CHAPTER 1

INTRODUCTION

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In the recent years, rising income inequality has become vigorously debatable issue among the policy makers and scholars within several countries of the world. In the world economy, inter-country inequality is increasing (Dabla-Norris, Kochhar, Ricka, Suphaphiphat, & Tsounta, 2015; Goda, 2013). The gap between the richest and the poorest countries in terms of GDP per capita was 9:1 in 1870 which increased to 45:1 in 1990 (Goda, 2013). After 2000, inequality somehow slightly decreased between countries but within country inequality has continue to rise (World Inequality Report, 2018). India too has witnessed an intense debate on disparities during the last few years. In India disparity persists not only in terms of the income but also in terms of investment on infrastructure, health facilities, education level, population growth, languages and also a huge disparity in share of sectors in the total SDP among the states (Cherodian & Thirlwall, 2013). In 2017, India ranks 132nd among 152 countries in inequality index (Prasad, 2017). Many researchers have argued that services led geographically concentrated economic growth in India, during post reform period which has increased the income inequality between states as well as between the households (Nayar 2008, Bandyopadhyay 2011, Himanshu 2007). The income gap between the rich and poor regions was 7:1 in 1991 which increased to 11:1 in 2016 (calculated at 2011-12 prices). In 2015-16 all India average per capita income was RS. 77803 at constant prices 2011-12 whereas the highest PCI was Rs. 267329 of Goa and the lowest was Rs. 24572 of Bihar. It is clear that there is a huge gap in per capita income between the richest and poorest region. The increasing gap among the states in per-capita income becomes the barrier for the development of the economy. It adversely impacts socio-economic conditions of an economy. Higher inequality leads to the lower growth by depriving the ability of lower income group to stay healthy and accumulate physical and human capital (Aghion, Caroli, & Penalosa, 1999; Galor & Moav, 2004). One of the reasons of this increasing gap is the structural difference among the states. In backward states, still a large portion of population depends on agriculture, whereas in the forward states a major proportion of population is engaged in secondary and tertiary sector for earning their livelihood. As in Bihar 70% of the state's labor force is engaged in agriculture where 90 percent of the state's population resides in rural areas (Tsujita, Oda, & Ghosh, 2010). While in Goa, only 22% of the states' population depends on agriculture. Overall in India, the growth rate of primary sector is consistently low; it was 2.80% for the period 1991-2016 whereas the secondary sector growth was 6.32% for the same time period. The growth rate of the tertiary sector was 8.41% over the time. It is clear that secondary and tertiary sector became the engines of growth for the Indian economy.

Although the Indian economy has experienced a faster growth in income after reforms and succeeded to reduce the poverty but on the other hand income inequality has increased among the states of India (B.B.Bhattacharya & Sakthivel, 2004; Kumar & Subramanian, 2012).

In order to present the clearer picture and for sharping our understanding year-to-year average growth rate along with the maximum, minimum and coefficient of variations of growth rate in per capita NSDP of states has been computed, which is shown in the below table.

Table 1: State-wise Average Growth Rate and Coefficient of Variation of Growth Rate of PCNSDP from 1991-92 to 2016-17				
States	Average GR	Max. GR	Min. GR	CV of GR
Andhra Pradesh	5.61	11.63	-4.45	73.85
Assam	2.62	8.16	-1.93	40.51
Bihar	3.58	15.29	-7.96	67.87
Delhi	5.11	11.91	-2.11	60.63
Goa	5.71	27.99	-15.20	61.16
Gujarat	7.41	29.82	-8.68	34.94
Haryana	5.16	10.57	-2.23	71.11
Himachal	5.50	9.08	2.12	77.95
Karnataka	5.15	12.03	-1.04	179.58
Kerala	5.84	9.71	1.31	125.14
Maharashtra	5.73	12.89	-4.86	75.70
Madhya Pradesh	4.23	12.99	-8.56	110.09
Orissa	4.13	13.33	-8.28	36.83
Punjab	3.34	8.77	-0.14	99.57
Rajasthan	4.78	29.24	-13.49	181.04
Tamil Nadu	6.16	14.77	-2.81	175.11
Uttar Pradesh	5.09	12.17	-1.78	105.52
West Bengal	4.34	6.75	1.24	76.58
All-India	4.30	8.07	-20.31	125.71
Source: Author's Calculation from Reserve Bank of India				

