International Journal of Research in Social Sciences
Vol. 8 Issue 11, November 2018,
ISSN: 2249-2496 Impact Factor: 7.081
Journal Homepage: http://www.ijmra.us, Email: editorijmie@gmail.com
Double-Blind Peer Reviewed Refereed Open Access International Journal - Included in the International Serial Directories Indexed & Listed at: Ulrich's Periodicals Directory ©, U.S.A., Open J-Gage as well as in Cabell's Directories of Publishing Opportunities, U.S.A

DISPARITIES IN GROWTH PERFORMANCE OF INDIAN STATES: EMPIRICAL EVIDENCE FROM BIHAR AND KERALA

Manish Kumar Singh*

Abstract

The disaggregated analysis of the regions of India is the curve of any discussion on economic development. The heterogeneity of Indian states gives importance to the special care needed in terms of regional development, keeping in mind that the high growth rate has not benefitted the states in the similar pattern. One way of study this is to examining disaggregated growth performance at the regional (state) level i.e., whether the growth performance is largely restricted to certain states of the country or not.Researcher has taken 36-year data of Per Capita Net State Domestic Product (PCNSDP) of Bihar and Kerala to identify inequality with in nation's growth performance.Semi-logarithmic regression model is employed for trend analysis and average annual percentage change for pattern analysis.Fluctuations in PCNSDP growth rate is more in Bihar as compared to Kerala. Kerala has experienced stagnantgrowth in PCNSDP since 1986-87 and after that, it has never turned back on declining path.While Bihar has experienced morevariation in course of growth.

Keywords:
growth;
per capita net state domestic product;
Semi-logarithmic regression;

* **Manish Kumar Singh, Junior Research Fellow, Department of Economics,Banaras Hindu University, Varanasi, India.**

1. Introduction

Economic growth always remains a concern of puzzle for economists. Sustained research and literature have placed many pieces of the puzzle; prediction of an economy that has struggled for decades is very difficult that when it would touch takeoff condition of growth. The economy, embedded as it is in politics, culture, and institutions, is a sufficiently complex organism for this not to be surprising. However, growth tends to generate growth, though, of course, missteps can bring it to a halt. Hence, our understanding of an economy's rapid growth has to focus largely on what causes the first stirrings.

The principal inference drawn from the various research and development policies of the past 50 years implies that the economic growth acts as the most efficacious technique to get people out of poverty trap and it also provides a wider opportunity for the attainment of a better life. Economic growth has various positive impacts like it provides employment opportunity, helps people with poverty, ensures a better standard of living, improves human development and helps in the advancement of health and education.

If we look at the growth performance of India, it has shown remarkable progress and registered itself as a fastest growing economy. Initially, India started its journey of development with highly regulated and protected economy till the 1970s. After that, it has adopted a relatively less regulatory framework than before and relaxed some restrictions. Growth during the 1980s was higher than in the previous decades. So that some economist argues that structural break of Indian economy has happened in 1980 {(Dholakia1994), (Wallack2003), (Kohli2006), (Das 2007), (Neog 2017)}. Then, India adopted new economic reforms in 1991 after an impending crisis and these reforms were more systematic and systemic and gave rise to a decidedly more stable and sustainable growth from 1992 on. These reforms also opened the doors for foreign and private participation in the economy. Therefore we can say that till the 1970s, India has grown at a stagnant growth rate of Gross domestic product (GDP) at around 3.5% per annum. From the 1980s to 1990s, India grew at an improved growth rate of 5.6% per annum. There was an improvement in the rate of growth but it wasn't stable. The decade of the1990s saw numerous reforms along with some macroeconomic measures which pushed the Indian economy towards the path of sustainable development. With the beginning of a new century, India registered an

all-time high growth rate of over 9% between the years 2005-06 and 2007-08. However, in successive years, the growth rate of India decelerated owing to the global recession and other difficulties. But, India recovered speedily which continued to exhibit steady pace of growth.

Economic performances of the states are equally important as economic growth at the national level because both are the two sides of a coin. The federal democratic structure in India has resulted in equal and considerable powers in the hands of the center and the states at times which make the steps taken superior in many areas and equal with the center in others. Economic performances of the states can be evaluated by the data available Per Capita Net State Domestic Product (PCNSDP) for an individual state. After liberalization, there is a significant reduction in the regulations exercised by the center in many areas which leads to the wider scopes for states to initiate by their own. In order to help and spread the potential of one state to other, it is essentially important to study the differences in the performances of these states as differences stand for uniqueness that can be the trigger for the development and it also provides ideas about what should be done and what shouldn't.

