

## ECONOMIC GROWTH – EMPLOYMENT LINKAGES IN INDIA

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### **ABSTRACT:**

Economic growth is an important indicator of economic development of the country, and consequently its standard of living. Employment is very closely associated with the economic growth. The Classical as well as Keynesian theories of the Employment describe positive growth- employment relationship. That is with the rapid and higher economic growth the higher and rapid employment, and vice versa. Its empirical analysis has a special importance. Whether, the same relationship between economic growth and employment is observed in the context of a particular economy, or otherwise. Economic reforms being implemented in India since 1991 has a special importance on economic growth ground. It is because, it is stated that the economic growth of India has been speeded up significantly and comprehensively. It is during the economic reforms period only, India has crossed the 5% rate of growth during the beginning of the implementation of the economic planning, and has succeeded in achieving growth rate up to 10 % and more that that also for some times. This poses the urgent need for examining the reality about the economic growth – employment linkages in India especially in the post reforms period. More importantly, what are trends in the linkages and what is their nature? This will enable us in assessing the growth – employment associations suggested by the Classical and Keynesian employment theories, or the linkages between growth and employment are different than that of the theories of the employment. It is against this over all background, the present research papers endeavours to examine the linkages between the economic growth and employment especially in the post economic reforms period. But it will also attempt for identifying the growth – employment linkages in the pre reforms period also so that the comparison between growth- employment linkages between pre and post linkages can be made,

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which can have policy implications. The present paper is organized as; I) Introduction, II) Review of Research Studies, III) Objectives of the Study, IV) Hypothesis of the Study, V) Research Methodology, VI) Trends in Economic Growth of India, VII) Growth and Pattern of Employment in India, VIII) Economic Growth – Employment Linkages in India, IX) Major Conclusions and Policy Suggestions, X) Concluding Remarks, XI) References. The study concludes that economic growth achieved by the Indian economy is a jobless growth in both the pre as well as post economic reforms periods. Its economic growth was considerable in the pre reforms period than the post reforms period. Sectoral employment has a different scenario for the pre and post reforms period. The linkages between economic growth and employment show that growth in employment was very much lesser in the pre as well as post reforms period. It is mainly contributed by the secondary sector and service sector, but speeded up by the secondary sector and primary sector.

**Key Words:** Economic Growth, Employment, Growth- Employment Linkages, Sectoral Distribution of GDP, Employment Pattern

## I) INTRODUCTION:

Economic growth is an important indicator of economic development of the country, and consequently its standard of living. Employment is very closely associated with the economic growth. The Classical as well as Keynesian theories of the Employment describe positive growth- employment relationship. That is with the rapid and higher economic growth the higher and rapid employment, and vice versa. Its empirical analysis has a special importance. Whether, the same relationship between economic growth and employment is observed in the context of a particular economy, or otherwise. Economic reforms being implemented in India since 1991 has a special importance on economic growth ground. It is because, it is stated that the economic growth of India has been speeded up significantly and comprehensively. It is during the economic reforms period only, India has crossed the 5% rate of growth during the beginning of the implementation of the economic planning, and has succeeded in achieving growth rate up to 10 % and more that that also for some times. This poses the urgent need for examining the reality about the economic growth – employment linkages in India especially in the post reforms period. More importantly, what are trends in the linkages and what is their

nature? This will enable us in assessing the growth – employment associations suggested by the Classical and Keynesian employment theories, or the linkages between growth and employment are different than that of the theories of the employment. It is against this over all background, the present research papers endeavours to examine the linkages between the economic growth and employment especially in the post economic reforms period. But it will also attempt for identifying the growth – employment linkages in the pre reforms period also so that the comparison between growth- employment linkages between pre and post linkages can be made, which can have policy implications. The present paper is organized as; I) Introduction, II) Review of Research Studies, III) Objectives of the Study, IV) Hypothesis of the Study, V) Research Methodology, VI) Trends in Economic Growth of India, VII) Growth and Pattern of Employment in India, VIII) Economic Growth – Employment Linkages in India, IX) Major Conclusions and Policy Suggestions, X) Concluding Remarks, XI) References.

