Introduction
1.1 Introduction

Globalization is the process of integrating various economies of the world without creating any hindrances in the flow of goods and services, technology, capital and even human capital. The term ‘Globalization’ has acquired considerable emotive force. According to some economists, it is a process that is beneficially a key to future world economic development which is inevitable as well as irreversible. On the other hand, others regard it with hostility and fear, believing that it increases inequality with and between nations, threatens employment and thwarts social progress. Despite the fact that the definition of globalization has been attempted by hundreds of authors and distinguished speakers, the word continues to mean, ‘different things to different people’. According to Stiglitz, “Globalization is the closer integration of the countries and people of the world which has been brought about by the enormous reduction of cost of transportation and communications, and the breaking down of artificial barriers to the flow of goods and services, capital, knowledge and people across borders”. In the word of Jagdish Bhagwati, “Economic globalization constitutes integration of national economies into the international economy through trade, direct foreign investment; short term capital flows, international flows of workers and
humanity generally, and flow of technology”. But what happens when there is a growing integration of economies across the globe? Majorly there has been a positive impact of this global phenomenon through liberalization, privatization and Globalization. Due to Globalization, there has been significant flow of inward foreign direct investment. MNCs are getting a chance to explore various different markets across economies and explore the untapped potentials. But whether the benefits are fairly distributed throughout?

Theoretical generalizations about growth and regional economic disparities have been provided in the pioneering works of Gunnar Myrdal, Albert Hirschman and William Alonso. The major empirical work covering a wide spectrum of countries at different levels of development is the well known article by Williamson. (Williamson, 1965). One of the major hypotheses which emerge from his writing is that regional economic disparities and the level of national development are linked together broadly in the form of an inverted U-shaped curve. The present study examines whether the emergence of globalization in India conforms to such similar empirical generalization. Here we are going to link relationship between Regional inequalities and the
income levels, employment trends and the poverty ratios among various States and UTs in the light of Globalization.

Regional imbalances in the growth process of a planned economy have become persistent in a federal country like India. Regional disparities are an important issue for debate and analysis not only across the world but also across the states within a country. With a billion plus population and an area of 3.29 million sq. kilometer, India is a vast country spread over 28 states and 7 union territories. Having much diversity in physiographic, climatic conditions, availability of natural resources, cultural and socio-economic conditions, India is a unique case of ‘Unity of Diversity’. Since the beginning of 21st century, Indian economy is growing very fast. This makes her the second fastest growing economy of the world after China. However, thousands of Indians continues to struggle in poverty, for employment and of low income because of uneven growth of economy leading to vast disparities in social and economic indicators of the people among various states/UTs in India. There had been a huge gap between active and vibrant regions and hinterland during pre-independence period in terms of availability of facilities and this has resulted in the form of unequal levels of development both in terms of economic and human. After independence, reduction in inter-state disparities has been
emphasized during successive five year plans, but the menace continued unabated. For instance, the World Bank (2006) in its report entitled, “India –Inclusive growth and service Delivery: Building of India’s success” has observed sharp differentiation across states since the early 1990s reflects acceleration of growth in some states but deceleration in others. The report further add that more worrying, growth failed to pick up in states such as Bihar, Orissa and Uttar Pradesh that were initially poor to start with, with the result that the gap in performance between India’s rich and poor states widened dramatically during the 1990s. The World Bank (2008) again in its release “The Growth Report strategies for sustained Growth and Inclusive Development” has mentioned that disparity in Income distribution in India has risen during 1993-2005 which is revealed by fact that Gini –Coefficient in this connection has risen from 0.3152 in 1993-94 to 0.3676 in 2004-05. The Draft Eleventh Five Year Plan (2007-12 Vol. I) has also admitted that regional disparities have continued to grow and the gaps have been accentuated as the benefits of economic growth have been largely confined to the better developed areas. This is why our Prime Minister and eminent economist Dr. Manmohan Singh admitted it frankly and expressed his anxiety over increasing disparities among regions of the country. These disparities, he
admitted have widened perceptively in the last few years with improved economic performance concentrated in some regions only. He also emphasized the need to work to arrest this trend and achieve convergence between regions rather than the other way round (The Economic Times, 19th October 2006, News Headings).

