Theoretical & Empirical investigation for the presence of Kuznets curve for two Indian States – Bihar and Maharashtra

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Abstract

Economists have been arguing whether there is a Kuznets curve for countries for quite a long time, in reality, rare people care about Kuznets curve within a country. This work investigates theoretically and empirically the possibility of Kuznets curve in two states of India – Bihar and Maharashtra. Time series data for the period 1996 to 2010 is used to analyze the relationship between economic growth, development level and income distribution inequality, so as to verify whether the Kuznets curve is applicable within India. Further, the impact of economic development on inequality is analyzed using multi-variable OLS regression technique and also develops an augmented Kuznets' curve. Towards the end, the work studies convergence in these states building upon Solow's idea of convergence. The results show the presence of Kuznets curve in the process of economic growth in both states Bihar and Maharashtra in India, namely there is a reversed U-shaped relationship between economic growth and income inequality. At the same time, there exists a direct U augmented Kuznets' curve for Maharashtra while a positive hence destructive relation between development and inequality in Bihar. As for the convergence, the theory does seem to have ground with respect to these two states.

Keywords: Economics Growth, Inequality, Augmented Kuznets' curve, Bihar, Maharashtra.

JEL Classification: D63, I25, P23, R21

1. Introduction

With almost 30 years of reform and opening up, India's economic growth and development made remarkable achievements, especially the GDP, which even reached ten percent during the famous golden era (2003-2008). Nevertheless, in the meanwhile, the rapid economic growth goes with the increasingly larger income gap among residents of our society.

Kuznets hypothesized that economic growth was associated initially with increasing income inequality followed by decreasing income inequality, which describes the distinctive inverted U shape curve. Kuznets stated that this relationship between economic growth and income inequality was produced by the combined effects of urbanization and industrialization and was associated with the movement of labor from lower paying rural agricultural jobs to higher paying urban industrial jobs. This paper checks whether a Kuznets' curve exist in reality for Indian states.

Moreover economic growth and residents' income gap have always been the focus of attention, while the relationship between development and inequality has been ignored. Therefore, correct understanding and handling of the contradiction between development and economic growth influences not only the overall situation of reform and development, but also the possibility to realize a new socialist goal. Two Indian states – Maharashtra and Bihar, sharing the same colonial legacy, are compared and contrast the above analysis in both the states since they differ strikingly in levels of income, with Maharashtra being one of the richest state and Bihar the poorest. Taking benefit of this distinction in income level and similarity in other features, further, the paper checks the presence of convergence hypothesis by Solow.

2. Literature review

Economic Growth has been a central theme in economics since the very beginning, but recently the focus is getting shifted towards development. Development in its own is a very wide term and encompasses almost every aspect of human life. The issues related to economic growth and development, like impact on income inequality have attracted the attention of not only economists but scholarly from every social science regime and thus it has resulted in diverse researches and economic thoughts.

This work is vehemently inspired by theories of Simon Kuznets (Kuznets (1955)) who established that there was an inverse relationship between equality and growth at lower levels of income, and that countries must face a trade-off between reducing inequality and promoting growth. Kuznets gave the famous inverted U shaped Kuznets's curve which highlights the specifics of his theory: for lower levels of income low inequality was found, inequality reached its maximum at middle levels of income and decreased to the lower levels again when income was maximized. That is, inequality initially rises with growth in income and falls again as growth in income becomes substantial.

Assane and Grammy (2003) estimate a three-variable VAR including real GDP per capita, the Gini coefficient and a human capital proxy variable education using US annual data for the period 1960-1996. They find that there is a negative correlation between inequality and growth, and a positive correlation between education and growth.

Davide Pini, Johns Hopkins University, studies the trends in growth and inequality across 27 OECD countries during the past 30 years. This paper analyzes how the relationship between growth and inequality has changed following the neo-liberal economic policies. He finds out that countries highly unequal in the 1980s achieved a fairer distribution of wealth (Turkey, Chile), while countries which initially had equal distribution of wealth are now facing greater disparities in distribution of wealth (Sweden, Norway, New Zealand). This convergence in inequality has been followed by a spread in growth as some countries catapulted (Luxembourg, Turkey), while other lagged behind (Mexico, Greece).

On similar lines, Achal Kumar Gaur (2010) analyzed total and per capita SDP of 20 Indian states for the period 1980-2002. Using inequality indices based on Lorenz curve, Atkinson's social welfare function, Herfindahl's Concentration indices and convergence hypothesis, he concluded that inter-state disparity in India has widened over time. Using Barrow regressions, he proved presence of weak convergence in state incomes during pre-reform era followed by divergence during 1991-2000.

