India: The Past and Its Future
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The unshackling of India from its historically low rate of growth has occurred. The challenge of maintaining high growth rates in some states and igniting them in the presently bypassed and marginalized states has to be met squarely. Sustaining high overall growth rates would require that rising inequalities be checked, if not reversed, to broaden the inclusiveness of growth.

A few years ago, what most people had in mind when they thought of India was a land of tigers, the land of the Taj Mahal, and a land of extreme poverty. What is the picture of India today? One, outsourcing; two, computers; three, services. But there is also an Indian story on manufacturing, seen, for example, in the sleek sports cars by the Indian firm Tata. India has the beginnings of first-class manufacturing and infrastructure.

So the India of today is no longer the India of 10 years ago, no longer the land of tigers and the Taj Mahal. But what exactly was India then, and what are India’s strengths today? Can we gauge where it might be headed?

I. 1950s–1970s: STRONG POLICY INTERVENTION, SPECIALIZATION, AND CONSTRAINED GROWTH

What India was, economically speaking, is something well known to most people. At the start, India followed a set of policies that resembled those in other countries, i.e., a policy primarily of import substitution with much emphasis on the public sector. The dramatic development of the then Soviet Union had so impressed the people who came to power, like Jawaharlal Nehru, that they emphasized import substitution and the public sector. The attitude in India then toward the private sector was one of ambivalence. Not that the private sector was totally discouraged, not that India ever went completely down the socialist line, but the private sector was sometimes encouraged, sometimes discouraged. Indeed there was a notion that capital was scarce and had to be conserved, but the private sector could not be left to decide where to invest this scarce capital. Thus,

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investment had to go through a tedious process of licensing. Directed credit also helped in this process. The government controlled much of the financial sector and decided who would get credit, who would get licenses, and who would have the opportunity to invest. There was the notion likewise, that small firms were the lifeblood of the economy, that they were critical to job creation. Hence, preferences were provided to small firms in a variety of sectors, meaning that only small firms could enter them.

Similarly there was concern about large firms becoming too large. Large firms were initially classified as firms with over 300 employees, but that was soon reclassified to any firm that had over 100 employees. Various antimonopoly legislations prevented large firms from dominating the economy. Labor was likewise protected, and labor laws became increasingly strict over time especially for large firms. Large firms were prevented from firing workers at will, and a variety of permissions were needed to close down.

A defining feature of India’s development approach was an emphasis on higher education. Myron Weiner (1991) argues that this reflects the strength of the middle and upper class in India, in that somehow, the middle class captured public policy making and directed investment in public services toward higher education. Certainly India had a much higher expenditure on higher education relative to primary education; in fact, primary education was woefully neglected for a long period of time. The benefit, however, was that India established world-class institutions at the higher level, including institutes of technology and institutes of management. The question is what actually happened as a result of all these policies. Often these policies had exactly the opposite effect of what was intended, and the intended effect was lost. I call this constrained adaptation. The bigger question is what this means for India going forward.

The early Indian development approach resulted in a set of specializations that were not reversed when Indian policy was reformed. So even though Indian policy has been reforming substantially for the last 15–20 years, the specializations that were put in place during the period of fairly constrained growth and strong policy intervention were not substantially changed.

Industry characteristics may be described in terms of size and skill intensity. Iron and steel is a large-scale industry, furniture is relatively small-scale. Skill-intensive industries typically use highly educated people, as in the professional and scientific sectors, while footwear does not. An industry is labor-intensive if a significant portion of value added consists of wages. Hence, textiles are labor-intensive, petroleum refineries are not.

Relative to the typical developing country, India has a much larger specialization in large-scale industries—exactly the opposite of what was intended. Part of this can be attributed to public sector involvement. The public sector tended to favor, and typically got involved in, industries that were large-
scale and capital-intensive, and as a result India had an overwhelming presence in those industries relative to small industry.