The above table 1 shows the averages of the year-to-year percentage growth rates in PCNSDP of states along with all India for the period 1991-92 to 2016-17. Looking at the average growth rate, find out that the Tamil Nadu, Kerala, Maharashtra, Goa and Gujarat achieved the high growth rate whereas Assam, Punjab, Bihar, Orissa and Madhya Pradesh earned very low growth rate over the time. The coefficient of variation has been also computed to see the variability in the growth rate of a state. Large fluctuations were found for Rajasthan, Karnataka, Tamil Nadu, Kerala, Madhya Pradesh and Uttar

Pradesh. On the other hand, Gujarat, Orissa, Assam, Delhi, Goa show relatively uniform growth rates. All-India growth rate is also very fluctuating over the years. One of the interesting finding is that there is no state which didn't experience a negative per capita NSDP growth rate except Himachal, Kerala and West Bengal.

1.1 Inequality and Sustainable Development Goals (SDGs)

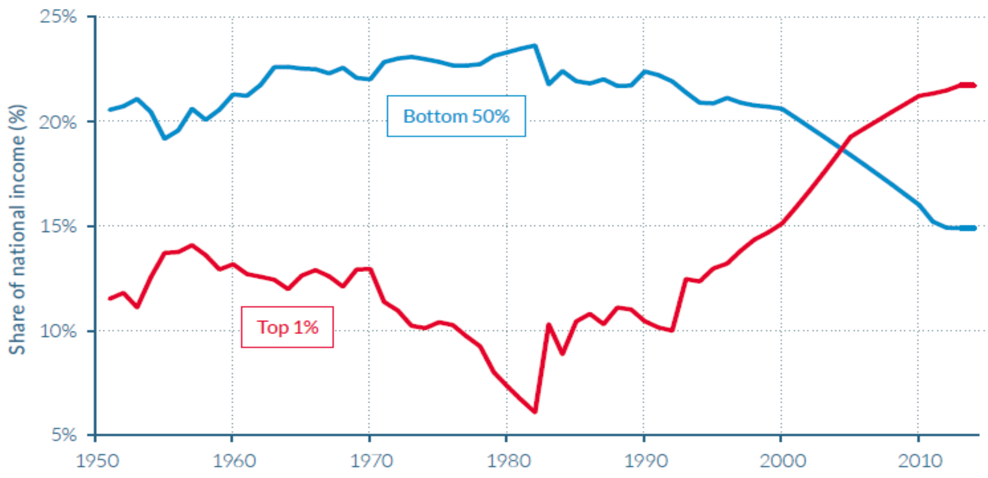
Income Inequality is a global problem that requires global solutions. First time at global level, reducing inequality is included in Sustainable Development Goals (SDGs). The goal number 10 of SDGs is about reducing intra and inter inequality among countries by 2030. There are mainly two targets of Goal 10 of SDGs, first to lift up the income of bottom 40% of the population at a higher rate than the national average, Second is to empower and promote the social, economic and political status, irrespective of ethnicity, origin, religion, disability, age, sex etc.

1.2 Historical Perspective of Income Inequality in India after Independence

In mid 1950s to 1980s, income inequality has declined significantly because at that time government implemented a number of socialistic policies with strict government control over the economy to limit the power of the elite. But after 1980s, income inequality started to increase despite the strong growth in the Indian economy because during 1984-89 the then government led by Rajiv Gandhi promoted market deregulation with increased external borrowings and increased imports. Due to these market deregulation policies, India faced balance of payment crisis which further pushed reforms in 1991. In this time government introduced special import license, which could be used for importing restricted items. Now only a few canalized and environmentally sensitive goods need import licensing.