## II) REVIEW OF RESEARCH STUDIES:

Economic growth and employment is a very important topic of research on various grounds in Economics. It has a special importance in India so as to extract the benefits of demographic dividend, which is an important present strength of India in the World. Hence it is important to take a review of the research literature on the topic growth and employment so as to identify gaps and lapses in the research on the present topic on which only emphasis is given in the present research study.

Pattanaik, Falguni (2010) in her study titled “Employment Intensity of Service Sector in India: Trend and Determinants” studies employment intensity with reference to India. According to her, a well-functioning service sector is the key to the economic performance of the contemporary developing countries. India is no exception, where service sector grows at a faster rate. What is, however, critical is the capacity of the service sector to create new jobs. This study investigates the employment intensity of service sector growth in India and examines the role of fundamental macroeconomic factors in determining the same. The results indicate that over the years, while output growth rate in service sector has increased, employment growth rate has decelerated significantly leading to considerable fall in employment elasticity. Coupled with this, there is predominance of low productive and unskilled labour based activities in service sector. Regression results indicate that investment friendly environment, better public expenditure

management, effective labour policies and proper structural transformation are the key to achieve higher employment elasticity in service sector. Kannan and Ravindran (2009) economic growth and employment with reference to organized manufacturing sector in India. The study argues that, there has been considerable debate in India about the impact of growth on employment especially in the organised manufacturing sector for different periods since the early 1980s. However, changes in the coverage of the Annual Survey of Industries demand a fresh look at the issue over a longer period. This study attempts such an analysis for the period from 1981-82 to 2004-05. For the period as a whole as well as for two separate periods – the pre- and post-reform phases – the picture that emerges is one of “jobless growth”, due to the combined effect of two trends that have cancelled each other out. One set of industries was characterised by employment-creating growth while another set by employment-displacing growth. Over this period, there has been acceleration in capital intensification at the expense of creating employment. A good part of the resultant increase in labour productivity was retained by the employers as the product wage did not increase in proportion to output growth. The workers as a class thus lost in terms of both additional employment and real wages in organised manufacturing sector. In an important research study Bhaduri, Amit (2008) studies Growth and employment in the era of globalization: Some lessons from the Indian experience. The paper examines the current growth process that the Indian economy is going through, discusses its impact on employment and redistribution and goes on to present an alternative growth model that is more socially inclusive. In an era of globalization, India has witnessed extremely high growth rates of GDP, but employment has failed to keep pace, as evidenced by the decline in employment elasticities of output. The author provides a political economy critique of the present growth paradigm and argues that the corporate logic of efficiency that is often extended to the national economy tends to have results opposite to that which was desired? Instead, he presents an alternate growth model which has employment at the centre and growth results from employment generated, or an 'employment first' model of development. The author then puts forward the institutional requirements of such a model, and argues that decentralised governance is at the heart of such an inclusive employment strategy. Bhalotra, Sonia (2002) has studied the impact of economic liberalization on employment and wages in India. This study assesses changes in the level and structure of employment and wages in India, relating them to trends in productivity. The discussion is set in the context of the on-going economic reforms in India and it therefore focuses on developments through the 1980s and 1990s relative to the previous period. In reviewing available studies of liberalization and the labour market in India, this paper argues that they suffer from a failure to recognize the importance of theory in formulating hypotheses and in offering a framework within which to cast opposing views.

Opinions are often put forward without reference to the data and, where data analyses have been done, they have tended to be *ad hoc*, ignoring restrictions imposed by *economic theory* and seemingly unaware of *econometric issues* that can create biases. For these reasons, one has to be very careful in drawing conclusions from the available literature. We attempt in this paper to discern important features of the data and to summarize what we have learnt so far, while delineating directions (and methods) for further research. It is important to stress that it is almost impossible to ascribe *causality* to relations that describe changes that have occurred since the start of the reform process and to note that the reforms are still in progress. Sankaran, Abraham and Joseph (2008) study the impact of trade liberalization on employment with reference to Manufacturing industries in India. The study states that, Indian economy has entered a phase of high growth in the recent years, after a long period of low growth. Since economic growth itself is not sufficient to achieve economic development, the concern of policy makers seems to have shifted towards making the growth inclusive – a process wherein employment is at its core. The available evidence, however, tends to indicate that the high growth has been accompanied by low employment growth in the organised manufacturing sector. Various reasons have been put forward in the literature to explain the observed jobless growth. This included, but not limited to, labour market rigidity, growth of maydays worked, growth in wage rate and others. But the observed jobless growth has been coincided with an unprecedented increase in the rate of integration of Indian economy with the world market through trade liberation. Yet, it is surprising to note that the impact of trade liberalisation has not received the attention of scholars that it deserves in explaining the observed jobless growth. Hence, the present study explores the underlying factors behind the poor performance of the organized sector in terms of employment generation in the context of trade liberalization.

