



UNDERSTANDING INDIA'S UNBALANCED ECONOMIC GROWTH

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Abstract

The unbalanced nature of India's growth has caused considerable concern but little is known about its causes. We use a new data set of district level income and socio-economic data to explore the determinants of transitional growth at the district level. We find that there is absolute divergence across districts but weak conditional convergence once we allow for district characteristics, particularly urbanization and the distance from a major urban agglomeration. State-level effects have also significantly contributed to India's unbalanced growth. This results suggest that while geography is important, policy differences may also account for much of India's uneven growth.

Keywords: *Convergence, Unbalanced Growth, India, Gravity Models, New Economic Geography, Urbanization.*

Introduction

Growing regional disparities in India are a cause for concern. But little is known about the relative importance of possible reasons for the varied growth experiences across the country. This column explores growth imbalances among Indian districts. Proximity to cities, infrastructure, degree of urbanisation and state government policies are found to be key determinants. The unbalanced nature of India's growth is becoming a cause for considerable concern. The growing regional disparities appear to have dampened political resolve for further economic reforms, and hence may pose a barrier to India's future economic growth. Indeed, the causes of this imbalance are key points of contention in the recent debate between Bhagwati and Sen. The Indian economy expanded 7.3 percent year-on-year in the last three months of 2015, slowing from an upwardly revised 7.7 percent growth in the previous quarter but in line with market expectations. The manufacturing sector surged 12.6 percent while farm output shrank 1 percent.¹ The manufacturing sector grew by 12.6 percent, more than a 9 percent rise in the previous period. Production in construction (+4 percent from 1.2 percent) and mining and quarrying (+6.5 percent from 5 percent) accelerated while the output for utilities grew 6 percent (7.5 percent in the third quarter). Activities in trade, hotels, transport, communication and services related to broadcasting went up 10.1 percent (8.1 percent in the previous period); financial, real estate and professional services increased 9.9 percent (11.6 percent in Q3); and public administration, defence and other services expanded 7.5 percent (7.1 in Q3). Farm output shrank 1 percent, after growing 2 percent in the previous period. On the expenditure side, private consumption went up 6.4 percent (5.6 percent in the previous period) and government spending grew 4.6 percent (4.3 percent in the previous period) while gross fixed capital formation growth slowed to 2.8 percent (7.6 percent in the previous period). Exports fell 9.4 percent (-4.3 percent in the previous period) and imports shrank 10.8 percent (-3.4 percent in the previous period).²

Share of Uttar Pradesh in Indian GDP

Uttar Pradesh is the most populous state in India with a population of 200 million people. Uttar Pradesh shares its borders with Nepal on the north, the Indian states of Uttarakhand and Himachal Pradesh towards the northwest, Haryana, Delhi and Rajasthan on the west, Madhya Pradesh on the south, Chhattisgarh and Jharkhand to the southeast and Bihar in the east. Uttar Pradesh is a favoured tourist destination in India due to the location of Taj Mahal, one of the Eight Wonders of the World, in Agra. In FY 2014-15, the state was ranked second and third in terms of domestic and foreign tourists, respectively. Nearly 182.8 million domestic and 2.9 million foreign tourists visited the state during the above period. Uttar Pradesh is the second largest producer of vegetables in the country. It produced over 21.47 million tonnes of vegetables during FY 2014-15. Uttar Pradesh is also the largest milk producing state, accounting for nearly 17 per cent of the total milk produced in the country in FY 2014-15. As of January 2016, Uttar Pradesh had a total installed power generation capacity of 17,110.5 megawatt (MW).³ Owing to the state's large base of skilled labourers, it has emerged as a key hub for IT and ITeS industries, including software, captive business process outsourcing (BPO) and electronics. The state has become a hub for the semiconductor industry with several major players having their offices and R&D centres in Noida. Uttar Pradesh ranks 10th among Indian states in rankings based on ease of doing business and 5th in complying with labour regulations, according to a study by The World Bank and KPMG. The state offers a wide range of subsidies, policy and fiscal incentives as well as assistance for businesses under the Industrial and Service Sector Investment Policy, 2004 and Infrastructure & Industrial Investment Policy, 2012.⁴ The state has well-drafted, sector-specific policies for IT and biotechnology. In the 2015-16 Budget, the state government proposed an investment of US\$ 50.3 billion for enhancements in power, health and transportation sectors.



