
Explaining India's Growth Mechanics

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Despite its woefully inadequate infrastructure, rigid labor laws, complicated tax systems, labyrinthine judicial system and inefficient public delivery system afflicted by corruption, Indian economy has been growing steadily in the last four decades. In the current decade the average annual growth in real terms (netting out inflation) is 7.65% on the back of 5.62% average annual growth in 1990s decade.

In order to understand India's growth mechanics, it is necessary to examine the state level data in India's fourteen major states. Per-capita net state domestic product grew in this decade at the slowest pace in the poorest second and third states, Madhya Pradesh and Uttar Pradesh, while highest growth is witnessed in the richer states of Gujarat and Andhra Pradesh whose ranks in poverty reduction and overall HDI are also relatively high. Five states in the lowest range in per capita income, decline in poverty incidence and human development index (HDI) ranks grew at lowest range of rates while five richest states with highest ranks in poverty decline, namely, Kerala, Punjab and Haryana, Gujarat, Andhra Pradesh and Tamil Nadu were the states that exhibited highest growth range.¹

During last decade also the same trend is observed. Studying these major states, Datt and Ravallion (2002) found that poorest states in 1980s grew at the slowest pace in 1990s. Another important finding of this paper is that growth in India has been higher in states that exhibit lower growth elasticity of poverty decline which explains why economic growth has not significantly reduced poverty incidence in India. Looking at the decline of poverty incidence per Datt and Ravallion(2002) incorporated in col.4 of the Table, it is seen that during 1960-2000 poverty incidence declined the most in Kerala at an annual rate of 3.26% followed by Punjab and Haryana, 2.96%, Andhra Pradesh, 2.38%, and Gujarat 2.02%. The lowest decline in poverty was in Assam, 0.06%, Bihar 0.32%, and Madhya Pradesh, 0.80%, Uttar Pradesh 1.11%. Again, these are the states which grew at the slowest pace and their human development indicators also improved

1 See Table. Among the poorer states, Bihar and Orissa grew at high rates particularly in 2005-06 and 2006-07 mainly because these mineral rich metal producing states benefitted from very high price rise following huge increase in demand in China and India. Maharashtra, the second richest state in per capita output term, was laggard in poverty eradication during 1960-2000 and growth during 2000-2007.

the least during this period. This correlation has an important bearing in understanding India's democracy mediated growth dynamics.

Ray (2001) shows that three factors of production drive growth of the real economy²: accumulation of physical capital and knowledge capital which are privately owned; accumulation of public infrastructure capital including social capital that are commonly owned; and increase in access to such commonly owned public capital. Poor economies due to lower level of accumulation of private and public capital and lower access of public/social capital among the poor fail to grow at high rates, while economies with higher levels of such capital and access continue to grow at higher rates. Both capital accumulation and increased access are necessary and critical for higher growth momentum of the real economy in the longer run.

India's four decade long growth story broadly follows this dichotomous growth dynamics in its richer and poorer states. Comparatively richer states where poverty declined the most and access to public goods /services widened the most grew much faster than poorer states with low poverty decline rate and low HDI rank. Maharashtra in spite of being a well endowed capital rich state which drew 35.46% of India's total foreign direct investment (FDI) grew at relatively lower rates in this decade as it could not provide higher access to capital to its marginal groups, a fact that is evident from its lower level of decline in poverty incidence and lower HDI rank. West Bengal in spite of achieving a relatively high poverty decline grew at lower rates than Karnataka, Gujarat and Tamil Nadu as its capital accumulation was lower: it attracted only 1.30% of FDI as compared with 17.78% by Delhi and Haryana, 6.49% by Karnataka, 6.20% by Gujarat, 5.36% by Tamil Nadu, and 4.12% by Andhra Pradesh³. This

2 There can be economic growth just based on expectations in the financial/capital market, asset market and real estate without corresponding growth in the real economy. Over the last two decades such growth is witnessed everywhere particularly in USA. But since such growth are not driven by accumulation of factors of production in the production side of the real economy, they burst just like bubbles as the expectations melt down and the growth comes back to the normal growth trajectory of the real economy as is witnessed now in USA after 2008 .

3 FDI inflows are registered in RBI branch offices at Mum-

shows that both capital accumulation and access to public goods/services including poverty decline are critical for higher growth momentum in the real economy. Gujarat, Andhra Pradesh, and Tamil Nadu are among the major states that exhibited highest growth rates as they have achieved remarkable progress in both capital accumulation and access as evident from higher FDI inflow and also higher poverty decline and HDI rank.