The foregoing review of research studies on the topic growth and employment reveals that, no doubt, some research studies have been carried out. But it is a fact that as it is a broad topic there wide scope on undertaking the number of studies on this topic. The studies reviewed shows that the studies have been carried out on the specific sectors employment like service sector, industrial sector or manufacturing sector or more particularly organized manufacturing sector. Economic growth and employment of the Indian economy as a whole has not been attempted in the previous studies. Hence it is very much essential to take up a study on the topic



economic growth and employment linkages relating to the Indian economy as a whole, it is therefore the present study has been taken up.

### III) OBJECTIVES OF THE STUDY:

The major objectives of the present research study are as follows.

- 1) To examine trends in economic growth of India ;
- 2) To study growth and pattern of employment in India ;
- 3) To analyse growth- employment linkages with reference to India.

### IV) HYPOTHESIS OF THE STUDY:

The hypotheses of the present research study are as follows.

- 1) Economic growth of India is rapid in the post reforms period.
- 2) Growth-Employment has not proportionate relationship in India.

### V) RESEARCH METHODOLOGY:

The present research study is solely relied on the secondary data so far as collection of the necessary data is concerned. The study covers the total period of 31 years from 1980-81 to 2011-12, which is divided in to two periods namely Pre reforms period comprising of 1980-81 to 1991-92 , and Post reforms period consisting of 1991-952 to 2011-12. The secondary data has been collected from the sources such as Central Statistical Reports (CSO), NSSO Reports, Economic Survey, Government of India, and Statistical Hand Book of India by R B I. The collected data has been classified, edited and tabulated in the light of the objectives and hypotheses of the study. The tabulated data has been analysed by employing the statistical techniques such as Compound Growth Rate (CGR), Ratio Analysis, Correlation and Regression. Total period of 32 years is divided into Pre reforms period, from 1981-82 to 19192, and Post reforms period from 1991-92 to 2011-12. The growth in economic growth in India has been measured by calculating a C G R. for both the pre and post reforms period. The sectoral distribution of the economic growth in India has been studied by examining the sectoral composition of GDP of India on both the terms growth as well as relative position. The relative position has been indentified by computing their ratios to total. Growth in employment in India is studied by calculating CGR for both the pre and post reforms periods. Like wise, growth in

employment by all the productive sectors, and their relative positions has been studied through both the CGR and Ratios as well. The linkage between economic growth and employment is a very crucial aspect studied by this paper through correlation and regression between GDP and Total employment, Total employment and employment by the three productive sectors, and Incomes of the Productive sectors and employment generated by them. Lastly by studying the results of the analysis of the data, the present study undertakes their interpretations and reveals important conclusions and gives policy suggestions as well.

#### VI) TRENDS IN ECONOMIC GROWTH OF INDIA:

Economic growth is an indicator of the extent of economic growth materialised by the country. And more importantly, it is an indicator of, whether a country is developed or under developed, etc. Hence it is of vital importance to examine the trends in economic growth of India, as the present study is exclusively relating to Indian economy. Gross Domestic product (GDP) is a measure of economic growth of the economy. Hence the data relating to trends in economic growth of India is presented in the table below.

**Table 1: Growth in G D P of India**

Year	G D P (at Current Prices )
1981-82	Rs. 160214 crore
1986-87	292924
1991-92	613528
1996-97	1301788
2001-02	2167745
2006-07	3953276
2011-12	8279975
CGR :	
1981-82 to 1991-92	6.29 % p. a.
1991-92 to 2011-12	3.37 % p. a.