Economy of Uttar Pradesh: The share of agriculture and allied sector in UP's GSDP has dipped from 29.7 % as of 2004-05 to 21.9 % as of:-

Year	GSDP		GSDP Growth		NSDP per capita		NSDP per capita growth		Net State Domestic Product (NSDP)		NSDP Growth	
	Base price	Current price	Base price	Current price	Base price	Current price	Base price	Current price	Base price	Current price	Base price	Current price
2004-05	260841	260841	-	-	12950	12950	-	-	231029	231029	-	-
2005-06	277818	293172	6.51	12.39	13445	14221	3.82	9.82	244514	258643	5.84	11.95
2006-07	300225	336317	8.07	14.72	14241	16013	5.93	12.6	263935	296767	7.94	14.74
2007-08	322213	383026	7.32	13.89	14875	17785	4.45	11.07	280851	335810	6.41	13.16
2008-09	344726	444685	6.99	16.10	15713	20422	5.63	14.83	302192	392771	7.6	16.96
2009-10	367417	523394	6.58	17.7	16390	23671	4.31	15.91	320989	463583	6.22	18.03
2010-11	396309	600286	7.86	14.69	17388	26698	6.09	12.79	346621	532218	7.99	14.81
2011-12	418403	685292	5.57	14.16	17980	30071	3.40	12.63	364684	609924	5.21	14.60
2012-13	443191	782285	5.92	14.15	18595	33616	3.42	11.79	383644	693539	5.2	13.71
2013-14	465969	890265	5.14	13.8	19234	37630	3.43	11.94	403523	789483	5.18	13.83

2012-13, the ASSOCHAM study said. In Bihar it has come down from 31.5 % to 22.5 %, while in Rajasthan it has slowed from 25.6 % to 19.9 %. MP registered just about three % decline i.e. from 27.7 % to 24.2 % during the period under review. The contribution of agriculture and allied sector in Indian economy too dipped sharply from 19 % to 13.7 % during this period. "On the industrial sector front, UP has registered 6.9 % growth rate during the said period while India clocked 7.4 % CAGR in the industrial sector," it said. While amid BIMARU states, Bihar clocked highest growth rate of 13.9 % in the industry sector followed by MP (9.2 %) and Rajasthan (8.5 %). The share of industry sector in UP's economy has marginally declined from 23.3 % as of 2004-05 to 23.2 % as of 2012-13, while it has increased considerably in other BIMARU states - Bihar (from 13.8 % to 19.2 %), MP (27.1 % to 27.9 %) and Rajasthan (30.6 % to 31.3 %).⁵ In the services sector too UP has clocked slowest growth rate of nine % during 2004-05 and 2012-13 which is not only below other BIMARU states but also the national average of 9.6 %. Bihar registered highest growth rate of over 10 % followed by Rajasthan (9.7 %) and MP (9.6 %) during the period under review. UP, however, has recorded highest growth in terms of services sector's contribution to the state economy as it rose from 47 % in 2004-05 to about 55 % as of 2012-13 followed by Rajasthan (from 43.8 % to 48.8 %), Bihar (from 54.7 % to 58.3 %) and MP (from 45.2 % to 47.9 %). Though, nationally the services sector share in the GDP increased from 53 % to 59.6 %. At 4.8 %, UP has also registered slowest per- capita income growth rate between 2004-05 and 2012-13, while Bihar topped with 7.6 % CAGR amid other BIMARU states followed by MP (7 %) and Rajasthan (6.1 %). Nationally the per-capita income grew by 6.2 % during this period. Real GDP growth or Gross Domestic Product (GDP) growth of India at constant (2011-12) prices in the year 2015-16 is likely to expand by 7.6 percent as compared to the growth rate of 7.2 percent in 2014-15.⁶ Quarterly GDP growth rates are: Q1 (7.6%), Q2 (7.7%), Q3 (7.3%). The 'agriculture, forestry and fishing' sector is likely to show a growth of 1.1 per cent in its GVA. Manufacturing growth is at 9.5%. India has registered highest growth of 10.3% in 'Financial, real estate & professional services' sector and lowest 1.1% in 'Agriculture, forestry & fishing' sector. At current prices, GDP growth rates for year 2015-16 is 8.6%. Growth for Q1, Q2, and Q3 are 8.7%, 6.4%, and 9.2%, respectively. At constant prices GVA (Gross Value Added), GNI (Gross National Income), NNI (Net National Income) growth of India is estimated at 7.3%, 7.5% and 7.6%, respectively. At current prices these figures are 6.8%, 8.7% and 8.7%. Data from 1950-51 to 2011-12 is from 2004-05 series and 2011-12 to 2014-15 is from 2011-12 series. According to IMF World Economic Outlook (April-2015), GDP Growth Rates of India in 2014 is 7.168% and India is 15th fastest nation of the world. Average growth rate from 1980 to 2014 stands at 6.23%, reaching an all-time high of 10.26% in 2010 and a record low of 1.06% in the 1991. In previous methodology, Average growth rate from 1951 to 2014 stands at 4.96%, reaching an all-time high of 10.16% in 1988-89 and a record low of -5.2% in the 1979-80. In 4 years, Growth was negative.⁷