Here the focus of the researcher is only two very different states Kerala and Bihar. Kerala and Bihar are two economies which are very different in many aspects. For instance, as per 2011 census, the highest literacy rate was observed for Kerala (93.91) while lowest literacy was noted for Bihar (63.82) [www.censusindia.gov.in]. Facts show that in terms of Human Development Index (HDI) ranking for 1999-2000, Kerala occupied 1st while Bihar occupied bottom positions. Kerala stands as the best-governed state in the country and Bihar ranked lowest position, said the Public Affairs Index 2018 released by the think tank Public Affairs Centre (PAC) in Bangalore. Average Annual Growth Rates of GSDP of Bihar in the period of 1980-90, 1990-00, 2000-11 are 4.55, 3.25, 7.11 respectively and Average Annual Growth Rates of GSDP of Kerala in the period of 1980-90, 1990-00, 2000-11 are 3.51, 5.59, 7.81 respectively (Ghatak and Roy 2014). If we compare the above data set of both states we find that in 1980-90 annual growth rate of Bihar is more than Kerala, in 1990-00 less than Kerala and in 2000-11 approx equal to Kerala but if we see the rank of states in terms of per capita income, three-year **(**Ghatak and Roy, 2014) from 1980-89 to 2008-10, Kerala has reach 10^{th} to 5^{th} rank but Bihar has stagnant on 16^{th} rank. Therefore now the concern is that what are the actually reasons because of which Bihar with the

same growth rate as of Kerala is not able to increase its per capita income and stagnant at same position since last two decades.

Eventually, some questions are rising in the mind of the researcher. First, what are the nature and causes of differences in the pattern of growth rates between Bihar and Kerala? Second, why per capita GSDP of Bihar is declining continuously? And third, where is the problem with Bihar growth rate?

These are definitely very pertinent issues. Scientific knowledge of these is essential for understanding the real dynamics of regional imbalance in selected states. Considering this scholars have attempted to address the issue. We very briefly look at the available literature to understand the extent to which it is able to provide the answer to these questions and also to know what remains to be said.

The paper by **Bhaskar and Gupta (2007)** analyses various aspects like the education system, the role of institutions, employment generation, performances of different sectors of the economy and macroeconomic policies in the context of India and China. The comparative analysis of India and China would help to find the gaps between developed and developing economies and it would also encourage people to get a deeper understanding of the problems in various aspects while taking initiatives. **Ahluwalia (2000)** in his article laid stress on the fact that states are receiving meager attention as compared to the center and said that Growth of a country does not only depend on the rising rate of GDP, it requires simultaneous growth of the states as well because states constitute the nation.**Bhandari (2012)** in working paper series analyses the performance of Indian States across three critical sectors – health, education, and infrastructure. Results conform with the already well-established findings of several other studies that states such as Kerala are amongst the best performing while the so-called BIMARU states (Bihar, MP, Rajasthan, and UP) are laggards.**Bhat**attempts to explore those factors which are responsible for inter-state differences in economic development in India. Panel data regression analysis is being used for two consecutive years, 2011 and 2012. Preliminary results indicate that differences in innovative efforts do explain inter-state differences in economic development. She further observes that the increase in availability or consumption of energy can contribute to economic

growth both directly and indirectly. **Ghosal (2012)** found that the nature of the growth experienced by the states is found to be divergent.No uniform relation has been found between the temporal behaviour of the growth rates and the Gini inequality across the states. **Ghatak, ET al. (2014) have** evaluated the performance of states relative to the national average and found that Bihar appears to have experienced significant acceleration in aggregate growth relative to rest of India post-2005, primarily driven by growth in the industrial sector. However, this growth spurt has not had a significant effect on real wages. **Gaur(2010)** has examined inter-state disparity in total as well as per capita SDP for 20 major Indian states for the period 1980-2002. Empirical results revealed disparity among states in terms of total/per capita SDP has risen sharply as inequality indices like Gini, Theil's index, RMD, Kakwani's as well as Atkinson's indices have shown surge, especially after the economic reforms of 1991. Widening gap in terms of income among rich and poor states, especially after 1991 has also been established through empirical results based on β-convergence and σ-convergence. This is indeed an alarming situation and a potential threat for the stability of a federation like India. **Jha, D. et al.** have analyzed the growth dynamics of states using either a regression-based approach or one based on some summary measure of inequality. As a result, these studies were unable to reveal what happened to the entire cross-section of the Indian states in the context of convergence. Following **Quah (1997)**, the distribution dynamics approach to analyse growth dynamics in different groups of Indian states for the period of 1993 to 2005 has been used, and study the evolution of the entire distribution over time. Stochastic kernel, and its 3-dimentional surface plots and 2-dimentional contour plots have been used to study the dynamics. The result shows that in post-reform period per capita income distribution shows a tendency towards bimodality and polarization. **Krishna (2004)** Focus is on the issue of growth variability (instability) volatility in Indian states during the past four decades. Its important finding is that the dispersion of growth rate of states increased considerably in the past reform period (from 15% in 1980s to 27% in 1990s). **Sanga, et al. (2017)**analysed regional convergence across 15 major states in India and suggested that there is a divergence of the aggregate economy for the period 1970–71 to 2013–14. The findings, therefore, do not lend support to the expectations of the neoclassical convergence hypothesis according to which poor regions tend to catch up with the advanced regions in the long run leading to regional convergence. **Rasul, et al. (2014**) investigates the underlying causes of the poor economic growth of Bihar and Uttar Pradesh, despite being

endowed with relatively rich natural resources. Against the conventional view, the analysis reveals that poor economic growth is not due to a particular factor but an outcome of a myriad of social, economic and political factors rooted in structural, historical and macro-economic policies. **Santra, et al. (2014)** explains thatthe structural change in Bihar at district level is clearly in underway. The tertiary sector is continuously getting important for contributing in NSDP in Bihar. The most important part here is the very low share of industrial sector. However, the share of industrial sector has started increased during the period 2005-2010. **Jeromi (2003)**studies the developmental experience of Kerala during the past two decades and identify emerging issues. Author uses the time series data since 1980-2000 and observed that Kerala economy recorded lower growth than the national economy, especially in the 1980s. **Subrahmanian(2006)** provides a critical assessment of the claim of the end of "lopsided development" and emergence of the "virtuous cycle of development" during the regime of economic reforms in Kerala.