Source: Central Statistical Organisation (CSO)

It is observed from the data results that the rate of growth of GDP at current prices was higher in the pre reforms period than the post reforms period.. It grew at the rate of 6.29% p.a.

during the period from 1981-81 to 1991-92, this is a pre reforms period. On the contrary, during the post reforms period the rate of growth of the GDP was 3.37%, which was significantly lower (less by 50%) than the pre economic reforms period. It is quite surprising that, how we can say India has achieved rapid economic growth in the post reforms period.

It is also essential to study, which is prominent productive sector, so far as the contribution of the different productive sectors to the economic growth of Indian economy is concerned. It is essential to know which productive sector has played a vital role in materialising economic growth of India. The examination of the composition of the GDP indicates the relative importance of the different productive sectors of the Indian economy. The necessary data and their results have been presented in the table below.

**Table 2: Composition of G D P of India**

Year	Primary Sector	Secondary Sector	Tertiary Sector	G D P at Current Prices
1981-82	58745(37%)	36090(23%)	65379(40%)	Rs. 160214 crore
1986-87	95182(32)	67754 (23 )	129988 (45 )	292924
1991-92	195454 (32)	140700 (23)	277374 (45 )	613528
1996-97	381142(29)	318260 (24 )	602386 (47 )	1301788
2001-02	546674(25)	497578 (23 )	1123493 (52 )	2167745
2006-07	829771(21)	1033410 (26 )	2090095 (53 )	3953276
2011-12	1650396 (20)	1969883 (24 )	2792304 (56 )	8279975
CGR :				
1981-82 to 1991-92	5.61 % (34)	6.37 % (23 )	6.78 % (43)	6.29 % p. a.
1991-92 to 2011-12	2.8 % (25 )	3.48 % (24 )	3 % (50 )	3.37 % p. a.

Source: Central Statistical Organisation (CSO)

It is revealed from the data results that economic growth of the Indian economy was dominated by the Tertiary sector, which was followed by the Primary sector and Industry sector. On an average their contribution to the GDP of India was 43%, 34% and 23% respectively. Thus India economy was a Service sector growth oriented in the pre reforms period. Surprisingly, no



radical change in the sectoral contribution to the GDP, of India has been taken place in the post reforms period. The note worthy change observed in the post reforms period is that, the relative contribution of the Primary sector to the GDP has been declined significantly, contribution of the Secondary sector showed a little bit hike, but a very commendable rise in the contribution of the Tertiary sector has been taken place. Thus there is more strengthening of the Service sector in its role in materialising economic growth of the Indian economy. While assessing sectoral composition of the economic growth of the Indian economy it is inevitable to observe growths in the productive sector of the Indian economy during the pre as well as post reforms period. In the pre reforms period, the growth rates of all the productive sectors were more or less the same with the marginal differences. They grew at the annual rates of the 5.61 %, 6.37 % and 6.78 % for the Primary sector, Secondary sector and the Tertiary sector respectively. In the post reforms period the growth rates of all the productive sectors have been declined significantly by about the 50% is a thing of concern for the India economy. But the trend was exactly in the same direction in which the GDP of India is growing in the post reforms period.

#### **VII) GROWTH AND PATTERN OF EMPLOYMENT IN INDIA:**

Employment is determined by the economic growth activities. The analyses of the trends in economic growth of India, in both the Pre as well as Post economic reforms period reveals that the rate of economic growth was higher in the pre reforms period than the Post reforms period. Like wise, rates of growths of all the productive sectors, namely Primary, Secondary and Tertiary sectors, were lower in the Post reforms period than the Pre reforms periods. In this backdrop, it is necessary to study the growth in employment in India, and more importantly changing pattern of the employment in our economy. Work Participation Rate (WPR) is a measure of the proportion of the country's labour force who are engaged in work. It provides information on the ability of the economy to generate employment (NSSO, 2009-10, p. 14). The data relating to the growth in employment in India in both the Pre as well as Post economic reforms period is presented in the table below.