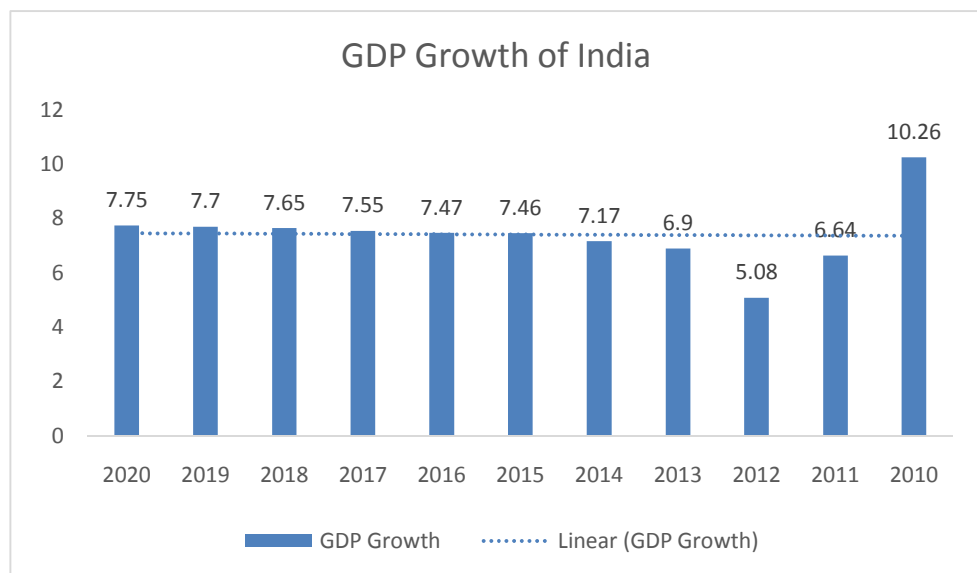
Year	Growth at 2015-16 Prices				Growth at Current Price			
	GDP	GVA	GNI	NNI	GDP	GVA	GNI	NNI
2015-16	7.6	7.3	7.5	7.6	8.6	6.8	8.7	8.7
2014-15	7.2	7.1	7.3	7.2	10.8	10.5	10.8	10.8
2013-14	6.6	6.3	6.6	6.2	13.3	12.7	13.2	13.2
2012-13	5.6	5.4	5.3	4.7	13.9	13.6	13.6	13.3
2010-11	5.6	5.4	5.3	4.7	13.9	13.6	13.6	13.3

Dimensions of India's unbalanced growth

The evidence on the imbalance in India's growth has several dimensions. First there is evidence of disparities across state income levels and growth rates, with richer states growing faster (For example, Cashin and Sahay 1996, Trivedi 2003, Ghate and Wright 2012, Bandyopadhyay 2012). This divergence is puzzling given that there are no political barriers to migration, almost free trade, and a common set of federal institutions. It suggests an important role for geographical barriers, such as transport and migration costs, but these issues have not been widely explored. Complementing these state-level studies is an extensive literature, typically based on household survey data, on rising returns to education and differences in human capital, opportunities for employment, and the provision of public infrastructure (Cain et al. 2010, Azam 2012, Basu and Maertens 2009, Sachs 2009, Lall, Wang, and Deichmann 2010, Ghani, Goswami, and Kerr 2012, Crost and Kambhampati 2010).⁸ Together these studies suggest a wide array of possible reasons for differing growth experiences across India. However, we know little about the relative importance of each.