After succinct review of literature related to our research problem, researcher finds out that sectoral and geographical imbalance of growth excluded the aim of inclusive growth. It becomes significant in the Indian context as the Sectorial Growth happens differently in the different regions of the Economy due to huge Geographical, Social and Political diversities. Most of the developing states, agriculture sector has been the main driving sector because most of the people depend on agriculture. But share of agriculture sector in GSDP decline continue which is the biggest problem for developing economy.

2. Research Method

As per the requirement of the study, secondary data has been used. The analysis has been covered period of 36 years from 1980 to 2016. For calculation of the trend and pattern in per capita net state Domestic Product (PCNSDP) of Bihar and Kerala semi-logarithmic regression model is employed for trend analysis and annual percentage change for pattern analysis.The semi-logarithmic trend model is:

$$\ln(Y_t) = \alpha + \beta t + U_t$$

In the above equation, the dependent variable is in natural log and α, and β are the parameter and t is the time. And the trend coefficient β shows the average annual growth in the specific time

period. For calculation of average annual growth rate for each period, we multiplied co-efficient β with 100.

The following formula has been used to calculating annual percentage change.

$$APCt = \frac{PCNSDPt - PCNSDPt - 1}{PCNSDPt - 1} \times 100$$

Where,

APC_t = Annual percentage change in t year.

$PCNSDP_t$ = Per capita net state domestic product in t year.

$PCNSDP_{t-1}$ = Per capita net state domestic product in t-1 (previous) year.

3. Results and Analysis

Nowadays, the diverse economic growth patterns are very common in Indian states. The patterns of the growth of developed states and developing states have been found to be quite different. The growth of most developing states is found to be characterized by instability and volatility (K.L. Krishna 2004). Present researcher also tries to analyze some reasons which bring about such differences and if possible motivate rapid economic growth in the future. Clearly, economic growth is a complex interaction of numerous factors, such as quality of governance, technological progress, population growth, physical capital, human capital, industrial structure, religious beliefs, geographical location, quality of land, stock market, inflation etc. According to different impacts, these relevant factors could be divided into exogenous and endogenous factors, or determinant and influential factors. Meanwhile, it is also significant to realize the fact that there is mutual influence between economic growth and these relevant factors, just like the relationship of eggs and chickens. So far, with our limited knowledge about economic development, it is still quite difficult to explain why growth rates differ among states. We need to trace the rate and pattern of economic growth of Bihar and Kerala. First of all, researcher has been examined the percentage annual change of PCNSDP of both states during this period which is given below.

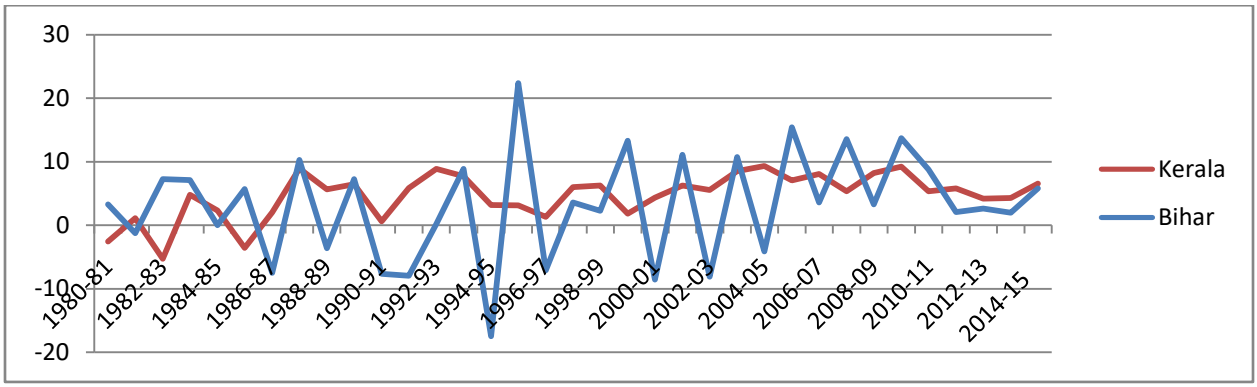
Table (1) - % annual change of PCNSDP at factor cost (constant price- 2011) During 1981-82 to 2015-16

Year	%Annual change(Bihar)	%Annual change(Kerala)	Year	%Annual change(Bihar)	%Annual change(Kerala)
1981-82	3.27	-2.59	1999-00	2.24	6.22
1982-83	-1.27	1.09	2000-01	13.27	1.79
1983-84	7.27	-5.32	2001-02	-8.54	4.29
1984-85	7.08	4.77	2002-03	11.08	6.22
1985-86	0.00	2.31	2003-04	-8.13	5.54
1986-87	5.68	-3.58	2004-05	10.71	8.48
1987-88	-7.49	2.00	2005-06	-4.12	9.31
1988-89	10.29	8.91	2006-07	15.43	7.02
1989-90	-3.63	5.64	2007-08	3.55	8.06
1990-91	7.26	6.45	2008-09	13.53	5.32
1991-92	-7.69	0.61	2009-10	3.28	8.22
1992-93	-7.96	5.81	2010-11	13.68	9.20
1993-94	0.20	8.85	2011-12	8.76	5.31
1994-95	8.86	7.70	2012-13	2.07	5.76
1995-96	-17.50	3.14	2013-14	2.59	4.15
1996-97	22.36	3.12	2014-15	1.96	4.26
1997-98	-7.13	1.31	2015-16	5.81	6.51
1998-99	3.55	5.98			

Source: Author's Own Calculation, Data Source: CSO (MOSPI) Government of India and Handbook of Statistics on Indian States- 2018, RBI.