**Table 3: Growth in Employment of India**

Year	Employment
1981	228.79 lakh persons

1986	256.30
1991	267.33
1996	279.41
2001	272.00
2006	269.93
2010	287.08
CGR :	
1981 to 91	0.70 % .a.
1991 to 2010	0.10 % p.a.

Source: Ministry of Labour & Employment, and Quarterly Employment Review

It is revealed that in the pre reforms as well in the post reforms period employment generation in India was meager only. Its growth could not also achieve one per cent also is a thing of concern. More importantly it was just 0.10 % p.a. is a very serious thing of concern, as far as employment generation in India is concerned. This is an indicator of employment was totally neglected in India in both the periods in the country like India, which has a population dividend. It is therefore employment generation should be given priority in the economic development agenda of the country. It argues that the time has come to constantly and explicitly make a clearer distinction between income earning or paid employment and unpaid work while analysing employment trends. (Mujumdar & Neetha, 2011, p. 118).

As, economic growth of India is contributed by the productive sectors, namely, primary, secondary and tertiary. Hence it is inevitable to examine the contributions of these productive sectors in the total employment generation in relative as well as growth perspectives. The necessary data relating to that is given in table below.

**Table 4 : Sectoral Distribution of Employment in India**

Year	Primary Sector Employment	Secondary Sector Employment	Tertiary Sector Employment	Total Employment
1981	22.69 (10%)	79.26 (35%)	126.84 (55%)	228.79 lakh persons
1991	9.91 (4)	45.94 (17)	211.50 (79)	267.35
1996	10.26 (4)	51.44 (18)	217.71 (78)	279.41
2000	9.85 (4)	51.83 (19)	217.71 (78)	279.60
2005	25.72 (10)	74.88 (28)	186.48 (62)	264.58

2010	26.65 (9)	80.99 (28 )	179.44 (63 )	287.08
C G R: 1981- 91	- 0.37 % p.a. (7%)	- 2.45 % (26%)	2.30% (67%)	0.70 % p.a.
1991 - 2010	1.42 % p.a. (16%)	0.81% (22%)	- 0. 24% (72%)	0.10% p.a.

Source: Ministry of Labour & Employment, and Quarterly Employment Review

The data results in the above table show that Tertiary sector was dominant in providing employment in India in both the pre as well post reforms period is concerned. It contributed more than 65% employment in both the periods. Its relative contribution stood at more than 70% in the post reforms period. Service sector was followed by the Industry sector so far as relative contribution to the total employment in India, in both the pre and post reforms period, because it contributed by more than 20%. But a slight decline in relative contribution of Industry is observed in the post reforms period. This is in accordance with the relative contributions of these productive sectors to the GDP of India. But on growth front the scenario of sectoral pattern employment in India rather different. In the pre reforms period, except Tertiary sector, both the Primary sector and Industry sector have shown a negation growth in employment generation, and the fall in the rate of employment was significantly higher for the Industry sector. It's an indicator that Industry sector neglected employment to be generated and was not much serious. In the post reforms period the Tertiary sector due to modernization and increased computerization and increased efficiency did not speed up employment generation in the economy. Its rate of employment generation was negative in the post reforms period is a thing of concern. Like wise, growth in employment generated b the Industry sector was even though positive in the Post reforms period, it was very meager and hence negligible. Hence labour fore engaged in the Primary sector to the higher extent possible, which can be disguised unemployment as a result growth in employment by the Primary sector remained at the considerable level. It is not a real employment generated by the Primary sector, but it is illusionary one. In totally employment is a serious thing of concern in both the pre and post reforms periods, and its gravity further increased in the post reforms period is a note worthy thing. The increased number of women in subsidiary status especially in rural areas in the context of the alarming agrarian crisis means that women do not have opportunities for long term regular employment (Neetha, 2005, p. 6).

**VIII) GROWTH- EMPLOYMENT LINKAGES IN INDIA:**

It is necessary to analyse the relationship between economic growth and employment generation. The theories of employment given by the Classical economists as well as J M Keynes state, with the increase in economic growth employment generation also should increase. This can be examined with the help of the data given in table below.