Estimates by IMF

Year	GDP Growth
2020	7.75
2019	7.70
2018	7.65
2017	7.55
2016	7.47
2015	7.46
2014	7.17
2013	6.90
2012	5.08
2011	6.64
2010	10.26



Indian states by GDP Growth

At constant 2004-05 prices, Puducherry has attained highest GSDP growth of 10.69% among 33 Indian States and Union Territories In year 2013-14. Only Puducherry has growth rate of above 10 per cent. Next in line come Meghalaya (9.76%), Chandigarh (9.64%), Madhya Pradesh (9.48%) and Delhi (9.35%). With Gross state domestic product Growth rate of 9.12 per cent Bihar is at number 7 and Gujarat is at number 10. Six states/UTs has growth rate between 9 - 10 % and 5 states has between 8 - 9 %. The bottom five states, in reverse order, are Odisha (1.82%), Telangana (4.76%), Rajasthan (4.79%), Uttar Pradesh (4.95%) and Chhattisgarh (4.99%). Data for 2014-15 are available for 23 states. Puducherry (11.54%) is fastest growing Indian state of country followed by Madhya Pradesh (10.19%). These two states have growth rate of above 10 per cent. Three states Bihar, Uttarakhand and Meghalaya has gdp growth rate between 9 to 10 percent. Jammu & Kashmir has lowest growth of -1.57%. During Period 2005-14, Sikkim has highest average growth rate of 16.49%. Uttarakhand (12.45%), Puducherry (10.62%), Goa (10.26%) is at 2nd, 3rd, and 4th position, respectively. Rank of Bihar is 7 and rank of Gujarat is 8. Four states/UTs has average growth rate of above 10 per cent. 10 states has above 9 per cent, and 18 has above 8 per cent. 21



states has grown faster than India's average 7.61 per cent at 2004-05 prices. Bottom five states are: Manipur, Assam, Jammu & Kashmir, Arunachal Pradesh and Odisha. At current prices, top five fastest growing states during 2005-14 are: Sikkim (26.06%), Uttarakhand (19.57%), Bihar (18.10%), Telangana (17.92%), and Rajasthan (16.74%). 18 states has growth rate greater than India's average 15.04 per cent. Five slowest states are: Manipur, Jharkhand, Assam, Tripura and Nagaland.⁹

Analysing district-level disparities

We use a set of income data at the district level and socio-economic indicators to explore the determinants of district-level growth of India. In particular, the data at the neighbourhood level allow both socio-economic and geographical factors to be taken into account. For example, some Indian districts are cities, while others are rural or semi-urbanized. In addition, some districts are very remote, while others, although rural, can be close to the city. If we take the economic geography literature seriously we would expect to see different levels of income in the long term in these districts that reflect differences in transport, migration and communication costs.¹⁰ Now consider the determinants of growth through 575 districts in India. In addition to considering the usual factors according to socio-economic characteristics of each district, we also build a neighbourhood measure "the distance" - defined as the minimum distance from the road by a headquarters of the district in one of the 10 largest urban agglomerations in India. The first feature of the district-level data is the great disparity in income levels across the states. For example, there is a difference between 9.8 times the richest state of Goa, and the poorest state of Bihar. But at the district level, the per capita income range of 3.858 billion rupees to 139.868 million rupees in Jamnagar district, Gujarat. It is a ratio of about 36, which means that the real income gap between districts in India can be as large as the gap in real incomes between the richest and poorest countries of the world - such as the US and Rwanda. A preliminary analysis of the data shows that despite this huge gap in income levels, there is no evidence of convergence³. Rather the tendency, if anything, is an absolute disagreement with the richest districts increasingly faster high in the poorest neighbourhoods. This shows the enormous difficulties the government faces in promoting reforms that can amplify these differences further in the short term. In a more detailed analysis, we then explore the possible causes of these growth rates. We find that the infrastructural indicators, such as urbanization and electrification are significant factors. Also we find that, even after accounting for many socio-economic characteristics, significant differences in growth rates are still among the states.¹¹ This suggests that state governments play an important role in determining the growth rates through the provision of appropriate institutional and regulatory environments, but also within countries, allocation of public infrastructure is important.