In India, national planners and policy makers have been putting efforts have a balanced growth of the Indian economy right since independence, so that every region of our Indian economy gets the benefits of economic growth. Williamson briefly investigated the pattern of regional inequalities during the decade of 1950s in India and came to the conclusion that this decade marked his first phase, the phase of increasing inequalities (Williamson, 1965). K.R.G. Nair examined interstate disparities in per capita net state domestic product during the fifties and concluded that there had been some divergence over the period (Nair, 1973), M.D. Chaudhary found that disparities around 1970 were roughly the same as those around 1950 (Chaudhary, 1974). Lately, the emergence of a tendency towards divergence has also been reported in article by R.K. Sampath and A.C. Mohapatra (Sampath, 1978) and because of this growing diverging scenario of Regional inequalities, so much of emphasis is being placed to inclusive growth and Balanced Regional development in India.
Structural reforms were introduced in India in 1991, although the fruits of globalization and liberalization have been observed more or less after 1993, since then a lot of changes have occurred in the structures of income, employment, saving, investment etc., in both rural and urban areas of India. All such changes have obviously created divergent effects on people’s well being. But India being a federal country, economic progress of the states has not been uniform. Some states are more advanced and some are lagging behind, creating regional disparities among states. The wide disparities in the development levels of different states are a phenomenon that is not only creating further inequalities among the states but are also impacting their growth prospects as well. Additionally, the reform process underway in the country since 1991 seems to have desperately affected the states of India. The reforms have led to a spate of structural deregulation of both domestic and foreign investment, liberalization of trade, exchange rate, interest rate, capital flows and prices (Bhattacharya and Saktivel, 2004). After globalization, the more dynamic states having rich resources with better infrastructure are able to attract larger flows of domestic and foreign investment through market mechanism which in turn is enhancing their employment and per capita incomes. This not only aggravates the problem of poverty
and inequality but also exercises detrimental impact on the long
term sustained growth and economic stabilization.

1.2 Significance of the study

There are concerns that regional inequality in India has
increased after the Economic reforms of 1991. This concern is
supported by various statistical analysis. The concern over the
regional inequality prevalent in India is worrisome, for it has and
may lead to lot many undesirable consequences.

• Loss of economic potential
• Unfairness in Regional opportunities
• Loss of social cohesion
• Adverse socio-economic consequences leading to more
  severe economic conditions.

In India, social evils and political instability have risen from
actual and perceived economic regional inequalities. In short,
regional balances has be fought and reduced at any cost for future
development of India. Thus, the major challenge before the Indian
government is to achieve balanced regional development. For a
well developed and prosperous society, it becomes necessary that
whatever growth has been achieved in the economy it must be
distributed equally. And thereby, the study of Regional Inequalities
becomes necessary, since it provides information about different indices of development of the society.

Since economic reforms of 1991, the issue of regional inequalities becomes more sensitive, as the emergence of globalization with all liberalized and privatized framework in the policies made almost all sectors and sections of the society to move freely without any intervention. The study of present theme will provide information and re-examine the linkages between globalization and regional inequality in India. The present study is an attempt to show the extent, level and trend of income, employment and poverty levels in the pre and post globalization period. The study will also help in evaluation and formulation of different plans and policies for reducing regional disparities in poverty inequalities, income distribution and in generating employment opportunities.

1.3 Hypotheses of the study

The pathetic conditions of Indian masses as revealed by the persisting problems of unemployment, poverty and unequal income distribution has always been at the centre of Indian Planning. In 1991, when Indian moved towards globalization, greater reliance was on the market forces. It was assumed that social sector might be adversely affected by it, since market forces positively
influences efficiency, not the welfare of the society. Therefore, the study is based on the following hypotheses:

(1) The level of regional disparities in India has decreased after the adoption of globalization in India.

(2) Reforms have given more positive response to secondary and tertiary sector than the primary sector.

(3) Employment rate is insufficient to reduce the gap between the states of India.

(4) Regional inequalities in terms of PCNSDP are constant.

1.4 Objectives of the study

The economic welfare of a country depends upon the level of development but unfortunately the fruits of economic development may not be equally distributed among different parts of the country causing regional inequalities and imbalances in standard of living of the masses and these regional inequalities give birth to various types of socio-economic problems. India is among the several developing countries facing the dilemma of economic efficiency versus social and regional equality. There are extreme differences in natural, human and capital resources in India. Consequently, there are enormous differences in the level of economic development amongst different parts of India which is termed as the problem of regional disparities. The forces of regionalism have
become strong in India and the gravity of the problem has increased to the extent that it has been threatening the political and economic stability of the country. Presently, Indian economy is experiencing structural change caused by the structural adjustment and stabilization policies which have regional dimensions as well. Therefore, there is urgent need of studying regional disparities on the basis of large number of variables of development.

The present research work is based on the following objectives:

(1) To examine the level of inter-regional disparities in the state.

(2) To identify causes of inter-regional disparities and hindering factors to development in the global era.

(3) To find out the extent of Regional inequalities in development among different states of India.

(4) To show the levels and trends of income, employment and poverty levels in pre and post globalization era.

(5) To analyze the regional divergence/convergence phenomenon in terms of PCNSDP cross Indian States/UTs during pre-and post globalization period.