**Table 5: Economic Growth – Employment Relationship in India**

Year	G D P	Employment
1981	Rs. 160214 Crore	228.79 lakh persons
1991	613528	267.35
1996	1301788	279.41
2000	1991982	279.60
2005	3390503	264.58
2010	7157412	287.08
CGR :		
1981 to 91	6.29% pa	0.70% p a
1991 to 2010	3.37% p a	0.10% p a

Source: C S O & Ministry of Labour & Employment and Quarterly Employment Review

It is clear from the data results in the above table growth in employment was not in proportion to growth in economy of the country in the pre as well as post reforms period. There was wide disparity in the growth in GDP and employment for both the periods. The rate of growth in employment was very meager in both the periods, further it declined in the post reforms period is a thing of serious concern. . Hence the Correlation analysis reveals that Economic growth (GDP) and employment were only moderately positively associated as indicated by Pearson coefficient of correlation ( $r .59$ ). This type of growth is a jobless growth only. It exclusively indicates the neglect of the employment generation in India, and it was greater in the post reforms period. Unemployment in India is not a straightforward issue that can be either estimated directly with a single measuring rod or addressed with a single policy initiative. (Government of India, 2010, p. 16)

It is also of greater significance to study the linkages between the sectoral distribution of employment and the sectoral distribution of the economic growth, i.e. GDP. The necessary data with regard to that is presented in the table below.

**Table 6: Linkages between Sectoral Distribution of GDP and Employment**

Year	Primary Sector Income	Primary Sector Employment	Secondary Sector Income	Secondary Sector Employment	Tertiary Sector Income	Tertiary Sector Employment
1981	Rs. 58745 crore	22.69	36090	79.26	653779	126.84
1991	195454	9.91	140700	45.94	236569	211.50
1996	381142	10.26	318260	51.44	602386	217.71
2000	506476	9.85	474323	51.83	788817	217.71
2005	732234	25.72	859410	74.88	1798859	186.48
2010	1461095	26.65	1749648	80.99	2792304	179.44
CGR :						
1981 to 1991	5.61 %	- 0.37 %	6.37 %	- 2.45 %	6.78 %	2.30%
1991 to 2010	2.8 %	1.42 % p.a.	3.48 %	0.81%	3 %	- 0.24%

Source: C S O & Ministry of Labour & Employment and Quarterly Employment Review

It is revealed that, in the pre economic reforms period growth in Primary sector income, Secondary sector income and Tertiary sector income better, but rate of employment growth was negative except Tertiary sector. In the post reforms period, a decline in growth of all the sectors is observed, but except Tertiary sector growth in employment was positive, even though it was meager. This adequately proves that employment generation by the productive sectors of the Indian economy could not keep pace with growth in incomes of the different productive sectors. Hence it is clear that all productive sectors have failed in generating employment to the extent expected and desirable. It is therefore, the Correlation analysis shows that Primary sector income and Primary sector employment, and Secondary sector income and Secondary sector employment have shown a moderate positive relationship (  $r.59$  &  $.55$  ), but a negative association ship between Tertiary sector income and Tertiary sector employment during the



period under the study. The results of Correlation analysis are presented in the table below. The rural-urban division shows increased number of women in primary sector in both the areas leading to increased female share in total primary employment. (Neetha, 2005, p.13)

**Table 7: Growth - Employment Linkages: Correlation Analysis**

		GDP	EMPLO Y	PSI	PSE	SSE	SSI	TSI	TSE
GDP	Pearson Correlation	1.000	.592	.997	.603	.528	1.000	.964	.017
	Sig. (2- tailed)	.	.216	.000	.205	.282	.000	.002	.975
	N	6	6	6	6	6	6	6	6
EMPLO Y	Pearson Correlation	<u>.592</u>	1.000	.646	-.257	-.351	.586	.386	.798
	Sig. (2- tailed)	.216	.	.166	.623	.495	.222	.450	.057
	N	6	6	6	6	6	6	6	6
PSI	Pearson Correlation	.997	.646	1.000	.552	.475	.997	.948	.083
	Sig. (2- tailed)	.000	.166	.	.257	.341	.000	.004	.876
	N	6	6	6	6	6	6	6	6
PSE	Pearson Correlation	.603	-.257	<u>.552</u>	1.000	.971	.614	.785	-.707
	Sig. (2- tailed)	.205	.623	.257	.	.001	.195	.064	.116
	N	6	6	6	6	6	6	6	6
SSE	Pearson Correlation	.528	-.351	.475	.971	1.000	.536	.719	-.809
	Sig. (2- tailed)	.282	.495	.341	.001	.	.273	.107	.051
	N	6	6	6	6	6	6	6	6
SSI	Pearson	1.000	.586	.997	.614	<u>.536</u>	1.000	.968	.013