Before the Second World War the income share of top 1% earner was 21% which decreased to 10-12% in 1950s-1960s and fell further to 6% in the early 1980s, thereafter reforms lead to increase the centripetal forces i.e. concentration of manufacturing activity near large market, it results increase the regional inequality. The share of top 1% earner rose to 10% in 1982-83, a decade after, it increased to 15% by 2000 and further it increased around 23% by 2014.

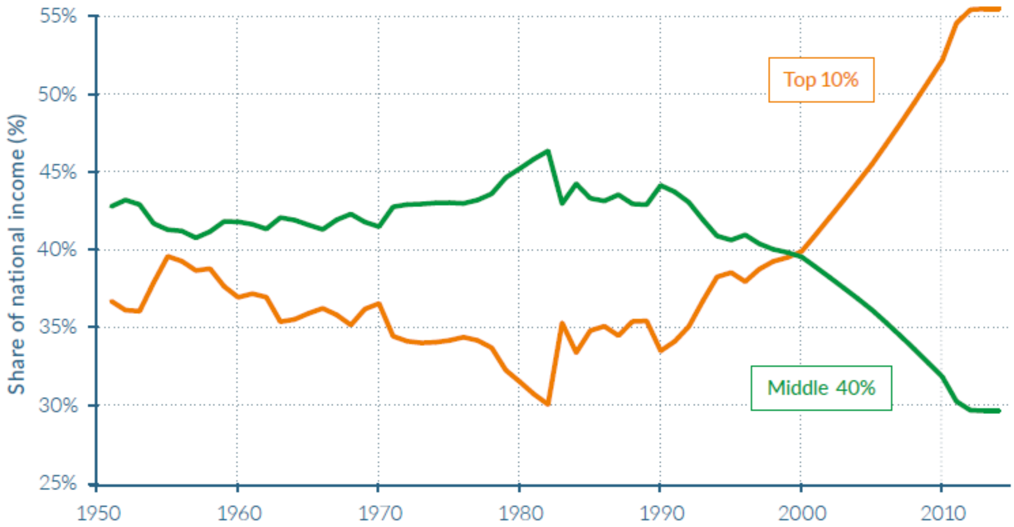
Figure 1.1: Top 1% and Bottom 50% Income Shares in India, 1951-2014



Sources: World Inequality Report, 2018

In 2000, the share of top 10% was 40% of the national income which increased to 56% in 2014 while the middle 40% shared 29% of aggregate income and the bottom 50% received only 15% of total income (World Inequality Report, 2018).

Figure 1.2: Top 10% and Middle 40% Income Shares in India, 1951-2014



Sources: World Inequality Report, 2018

1.3 Growth Theories and Regional Convergence

One of the old growth theories postulated by Harrod-Domar explained the economic growth in terms of capital-output ratio and saving rate. According to this, economic growth is positively related to the saving rate i.e. higher savings (through banks, stock market etc.) generate higher investment and this leads to the greater level of production of goods & services (Todaro & Smith, 2014). Similarly, it is negatively related to the capital-output ratio i.e. the amount of capital required to produce a single unit of output. Hence, economic growth is strongly linked only to these two variables as per this old growth theory. But latter Solow-Swan (1956) developed the improved version of neoclassical growth theory. This neoclassical model went ahead of the Harrod-Domar model by treating the capital-output ratio as endogenous variables. This theory postulates that the convergence hypothesis takes place when the growth rate of a region with lower per capita income tends to grow faster than the region with a higher per capita output, due to diminishing return to the capital. This convergence is dependent on the technological progress and the growth rate of human capital that is labour force.