India also favored skill-intensive industries, thus the country had a large presence in industries like pharmaceuticals, which are relatively skill-intensive, and even in the auto industry, perhaps because of the emphasis on tertiary education. However it had very little presence, relative to the average developing country, in labor-intensive industries. One potential reason for this is because of its strong labor laws, which could have driven labor to the unregistered sector, i.e., the informal sector not subject to labor laws. Labor-intensive industries tended to migrate to the unorganized sector where they were not subject to government control.

One could ask if this is typical of labor-intensive industries but not of skill-intensive industries. In skill-intensive industries, there was an equal presence in both the registered and unregistered sectors. It was labor-intensive industries that migrated especially into the unregistered sector.

Why was it different for skill-intensive industries? The answer is labor laws typically did not protect highly skilled employees. Highly skilled employees, management, etc. were not subject to labor laws against firing. In India today, managers can be fired but workers cannot. Hence industries are hiring engineers and other skilled labor, and are staying away from labor-intensive workers.

Also interestingly, against this mesh of different protections, laws, licensing, etc., India was much more diversified across manufacturing compared to a typical developing country. Further, establishments in India were far smaller than in other countries. Clearly the panoply of laws accounted significantly for this. Credit was not easily available to large industries, labor laws put more restrictions on large firms, and even antimonopoly laws combined in a sense to make the average Indian firm small. Figure 1 shows average firm size in India relative to other countries. Note that the industries that are larger in other countries are also larger in India, but the average size of an establishment in India is far smaller than in other countries.
II. THE 1980s AND 1990s: BUSINESS-FRIENDLY AND MARKET-FRIENDLY REFORMS

As India moved into the early 1980s, the slow process of liberalization started and the environment became a little more business-friendly, allowing businesses to do more things. Liberalization really took off in the early 1990s following India’s foreign exchange crisis, which saw the Indian economy opening up to foreign entry and an increasing level of competition. Some people have termed what happened in the 1980s “business-friendly reforms”, which expanded opportunities for existing businesses; and the 1990s as the period of market-friendly reform, which increased the extent of competition and expanded the freedoms industry had.

A. Hysteresis: The Legacy of the Past

The service sector has been the biggest story since reforms started in the 1980s. Services have exploded in value added relative to the typical comparable emerging market country, although service employment has not grown. The share of labor in manufacturing has fallen slightly but remains almost where it was. Despite the reforms, industry has not pursued the same traditional focus of poor countries, which is labor-intensive manufacturing. India still has very little
presence in labor-intensive manufacturing and still focuses on skill-intensive manufacturing and large-scale industries. In other words, there is a form of \textit{hysteresis}, where the specialization during the period of heavy government intervention continues despite changes on the fringes. For example, the relative value added of labor-intensive industries tends to be far below other countries at similar levels of per capita gross domestic product (GDP). In Figure 2, at similar levels of per capita GDP, India lies far below People’s Republic of China (PRC) in the share occupied by labor-intensive industries. Similarly looking at skill-intensive industries (Figure 3), India’s share is above the PRC’s share and in fact is above countries like Republic of Korea (henceforth Korea) and Malaysia at similar levels of per capita GDP.

Figure 2. \textit{Value Added Share by Labor Intensity}

Ratio of Value Added in Above-median, Labor-intensive Sectors to Below-median Sectors
It is also interesting to look at the different states to check for differences. Almost all the Indian states are moving toward small, service-oriented firms. There is a difference, however, between the fast-growing states and the slow-growing states. The fast-growing states are moving toward private services like telecom and finance, and are not shifting toward manufacturing—and certainly not toward labor-intensive manufacturing. Gujarat for example is increasing its presence in manufacturing, but it is moving from textiles to petrochemicals in terms of share of value added.