Concerned about the nature of interactions between increasing economic prosperity, nutrition transition and the implications for health and development policy, Arnab Mukherji, Divya Rajaraman and Hema Swaminathan examined the association between various measures of economic development and diet, activity and lifestyle choices on malnutrition in India. They studied a sample of 163613 individuals in 19 to 40 age-group and discovered that being over-weight is positively correlated with state per capita income. Income inequality has a robust and positive relationship between with both over and under nutrition.

A. Shaban constructed regression for inter-district inequalities in Maharashtra. Their underlying ideas are the same as our paper in terms of analyzing relationship between inequality and growth and idea of convergence; however it focuses on inter-district convergence as opposed to inter-state convergence in our paper. The paper analyses the inter-district inequality of per capita incomes in Maharashtra for the period 1993-94 to 2003-04. The (spatial) convergence has been noted by his paper and is noteworthy because other state economies show divergence and not convergence. He also notes that in comparison to 1993-94, inequality in per capita district income has declined in 2003-04.

This paper is an attempt to further lighten the path of such inclusive growth theories which focus on measures beyond growth rate to study the path of progress. Kuznets curve has always been celebrated by economists. However, its presence has been challenged by the empirics of the last few decades which disagree with the hypothesis proposed by Kuznets. This has rekindled our interest in the topic and prompted us to re-examine the relation between growth and inequality once again in Indian context. In this work, we study the presence of Kuznets curve for Bihar and Maharashtra using regression analysis.

Besides, the concept of human development as a social arrangement for "human good" dates back to the time of Aristotle. He argued that *"wealth is evidently not the good we are seeking; for it is merely useful and for the sake of something else"*. Human development does not deny the importance of economic growth and wealth accumulation for the welfare of society, but, it claims that economic growth is not a sufficient condition for human well-being.

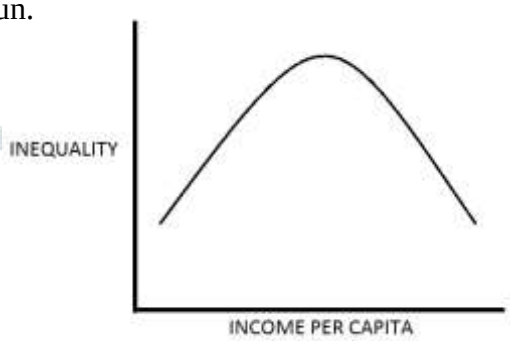
Inspired by such thoughts and all the above mentioned works, this paper considers growth rate, equality and development indicators such as health and education as the pillars of progress for any society. Time series analysis is used to establish a relation among them for two Indian states namely, Bihar and Maharashtra. It is found that the majority of research around this topic gives insight to the impact of inequality on growth rather than growth on inequality. This work not only tries to analyze the impact of economic growth on inequality but rather take a holistic approach and also tries to analyze impact of human development on growth too as opposed to many papers which just focus on economic growth. By modeling growth and human development as components in the regression process, this work tries to calibrate the impact each has on inequality across the population of the two states. Further, efforts are made to address the theory of convergence by choosing Maharashtra and Bihar strategically as rich and poor income states respectively to see if over time the states seem to approach similar growth levels and thus reducing regional disparities among themselves. Whether growth in India is leading to significant reduction in inequality and improvement in the overall conditions of everyone is a moot point. We consider this to be an important part of our motivation for studying inequality in the Indian context is derived from this.

Objectives of the paper

(1) When growth occurs, how do the benefits reach the lowest rung of the society?
(2) What difference does the economic growth and human development have on the inequality?
(3) Does the convergence apply to states within a nation where people share a common history?

3. Theory Model

Using GDP as a measure of an economy's progress has been very popular among economists. Undoubtedly, GDP is an important indicator of growth. However, it has to be supported by various other aspects of development in order to receive appreciation. Various research works prove that GDP cannot speak for itself, especially in long run.



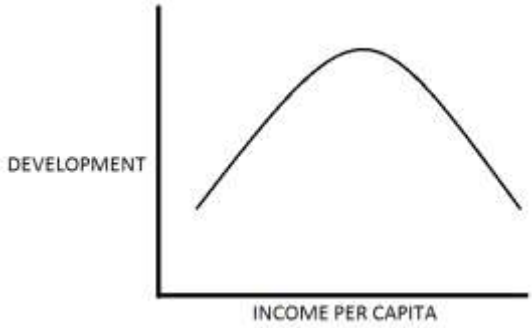
In 1955, Kuznets work bought the distribution of income into picture. Kuznets developed a link between income and inequality in form of the famous inverted U shaped curve.

However, nowadays along with growth rate and inequality, social indicators such as health and education have become crucial measures of evaluating development. It has been observed worldwide that countries who invested in the social sector (say education, health care etcetera) have achieved better position than those who neglected their importance.