Researcher has taken 36 year data of PCNSDP to studied states for identifying inequality within nation. As from the above table, it is clear that Bihar hag caught under negative growth of PCNSDP ten times while Kerala only three times which are initial years of study, i.e. 1981-82, 1983-84 and 1986-87.

Figure (1): comparison of Percentage annual change in PCNSDP of Bihar and Kerala



Source: Author's Own Calculation, Data Source: CSO (MOSPI) Government of India and Handbook of Statistics on Indian States- 2018 RBI.

Fluctuations in PCNSDP growth rate is more in Bihar as compared to Kerala. The highest growth rate is 22.36% during 1996-97 in Bihar while the same with the highest value in Kerala is 9.31% in 2005-06 and on the other hand Bihar has lowest or negative growth rate of -17.50% during 1995-96 while Kerala has -5.32% in 1983-84. Therefore, sustainability has not been found in the growth rate of PCNSDP in both states but have large variations or fluctuations in Bihar as compare to Kerala. Since last four year like 2011-12 to 2015-16 Kerala is sustain in terms of growth rate of PCNSDP but Bihar is still bearing fluctuation in terms of growth rate except for three years as 2012, 2013 and 2014.

We can easily understand these all thing with the help of descriptive statistics of PCNSDP and its % annual change at factor cost during the period of 1980-81 to 2015-16 for the check of normality of data set which results are given below in table(2).

Table (2) - Descriptive statistics of PCNSDP and its % annual change at factor cost (Constant price- 2011) During 1980-81 to 2015-16

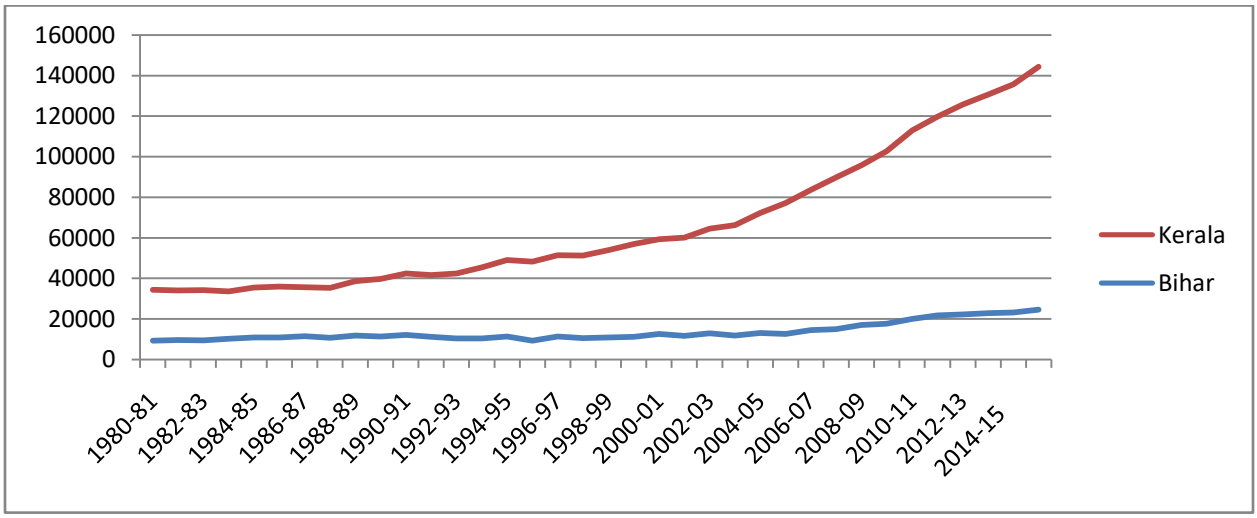
	PCNSDP (Bihar)	PCNSDP (Kerala)	% annual change in PCNSDP(Bihar)	% annual change in PCNSDP(Kerala)
Mean	13545.50	52581.19	3.152725	4.624068
Median	11557.36	41879.16	3.282509	5.536821
Maximum	24572.00	119763.0	22.36070	9.306266

Minimum	9296.722	23424.52	-17.48336	-5.319865
Std. Dev.	4464.140	29410.64	8.452498	3.582251
Skewness	1.315127	0.903461	-0.170900	-1.004761
Kurtosis	3.336018	2.542520	2.851651	3.672858
Jarque-Bera	10.54671	5.211388	0.202467	6.549256
Probability	0.005126	0.073852	0.903722	0.037831
Sum	487637.9	1892923	110.3454	161.8424
Sum Sq. Dev.	6.97E+08	3.03E+10	2429.121	436.3057
Observations	36	36	35	35

Source: Author's Own Calculation, Data Source: CSO (MOSPI) Government of India and Handbook of Statistics on Indian States- 2018 RBI.

