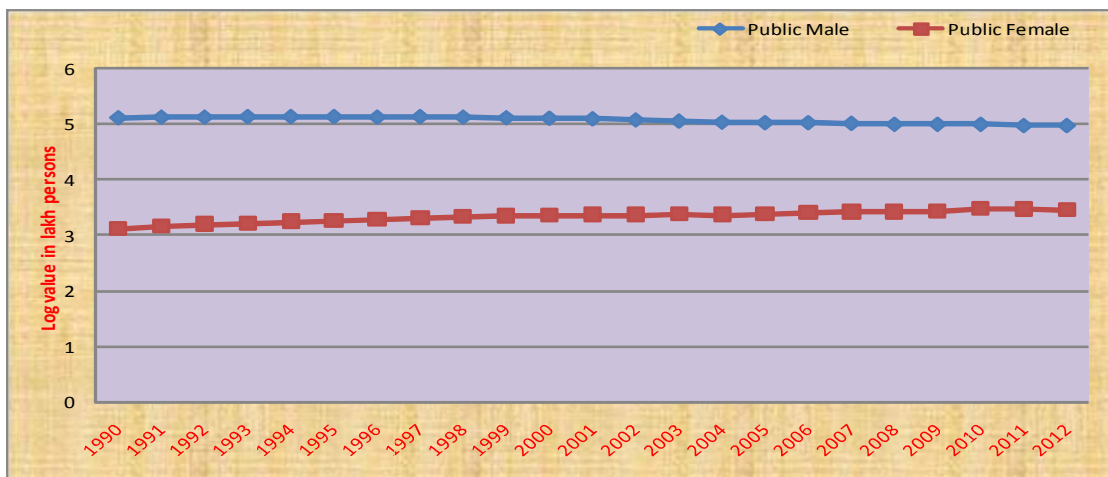


Table 3: Growth Rate of Employment for Female in India, Organised sector by Simple Exponential method for the period 1990 to 2012.

Sector	Variables	R	R ²	Adj R Squared	Standard Error	Constant	t-value	RC	t-value	F-test Value
Public (I)	Female	0.968	0.937	0.934	0.02526	3.331(.005)	632.29*	0.014(.001)	17.64*	311.2
Private(II)	Female	0.971	0.942	0.939	0.05138	2.995(.011)	279.56*	0.030(.002)	18.487*	341.77*
I+II	Total	0.977	0.954	0.952	0.03133	3.872(.007)	592.57*	0.021(.001)	20.978*	440.08*

Note: Total = Public +Private; RC = Regrassion Coefficient & * indicates statistically significant

Graph 3: The trend of employment in organized sector for Private male and female during 1990-2012