What explains poverty decline in India? Decline in poverty incidence and improvement of human development indicators are attributable to three major political movements in democratic India. The first movement is the bank nationalisation program in 1969. Burgess and Pande (2005) found that large state-led bank-branch expansion program following bank nationalisation was associated with poverty reduction in India. The second major political movement is empowerment of India's dalit and other socially backward population. Studying investments in rural infrastructure (for example, primary schools, piped water, and electricity connections) over 1970s and 1980s⁴ and their access to different categories of population using data on public goods and social structure from parliamentary constituencies in rural India, Banerjee and Somanathan (2007) found evidence of considerable equalisation of access in accordance with national policies and political agendas of universal access to basic amenities and public facilities. The scheduled caste population who were better organised politically got higher access than the scheduled tribes who were not so well organised politically.

The third major political movement is common minimum program of the political alliance of the Congress parties with leftist parties, which led to National Rural Employment Guarantee Act, 2005. This Act guarantees at least 100 days wage employment in every financial year to every household in rural areas whose adults volunteer to do unskilled manual work. Two recent legislations, Right to Education Act, 2009 and the Women Reservation Bill, 2010, have laid the foundation for India's rapid socio-economic transformation in coming years. The former makes free and compulsory education a fundamental right for all children between the ages of 6 and 14 providing for 20% quota in private schools for the disadvantaged groups. The latter provides for reservation of 33% seats for women in Union and states legislature.

bai, New Delhi, Bangalore, Ahmedabad, Chennai, Hyderabad, and Kolkata for the respective states.

4 Primary schools were available in 75% of all villages in 1991 as against 53% in 1971; electricity connections increased from 18% to 70%, and there was nine fold increase in access to piped water over these two decades.

India's democratic political dynamics have been leading India to a growth dynamics that exhibit strong correlation between economic growth and poverty decline. This growth process has also generated win-win outcomes of investments in private as well as public firms in the organised sector, a supporting evidence of which comes from the firm level study of Alfaro and Chari (2009), which have raised expectation for higher private and public investments in the real economy. Favorable business climate is reflected in last year's survey of Japanese firms in India by JETRO which revealed that their revenue and profits came entirely from domestic market; they were in expansion mode; none of them required retrenching their workforce; and none was considering shifting their business to other countries.

The prospect of India's future growth is brighter with the growing pool of educated workforce, planned public-private investment of about US \$500 billion in productive infrastructure such as power, highways, ports, airports, railways, and telecommunications by the end of the current plan period and the vastly improved business climate following the ongoing economic reforms program of Indian governments. Two recent examples of such program are the e-BIZ project and the Unique Identification Number Program (UNIP) launched by the government of India. The first mentioned initiative is on course to take India to a new height in e-governance of G2B services through an integrated on line portal for delivery of clearance, approval, and compliance related services of central, state and local governments, while the latter will improve governance, accountability and transparency as it will effectively monitor public funded programs including those targeted for the poor and vulnerable.

REFERENCES

- Alfaro, Laura. & Chari, Anusha., 2009. India Transformed? Insights from the Firm Level 1985-2000. NBER Working Paper 15448
- Banerjee, Abhijeet & Somanathan, Rohini., 2007. The political economy of public goods: Some Evidence from India *Journal of Development Economics* 82 (7) pp. 287-314.
- Burgess, Robin. & Pande Rohini., 2005. Do Rural Banks Matter? Evidence from the Indian Social Banking Experiment. *American Economic Review* 95(3) pp.780-795
- Datt, Gaurav & Ravallion, Martin., 2002. Is India's Economic Growth Leaving the Poor Behind? *Journal of Economic Perspectives*, 16(3) (Summer), pp. 89-108
- Ray, Gautam, Lakshmanan, T.R. & Anderson, William P. 2001 Increasing Returns to Scale Inherent In Affluent Knowledge-Rich Economies: A Theoretical Inquiry *Growth and Change*, 32(4), pp. 491-510.

Table : Poverty Decline and Growth

State	Population (Million)	SDP per capita (Rs.)	Poverty Decline during (1960-2000) (%)	Annual Compounded Growth in the current decade (2000-2007) (%)	Growth Rank (2000-2007)	Poverty Decline Rank (1960-2000)
Andhra Pradesh	76	35,864	2.38	15.1	2	3
Maharashtra	97	47,051	1.31	12.7	8	10
Gujarat	51	45,773	2.02	15.9	1	4
Tamil Nadu	62	40,757	1.92	13.1	6	6
Punjab & Haryana	45	51,712	2.96	13.2	5	2
Kerala	32	43,104	3.26	14.17	3	1
Karnataka	53	36,266	1.54	12.9	7	8
West Bengal	80	31,722	2.29	12.21	9	5
Orissa	37	23,403	1.55	14.17	4	7
Rajasthan	56	23,933	1.49	9.8	12	9
Assam	27	21,991	0.06	10.2	11	14
Bihar	110	11,135	0.32	11.5	10	13
Madhya Pradesh	81	18,051	0.8	6.5	14	12
Uttar Pradesh	175	16,060	1.11	8.7	13	11
ALL INDIA	1,027	33,283		12.73		

Sources: Economic Survey 2009-10; Datt and Ravallion (2002); and author's estimation of compound growth rate of Indian states between 1999-2000 and 2006-07)