Consider a situation where the economy is a vehicle with all its population, sitting inside and struggling hard to cover a beautiful journey. Here, at first thought, people may be most concerned about the speed of vehicle that is, to have a high growth rate. However, pondering more about the issue, it is not hard to realize that first of all, achieving high speed in itself require several other issues to be accounted for. For example, what if a high proportion of population has poor health indicators or lack proper knowledge and skills? In the first case economy may somehow be able to achieve the short run goals but in the long run, unhealthy component of the population, acting like a burden would definitely affect growth process. Besides, there are many things apart from the growth rate which ought to be given due importance not only to boost the GDP but also for their own sake. For example, basic human rights such as right against discrimination on the basis of caste, color or gender.

In the second case, lack of required knowledge and skills may even make economy drive the vehicle in a wrong direction. Nature of policy formation plays a crucial role in determining future pathways. Choosing the right policies/direction requires ignited minds which can be developed only through investment in human capital. Development of new models for development or advancements in technology has no use if they cannot be understood by the masses.

Hence, along with the GDP there are several other factors that need to be brought in the picture while evaluating any economy's performance. Clubbing all such factors together to get a broader view than growth rate which can be termed as development and we expect development to have some link with growth of an economy. It must be emphasized that development has no proper definition in economics and can include almost every aspect of life. However, for the sake of simplicity, in this paper, only income, health and education status of Bihar and Maharashtra is studied .Life expectancy at birth is taken as an indicator of health and total literacy rate as an indicator of education. Together they act as a measure of development in both the states.



While establishing a relation between development and inequality, augmented Kuznets curve is formed. inequality is measured by the Gini coefficient against various social indicators. This curve will help to analyze development-inequality patterns in Bihar and Maharashtra. Just like Kuznets curve, augmented Kuznets curve is expected to be inverted U shaped i.e. inequality might initially rise with development but as development progresses and reaches all sections of population, inequality must reduce.

Data is taken for 1 5 years, from 1996-97 to 2010-11 to check for the validity of Kuznets curve for both states Bihar and Maharashtra. Even after belonging to the same country, both states appear to have chosen a different direction. Income inequality as measured by Gini coefficient appears to be higher in Maharashtra. However, a look at social indicators of both the states prevents to give the conclusions in favor of Bihar as Maharashtra appears to have better health and education indicators as depicted by life expectancy at birth and literacy rates data. Hence, while evaluating the process of development Maharashtra does have an edge over Bihar and therefore a higher probability of better future prospects as its educated and healthier workforce could be more efficiently and effectively utilized in the process of growth. Regression analysis is performed to make results more concrete in establishing a link between growth, inequality and development of Bihar and Maharashtra.

According to Kuznets, a rise in income levels initially increases income inequality and then as GDP rises further, inequality tends to fall. He further explains that a rise in income is associated with rise in industrialization and urbanization. In his paper, Kuznets also mention that his work was '5 percent empirical information and 95 percent speculation, some of it possibly tainted by wishful thinking'. Based on empirics of nearly two decades for various countries such as UK, US, Germany and Prussia, he came up with his theory about income-inequality. He has tried to make logical arguments about how the growth process takes place, changing the lifestyle of people and affecting the distribution of income among them. However, his work has received several criticisms owing to situations where the curve did not hold true. For example, the East Asian miracle where inequality was taken care of from the very beginning along with rise in GDP levels. David Lemper and Cambridge University Lecturer Gabriel Palma are among those who while studying the field of income inequalities did not find the existence of Kuznets U shaped curve.

Kuznets himself accepted that the field of income inequalities is plagued by looseness in definitions, unusual scarcity of data, and pressures of strongly held opinions. Still, his keen interest in income inequalities made him go ahead. He clearly emphasizes that the field requires lot more research and encourage researchers to dig deeper. After all, income inequalities speak a lot about the real picture of any society, which is often missed by averages in form of GDP.

Kuznets Stages:

Stage of Development	Effect on growth and inequality	Reasoning
Stage 1 by Kuznets	Growth ↑, Inequality ↑	A technological or structural breakthrough allows a small portion of the population holding relevant technology and accumulated capital to accumulate great amounts of wealth and income.
Stage 2 by Kuznets	Growth ↑, Inequality ↓	The improvement in productivity and deeper-wider inclusion of lower income individuals in the economy allows the trickle down benefits and creates certain level of equality.

The idea of Solow's convergence implies that, 'poorer economies' per capita incomes will tend to grow at faster rates than richer economies. As a result, all economies should eventually converge in terms of per capita income. Developing countries have the potential to grow at a faster rate than developed countries because diminishing returns (in particular, to capital) are not as strong as in capital-rich countries. Furthermore, poorer countries can replicate the production methods, technologies, and institutions of developed countries'. In order to test Solow's convergence theory, plot scatter diagrams and observe whether growth rates of both the states converge or not.