	Correlation								
	Sig. (2-tailed)	.000	.222	.000	.195	.273	.	.002	.981
	N	6	6	6	6	6	6	6	6
TSI	Pearson Correlation	.964	.386	.948	.785	.719	.968	1.000	<b><u>-.197</u></b>
	Sig. (2-tailed)	.002	.450	.004	.064	.107	.002	.	.709
	N	6	6	6	6	6	6	6	6
TSE	Pearson Correlation	.017	.798	.083	-.707	-.809	.013	-.197	1.000
	Sig. (2-tailed)	.975	.057	.876	.116	.051	.981	.709	.
	N	6	6	6	6	6	6	6	6

Source: Computed by the Researcher

While studying the linkages between economic growth and employment, it is also inevitable to identify the determinants of the employment generated in Indian economy. Hence the Regression analysis of employment generation in Indian economy is carried out to identify the determinants of the employment generation in the economy. The results are presented in the table below. This is a signal as well as the challenge for the policy makers about the huge demand for better paying jobs that will arise soon. (Naik, S. D., 2011, p. 26).

**Table 8: Growth - Employment Linkages: Regression Analysis**

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.960	.912	.812	.2808

a Predictors: (Constant), TSI, PSI, GDP, SSI

Coefficients: Regression between Employ and GDP, PSI, SSI, TSI

		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	250.832	.779		321.890	.002
	GDP	-1.008E-04	.000	-12.439	-35.200	.018
	PSI	2.305E-04	.000	5.546	40.828	.016
	SSI	3.156E-04	.000	9.596	21.669	.029
	TSI	-4.710E-05	.000	-2.172	-41.899	.015

a Dependent Variable: EMPLOY

It is revealed from the data results in the above table that GDP growth and Tertiary sector income have shown a negative growth in employment generation. Comparatively Secondary sector and Primary sector have played considerable role in the growth of the employment generation in the Indian economy. It is clear from the Standardised beta coefficients as well as t values and significance levels. The R square indicates that the regression model significantly fit.

Like wise, I also carried out the regression analysis by taking into consideration Total Employment as a dependent variable and primary sector employment, secondary sector employment and tertiary sector employment as independent variables. Its results are presented below.

**Table 9: Growth Employment Linkages: Sectoral Regression Analysis**

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.957	.916	.791	9.5445

a Predictors: (Constant), TSE, PSE, SSE

Coefficients: Regression between Employment and PSE, SSE, TSE

		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
Model		B	Std. Error	Beta		
1	(Constant)	-41.082	105.307		-.390	.734
	PSE	-2.190	2.622	-.874	-.835	.491

	SSE	2.436	1.647	1.862	1.479	.277
	TSE	1.006	.252	1.686	3.997	.057

a Dependent Variable: EMPLOY

It is revealed from the data results that Total employment in Indian economy is determined by the constituents or determinants namely primary sector employment, secondary sector employment and tertiary sector employment. The data results show that during the study period Secondary sector was ahead in employment generation in India, which was followed by tertiary sector and primary sector respectively. The model is fit and t value and significance level support the argument.

### IX) MAJOR CONCLUSIONS AND POLICY SUGGESTIONS:

The topic of study growth – employment linkages is vital importance for the research. It is against this over all background the present study endeavours to examine the growth-employment trends and linkages in India. Its thorough study reveals the following important conclusions.