In the above table, the result of Descriptive statistics of per capita net state domestic product (PCNSDP) of Bihar and Kerala and its % annual change at factor cost (constant price- 2011) during the period of 1980-81 to 2016-17 is given and are showing that data set have been normal.

Figure (2): comparison of change in annual PCNSDP of Bihar and Kerala



Source: Author's Own Calculation, Data Source: CSO (MOSPI) Government of India and Handbook of Statistics on Indian States- 2018 RBI.

The graph represents PCNSDP in absolute term at factor cost. It depicts that Kerala has experienced stagnant growth in PCNSDP since 1986-87 and after that, it has never turned back on decreasing path. While Bihar has experienced many fluctuations of positives and negatives as already discussed above, therefore, a graph of PCNSDP of Bihar has been found like a line at

some extent. After 2006-07 it has also not gone back on the negative growth rate path. As it is clear that PCNSDP of both states varies from the initial period of study but the gap was sustained till 1986-87 but after that Kerala economy moved up and touches an appreciable height which is observable from the graph.

Average annual growth rate of PCNSDP in Bihar and Kerala during 1980 to 2016

In our overview, we partition the period 1980-2016 into four separate time periods: 1980-1991, 1991-2000, 2000-2005, and post-2005. The basis of this classification is analytical rather than statistical.

The first period captures pre-liberalization economy. This represents a period when the structure of the economy, its endowments, and its politics has markedly changed in Bihar and Kerala in existence after 1990. The second period captures post- liberalization period or pre- bifurcation of Bihar, with various changes at national as well as states levels. Third categorized period in present study is taken as post- bifurcation because this is a period when Bihar has experienced a bifurcation. The fourth period is the period after the 2005 elections in Bihar when Nitish Kumar and his political party Janata Dal (United) (JD (U)), came to power together with the BharatiyaJanta Party (BJP). This period saw major changes in policy, administrative, and overall governance changes as well as rapid economic growth.

Average growth rate for each concerned period has been analyzed below through semi-log regression at constant price 2011 and thereafter comparison has been done between Kerala and Bihar in each period. By multiplying slop values (i.e. β) with 100, we can calculate the average annual growth rate of per capita net state domestic product which is shown below in below table (3).

Table (3) – Average growth rate of per capita net state domestic product

(Constant price- 2011)

State	Growth rate(in %) during			
	1980-81 to 1990-91	**1991-92 to 1999-00**	**2000-01 to 2004-05**	**2005-06 to 2015-16**
Bihar	2.52	0.34	3.67	6.58
Kerala	1.69	4.78	5.89	6.20

Source: Author's Own Calculation, Data Source: CSO (MOSPI) Government of India and Handbook of Statistics on Indian States- 2018 RBI.

Bihar per capita net state domestic product (PCNSDP) data indicates that growth performance has been quite weak, averaging barely 2.5% during 1980-90 which was above Kerala growth rate of 1.69% and then turning down 0.34 during 1990-00 which was below Kerala (4.78%). During post liberalization, Bihar continues to lag seriously behind Kerala. Over the period 2000-05, growth rate of Bihar averaged with 3.67% while Kerala had 5.89%. Gap of PCNSDP between both states was widening but afterward during 2005-06 to 2015-16 average growth rate of Bihar has been reached to 6.58% which was greater than Kerala growth rate of 6.20%.

Pre-liberalization (1980-81 to 1990-91)

Time series data since 1980-81 shows that the Kerala economy recorded lower growth than the Bihar economy especially in 1980-81 to 1990-91. During 1980-81 to 1990-91, the average rate of growth of PCNSDP was much lower at 1.69% as against 2.52% in case of Bihar. The PCNSDP of Kerala was also highly volatile during this period; there was negative growth during three years (1981-82, 1983-84 and 1986-87).

The main factors responsible for the slow growth of Kerala during the 1980-81 to 1990-91 are poor performance of agriculture sector (growth rate 2.3% and share in NSDP was 36.9%), poor performance of industry sector (growth rate 3.3% and share in NSDP was 23.8%, including construction), severe power shortage and return of large number of migrants from the West Asia during the second half of the 1980s (Prakas, 1999).

In this period growth of Kerala in PCNSDP would have been lower than Bihar but for the steep decline in the rate of growth of population. Growth rate of population in this period has been 14% of Kerala and 23% of Bihar. A balance between population and economic growth is essential for the manpower to be observed by the productive sector.

Bihar PCNSDP is better than Kerala in this period because Bihar is rich in mineral resource and forests. More than 40% of India's coal, 32% of its bauxite, 59% of its copper, 17% of its iron

ore, about 80% of its silver and 60% of its mica comes from Bihar (Sharma, 1985). Most population (80%) of Bihar are dependent on agriculture sector. High rainfall along with melting of snow from the Himalayan Mountains, feeds the Ganges and its tributaries with water during the dry season and provide a perennial source of irrigation to large area in Bihar.