1.5 Research Methodology

Our study is based exclusively on secondary data which are published mainly by the Ministry of Finance, Government of India
and other department/offices of Government of India & Reserve Bank of India. Most of the relevant data has been taken from various issues of National Accounts Statistics, Economic Survey, Budget at a Glance, National Income Accounts by CMIE etc. The three major indicators chosen to show regional disparities in the study are Income level, Employment and Poverty in India. NSDP and PCNSDP are used to show regional inequalities in income level. The period of study is from 1980-81 to 2006-07 for income level. But for the data on Employment and poverty we are relied majority on NSSO reports, study is covered up to 61st Round i.e. up to 2004-05.

The formulation of the study are based on the data for Net State Domestic Product (NSDP) and per capita Net State Domestic Product (PCNSDP) culled from the website of the Reserve Bank of India (RBI) and Central Statistical Organization (CSO). Before getting into the analysis, some conceptual issues regarding the data on the state domestic product (SDP) need to be addressed. The SDP are estimated by the individual states and, therefore, are not strictly comparable due to qualitative differences in data collection and computation system. The Central Statistical Organization (CSO) has revised the SDP series with base years 1993-94 and 1999-00. The revised series based on certain conceptual
modifications, after relative growth across states, sectors and periods. For a proper analysis of regional growth and inequality over time, it has been deemed imperative to make the data of previous years commensurate with the revised series of SDP. For this purpose, the price correction factor is used to have the consistent series of SDP with the 1999-00 series data since the data for the period 1980-81 to 2006-07 is available in three series with different base years, we are required to use twice the price correction technique.

The price correction factor is calculated as the average of the price implicit deflator of the common years i.e. 1993-94 to 1999-00 mathematically.

\[
P = \frac{1}{7} \sum_{j=93}^{99} \left( \frac{P_{j,93}}{P_{j,80}} \right) = \frac{1}{7} \left[ \frac{P_{93,93}}{P_{93,80}} + \frac{P_{94,93}}{P_{94,80}} + \frac{P_{95,93}}{P_{95,80}} + \frac{P_{96,93}}{P_{96,80}} + \frac{P_{97,93}}{P_{97,80}} + \frac{P_{98,93}}{P_{98,80}} + \frac{P_{99,93}}{P_{99,80}} \right]
\]

The price implicit deflator of the common years i.e. 1999-00 to 2006-07 is

\[
P = \frac{1}{8} \sum_{j=99}^{2007} \left( \frac{P_{j,07}}{P_{j,80}} \right) = \frac{1}{8} \left[ \frac{P_{99,99}}{P_{99,80}} + \frac{P_{00,99}}{P_{00,80}} + \frac{P_{01,99}}{P_{01,80}} + \frac{P_{02,99}}{P_{02,80}} + \frac{P_{03,99}}{P_{03,80}} + \frac{P_{04,99}}{P_{04,80}} + \frac{P_{05,99}}{P_{05,80}} + \frac{P_{06,99}}{P_{06,80}} \right]
\]

The P is multiplied with the 1980-81 price series to make it comparable.

To analyze the data some statistical tools have used, such as to measure the growth rate, the log-lin Model has been used.
Well known compound interest formula is given by:

\[ Y_t = Y_0 (1+r) \]

Where \( r \) is the compound (i.e. overtime) rate of growth of \( Y \).

Taking the natural logarithm, we can write:

\[ \ln Y_t = \ln Y_0 + t \ln (1+r) \]

Now letting \( \beta_1 = \ln Y_0 \)

\( \beta_2 = \ln (1+r) \)

We can write \( \ln Y_t = \beta_1 + \beta_2 t \)

Or \( \ln Y_t = \beta_1 + \beta_2 t + \epsilon_t \)

Such type of model is known semi log Model. In this model, the slope coefficient measure the constant proportional or relative change in \( Y \) for a given absolute change in the value of regressor (in this case the variable \( t \)) i.e

\[
\beta_2 = \frac{\text{Relative change in regressand}}{\text{Absolute change in regressor}}
\]

\[
= \frac{(Y_t - Y_{t-1})/Y_{t-1}}{(X_t - X_{t-1})}
\]

To analyze the variations in the state level NSDP and PCNSDP, standard deviation (\( \sigma \)) and coefficient of variation (CV) are used.

**Standard Deviation (\( \sigma \))**: It is widely used measure of variation. Alternatively, it is called root mean square deviation. To capture
the imbalance between the state in terms of levels and growth of SDP, it is used.

\[ \sigma = \left[ \frac{\sum_{i=1}^{n} (x_i - \bar{x})^2}{n} \right]^{1/2} \]

where \( X_i \) is the ith observation; \( \bar{X} \), the mean of the observations; \( n \), the number of observations.