The study reveals that rate of economic growth was comparatively higher in the pre economic reforms period than the post reforms period. Hence it will be debatable to make an argument that the rate of economic growth of the Indian economy was higher and rapid in the post reforms period. India economy is not an agriculture growth dominated economy, nor industry sector growth prominent economy, but it is a service sector growth dominated economy. This is true for both the pre as well as post economic reforms periods in India. All productive sectors grew at comparatively higher rates the in the pre reforms period than the post reforms period, is a noteworthy feature. In the post reforms period, rate of growth of industry sector was higher, which was followed by the service sector and primary sector respectively. This reveals that all productive sectors could not perform well in the post reforms period, is a thing of serious concern which demands due attention for their growth. On employment front Indian economy has shown a very dismal performance in both the pre reforms and post reforms periods. The rate of growth in employment could not reach even at one percent is a very serious thing; Hence economic growth in India is a jobless growth in both the periods, pre as well as post reforms period. Relatively service sector employment was dominant in employment generation in India,

which was followed by the industry sector and primary sector respectively. But so far as growth in employment is considered, in the pre reforms period except service sector, primary sector and industry sectors showed negative growth, and in the post reforms period only service sector showed a positive growth in employment generation. The analysis of the linkages between growth and employment reveals that, GDP growth and Tertiary sector income have shown a negative growth in employment generation. Comparatively Secondary sector and Primary sector have played considerable role in the growth of the employment generation in the Indian economy. The study shows that, during the study period Secondary sector was ahead as a determinant in employment generation in India, which was followed by tertiary sector and primary sector respectively. Thus employment has remained a much neglected aspect in India. Indian economy has given more importance to the economic growth than the employment generation. Hence employment generation and the problem of unemployment have emerged out as a very intensive economic problem in India in the periods, pre as well as post economic reforms period. These demands due precautions and necessary actions for the employment generation, whereby the blot of jobless growth on India can be vanished. It is a clear indicator lack of desirable linkages between economic growth and employment in India.

It is very much essential to pay increased attention towards the employment generation in India, because we have strength of population dividend. Hence the exploitation and utilization of the available labour force is very much essential, which will enable to achieve employment oriented growth in the economy. For this, the following policy suggestions will very much useful. The Union as well State governments should formulate and implement employment policy regularly, honestly and rigorously. Each economic activity included in the primary sector, secondary sector and service sector should estimate and declare their employment potentiality. It should be made obligatory to use labour intensive technique of production than the capital intensive one. Union as well state governments should attempt for employment generation through their different departments and public sector economic activities. A frequent review of availability of labour force and necessary employment opportunities should be taken yearly and regularly. Education should be linked to employment generation and absorption in the employment. Due emphasis should be given on the development of the small scale, cottage and rural industries on the priority basis for increasing level of employment. Economic incentives



should be given to the businessmen and industrialists to promote employment generation in the economy.

#### **X) CONCLUDING REMARKS:**

Economic growth – employment linkages a very important topic of research study in Economics. Hence studying its various issues and aspects is of vital importance. Its study has a special importance in India on various counts. It is in this backdrop the present study has been taken up. This study is an attempt to examine the trends in economic growth of India, trends in employment, growth and employment pattern as well. It also endeavours to assess the linkages between economic growth and employment in India as well as between their productive sectors and sectoral employment. The study concludes that economic growth achieved by the Indian economy is a jobless growth in both the pre as well as post economic reforms periods. Its economic growth was considerable in the pre reforms period than the post reforms period. Sectoral employment has a different scenario for the pre and post reforms period. The linkages between economic growth and employment show that growth in employment was very much lesser in the pre as well as post reforms period. It is mainly contributed by the secondary sector and service sector, but speeded up by the secondary sector and primary sector. Even though this study has not tested its hypotheses with the help of statistical methods, no doubt it has incorporated the analysis with regard to that and tested them. It is revealed that both the hypotheses are not proved. The rate of economic growth is not rapid in the post economic reforms period. Employment generation is absolutely not in proportion of economic growth materialised by India. The present study is a little bit attempts to examine the growth-employment linkages in India. As it is a broader topic of study it has number of issues and aspects. Hence there is a wide scope for further studying the remaining various aspects of the topic, which can be studied for dissertations, theses as well as research projects.

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