4. Econometric Modelling

4.1 Data and Methodology

This research paper attempts to evaluate the effect of income inequality on economic growth and development of Indian States Bihar and Maharashtra over the period 1996-97 to 2010-11. Maharashtra is representative of high income and well developed states of India whereas Bihar is representative of low income and developing States of India. The data for the study comes broadly from Publications of Reserve Bank of India, World Bank and The Ministry of Rural Development India.

The income-inequality measure considered for the analysis is the Gini Coefficient. The data used is from the Ministry of Rural Development Publications and World Bank reports. The data is not available on an annual basis. Hence, for those years where data points are not available, assumption is made that about the same inequality level as the preceding year since inequality does not change very frequently.

Economic growth is measured using per capita net state domestic product at factor cost at current prices. The data used is from Reserve Bank of India Publications. Human Development Index is used as a measure of development.

Human Development Index

Human Development Index (HDI) is calculated for the two states by considering three variables, namely life expectancy as an indicator of long and healthy life, per capita net state domestic product at factor cost as an indicator of a decent standard of living and literacy rate as an indicator of education.

As per the methodology, Minimum and maximum values (goal posts) are set in order to transform the indicators expressed in different units into indices on a scale of 0 to 1. They are set at the following values:

Dimension	Indicator	Maximum	Minimum
Health	Life expectancy (years)	85	20
Education	Literacy rate (in %)	100	7.13 Arunachal Pradesh, 1961
Standard of living	Per capita net state domestic product at factor cost at constant prices (Rs.)	273618 (Chhattisgarh, 2010)	3037 (Bihar, 1993-94)

A society is expected to have 100% literacy rate making it maximum goal post for education index. For minimum of literacy, the minimum literacy rate achieved by Indian States for period of 1971 to 2011 are looked at. For per capita net state domestic product, maximum and minimum data of per capita net states domestic product of Indian States is calculated for the years 1990-91 to 2010-11.

Having defined the maximum and minimum values, the dimension indices are calculated as

$$Dimension\ index = \frac{Actual\ value - Minimum\ value}{Maximum\ value - Minimum\ value}$$

HDI is the geometric mean of three dimension indices.

$$HDI = \sqrt[3]{Health\ index * Education\ index * Standard\ of\ living\ index}$$

The data of life expectancy and literacy rate is obtained from the publications of Reserve Bank of India. The data is not available for few years for both life expectancy and literacy rate. Hence, for those years where data is not available, assumption is made that the same life expectancy level as the preceding year.

Human Development Index is calculated by using the above formulae for Bihar and Maharashtra separately.

4.2 The model

Normal linear regression is used to assess the relationship between inequality, growth and development. Baseline model is as follows

$$Inequality_t = \alpha + \beta Growth_t + \gamma Development_t + \varepsilon_t$$

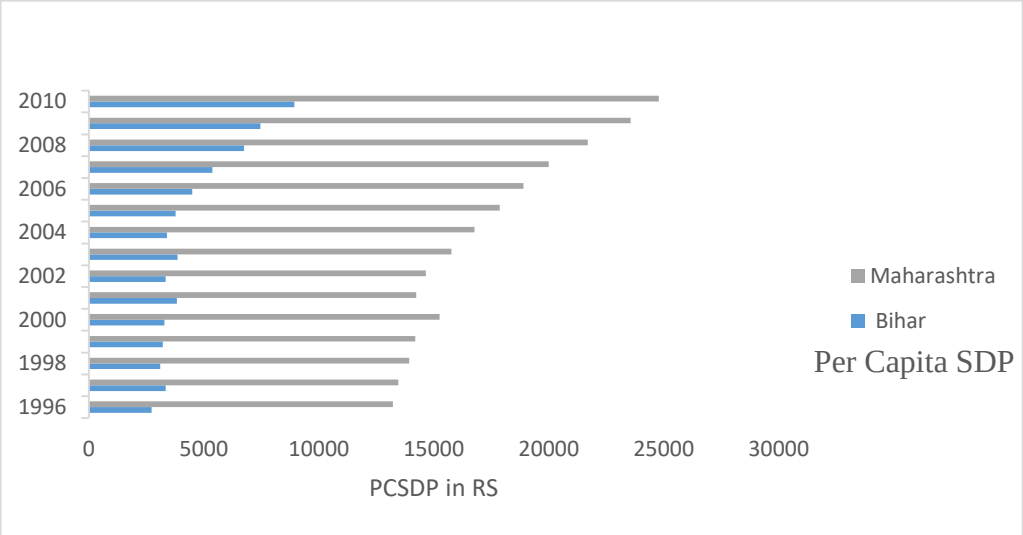
Inequality: As measured by Gini coefficient
Growth: As measured by per capita net state domestic product
Development: As measured by human development index

Time series regressions are run for two sub periods: 1996-97 to 2001-02 and 2001-02 to 2010-11 to check for presence of Kuznets' stages of development. The period of the study is chosen to capture strategic breaks in data and policies. During 1990s strategic reforms were introduced with a key focus on economic liberalization. These reforms were aimed to make economy more market and service oriented and expanding the role of private and foreign investment. There is a significant debate over liberalization being an inclusive economic growth strategy. Since 1992, income inequality in India has intensified with consumption staying low and stable among the poorest while increasing exponentially for the wealthiest. This makes it important to see the impact of reforms on Indian States.