**Co-efficient of variation (CV):** Co-efficient of variation is another measure of variation, which is an improved measure over standard deviation. It is the ratio between the standard deviation and mean, and it is usually represented by percentage. This measure indicates the consistency of the observations within a sample and discriminates a given set of samples sharply in terms of consistency.

\[ CV = \frac{\sigma}{\bar{X}} \times 100 \]

\( \sigma \) the standard deviation, and \( \bar{X} \), the mean.

Rank analysis is also done to show the variations in ranks for States /UTs in terms of PCNSDP. In order to examine, whether there existed a harmony among the ranks assigned to different states in respect of PCNSDP, **Kendall’s coefficient of concordance (W)** was computed.
Taking K columns with n items in each, and rank each column from 1 to n. The null hypothesis is that the ranking disagree.

Compute a sum of ranks of ranks $SR_i$ for each row.

Then $S = \sum (SR_j^2 - N(\bar{SR})^2$, where $\bar{SR} = \frac{n+1}{2}$ is then mean of the $SR_i$s. If $H_0$ is disagreement, $S$ can be checked against a table for this rest.

The formula for Kendall’s coefficient of concordance is-

$$W = \frac{S}{\frac{1}{12} K^2 (n^3 - n)}$$

Its value must lie between 0 & 1.

Convergence analysis is done to examine the disparities in PCNSDP for Indian states/UTs. The usual tests adopted to verify the process of convergence/divergence are: $\sigma$-convergence, $\alpha$-convergence and $\beta$-convergence. The $\sigma$-convergence hypothesis tests whether the inequalities have declined or not in terms of the standard deviation of the chosen variable. The trend rate of the log of standard deviation of PCNSDP is estimated by fitting a log-linear time model. If the estimated beta coefficient is negative and significant, convergence is said to be taking place. On the other hand, if the coefficient is positive, divergence occurs across the selected regions. The $\alpha$-convergence is tested by estimating the time trend of co-efficient of variation of PCNSDP during the study.
period. Similar to \( \sigma \)-convergence, if the beta co-efficient is negative, convergence is said to exist if the estimated beta coefficient is negative and significance. Lastly the \( \beta \)-convergence is tested by estimating the relationship between the trend growth of PCNSDP and the log of base year PCNSDP. Similar to the above, convergence is said to exist if the estimated beta coefficient is negative and significant.

Also analysis of variation (ANOVA) is done for getting the variances in the poverty ratios and domestic products of various states. It allows us to test whether the differences among more than two sample means are significant or not. It is based on a comparison of two estimates of the population variance. One estimate is obtained from variance among the sample means and the second estimate is obtained from variation that exists within samples. The ratio of two is referred as F-Ratio. If the calculated F-ratio value is less than the critical value or table value at the particular degrees of freedoms and significance level then we accept the null hypothesis or else we reject it.

Another statistical technique of correlation has been used to show the degree of correlation between poverty ratios and the level of NSDP among Indian states/UTs. In this study, Spearman's
**Rank Correlation Coefficient** is used for finding correlation, with the formula:

\[ R = 1 - \frac{6 \sum D^2}{N(N^2 - 1)} \]

where \( R \) = Spearman's Rank Correlation coefficient

\( D \) = Difference between the two Ranks;

and \( N \) = Total number of items.

**1.6 Limitations of the study**

There are a number of studies that have given some useful analysis of regional inequalities and the globalization in India, but no one is complete. A complete study should incorporate factors relating to the socio-economic structure of the economy, structural and regional differences and differences among individuals and households. Thus, every study is subjected to certain limitations. These are the following limitations of the present research effort:

1. The study is totally based on the secondary data obtained from different surveys of government of India and other organizations. Due to the problems of data collection and calculation, it is possible that we could not have the exact figure of the subjected variables. Problems also may arise due to statistical errors.

2. The study includes only three major indicators (Income, Employment and Poverty) to show regional disparity. All
other indicators like education, infrastructure etc. are not included.

(3) The present study includes only quantitative aspects of the subject.

1.7 Review of the Literature

Before embarking upon a research project it is absolutely essential to review the literature on the same or similar subject. Keeping this in mind an effort has been made here to review some of the existing literature on globalization and issues of regional inequality.

Ghosh (2008) examine the long run growth performance and regional divergence in per capita income across 15 major Indian states during the pre and post reform periods. The period of σ-divergence and absolute β-Divergence suggests that the Indian states have diverged in per capita income over the period particularly after the implementation of large scale economic reforms. The evidence on conditional β-convergence indicates that the divergence in per capita income has been due to inter-state variation in the steady state level. Larger public investment in human capital and infrastructure for states with lower steady-state could improve overall growth performances and reduce regional imbalances. He also stated that the ongoing reforms that seems to
have led to an increase in growth as well as regional disparities of income need to be modified appropriately.