There are main two empirical concepts of convergence to analyze the long run growth trajectories. First, β-convergence and second is σ-convergence. β-convergence proposes that the poorer economies grow faster than the richer economies and are hence able to catch up with them in the long run, given to their diminishing return to capital. In other words, β-convergence is said to exist if negative relationship exhibits between the growth rate of per capita income and the initial level of income. This concept is further separated into two parts: absolute or unconditional β-convergence and conditional β-convergence. Conditional β-convergence is based on certain assumption w.r.t. similarity of parameters (per capita income, technical progress, depreciation rate, saving rate, population growth rate etc.) across regions. On the other hand, the concept of unconditional convergence doesn't require the assumptions of similarity of parameters. Unconditional β-convergence exists when the growth rate of an economy declines as it approaches its steady state.

σ-convergence is said to exist if dispersion decreases over the time across the region in terms of per capita income. Thus, σ -convergence measures the inter-regional inequality at a given point of time while β-convergence measures the speed at which the poorer regions catch up the rich regions (Rao et al, 1999). It is to be pointed that the β-convergence is a necessary condition for the existence of σ-convergence but not a sufficient condition due to random shocks. When initially a poor region grows faster than a rich one, its level of PCI will tend to converge over time. Thus, β-convergence will tend to generate σ-convergence (Ghosh 2008; Nayyar 2008).

1.4 Rationale of the Study

After economic reforms, the growth pattern has changed a lot due to the change in economic structure through the movement of concentration from primary to tertiary sector rapidly. The share of primary sector was approx. 38% in 1991-92 which decreased to around 17% in 2016-17. While the share of tertiary sector increased from 36% in 1991-92 to 54% in 2016-17. Moreover, because of these reforms, regional disparity is also increasing among the states in terms of per capita income. Rich states are becoming richer while the poor states are becoming poorer (Khomiakova, 2008). So it is necessary to understand the trend of the regional convergence and economic growth and contribution of each sector in total divergence. Simultaneously this study tried to find out the reasons behind the increasing divergence so we can assure the efficient and effective allocation of resources which will be helpful in future policymaking.

1.5 Statement of the Problems

The Indian economy has made considerable progress after the economic reforms period. It has become the leading economic power in the developing world. Recently it achieved the tag of world's fastest growing major economy, surpassing china. But the distributional aspects accruing from this progress is far from being just and equal. Economic and social disparities are increasing among the states more after economic reforms 1991. The share of output is also shifted from agriculture sector to tertiary sector. So, it became important to know the impact of reforms on the regional disparity. Moreover, to understand the nature of these impacts at deeper level, it also became necessary to measure the contribution of each sector in aggregate regional inequality in India.

1.6 Research Questions:

Based on the literature review of the study following are the some research questions that are sought to be answered through this research:

(1) What are the recent trends and patterns of per capita income growth across the states in India?

(2) What are the inter-state trends in convergence or divergence in income and development expenditure in the major states of India?

(3) Which are the sectors growing at a faster rate in post-reform period in India? Does the sector witness a high growth result high inequality in income?

(4) What are policy measures that can be help to promote the balance regional development?

1.7 Research Objectives:

This study seeks to address the question of regional inequality in India - how these arise, how they continue to persist and what can be done to iron out this. The specific objectives of the research that will be addressed through this thesis include:

- To analyze the trends and patterns of NSDP and per capita NSDP among the sectors and states respectively.
- To study the regional convergence and economic growth in India.
- To know the contribution of the each sectors in aggregate inequality.

- To examine the trend of disparity in per capita development expenditure among the states.

1.8 Organization of the Thesis

This thesis is organized into seven chapters. The preceding pages of this introductory **Chapter 1** provides a brief overview of the existing state of affairs about inequality with historical background, theories related to regional convergence, statement of the problems, relevance of the study, research questions and objectives of the study. The next **Chapter 2** explains a brief literature review related to the study in the global and Indian context. **Chapter 3** collates the all tools and techniques which have been used to find the results of the study. **Chapter 4, 5, 6** discuss the all the results of study to fulfill the objectives of the study. **Chapter 7** collates the overall findings of the thesis, explaining the contours of development so observed and providing policy recommendations to address the issue of regional disparities in India.