In 2008-09 there was global financial crisis affecting all the emerging economies including India. The Indian economy was less affected because of its lower dependence on exports, restraining from complete capital account convertibility and also because of the fact that sizeable contribution to GDP was from domestic sources. But still there was deterioration of all macroeconomic financial indicators in 2008-09 globally thus affecting Indian States also.

This paper analyzes the relationship between inequality, growth and development over these sub periods for both Maharashtra and Bihar. Also we will see how the inequality changes with increasing growth and better development of States. Inequality in regards to economic growth is a sensitive topic therefore making it necessary to have a look at their dependence.

For Solow's convergence theory we are plotting a scatter plot for 15 years from 1996-97 to 2010-11. Scatter diagram show whether the growth rates converge or not. Growth rates for both the States are calculated using the per capita net SDP.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2008
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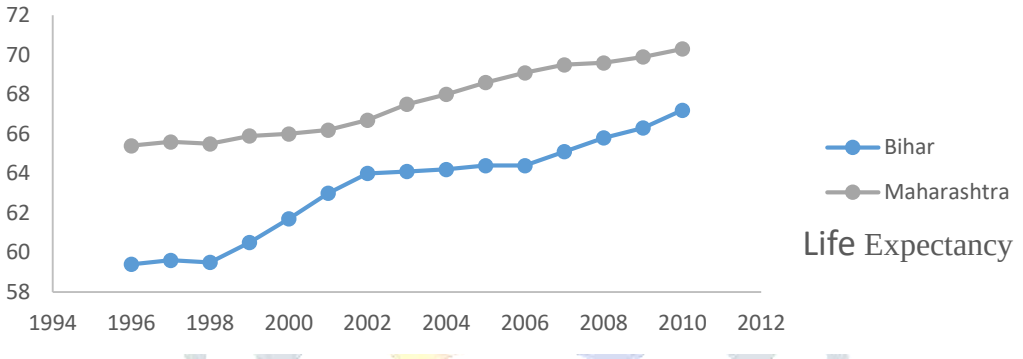
PCSDP in RS
Maharashtra
Bihar
Per Capita SDP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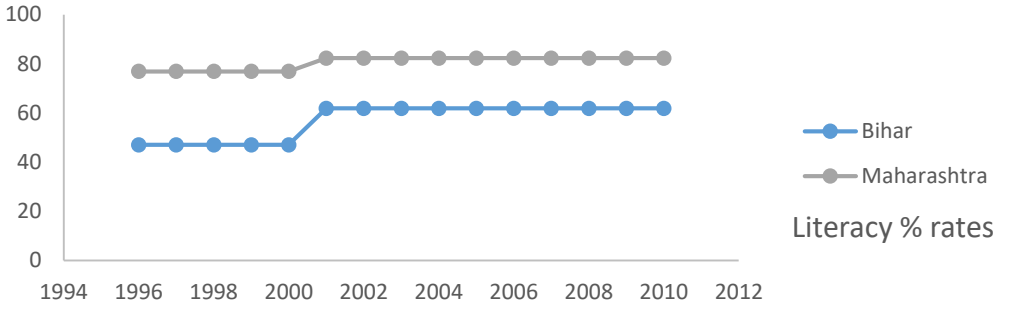
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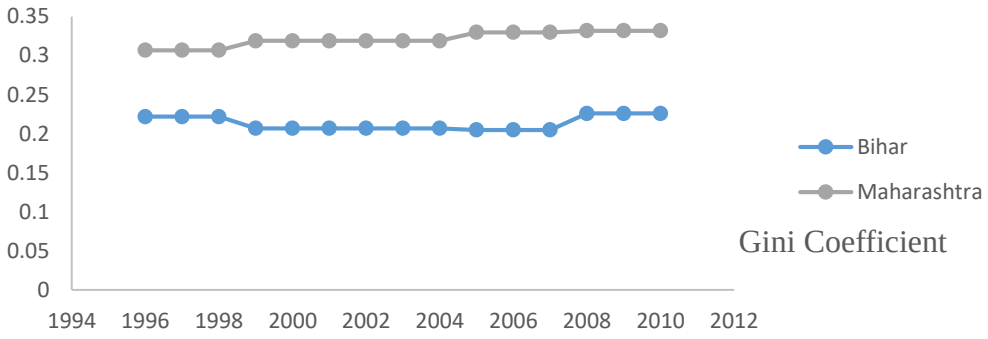
Literacy % rates