Virmani (2008) in his article shows that the inter-state differences in poverty rates can be largely explained by differences in the per capita gross domestic product, agricultural growth and the share of the bottom 40 percent of the population in consumption. He stressed that, to eliminate poverty economic policy has to accelerate growth, focus programmes on agriculture and rural development in the poorer states and target subsidies at the bottom 40 per cent. He also stated that the most critical areas distinguishing state growth performance have been modern (registered) manufacturing and commerce.

Jayadev, Motiram and Vakulabharanam (2007) in their comprehensive work examine pattern of wealth disparities in Indian using all India debt and investment survey (1991 and 2002). They found that there has been increase in wealth levels in the country across virtually all grouping, accompanied by a small but perceptible rise in the level of interpersonal wealth inequality whether examined by Gini co-efficient or by Centile share of wealth. They also examined differences in wealth holding by state. Their study shows that there has been sharp differences in the middle and upper income states on the one hand and poor states on
the other suggesting divergence wealth outcomes. In their study they explain that faster growing states have been larger increase in wealth inequality.

Pal and Jayati Ghosh (2007) through their paper, analyse the nature and causes of the patterns of inequality and poverty in India. It is showed that, since the economic liberalization in the early 1990s, the evidence suggests increasing inequality (in both spatial and vertical terms) as well as persistent poverty. It is analysed that the macro-economic policies are responsible for these trends including fiscal tightening, regressive tax policies and expenditure cuts; financial sector reforms that reduces institutional credit flow to small producer and agriculturist, liberalization of rules for foreign and domestic investment, leading to more regional imbalance and skewed investment patterns and trade liberalization which has affected livelihood and employment generation.

Dadibhavi and Bagalkoti (2006) made an attempt through their study which aims at analysing the trends in inequality in the levels of income and growth of the major 17 state economic of Indian for the period 1980-81 through 2000-01. An adjusted series of NSDP data was constructed by adopting a specific methodology for the purpose of inter temporal comparison. The analysis shows divergence of state income especially after the initiation of
economic reforms since 1990-91. The study reveals that income inequalities at aggregate as well as per capita level have increased as is evident in the increasing values of the co-efficient of variation (CVS) Different measures of convergence /divergence have also been estimated. The study makes many policy recommendation for realizing better regional balance in the economy.

Nayyar (2005) presented his study with the objective to analyse differences in poverty levels across states in rural India during the period 1983-2000. In doing so, he seeks to focus on inter-state differences in economic growth. He also attempts to analyses the effect of policies and institution on the poverty reduction impact of growth. In his study of 15 major Indian states, he found that economic growth is an important determinant of poverty reduction, but it does not provide a complete explanation. He also pointed out that public expenditure on anti-poverty programmes has a significant impact on rural poverty, as does greater gender equality and increased democratic decentralization. He further stated that rates of inflation and differences in initial conditions also matters.

Bhattacharya and Sakthivel (2004) presented an analysis of the growth performance and structural changes in the domestic products of Indian states in the 80’s and 90’s. It shows while the
advanced industrial enjoyed the benefits of the economic reforms, backward states with higher population growth are not able to attract investment, thus there is strong need for pro-active public policy to induce more investment in backward regions, through fiscal incentives. Finally, they emphasized on the quality of governance and in particular the efficiency of investment should be given more attention at the state level.

Sen and Himanshu (2004) conducted a study that reviewed all available 55th round estimate and reported comparable estimate of poverty and inequality. They examined available data not only for states but also at the level of N.S.S. regions. They presented along period time series that showed inequality has increased in the initial decades of the “Green Revolution”. But with urban gaps reducing, inequality increase in that period was largely confined to study the economic inequality increased sharply during the 1990s in all its aspects and as a result poverty reduction deteriorated markedly despite higher growth.

Singh, Bhandari Chen and Khare (2003) showed that regional inequality in India has increased after the economic reforms of 1991. This concern is supported by various statistical analysis. It also shows that human development indices do not show the same increase in regional inequality. Furthermore, consumption and
credit indicators for regions disaggregated below the state level also suggests that inequality trends may not be as bad as suggested by state domestic products data, although the greater strength of the economies of the western and southern states emerges in the result. Finally, he also discussed some policy implication within the content India.

Angus Deaton, and Jean Dreze, (2002) in their study presented a new set of integrated poverty and inequality estimates for India and Indian states for 1987-88, 1993-94 and 1999-2000. They showed that poverty has declined in the 1990s proceeded more or less in line with earlier trends. Regional disparities have increased in the 1990s with the southern and western regions doing much better than the northern and eastern regions. Economic inequality also increased within states, especially within urban areas and between urban and rural areas. The study finally found that the trends and disparities are simply evidence of the impact (positive or negative) of liberalization.

