Understanding India's Economic Growth

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hy did India's economy grow the way it did?" is a grand historical question and like all such questions it cannot have a definitive answer, one with which all reasonable observers will be in agreement. Any such question involves posing counterfactuals like: if a more liberal policy had been followed in the 1950s, one that did not involve the State setting investment priorities for private goods, would growth have been faster? Since we did not observe the counterfactual world, and any analogies that we can draw are necessarily quite far from the particular historical case under examination, it is impossible for us to have a high degree of certainty about the answer. Pulapre Balakrishnan, for the most part, avoids posing such questions explicitly. Nevertheless, the questions and his preferred answers are implicit in the tale that he tells.

Chapter 1 surveys theories of economic growth and, after critiquing neoclassical theories, quickly zeroes in on Allyn Young's (1928) famous view of growth by cumulative causation. Growth expands the market and the increase in the market makes possible a further division of labour. The division of labour captures further economies of scale, which raises productivity, thus leading to further growth. The problem I see with applying Young's theory to Indian economic growth is that India is a follower economy with much larger markets for manufactures outside the country. It is not immediately clear, then, why economies of scale cannot be captured by exporting to external markets.

Balakrishnan does not address this objection directly but he does point out that

As agriculture expands there arise support services such as banking, insurance, and transportation, aiding its further expansion. As these services are potentially inputs across economic activities, that is, they enjoy economies of scope, they are not without a role in the expansion of manufacturing.

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Economic Growth in India: History and Prospect by Pulapre Balakrishnan (*New Delhi: Oxford University Press*), 2010; pp xxxv + 289, Rs 750.

Some necessary inputs into the production of manufactured goods are nontradeable. They have to be present locally. Thus, it may not be possible to build a huge factory that can export to the world market without first growing a domestic support sector. This may require a gradual process of scaling up via a Smithian, or if you like, Youngian process, possibly helped along by trade with the outside world. It may be pointed out here that trade may hinder the process if it prevents infant industries from establishing themselves.

In the introduction to the book, we are told that

the central contribution of this study to the discourse on growth in India is that policy regimes, alternative dubbed 'socialist' and 'liberal', have been less directly relevant for growth transitions than the specific interventions that have been made from time to time.

To put these "growth transitions" in perspective, Figure 1 is useful. (The book opens with a similar figure showing aggregate, rather than per capita, GDP.)

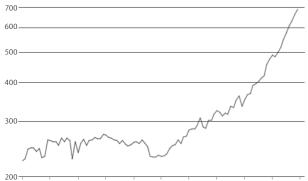
domestic product (GDP) over the course of the last century. Since the vertical axis is plotted on a log scale, the slope of the curve between any two points gives the proportional growth rate in that priod. What jumps out from this figure is that there was almost no growth in per capita income during colonial

Figure 1 shows real per capita gross

rule. Growth on a sustained basis started during the First Plan in the early 1950s. Faster growth in the last two decades of the 20th century is also apparent and it would be faster still if the first decade of this century was to be included. Econometric work by the author and by several other scholars confirms that there was indeed a statistically discernible increase in the trend rate of growth (in aggregate GDP) around 1980. The fact that the only statistically detectable break in the trend (after independence, of course) occurred at least a decade before the era of economic reforms sits uncomfortably with the view that changes in the policy regime are the most important determinants of the rate of growth. We begin to see why the author wants to direct our attention to "specific interventions" rather than dwelling on overarching policy regimes. The picture of accelerating growth presented in Figure 1 also accords well with Young's story of growth by cumulative causation, no doubt one of the reasons that Balakrishnan finds it attractive.

The start of economic growth in the Nehru era (1947-64) is the reason for the title of Chapter 2 "A Moribund Economy Quickened". Balakrishnan's story of why growth picked up in the Nehru era is that public investment was increased in every sector of the economy – agriculture, industry, and services. This is a simple and parsimonious explanation. The British government undersupplied public goods, including infrastructure, while the new Indian government tried to remedy this lack. We may contrast it with the tortuous explanations from writers convinced that laissez-faire





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Data Source: Sivasubramonian (2000), Table 6.11 and Appendix Table 8(b).
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must be better than interventionism of any kind. For example, Mancur Olson, in his otherwise penetrating and stimulating book, *The Rise and Decline of Nations* (1982), suggests that it was the caste system that held back Indian entrepreneurship during British colonial rule.

Focus on Mahalanobis

This chapter contains a good account of the composition of government investment and regulatory policy, but Balakrishnan spends an inordinately long time on the Mahalanobis model. The model suggests that the growth rate will increase over time if investment is in capital goods that make capital goods. This prediction turned out to be correct, but I doubt that it was due to the Mahalanobis strategy. Had policy supported light industry turning out consumer goods, I suspect that matters would have turned out much the way they did, except that returns on investment would very likely have been higher and growth faster. Capital goods could have been imported for longer and in greater quantities than they were to supply this industry. Intervention to direct the pattern of foreign trade need not have taken place to the extent it did. The foreign-exchange constraint was a creation of policy, something that Balakrishnan fails to acknowledge.

The next chapter, "Second Wind", discusses the period 1965-91. Balakrishnan points out that it was during this phase that what came to be called the "licence raj" really began. Nehru's government was much less interventionist when it came to regulating industry. There was also a fundamental change in the nature of the government, from being fairly secure and long-term in outlook, to being driven by short-term electoral and financial considerations. This period marked the beginning of large-scale government corruption.