The significance of remoteness

In our analysis, we also find that the distance is an important factor in explaining the differences in growth rates across districts. By way of example, the remote district from any major urban area in India is in Manipur, near the Burmese border. It is 2,531 km from Kolkata, the nearest town. On the contrary, some districts areas are just 8 km away from a big city. We expect that, in this case, the district closest would have a per capita gross domestic product (GDP) level about four times higher than those in more remote areas of Manipur. Similarly, the most remote district would have a growth rate that is in the range from 1.5 to 3 percentage points lower, on equal terms. Thus the distance has a significant economic effect on growth rates for very remote districts, although for many districts the effect is small. Subject to this, and other infrastructure factors, we find that there is strong evidence of conditional convergence across districts.¹² However, we also find that the conditional convergence through Indian districts is a very weak force. And 'only about half the usual rate, known as the law of Barro of 2% convergence of iron. Our estimate convergence rate implies that, after a decade of growth, the income gap between the two districts would still be 90% of its level at the beginning of the decade.

Conclusion

Although India's growth has been unbalanced, the causes of this divergence model are not well understood. We then examine the evidence for the convergence of per capita income at the district level using a new per capita of District datasets income and socio-economic characteristics. We find little evidence of convergence both within states and between all districts as a whole. Rather there is absolute divergence in income levels across districts. Our research helps to clarify the roles of the various competing theories of unbalanced growth of India. The differences that exist among Indian districts in terms of proximity to the city, the creation of infrastructure and degree of urbanization are all important factors. In addition, there are also significant differences between Member States - suggesting that the state-level political differences are contributing to an imbalance in India's growth. The results are therefore indicative of an important role for government to address the growing imbalances of India, through appropriate state-level reforms and the adoption of best practices for the delivery of public infrastructure. However there is still much to explain. Distance, although important, has great effects only for very remote districts. Similarly the slow pace of convergence suggests that there are significant, but currently unidentified, barriers to growth across India.



Reference

1. Barro, R. J., & Sala-i Martin, X. (1991). Convergence across states and regions. *Brookings Papers on Economic Activity*, 1(1), 107–182.
2. Bandyopadhyay, S. (2012), ‘Convergence Club Empirics: Evidence from Indian States’, *Research on Economic Inequality*, 20, 175-203.
3. Barro, Robert J. (2012), ‘Convergence and modernization revisited’, Paper Presented at the Nobel Symposium on Growth and Development, Stockholm, September 3-5, 2012.
4. Basu, Kaushik, and Annemie Maertens (2009), ‘The growth of industry and services in South Asia and its impact on employment’ In *Accelerating Growth and Job Creation in South Asia*, New Delhi: Oxford University Press, pp. 81–140.
5. Baumol, W. J. (1986). Productivity growth, convergence, and welfare: What the long run data show. *American Economic Review*, 76(5), 1027–1085.
6. Cashin, Paul, and Ratna Sahay (1996), ‘Internal migration, center-state grants, and economic growth in the states of India’, *International Monetary Fund Staff Papers*, pp. 123–171.
7. Das, Samarjit, Chetan Ghate and Peter E. Robertson (2013), ‘ICRIER Working Paper 268, September 2013.
8. Bhagwati, J., & Panagariya, A. (2013). *Why growth matters: How economic growth in india reduced poverty and the lessons for other developing countries*. Washington DC: Public Affairs, Council of Foreign Relations
9. Ghate, C., and S. Wright (2012), “The V-factor: Distribution, timing and correlates of the great Indian growth turnaround”, *Journal of Development Economics*, 99(1), 58-67.
10. Bhandari, L. (2009). Socio-economic performance of constituencies: A response. *Economic and Political Weekly*, 44(40), 61–63.
11. Lall, Somik V, Hyounghun Wang, and Uwe Deichmann (2010), ‘Infrastructure and city competitiveness in India’, Technical Report, Working paper, World Institute for Development Economics Research.
12. Sachs, Jeffrey D (2009), ‘South Asia story of development opportunities and risks’, in Ejaz Ghani and Ahmed Sadiq (ed.), *Accelerating Growth and Job Creation in South Asia*, New Delhi: Oxford University .