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southern and western region doing much better than the northern and eastern regions. Economic inequality also increased within states especially within urban areas and between urban and rural areas. They also briefly examined other development indicators relating to health and education which have continued to improve in the nineteen but social progress has followed very diverse pattern. But they found no support for sweeping claims that the nineties has been a period of ‘unprecedented improvement’ or ‘widespread improvement’.

Jha, S.C. (2001) in his paper, found that as a result of economic reforms, the flow of both domestic and foreign investment was directed more towards better performing regions. The low performing regions received only a small fraction of commercial bank credit and credit from all-India financial institutions. These indicate the likelihood of growing more inter-regional disparities in future.

Neeraj Kaushal (2001) in her study rejected the growing disparities hypothesis, saw the possibility of both intra-state and inter-state disparities reducing in future.

Jayantha Madhab (2001) in his article, “New Economic Policies and Regional Disparities” argued that both foreign investors and all-India financial institutions showed a bias in
favour of the more advanced western region in financing investment because of their better infrastructure and market friendly environment. In contrast, comparative neglect by foreign as well as domestic investors owing to lack of infrastructure, local entrepreneurs congenial law and order. The north—eastern states despite their rich resource base could not come out of the poverty already in operation there. Consequently, the disparities between the western region and the north—eastern region had been widened during the post—reforms period.

Sharma, A. (2001) examined the effect of resource flows to the states and regional disparities in his study. He found fiscal transfer from the central government mostly, favouring the poorer and special category states. According to the study, financial institutions and market oriented investment has favoured the relatively advanced states. He suggested an enhancement of the equity-Oriented fiscal transfer to enable the less developed states to increase the level and quality of infrastructure. He added that the transfer of funds to the less developed states would not ensure a quicker pace of development of these states.

Das Gupta, Maiti, Mukherjee, Sarkar and Chakrabarti (2000) offers analytical description of the economic performance of Indian states as reflected in their per capital (Net) state domestic product
statistical of data for the period 1960-61 to 1995-96 shows a clear tendency for Indian states to diverge in peer capital state domestic product but converge in shares of different sectors in state domestic product. But his study is limited in scope since the primary focus is on state domestic product data.

Rao (1999) observed that per capita income across 14 major state have diverged and interstate disparities has accentuated during 1965-66 to 1994-95. The increase in divergence and dispersion have been much sharper since 1991. The divergence in growth rates have been largely due to skewed distribution of public expenditure causing larger flows of investment to major affluent regions in the country. But this is in sharp contrast to the results of the other studies of Cashin and Sahay (1996) and of Sachs (1996).

Sharma, G and Singh, A.J. (1998) pointed out in their study that there has been a decline in the total number of poor according to the estimates given by the planning commission. However, according to the expert group on poverty (1993), the absolute numbers of poor have actually increased by 20 percent since 1973-74. However, the percentage of people below the poverty line has actually declined from 54.8 percent in 1973-74 to 38.0 percent in 1987-88. Further, the state specific head-count ratios suggest a fair amount of inter-state variability every year and for different
segments of population. Punjab has the lowest and Bihar has the highest head count ratio for almost all the years.

Chadha, G.K. (1998) in his study evaluated the vital role of agriculture sector in economic development during the study period. The study has selected 17 major states and data collect from the Government of India. Agriculture Statistics, Economic Survey for various years were analyzed using simple statistical tools like percentage, average, co-efficient of variation and compound growth rate. He concludes that the regional unevenness has evolved due to changes of technological attitudes joined with ‘Green Revolution” from the mid sixties. But technology has undoubtedly remained in the centre-stage with inadequate effect.

Chatterjee, B. and Swati Bhatacharya (1998) has analysed the inter-state variations through poverty in India. The study has analysed poverty inequality and development by the selected variables such as per capita consumption expenditure, head count ratio between rural and urban, agricultural sector in Net State Domestic Product (NSDP), per capita income and non-agricultural sector. The tools used to identify the inequality between the states are mean, ranking, Gini co-efficient, Sen’s measure of poverty, co-efficient of variation, rank correlation, regression etc. The study concluded the importance of growth factors in explaining the
observed pattern of behaviour of poverty indices during the period from 1961-87. The interstate variability of poverty indices also remained high during the period of study.

Choudhary, S. (1998) in his study, proposed to examine the Regional disparities in Human Development in India by constructing different HDIs. The methodology used, HDR-94, is comprised of three major yardsticks for development of health, education and income. The data has been obtained from NSSO survey 42nd round. The analysis concluded that usually the lowest positions are occupied by states like Bihar, Uttar Pradesh, Madhya Pradesh, Rajasthan and Orissa whereas the states like Kerala, Maharashtra, and Punjab occupies the top position.