Post-liberalization or Pre-Bifurcation of Bihar (1991-92 to 1999-00)

There has been a structural change in the composition of state income of Kerala during this period. The growth rate of primary sector has been 2.3 per cent and share of primary sector in NSDP has been 25.7 per cent. Growth rate of the secondary sector (including construction) has been 7.6 per cent and share of secondary sector in NSDP has been 20.9 per cent during this period. The growth rate of tertiary sector has been 8.3 per cent and share of the tertiary sector in NSDP has been 53.3 per cent in this period (Economic Review, various issues, state Planning Thiruvananthapuram. and Department of Economics and Statistics)

The major factors, which influenced Kerala's economy during the 1990's, were economic policy reforms, buoyancy in exports, favourable climatic conditions, increase in migration to the west Asia, higher income generated in the communication sector, relatively better performance of agriculture and industry and the devaluation of the Indian Rupee by 18.3 per cent in July 1991, partial convertibility of the rupee in March 1992 and full convertibility in March 1993 helped migrants to earn more Rupees in exchange for foreign currencies (exporters benefited).

Ghosh and Gupta (2010) argue that Bihar failed to capitalize on the subsequent process of liberalization and opening of the India economy; they note that "… the growth rate of the Bihar economy during the post-reform era was the lowest of any of the regions of India in any of the decades." Due to the absence of a dynamic non-farm or industrial sector in Bihar, the growing low-skilled population has created tremendous pressure on the agriculture sector. The percentage of agriculture workers in Bihar has increased from 41.8% of the economically active population in 1971 to 48% in 2001. As the agriculture sector has limited capacity to absorb the additional labour force, the extra hands have failed to contribute to agriculture production, in what is referred to as disguised unemployment. Low public and private investment, poor physical and institutional infrastructure, unequal land distribution, poor agrarian social structure including

persistence of feudal elements not only hindered the growth of productivity in agriculture but also reinforced social inequality that creates structural barriers to the overall development of the society and economy. Bihar also faced the problem of population growth rate which was 28.62 % where Kerala population growth rate was 9.43.

In this period Bihar achieves very poor change in sectoral growth rate. Annual compound growth rate of agriculture, industry (including construction) and service sector have been -0.85 per cent, -1.07 per cent and 5.85 per cent respectively. Ghosh and Gupta's (2010) and Sharma's (1995) arguments that the failure of growth in Bihar was largely a failure of the services and industrial sectors to expand. This, in turn, raises questions about the nature of the prevailing policy environment in Bihar during the 1990s, particularly because during the 1990s, Bihar's access to mineral resources was largely intact.

Because Bihar has relatively undeveloped industry and services sectors, the fiscal resource base of state is relatively small. Moreover, their low administrative capacity (coupled with the reliance on patronage politics) has weakened the ability of state to collect revenue. Bihar was not even able to manage the matching funds required for centrally sponsored development programmes. The weak administrative capacity has also led to low utilization of development funds in Bihar. Well-functioning institutions, good governance and strong leadership play critical roles in economic development (Beer &Clower, 2014; Nayyar, 2008). Bihar is rated as the most poorly governed state of India (World Bank, 2005).

Post-Bifurcation of Bihar (2000-01 to 2004-05)

Bihar's economy was substantially transformed when it bifurcated into Bihar and Jharkhand under the Bihar Reorganization Act of 2000. One of the immediate consequences of bifurcation for Bihar was that its economy became much more sensitive to shocks such as floods. While earlier about 55% of Bihar had been flood-prone, with the reduction in land area, 73% of the area after bifurcation was flood prone. Most of the manufacturing units and capacity to generate power were located in southern Bihar, and these went to Jharkhand. Thus, the share of industry (excluding construction) dropped from 22.5% to 4.6% of NSDP, and there was a parallel increase in the share of the services sector from 36% to 50%, in a matter of a year. The share of

the agricultural sector in the economy increased modestly from 36.5% to 40.4%. A natural consequence of the loss of the industrial sector was a substantial drop in the state's own share of non-tax revenue from this sector. Thus, over the 1991-95 years, the industrial sector in Bihar contributed Rs. 61,119 crore to the state, i.e. about 10% of total revenue. This declined marginally to 7% of total revenue for the 1995-2000 periods. However, over the 2000-05 period it accounted for a mere Rs. 12,344 crore, and this was no more than 1% of total revenue (Economic Survey, Government of Bihar, various rounds).

In this period Kerala economy grow continuously faster. There has been a structural change in the composition of state income of Kerala during 2004-05. Contribution of primary sector of Kerala in GSDP of Kerala has been 17.86 per cent and growth rate of primary sector has been 7.7 per cent. Contribution of secondary sector (including construction) in GSDP of Kerala has been 22.45 per cent and growth rate of secondary sector has been 11.6. Contribution of tertiary sector in GSDP in Kerala has been 59.59 per cent and growth rate tertiary sector has been 12.6 percent which was faster than other sector.

Interestingly, right after bifurcation in 2000-05 we find a sharp increase in growth of Bihar at 3.67% in comparison to the 0.34 % seen over 1991-99. However, Kerala grew faster than Bihar at 5.89% over 2000-05 and the gap between Bihar and Kerala continued to increase. This was in spite of the fact that in the first five years after bifurcation Bihar grew much faster than it had grown ever since 1980.