Despite this, the growth rate increased. This was partly because public investment continued to increase as Balakrishnan emphasises, even though its effectiveness may have declined. I am inclined to believe the Youngian story here told by Balakrishnan. There is a detailed discussion of intersectoral growth linkages. The increase in agricultural productivity brought on by the green revolution was obviously important. The book emphasises the complementary public investments made in India in research and extension that were necessary for the external impulse from the new crop varieties to have a large impact on Indian agriculture.

Understanding the Acceleration

Why did the growth rate increase significantly in the 1980s? Balakrishnan dismisses the "attitudinal change in government" theory of Rodrik and Subramanian (2004). He tells a more complex story, grounded in econometric analysis of inter-sectoral linkages, of agricultural growth following on from the green revolution that stimulated the other sectors, in combination with some liberalisation that disproportionately benefited services. To buttress Balakrishnan's account, one may add that the greatest expansion in tube well irrigation, essential to capture the full benefit of the green revolution, took place in the 1980s (Shah 2008).

The last chapter deals with the post-1991 phase, and is followed by an epilogue on inclusive growth. The author points to two areas that need remedial attention if the average growth rate of aggregate GDP of 8% or so over the last seven years is to be sustained or raised. One is agriculture, and the other is education. Underinvestment in basic education began in the Nehru era, and despite successively greater resources available to governments since then, this continues.1 Worse, the decline in state capacity to deliver results rather than simply spend money, has affected education as much as any other sector. There is an illuminating comparative perspective on the quantity and, just as importantly, quality, of education in India. It is clear that we have the resources to be doing much better on both fronts.

One may ask how important education is for growth, while recognising that it is important for other reasons. That it has *some* effect is not to be doubted, but it may well be that the economy is currently constrained by other bottlenecks. Is a lack of education important in explaining why manufacturing has grown so much less in India than in China? The author rather tersely cites a paper (Eswaran et al 2009) in support of his claim that industry is constrained by the supply of educated workers, rather than other factors constraining the demand for educated workers. The evidence put forward in that paper is based on a rise in the wage premium commanded by more educated workers over less educated ones in the period 1983-2004. This does suggest that Balakrishnan is correct in asserting that industry is being constrained by the supply of educated workers.

The other critical sector that the author believes needs more resources and more intelligent resource allocation is agriculture. There is an enlightening account of the state of agricultural research and extension programmes as well as other public investments. He suggests that the decline in farm size has reached the point where it may be hampering technical progress and investment, and that a restructuring of obsolete land-ceiling legislation may be needed. And he points to mounting environmental problems that need urgent attention if agriculture is to grow.

Balakrishnan is much less sanguine about further economic liberalisation doing much for the growth rate. He notes that this will help but warns us not to expect too much from it as long as agriculture and education remain underfunded and under-governed. He also notes that the problems of agriculture and education, insofar as they stem from poor governance, are replicated in other sectors in which the government has to provide public goods, although, in his view, these two are the most important.

Missing Demography

The one important matter that I think is neglected in the book is demography. Given the importance that the author assigns to the wage-goods constraint and to agriculture, it is surprising that he does not pursue the logical conclusion that slower population growth via reduced fertility has an important role to play. Food demand and food supply are highly inelastic considered as aggregates, so depending on imports to feed the currently underfed as well as an additional two to three hundred million people over the next three decades would be foolhardy in the extreme. Climate constraints may bind severely in the next few decades in India and elsewhere. Given these risks, it is clearly important to reduce fertility in the high-fertility states like Bihar and Uttar

Pradesh from the current high level of close to four children per woman to two or less. There is now very strong evidence from India and elsewhere that female education has a large impact on fertility reduction, not, one may add, through "economistic" channels like the opportunity cost of labour, but rather via other means (Dreze and Murthi 2001; Lavy and Zablotsky 2011). The recent National Family Health Survey shows a large unmet demand for prevented births in the highfertility states, so relaxing constraints on the supply of contraception can be expected to have an immediate impact.

My only other criticism about the book is stylistic. Balakrishnan has been far too sparing in his use of graphs rather than tables. When he does use graphs, it is to very good effect. Now that standard statistical packages like Stata and R are capable of producing excellent graphics, there is really no reason not to make life easier for the reader by a much more extensive use of graphs.

The detailed and thoughtful exposition of the growth prospects of the Indian economy in these final parts of the book are excellent reading for anyone interested in Indian economic growth. For students, they should be a useful antidote to the rather superficial focus on liberalisation and privatisation in the business and general news media. There may, of course, be other views about the relative importance of the issues emphasised in this book. As noted earlier, these are not matters on which it is possible to reach irrefutable conclusions. But anyone with an interest in these issues would do well to read Balakrishnan's account. A brief review like this one cannot do justice to the richness of material or subtlety of argument in his book.

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NOTE

- 1 The elitist origins of Indian education have often been traced back to Macaulay's famous Minute of 1835 and in particular the much-quoted second sentence below.
 - ...it is impossible for us, with our limited means, to attempt to educate the body of the people. We must at present do our best to form a class who may be interpreters between us and the millions whom we govern, – a class of persons Indian in blood and colour, but English in tastes, in opinions, in morals and in intellect. To that class we

may leave it to refine the vernacular dialects of the country, to enrich those dialects with terms of science borrowed from the Western nomenclature, and to render them by degrees fit vehicles for conveying knowledge to the great mass of the population.

But the rest of the paragraph is equally significant. Contrary to the hope expressed in it, once an elite has been created, it is not eager to invite the "great mass" to share in its privileges. The same "limited means" are invoked by today's vastly richer governments in defence of their neglect of education.

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