Regression Analysis

Bihar

Simple linear regression technique is applied to the time series data model for two sub periods: 1996-97 to 2001-02, 2001-02 to 2010-11 to check for Kuznets stages of development and also try to create an augmented Kuznets' curve by analyzing the relation between development and inequality in the wake of rising importance being given to social indicators like health and education. Previous researches have shown that inequality has been on a rise in all Indian states since the reforms of 1980s when the growth finally picked up. Hence Bihar and Maharashtra were in the first stage of development where inequality increased as income increased.

Bihar 1996-2002

Inequality	Coef.	Std. Error	t	p>|t|
HDI	0.0526	0.926	2.1	0.0926
Growth	-9.2	0.448	-2.87	0.0448
Constant	0.2558	0.2558	29.91	0
R-squared	0.9412			
F(2, 4)	23.99			
Prob > F	0.0143			

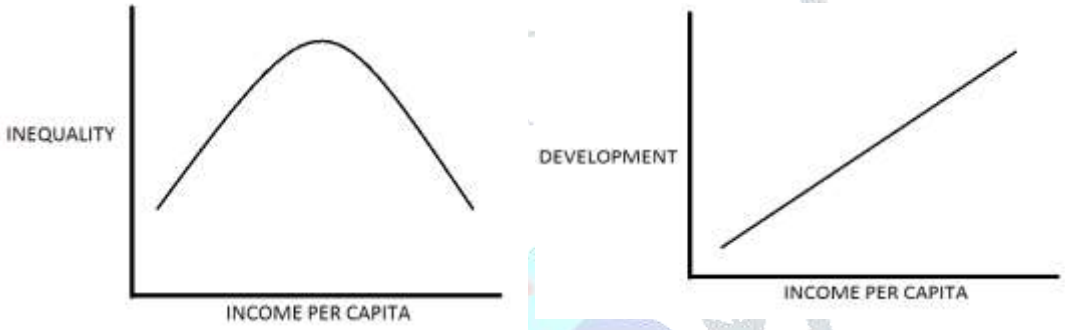
Bihar 2002-2010

Inequality	Coef.	Std. Error	t	p>|t|
HDI	0.5565	0.3713	2.5	0.0231
Growth	-6.18	4.42	-3.4	0.0057
Constant	0.1593	0.0295	5.39	0.0113
R-squared	0.7356			
F(2, 6)	4.17			
Prob > F	0.136			

Above results show that for Bihar, regardless of the time period selected, the model is significant and hence the null hypothesis of the model being irrelevant. This is also evident from high R^2.

Now checking for stages of development, coefficient of per capita net income is negative for the two sub periods. Thus the Kuznets' inverted U curve does exist for Bihar since inequality decreases as soon as 1996-97 onwards.

As for the augmented Kuznets' curve which highlights the relation between development and inequality, at initial and low levels of development, inequality and development seems unrelated in Bihar and positive coefficients for next sub-period, thus even though inequality might fall with increase in income in Bihar, it keeps on increasing with rising development in Bihar, Hence, there does not exist any inverted U-shaped augmented Kuznets' curve for Bihar and improvement in social indicators like literacy and life expectance tend to increase inequality in Bihar irrespective of their levels. This could be due to lopsided policies and thus policy makers must pay attention towards inclusive development.



Maharashtra

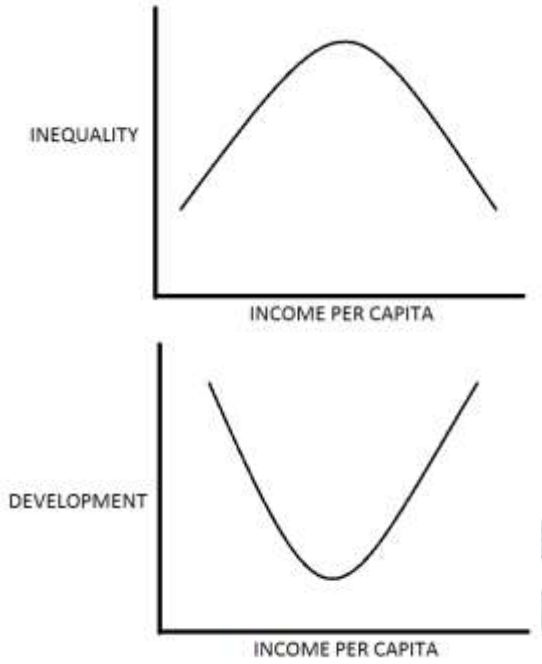
Regression results of Maharashtra are as follows:

Maharashtra 1996 -2002				
Inequality	Coef.	Std. Error	t	p>|t|
HDI	-2.384	0.7803	-3.06	0.038
Growth	6.43	3.71	1.98	0.0123
Constant	0.8842	0.1647	5.37	0.006
R-squared	0.946			
F(2, 4)	35.64			
Prob > F	0.0028			

Maharashtra 2002-2010				
Inequality	Coef.	Std. Error	t	p>|t|
HDI	2.197	0.3845	5.71	0.005
Growth	-7.06	1.65	-4.28	0.013
Constant	-0.3544	0.987	-3.59	0.023
R-squared	0.9336			
F(2, 6)	28.12			
Prob > F	0.0044			

Above results again show that for Maharashtra as well, regardless of the time period selected, the regression model is statistically significant, and hence the null hypothesis of the model being

irrelevant. This is also evident from high R^2 values.

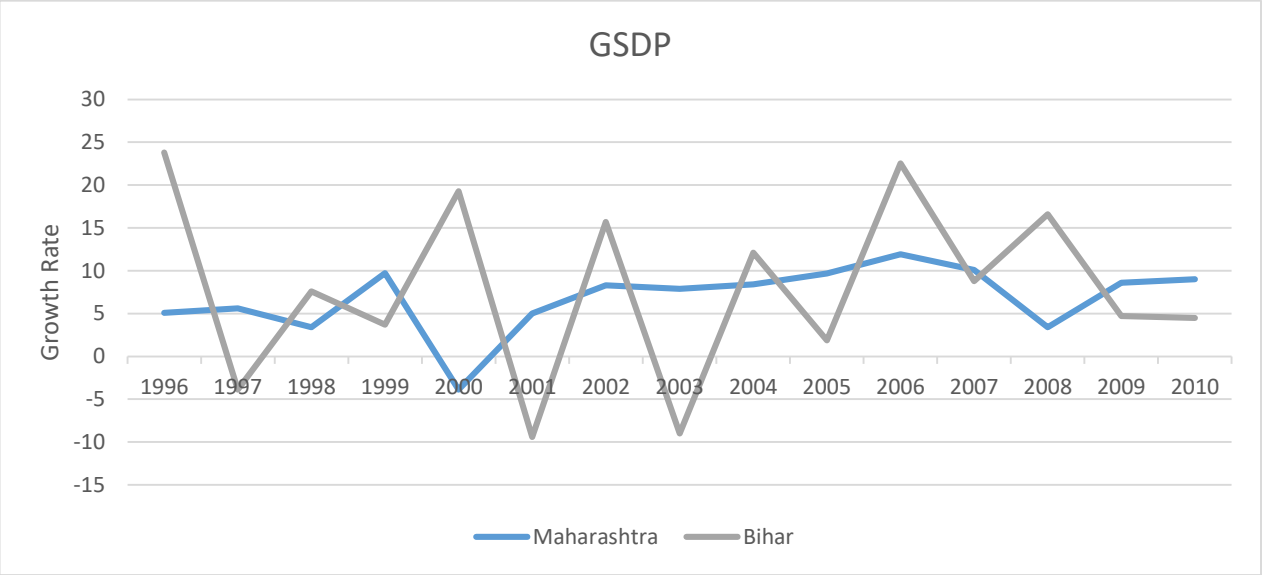


Now checking for stages of development, coefficient of per capita net income is positive for the first sub period and negative for second period. Thus an inverted U shaped Kuznets' curve does exist for Maharashtra.

As f or the augmented Kuznets' curve, we observe negative coefficient for first period, positive for second period i.e. high level of development, inequality and development seems unrelated in Maharashtra, thus even though there exist an inverted U curve for income-inequality relationship, there seems to be a direct U curve for development and inequality. Thus, rising inequality is a valid concern at the broader picture and not just focus on economic growth.

Scatter plot of convergence theory

We have plotted the growth rates of Bihar and Maharashtra for 15 years from 1996-97 to 2010-11 to check for convergence between relatively poor state Bihar and relatively rich state Maharashtra.



As it is evident from the graph, there seems truth in convergence theory. First, as per the Solow's theory, Bihar is initially growing at a higher rate than Maharashtra due to being poor and thus diminishing returns to labor leading to high growth rates at relatively low levels of capital. Also over the years, their growth rates seem to converge and the wide gap in their income might cease to exist in a few more decades.