B. Widening Inequality

Earlier, all the states moved together at the same stately Hindu rate of growth. To some extent that was an objective of the licensing system: to spread growth around the country. Licenses were often contingent on setting up in remote locations without infrastructure, because development was needed in that area. That was an objective of state-led development: to ensure balanced growth. This convoy system of growth resulted in all the states growing, but it also kept the average growth rate considerably down. What happened postreform in the 1990s was that the center no longer determined where investments would take place, it was more the states themselves competing through policies to attract investment. What this did was to completely change the pattern of growth. Some
states took advantage, especially the coastal states of Gujarat and Maharashtra, and the southern coastal states of Karnataka and Tamil Nadu. These shot up in growth rate, leaving behind the interior states, especially the states where much of the population was concentrated like Bihar, Madhya Pradesh, and Uttar Pradesh. The highly populous states with rapidly growing populations were the ones left behind. Eventually, the states diverged in growth rates and per capita GDP. All of the states were growing, but the fastest growing states were growing so much faster that inequality increased rapidly.

Two elements determine growth rate. One, pre-existing capabilities. In Karnataka, elements of the electronics industry through the public sector were already in place. CMC Limited and the Electronics Corporation of India, Ltd. were public sector corporations that were operating in Bangalore. As the economy opened up, these corporations became the seed for private sector corporations that sprung up around that area. A lot of former CMC Limited employees started software enterprises that became famous.

This was also true elsewhere. For example, the much derided Indian Airlines, which anybody who has flown will recognize as a true state monopoly, provided the manpower skills for new airlines like Jet Airways, which is now considered the epitome of efficiency and customer care. Hence, the much derided public sector in a sense seeded private sector growth that took place in some of these states.

C. Poor Institutions

One reason for the difference in growth among states was that there were pre-existing capabilities in some states that allowed them to take advantage of opportunities once they opened up. Pre-existing capabilities in the southern states that focused more on education than did the interior and northern states helped the southern states once the economy opened up.

A second factor was the decentralization process itself. Essentially states were allowed to run on their own scheme rather than forced to grow at the same Hindu rate of growth. In particular, states that had better institutions grew much faster. One example of performance of an institution can be seen in the line losses or transmission and distribution losses in India. Once power is generated by an electricity generator, what actually reaches the final consumers, and is billed, is only a fraction of the power generated. Part of the reason is because technically, there are line losses that take place across the line depending on the level of voltage, among others. There is also a tremendous amount of theft, resulting in unaccounted leakage. The extent of transmission and distribution losses is a quick and ready measure of the quality of institutions in a state. Looking at the states, the states that had the highest transmission and distribution losses were those that
have grown slowest. In other words, institutional quality exerts a major effect on performance.

The pro-market reform period of the 1990s therefore can be described as a time when pre-existing specializations mattered a lot. India’s specialization in skill-based industries resulted partly from the neglect of infrastructure. Without good infrastructure, how can you compete when the economy opens up? You cannot compete on highly labor-intensive, low-margin industries that depend a lot on low-cost power, access to ports, and so on. Where India could compete despite the poor infrastructure was in high-value-added, high-skill industries where the output is relatively lightweight and relatively less dependent on things like ports and electricity. Electricity and ports are only a fraction of the value added in high-skill industries, as in pharmaceuticals or software. Thus Indian industry had migrated to its comparative advantage. But its comparative advantage was linked to what had been built up in the period of relatively slow growth (1950s–1970s), and so India today has a presence certainly in the service industry, certainly in the value-added services, but also in skill-based manufacturing.

### III. THE WAY FORWARD

Going forward, what are the problems that could arise? The central problem for India is the inequality that is emerging between the populous interior states where there are few jobs, and the coastal areas that are on a roll and that presumably would take care of themselves going forward. The challenge here is that because of the dismal state of infrastructure in India it is very hard to create much needed labor-intensive jobs. This is not to say one must absolutely create labor-intensive jobs for manufacturing. More labor-intensive jobs could likewise be generated through services; there can be an economy that has far more jobs created in tourism, health care, and so on. It is quite possible to build a more service-oriented economy that creates labor-intensive jobs. But certainly anybody who takes a close look at this will argue that at least some labor-intensive manufacturing needs to be created, and for that clearly one key has to be an increase in infrastructure. Looking at India’s labor force, one can see a transition taking place from the typical pyramid with lots of very young people at the base and very few old people at the apex. This is going to change moving into 2030, where one can see the bulge moving up the pyramid as more and more people enter the workforce (Figure 4).
A. The Challenge of Productive Job Creation