Rana, R.K. (1997) analyzed the inter-state disparities on the basis of large number of social, economic, and infrastructural factors during the period 1971-95. Coefficient of variation figures worked out for selected indicators revealed that inter-state disparities widened in terms of economic indicators and the disparities reduced in social and infrastructural sector over time. The study found that the pattern of development of Indian economy was not unison with respect to all the indicators rather it was of mixed nature. The study proved that economic development does not necessarily lead to social development and Vice versa.
Analyzing a sample of 19 Indian state for the sub period 1961-93 (divided into three sub period), Bajpai and Sach (1996) do not find statistically significant result of convergence for the period as a whole. It is only for the sub period 1961-71 that they found evidence of convergence.

Marjit and Mitra (1996) highlighted that restriction on resource movement plays an important role in justifying "Convergence" in regional income levels. After providing a critique of the Barro and Sala-i-Martin (1995) approach, the study presented a very preliminary study on the Indian states. It is observed that the states have been diverging rather than converging in terms of their per capita income.

Das and Barua (1996) examined the pattern of regional inequalities amongst 32 states in India during 1970-92. Net State domestic Product (NSDP) and its various components among selected states were examined by applying Theil Index of inequalities, correlation analysis, and Ordinary Least Square (OLS) method. Negative correlation coefficients between the inequality indexes and exponential annual growth rate in almost all the cases revealed that Indian economy has been developing but overall regional disparities widened during the period 1970-92. Regression Analysis results also proved that agriculture, services and
unregistered manufacturing sectors were significant contributors of inter-regional income inequalities in India during 1970-92.

Anuradha and Rao (1995) analysed inter-state disparities in the level of industrial development over the period 1970-71 to 1985-86. They applied Williamson’s unweighted and weighted coefficient of variation and Hirschman Herfindalh (H.H.) Index and Theil index to examine the disparities amongst 15 major states. Both weighted and unweighted coefficients of variation for selected indicators declined significantly indicating that interstate disparities in industrial sector declined over time. Hirschman Herfindalh (H.H.) Index and Theil Index also supported the results. It was concluded that regional disparities in industrial development definitely converged over time regardless of the variable and index taken into consideration. Magnitude of inter-state disparities tended to decline significantly though in relative terms but in absolute terms the process of industrialization was characterised by an inequality in its spatial distribution.

Dholakia (1994) considered 20 Indian states for analysis of the economic performance for the period 1960-61 to 1980-81. He found that there is an existence of convergence of long term economic growth rates for the states. He found the year 1980-81 as a point from where the lagging states started picking up faster.
Mazumdar (1993) made an attempt to analyse the inter-state disparities in per capita state domestic product (PCSDP) for the period 1960-86 to check whether regional disparities were divergent or convergent during this period. The study also introduced price differentials in the per capita state domestic products (PCSDP) series of fourteen major states of India. With the help coefficients of variation of per capita state domestic product of 14 selected states, the study revealed that interstate income variations were on the increase with fluctuating trend during the period. Furthermore, the study revealed that the divergence was more with the introduction of inter-state price differential in PCSDP series of the selected states as the trend of the coefficients of variation were higher than the trend rates of the coefficients of variation at All-India current as well as constant prices (1970-71=100).

Kantawala and Rao (1992) analyzed the inter-state disparities in sectoral development in India during 1970-71 to 1985-86 selecting 8 agricultural indicators, 12 industrial indicators and 6 indicators of services sector. They used composite index tool to estimate the sectoral development and rank correlation analysis to show the change in positions or the states in their ranks. Moreover, the developed states have been growing at faster rate as compared
to the backward regions. The study also proved that the relative position of states have not changed significantly considering the overall development.

Dabibhavi (1989) conducted a study on inter-state disparities in India based on the cross-sectional data for 16 major states for the years 1960-61 by applying simple regional quantitative measures like coefficients of variation, correlation coefficients and shift and share analysis. The study reported that inequalities among states have been growing over the period. The study also showed that two factors viz. per worker productivity in agriculture and degree of industrialization have positive and significant association with economic development.

Singh, Sudama (1988) made an attempt to analyse the inter-sectoral relation, sectoral growth and structural transformation in the Indian and global perceive for the period 1949-50 to 1985-85 by applying the method of ordinary least squares (OLS) and Two-stage Least squares (2-SLS). The study revealed there were substantial inter-temporal and intra-sectoral growth differential.

Dr. B. Appa Rao’s study (1987) proposed to, critically examine, to what extent economic planning in India has been used as an instrument for bringing about balanced regional development and to suggest the measures to make it more effective. He
concluded that during the plan periods the cumulative result of plan outlays and central assistance has been more in favour of relatively developed states, thus widening the gap between developed and backward states.