2005-06 to 2015-16

After the 2005 elections in Bihar when Nitish Kumar and his political party Janata Dal (United) (JD (U)), came to power together with the BharatiyaJanta Party (BJP). This period saw major changes in policy, administrative, and overall governance changes as well as rapid economic growth. This period marks a clear break from the past, in both a statistical and qualitative sense. In terms of sectoral growth it is also clear that the post 2005 period saw a quacking pace in each sector within Bihar. Thus, not only was the economy growing fasters, but each of its key sectors themselves was growing faster in the post 2005 period. The services sector, the largest contributing sector (61% of GSDP) in Bihar at this point, was also growing at a compound

annual growth rate of 11.9 per cent. Contribution of industrial sector (including construction) of Bihar in GSDP of Bihar has been 18 per cent and contribution of agriculture sector of in GSDP of Bihar has been 21 per cent in 2016-17(Bihar budget 2018-19).

In this era, development style of Kerala is known as a Kerala model. Kerala has been achieved improvements in material conditions of living, reflected in indicators of social development, (comparable to those of many developed countries), low levels of infant mortality, low level of population growth, high levels of literacy and high level of life expectancy and political awareness, along with the factors responsible for such achievements have been considered characteristic results of the Kerala model.

Share of agriculture sector in GSDP of Kerala has been 11.3 per cent, share of industrial sector (including construction) in GSDP of Kerala has been 25.6 per cent and share of service sector in GSDP of Kerala has been 63.1 per cent which are much higher than including both sector in 2016-17(Kerala budget analysis 2018-19). Population growth rate also decline in both state. In the period of 2001-11 population growth rate of Kerala has been 4.86 per cent and population growth rate of Bihar has been 25.07 per cent which was decline with -4.57 per cent and -3.5 per cent respectively as compare to previous time period.

4. Conclusion

There is enormous scope of further research in analysing the performance of states. The 'refined' analysis can be conducted every few years to monitor incremental changes, or the regression could be run on growth rather than levels over specified time periods. This will allow us to gauge how particular states are improving their performance over time and how performance across different time periods has differed.Researcher has been used per capita net state domestic product data set of Bihar and Kerala at constant price (2010-11 base years) in this study. Conclusion and suggestion of this study are given below.

In order to identify the prevailing inequality within the nation, researcher has taken the past 36 years data of PCNSDP of individual states. Highest growth rate was 22.36% during 1996-97 in Bihar while Kerala has registered the growth rate with highest value of 9.31% in 2005-06. Both

states have also experienced the lowest or negative growth rates. During 1995-96, the growth rate of Bihar was -17.50%. Kerala, on the other hand, was experiencing the negative growth rate of -5.32% during the year 1983-84. Therefore, sustainability has not been found in terms of growth rate of PCNSDP in both states but, a larger degree of variations or fluctuations can be observed in Bihar as compared to Kerala. Kerala has experienced growth in PCNSDP in absolute terms at factor cost since 1986-87 and never turned back on the decreasing path. While, Bihar has undergone through many positive and negative swing. After 2006-07, Bihar has also not taken the road of negative growth rate. It is clear from the observation that PCNSDP of both states varies from the initial period of study but the gap was sustained till 1986-87. After that, the economy of Kerala moved up and touched an appreciable height.

Bihar is classic examples of how a rich natural resource-based economy can be caught by a low-level equilibrium trap. This study analysed the underlying causes of low levels of development of Bihar. It is very clear that the structural change in Bihar is clearly in underway. The tertiary sector is continuously getting important for contributing in NDDP in Bihar. The share of agriculture is decreasing significantly. However, that share for agriculture is still very high in Bihar. Bihar is still an agrarian economy, and trying to be a service-led economy. The most important part here is the very low share of industrial sector. However, the share of industrial sector has started increased during the period 2005-2010. “With a very weak industrial sector, the chances of sustaining growth through strengthening industry seems very limited currently. In addition, with power situation being very constrained there is little ability to support industrialization. Thus, only small or very niche enterprises are likely to flourish. In this respect, agro-and horticulture based industries have begun entering Bihar” (Mukherji&Mukherji, 2012). However, Bihar remains a poor economy with key structural imbalances and is still well below the national average in terms of well-being, productivity and public investment.

The study envelops some important facts about Kerala economy like the share of primary sector in NSDP of Kerala has been declined sharply but, the corresponding decline in the share of employment has not taken place. Moreover, the excess labour force has moved from primary sector to secondary sector thus, causing labour abundance in secondary sector and there was only a meager increase in the share of income contributed by the secondary sector in NSDP. The

share of income from service sector has increased sharply but, it has failed to register proportional increase in employment. Thus, it follows from the facts that Kerala did not experience a sequential growth process (as propounded by structural change growth theories) as the service sector led growth did not provide employment equivalent to its income and the process of industrialisation has failed to take off as the share of income generated by the secondary sector did not commensurate with the level of employment in the given sector.

5. Suggestions

- The available pieces of evidence show that there are enormous differences across states. Therefore we should pay much more attention on the individual states to find out what is going on. Several states are performing very well. Kerala has been categorised under the states which are doing exceptionally good. While, opposite is the case of Bihar, which is doing really poor.
- Policy makers and academicians should examine the reasons for these differences on the basis of relevant state-specific characteristics which may be economic, institutional, socio-economic or even socio-political. This would help in devising strategies that can help in breaking the specific constraints that prevent the present poorly performing states from replicating the success of the better performers.
- Apart from a structural transformation of the economy, the other issues, like the issue of productivity, the lack of skill generation, the absence of vocational training and the absence of job-ready candidates need to re-emphasized that can engage in growing sectors and sub-sectors of the economy.