Some people argue that this is going to be India’s salvation: that more and more people in the workforce will mean more people saving, as did other countries that have developed rapidly including the PRC and Korea, where the greater bulge within the labor force created additional growth. That is only true provided you can find jobs for this bulge. And this clearly is the big problem for India. It is a problem that is going to affect not just India’s growth rate but also equity within the country, for unless there are jobs, and unless these jobs appear
in the hinterland states and not in the coastal areas, there will only be growing disparities that in turn will create growing political turmoil.

India has the benefit of having had a relatively young population for a considerable period of time relative to other developing countries such as Brazil, PRC, and Indonesia, but India yet has to create jobs to take advantage of its young population (Figure 5). In this job creation mission, laggard states are central. For laggard states to create jobs, labor law reform will be an important part of job creation, and so will infrastructure development and agriculture. Agriculture at this point is far less productive than manufacturing and services. One way of increasing value added in agriculture is by improving the retail network. Any Indian government bureaucrat will talk about the tons of vegetables that are wasted from the farm to the market. Storage facilities, refrigeration facilities, and transportation facilities from the fields to the markets are dismal. The government has that in mind but clearly private sector involvement will play an important role in this. What is encouraging is more and more private sector firms are discussing setting up networks to bring agricultural produce from the farmer to the markets. Press reports suggest Reliance and Bharati have talked about setting up this network. To my mind that is where hope lies, that in fact agricultural jobs will be created.

Figure 5. Forecasts of Working Age Population (percent of total)

In some of the laggard states, clearly the state of institutions has to be improved considerably. Law and order in some of these states has been deteriorating considerably, and as the Prime Minister has said, the emergence of Marxist rebellions in different districts is getting alarming. While this movement is still contained, unless jobs are created in the rural areas in a significant way and people find opportunities, there will be a great and greater tendency to embrace extreme measures. Clearly, to stem this occurrence, institutions, education, health care, the police, and the judicial system need to be improved.

B. Improving Institutions: Labor and Judicial Reform

India’s judicial system in many ways is central to much of what India is trying to do. Consider for example labor laws earlier discussed. Assume the existing labor protection is abolished and instead workers are allowed to be dismissed at will. What will happen? For a while employers will have the luxury of firing workers but soon workers will find that since they cannot seek redress through the laws, and since they cannot seek redress through the judicial system because it takes so long, they will turn to the other alternative, which is the street. Thus the level of labor violence will increase if reforms leave us without adequate worker protection in the form of a safety net and a more rapid judicious system to take care of unfair firing. Reform is needed on all fronts when reforming labor laws. Part of that reform has to be judicial reform.

Figure 6 shows where India stands in terms of labor market flexibility. There is a fair amount of restrictiveness on hiring and firing in India. But making Indian labor laws more flexible has to be seen as an overall package to be put together, rather than simply amending the laws on hiring and firing.

Figure 6. Global Perspectives on the Restrictiveness of Hiring and Firing
Finally, legal reform will need to encompass not just labor laws, but also laws to protect contracts and property rights. This requires reform of the judicial system not just in terms of laws but in terms of delivery of justice. Justice is too slow in India and that poses a significant problem.