Dadibhavi, R.V. (1987) in his study examined the inter-state disparities in India, the factors associated with inter-state disparities and the role of Finance Commissions, Planning Commission and institutional finance in reducing regional imbalances. The study was based on the Cross Sectional data for sixteen major states available for the years 1960-61, 1970-71 and 1980-81. There had been inequality in growth among states’ relative per capita income. The range of states’ relatives per capita income was 70.0 (Bihar) to 133.2 (Maharashtra) in 1960-61. It had been widened from 61 (Bihar) to 182.2 (Punjab) in 1980-81. The co-efficient of variation has also increased from 17.9 percent in 1960—61 to 33.87 percent in 1980-81. The study also noted that the dislocation of resources to low income states were progressive but plan outlays and flow of institutional funds to such states were regressive.

Kulkarni, M.R. and Sateesh Kulkarni (1986) in their study analyzed the growth of State Domestic Product in various states in terms of Net State Domestic Product (NSDP) and Per Capita State
Domestic Product (PCSDP). The purpose of the study was to assess the performance of various states over time and to find whether the developed states had further speeded up the pace of their progress or inter—state disparities had narrowed. The data has been collected from Central Statistical Organization (CSO). The authors concluded from their analysis that some states lagged behind the average national achievement while others forged ahead faster, resulting in the widening of inter—state disparities. Inter—state disparities must have been only accentuated during the last two decades.

Singh, A.K. (1984) examined the trends in inter-state disparities amongst 17 major states during 1951-81 on the basis of net domestic product at constant prices. The study revealed that all the selected states registered steady increased in total state domestic product by the increase in per capita terms. The coefficient of variation in per capita declined from 28.59 percent in 1950-51 to 23.79 percent in 1955-56 and further to 21.92 percent in 1960—61 indicating narrowing of inter-state income disparities, but this trend has been reversed in the late period of 1961-81 interrupting for a short period during 1972-74 and remained disparities was observed during post-green revolution period. The study showed a positive association in the level of per capita
income and growth rates, as a result of which inter-state income disparities have tended to widen during the period 1961-81.

Nair, K.R.G. (1983) attempted to test the "Concentration Cycle Hypothesis" which states that inter-regional disparities increase initially but narrows down in later stages of development. The analysis of inter-state income differentials was carried out for 17 major states of Indian Union during the period 1970-80 with the help of weighted and unweighted coefficients of variation, State Relatives and Rank Correlation. The rank correlation coefficient was all positive and significant with none of them having value less than 0.90. The unweighted and weighted coefficients of variation also indicates that inter-state differentials in per capita income had widened during the period 1970-80 and hence, the country was in divergent phase of the inverted U-shaped path.

Jha, D.N. (1982) analyzed regional disparities by grouping the indicators of inter-state disparities as indices of income, poverty and unemployment, agricultural indicators, industrial indicators, infrastructure indicators, social service indicators and resource allocation indicators. He concluded that in India, many of the poor regions were blessed with a rich natural resources base. It contradicted the facile theory that the poor regions were poor because of their poor natural resource endowment. He concluded
that the initial disparity in investment tended to be self-perpetuating. Areas with a high initial rate of capital formation continue to grow whereas others were lagging behind.

Bharadwaj, K. (1982) analyzed and compared the regional disparities in economic growth during British rule period (1891-1946) and independent India (1947 to 1978-79). Her study revealed import-export led growth pattern during British rule period which proved that only a few regions having import-export based industries viz. Madras, Bengal (Calcutta) and Bombay were more developed. Punjab is only exception having agriculture-based growth pattern. Some cantonment townships like Meerut were also developed and rest of India was underdeveloped. During the period 1950-51 and 1960-61 there were some tendencies towards narrowing of disparities, but thereafter the gulf between the developed and underdeveloped regions went on widening because of uneven impact of green revolution on states.

1.8 Plan of Research Work

The present research work is divided into five chapters. The chapter first gives the introduction of the proposed research work. Chapter second is devoted to show the levels and trend growth of income levels among Indian states/ UTs in pre and post
globalization period. It gives an analytical framework of disparities in NSDP & PCNSDP using various statistical tools and techniques.

Chapter three deals with the employment trend and structure in pre and post globalization period. Sectoral distribution of employment and regional inequalities among states is also shown.

Chapter four introduces the poverty with the concept and its measurement. Trends in incidence of poverty, review of situation of inequalities, disparities in the level of living and such other persisting problems of poverty during the pre and post globalization period is shown.

Finally, in the last chapter, conclusions draw from the study are made and some suggestion have also been put forward.
References


42. Williamson, p.27, table 2.