5. Conclusion and Policy Implications

This paper has applied a simple arithmetic approach to investigate the relation between growth and inequality for Bihar and Maharashtra during the past 15 years. It has asked, given former patterns of growth, development and inequality, how income distributions within each state have evolved? The rise in inequality has been one of the subjects undergoing intense study for quite a long time and is gaining importance alike for policy makers, analysts, economists, and citizens, particularly following the reforms in 1990s and the 2008 financial crisis.

Inclusive approach in growth as well as development is needed for several reasons. With respect to ethics and humanism, equality has intrinsic value as it is important for its own sake. Inequality reduction has functional importance also as it is required for sustainability of growth. If we reduce personal, gender, social, regional and rural-urban discriminations, both the intrinsic and functional objectives of equality will be achieved. And lower inequalities would undoubtedly result in higher demand from disadvantaged sections and thus lead to higher growth.

This paper has shown how the relation between growth and income inequality has changed for the two states following the neo-liberal economic policies implemented in beginning of 1990s. The result of 15 years of neo-liberal economic policies is that though Maharashtra and Bihar certainly entered the second stage. Policy makers then must be wary of rising levels of income as it can again push the states and thus economy into a stage where inequality rises with income and thus they should design policies carefully keeping in mind the possibility of third stage of development. If high levels of inequality prevail even if income levels are high, it will be detrimental for the society in long run because only inclusive growth can lead to sustained growth.

Another hot topic of broad and current interest is the impact of social indicators like health and education on economic variables. Augmented Kuznets' curve is highlighting the relation between development which includes income, health (life expectancy) and education (literacy) as its components and inequality. There seems to be a positive hence detrimental relation between development and inequality of Bihar and for Maharashtra two key stages are identified with certainty, in which inequality first decreases with development but then rises again as development increases and thus shows a possibility of direct U-curve. Thus, even if inequality might still be falling with rising incomes but it certainly increases with improvement in development indicators and thus fears about rising inequality seems to be valid. This implies that policies aiming towards improving the much needed social indicators should be cautious about their impact on inequality and must take necessary steps to avoid a rise in inequality since just like growth, only inclusive development can help an economy sustain and not just development of certain groups and sections.

The paper also highlights the need for better and more in-depth data on development indicators and inequality. This will allow statistically significant cross state comparison that could guide policy makers and economists to correctly deal with the development-inequality trade off through progressive taxation and various redistributive measures. Also there are many other factors like social norms, culture, beliefs etcetera that too affect inequality apart from income and development which being highly qualitative in nature are very hard to measure and thus could not include them in our model.

As for the convergence theory given by Solow, the graph indicates that the gap in growth rates across the two states has narrowed in the last two decades. The impact of liberalization and privatization on the dispersion of growth rates between states aroused obvious interest among theorists of income and convergence theories. In this respect, there seems to be opening up of a catch-up opportunity and growth rates seem to be converging in the last 15 years. This could mean that overall inequality would decrease in India in coming decades and could be a positive result for policy makers on national level.

Although inequality seems to be falling with growth rates as per our model, at the same time states might enter third stage of development as per our analysis where state wise inequality might increase with rising incomes. And even if this does not happen in recent years, we have already seen rising inequality when we take a more comprehensive and practical approach of including social indicators along with income and thus focus on development.

Thus, to narrow the gap in standard of living of residents within the states and ensure declining inequality across the states as per convergence theory, the paper offers some policy suggestions:

1) Continuing to increased policy support in social indicators like education and health to rural areas, thereby promoting economic development and human capital accumulation in rural areas. Only the long-term and stable economic development simultaneously in rural and urban areas while carefully keeping in mind the possibility of augmented Kuznets' U curve can solve the problem of persistence of inequality with improving social variables. In fact, increasing expenditure in social sector has become need of the hour.

2) Accelerating the momentum of urbanization and modernization of agricultural to stimulate the transfer of rural surplus labor and surplus food to modern sectors to achieve the much needed structural break and also to narrow the gap between agricultural productivity and the productivity of secondary and tertiary industry so that the income gap between non-agricultural workers and (rural) agricultural

workers is reduced and thereby reducing inequality to a great extent.

3) Improving the taxation and fiscal policies by improving the coverage of social security system for rich and poor alike like pensions and insurances, strengthening productive transfer payments of poor residents; and a more inclusive and progressive tax system reform.

4) Other steps could be promoting self-employment, increasing credit availability for farmers as well as small businesses and empowering scheduled and lower castes to take a greater participation in economic, political and social spheres of economy.

Both politically and economically, for having a stable and democratic society, the government needs to have a more equitable approach. Large, even if poor, sections of the society can't be ignored and left behind. It is increasingly clear that the both the processes of growth as well as development must become more socially and economically inclusive. Otherwise, it can lead to severe social tensions. Thus, there are not only economic but social and political reasons for reducing inequalities and thus economic and social inclusiveness and equality has to be accorded highest priority for sustained development.

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