C. Improve the Business and Investment Climate:
   Speed Up Infrastructure Development

Among the concerns that businesses in India have are infrastructure where there are still huge gaps, the bureaucracy, corruption, and labor regulation (Figure 7). Problems with infrastructure can be seen in the increasing shortage in electricity supply (Figure 8). The reaction of industry to this is fairly opportunistic as in industry elsewhere. Industry overcomes some of these problems but at a relatively high cost, which is to build captive power plants instead of relying on the public network. In India, each industry regardless of size has its own power plant. Obviously this increases the cost of doing business, which means India cannot compete with the PRCs and Viet Nams of the world in terms of power-intensive areas.

Figure 7. Most Problematic Factors for Doing Business in India
   (percent of responses)
Figure 8. **Peak Shortage in Electricity Supply**  
(percent)

Ports are one of the better stories in India’s infrastructure, where privatization has created considerable competition with public sector ports, such that public sector ports have reduced tariffs in order to compete both with domestic ports and international ports (Figure 9).
Telecommunications are another example of a success story; and a challenge for the Indian government is to implement liberalization more widely. The government is trying to liberalize as significantly in roads and airports but the process has to be more rapid. Indeed, the concern in India has always been why can’t this be done much faster? The process of reform is always a little too slow for anybody watching. But for a large country with diverse interests it may be the only way to go. If you need to bring people along it may be difficult to do so without this slow pace.

Another issue—which also is an issue across emerging markets—is urban infrastructure such as water supply, quality of cities, congestion, and pollution. Environmental quality is breaking down, as can be seen in Bangalore, Bombay, and Delhi. Clearly, a service-oriented, high-skilled, manufacturing-oriented economy will need professionals who will be valuable to that effort, but without adequate living conditions these professionals will not be enticed. So it is important to focus on urban infrastructure.

Currently there is a lot of rural–urban migration that is not kept track of well in Indian data. As the disparities between states increase, this migration will increase. India will need significant upgrading of the urban infrastructure to address this migration. Estimates of how much financing is needed—around $400 billion over the next 5 to 10 years—demonstrate the need for infrastructure development for laggard states to stimulate labor-intensive growth, and for fast-moving states to address the same problems as well.
D. Increasing the Supply of Skilled Labor

One of the places where India has a comparative advantage is tertiary education. That was a reason India moved so heavily into highly skilled manufacturing and services. But what that move has done especially with the advent of foreign capital, is that it has quickly eaten up the available labor supply at the highly skilled level. All this talk of 400,000 engineers produced every year is just talk. The degree of some 350,000 of those engineers is probably not that valuable, probably obtained from a very small engineering college where teachers are of “uneven quality”, to use a euphemism.

The fact is in India right now, a lot of training is being done by corporations. The largest educators now are not the public sector universities but increasingly the corporations like Infosys, Wipro, and ICICI. A lot of on-the-job training is being done precisely because of the uneven quality of tertiary education. So can tertiary education up its gains? For this India has to allow more entry into tertiary education, not just domestically but by foreign institutions to meet tremendous demand. In fact one of India’s biggest imports is education. There are around $2–3 billion being spent every year by Indian parents to educate their children abroad. They are importing education. There is no reason why education cannot be produced domestically. But the poor quality of domestic education is forcing these people to go outside. You may have heard about the recent clamor to expand reservations in universities. One silver lining in the government response to this demand is the government is expanding tertiary education considerably, and hopefully that will sustain quality and create far more highly educated individuals.

E. Broadening the Inclusiveness of Growth

Because of rising inequality in India, there are many people who do not see the benefits of reforms. Distributional concerns will have to be addressed. The people see the costs rather than the benefits. Opening up opportunities to the middle class makes the services that the middle class provides the rest of the economy more expensive. As the economy is opened up, access to education, health care, and finance should be provided to the poor. Unless this is done, the poor will not see the opportunity in reforms and in increasing competition.

Needless to say, there is a need for safety nets to protect workers as the economy becomes more subject to business cycles. The government is talking about some of these issues, for example, through the rural employment guarantee scheme, which is trying to give work to one person per family. Concerns about these programs have been expressed in the past, such as leakage and corruption, and government has to see whether those concerns are valid. It is also very important that the government has fiscal space to undertake some of these
programs, and to determine if they are well targeted and worth undertaking. The problem is that with the increased revenues from growth, there is also tremendous demand for all kinds of expenditures, and there is worry that these expenditures will be misdirected. Thus it is very important to focus on targeting.