References

Acharya, Shankar, et al. India: Economic Growth, 1950-2000. Indian Council for Research on International Economic Relations. New Delhi: Research Gate, 2003.

Balakrishnan, Pulapre and M Parameswaran. “Understanding Economic Growth in India: A Prerequisite.” Economic and Political Weekly 42.27/28 (2007): 2915-2922.

Basu, Kaushik and Annemie Maertens. “The pattern and causes of economic growth in India.” Oxford Review of Economic Policy 23.2 (2007): 143–167.

Bhaskar, V and Bishnupriya Gupta. “India's development in the era of growth.” Oxford Review of Economic Policy 23.2 (2007): 135-144.

Chattopadhyaya, R N and M N Pal. “Some Comparative Studies on the Composition of Composite Regional Indices.” Indian Journal of Regional Sciences 2 (1972).

Datt, G and M Ravallion. “Regional Disparities, Targeting and Poverty in India.” (1993).

—. “Why has Economic Growth been more Pro-poor in some states in India than others?” Journal of Development Economics 68 (2002).

—. “Why have Some Indian States Done Better than Others at Reducing Rural Poverty?” Economica 65 (1998).

Dholakia, Ravindra H. “Spatial Dimension of Acceleration of Economic Growth in India.” Economic and Political Weekly 29.35 (1994): 2303-2309.

Dreze, J and A Sen. “India: Economic Development and Social Opportunity.” (1995).

Gaur, A K. “Regional disparities in economic growth: A case study of Indian states.” 31st general conference of IARIW. Switzerland, 2010.

Gross Domestic Product of Kerala and India from 2004-05 to 2012-13 (Base Year 2004-05). Thiruvananthapuram: Government of India, 2014.

Jeromi, P D. “What Ails Kerala's Economy: A Sectoral Exploration.” Economic and Political Weekly 38.16 (2003): 1584-1600.

Krishna, K L. Patterns and Determinants of Economic Growth in Indian States. Working Paper No. 144. Indian Council for Research on International Economic Relations. New Delhi, 2004.

Kurien, C T. “Kerala's Development Experience: Random Comments about the past and Some Considerations for the Future.” Social Scientist 23.1/3 (1995): 50-69.

Majumdar, R. “Human Development in India: Regional Pattern and Policy Issues.” 2004. Munich Personal RePec Archive. 5 July 2018 <http://mpra.ub.uni-muenchen.de/4821>.

Mathur, A. “Regional Development and Income Disparities in India: A Sectoral.” Economic Development and Cultural Change (1983).

—. “Regional Economic Change and Development Policy in India.” Indian Journal of Applied Economics 12 (1992).

—. “Why Growth rates Differ Within India- An Alternative Approach.” Journal of Development Studies 23.2 (1987).

“Modern Theories of Economic Growth.” n.d. 5 August 2018 <http://www.tutorialspoint.com/managerial_economics/modern_theories_economic_growth.htm>.

Mohapatra, A C. “An Alternative Model of Measuring Divergence-Convergence Hypothesis: A Study of Regional Per Capita Incomes in India.” Indian Journal of Regional Science 10.2 (1978).

Mukherji, Arnab and Anjan Mukherji. Bihar: What Went Wrong? And What Changed? National Institute of Public Finance and Policy. New Delhi, 2012.

Nagaraj, R. “Growth Rate of India's GDP, 1950-51 to 1987-88: Examination of Alternative Hypotheses.” Economic and Political Weekly 25.26 (1990): 1396-1403.

Nair, K R G. “A Note on the Inter-State Income Differentials in India, 1950-51 to1960- 61.” Journal of Development Studies (1973).

Neog, Yadawananda. "STRUCTURAL SHIFT IN MACRO ECONOMIC AGGREGATES OF INDIAN ECONOMY."*EPRA International Journal of Economic and Business Review*, 2017: 77-81.

Rasul, Golam and Eklabya Sharma. "Understanding the poor economic performance of Bihar and Uttar Pradesh, India: a macroperspective." Regional Studs Regional Sciences 1.1 (204): 221-239.

Sanitha, V P and Naresh Singla. "Structural Transformation in Kerala's Economy: Is There any Role of Agriculture Sector?" Journal of Regional Development and Planning 5.2 (2016): 45-58.

Santra, Swarup , Rajesh Kumar and Nidhi Bagaria. "Structural Change of Bihar Economy during 1999 to 2010: A District Level Analysis." The International Journal of Humanities and Social Studies 2.1 (2014): 129-134.

SHARIPOV, Ilkhom. "Contemporary Economic Growth Models and Theories: A Literature Review." CES Working Papers 7.3 (n.d.): 759-773.

Subrahmanian, K K. "Economic Growth in the Regime of Reforms: Kerala's Experience." Economic and Political Weekly 41.10 (2006): 885-890.

Wallack, J S. "Structural Breaks in Indian Macroeconomic Data." Economic and Political Weekly 38.41 (2017): 4312-4315.

n.d. 5 July 2018 <http://www.ideasforindia.in/topics/governance/mirror-mirror-on-the-wall-which-is-the-most-dynamic-state-of-them-all.html>.

n.d. 10 July 2018 <https://www.scribd.com/doc/84940762/Characteristic-Features-of-Indian-Econom>.

n.d. 13 August 2018 <https://www.importantindia.com/24527/features-of-indian-economy-20-points>.