The disparity between the states is creating more migration that has to be handled well. Migration is also creating pressure for center-led redistribution initiatives. States that have not benefited from high growth are yearning for the old convoy system where the center forced balanced development. The finance commission is becoming the center of acrimonious dialogue because of the states that are losing out. These states want to tax the states that are gaining, and clearly the states that are gaining do not want to have anything to do with this. This could become a much more serious political problem in the future. In fact one of the things keeping a lid on this is the fact that populous states have not been allowed increasing representation in parliament, as representation is based on a frozen population figure. This has kept the more populous states from acquiring more political power through which they can in a sense acquire economic rents from the other states. How long this would last is something that remains to be seen. There are also more disparities between communities that are creating more tension. What is happening is communities that are being left behind want a share of the pie, and they increasingly see the political route as the way they can get a share of the pie.

One example of this is the demand for reservations in university seats. The demand for reservations is just the tip of the iceberg. Down the line there is going to be a lot of pressure for reservation of jobs in the private sector for different communities. Thus unless people are convinced they have equal opportunity, there will always be more attempts to engineer outcomes so that they become more equal. This tension is going to play out between the haves and have-nots, and it is going to be played out on things like jobs and access to education.

**IV. INDIA MUST BECOME A RESPONSIBLE GLOBAL PLAYER**

India will have to consider the issue of how it will engage with the world. It is becoming an increasingly significant trading partner, and increasingly, manufacturing will play a role especially if India gets its infrastructure straightened out. The competition for resources between the PRC, India, and many other emerging markets is now being compared to the “Great Game” for resources and influence between Great Britain and Russia toward the end of the 19th century. To my mind this game is overstated and if the participants actually indulge in it, it would be detrimental to themselves. Going forward I do not think there is an imminent shortage of resources. Prices could increase but the notion that countries should be engaged in buying up these resources around the world is a very dangerous notion and could be problematic going forward.
In conclusion, there are challenges ahead for India. I am very wary of straight line projections, such as the famous Goldman–Sachs–BRICS report, which suggests that if India grows at 6 percent for a long time, it will become a big country. The problem is that 6 percent for a long time is a pretty challenging rate of growth. But there is also reason for optimism.

Let me conclude with lessons I draw from India’s highly regulated past. First, India’s past policies relating to science and education, no matter how distorted, gave it capabilities in skilled manufacturing and in services, where its comparative advantage now lies. India should not sacrifice this advantage in a blind attempt to follow the East Asian path of unskilled, labor-intensive manufacturing. In particular, it should remove distortions that hold back its areas of strength: the overregulated higher education system and the sclerotic legal system. But it also needs to remove the disincentives for the creation of unskilled jobs, not just by getting rid of archaic job protection while building a genuine safety net for all workers, but also by improving infrastructure, especially in laggard states and rural areas so that they connect better to the larger economy.

Second, the government cannot simply legislate outcomes or achieve them by offering resources or subsidies, especially as the economy becomes more market-oriented. Indeed, such direction can be counterproductive. What the government intends and what materializes can be very different because of the way people react to policy. The government must focus instead on getting the environment right, and thus spread opportunity.

Third, the government, by and large, will not refocus in a vacuum. I do not believe that there will be a revolutionary change in government attitudes, because Indian society is not ready for it. Instead, I see a more evolutionary change—as more and more people in India obtain access and see opportunity in the market economy, they will press for a more enabling government, and Indian democracy will respond. The sooner this happens though—and reformers in government can play a role here in expanding access—the better it will be for India. For better governance and wider opportunity, rather than turning back from market-oriented reforms, will be the way to social justice and a more prosperous, fairer, India.

REFERENCE