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Twenty-Five Years of Indian Economic Reform

A Story of Private-Sector Success, Government Failure, and Institutional Weakness

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EXECUTIVE SUMMARY

Economic reforms that began 25 years ago have transformed India. What used to be a poor, slow-growing country now has the third-largest gross domestic product (GDP) in the world with regard to purchasing power parity and is projected to be the fastest-growing major economy in the world in 2016 (with 7.6 percent growth in GDP). Once an object of pity, India has become an object of envy. It has been called a potential superpower and the only credible check on Chinese power in Asia in the 21st century. Hence, the United States has backed India for a permanent seat in the United Nations and has persuaded the Nuclear Suppliers Group to exempt India from the usual nuclear nonproliferation rules.

Yet India's success has been tarnished in several areas. The past 25 years can be largely summed up as a story of private-sector success and government failure, of successful economic reform tainted by institutional erosion. Although many old controls have been abolished, many still continue, and a plethora of new controls have been created in areas relating to the environment, health, tribal areas, and land. What leftist critics have denounced as an era of neoliberalism is better called neo-illiberalism. India remains in the bottom half of countries measured by indicators of economic freedom. Social indicators of education, health, and nutrition have improved much too slowly, and India has been overtaken in some indicators by poorer Bangladesh and Nepal. The delivery of all government services remains substandard. Political interference has eroded the independence and quality of institutions ranging from the police and courts to educational and cultural institutions. India's economic reforms over 25 years have transformed it from a low-income country to a middle-income one. But to become a high-income country, India must liberalize the economy much further, improve governance, and raise the quality of its institutions.

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INTRODUCTION

In 1991 India embarked on major reforms to liberalize its economy after three decades of socialism and a fourth of creeping liberalization. Twenty-five years later, the outcome has been an outstanding economic success. India has gone from being a poor, slow-growing country to the fastest-growing major economy in the world in 2016. The *World Economic Outlook* for 2016 says that the United States and India are the two pillars of strength today that are helping hold up a sagging world economy.[1] Once an object of pity, India has become an object of envy among developing countries; it is often called a potential superpower and is backed by the United States for a seat on the UN Security Council.

Yet those successes have been accompanied by significant failures and weaknesses in policies and institutions. The past 25 years of liberalization are largely a story of private-sector success and government failure and of successful economic reform tarnished by institutional erosion. Even as old controls have been abolished, new ones have been created, so what leftist critics call an era of neoliberalism could more accurately be called neo-illiberalism.

The quality of government services remains abysmal, and social indicators have improved much too slowly. The provision of public goods—police, judiciary, general administration, basic health and education, and basic infrastructure—has seriously lagged improvements in economic performance. Political appointees and government interference erode the independence and quality of institutions ranging from the courts and universities to health and cultural organizations. India's economic reforms have been highly successful in moving the country from low-income to middle-income status, despite little improvement in its institutions and quality of public goods. To sustain rapid growth and to become a high-income country, India will need major reforms to deepen liberalization and build high-quality institutions.

A BRIEF HISTORY OF THE INDIAN ECONOMY

It is difficult for youngsters today to grasp that until 1990, India was famous (or perhaps infamous) as the biggest beggar in the world, seeking food aid and foreign aid from all and sundry. It was hamstrung by a million controls, imposed in the holy name of socialism and then used by politicians to create patronage networks and line their pockets. On attaining independence in 1947, Indian politicians were worried that imperial foreign rule would return in the guise of economic domination through trade and investment.

So India sought "economic independence" to buttress political independence, and that took the form of aiming for economic sufficiency, along with a variation on soviet-style five-year plans. India's share of global trade fell steadily from 2.2 percent at independence to 0.45 percent in 1985, and that was actually hailed as a policy triumph by Indian socialists. The public sector was supposed to gain the commanding heights of the economy. Nothing could be manufactured without an industrial license or imported without an import license, and those licenses were scarce and difficult to get. Any producers who exceeded their licensed capacity faced possible imprisonment for the sin of violating the government's sacred plan targets. India was perhaps the only country in the world where improving productivity (and hence exceeding licensed capacity) was a crime.

The underlying socialist theory was that the market could not be trusted to produce good social outcomes, so the government in its wisdom must determine where the country's scarce resources should be deployed and what exactly should be produced, in what location, and by whom. In other words, the people would be best served when they had no right to decide what to produce and no right to decide what to consume: that was all to be left to a benevolent government.[2]

In its first three decades after independence in 1947, the Indian economy averaged just 3.5 percent GDP growth, which was derisively called the "Hindu rate of growth." That was half the rate achieved by the Asian tigers.

Indian socialism reached its zenith in the 1970s, when the banks and several major industries were nationalized. The top income tax rate rose to 97.75 percent, and the wealth tax to 3.5 percent. The *Garibi Hatao* (Abolish Poverty) slogan of Prime Minister Indira Gandhi (1969–77) aimed to cut fat cats to size and create a paradise for the poor. In fact, the poverty ratio did not fall at all until 1983.

Meanwhile, the population had virtually doubled since independence in 1947, meaning that the number of poor people virtually doubled in this socialist era. There could scarcely be a crueler demonstration of how policies in the name of the poor could end up impoverishing them even further. GDP growth improved to 5.5 percent in the 1980s because of some very modest liberalization plus a government spending spree. But the spending spree was unsustainable and ended in tears and empty foreign exchange reserves in 1991.[3]

P. V. Narasimha Rao became prime minister in 1991. The Soviet Union was collapsing at the time, proving that more socialism could not be the solution for India's ills. Meanwhile, Deng Xiaoping had revolutionized China with market-friendly reforms. And so Indian politicians turned in the direction of the market too. India had no Thatcher or Reagan leading any ideological charge. Reform was very pragmatic, with Rao insisting he was pursuing a "middle path" and not a radical transformation. The Indian economy took two years to stabilize but then achieved record growth of 7.5 percent in the three years 1994–97. When the reforms began, all opposition parties had slammed them as a sellout to the International Monetary Fund (IMF). But when the outcome was record GDP growth, the objections melted away in practice even if not in rhetoric. Every successive government that came to power continued down the path of economic liberalization, despite some steps backward. The reforms were erratic and half-baked but not reversed.[4]

The Asian financial crisis of 1997–99 laid India low, yet it proved far more resilient than other Asian nations. Soon after came two droughts (in 2000 and 2002), the dot-com collapse and global recession of 2001, and the huge global uncertainty created in the run-up to the invasion of Iraq in 2003. The Indian economy sputtered in those difficult years, and average GDP growth slowed to 5.7 percent in 1997–2003. But then followed the global boom of 2003–8, spearheaded by China, which lifted all boats across the world. India's GDP growth soared, and it reached a peak of over 9 percent per year in the three years 2005–8.[5]

The euphoria of those days has now dimmed. Many serious problems arose after 2010–11, such as widespread charges of mass corruption, which led to paralysis in decisionmaking; a collapse of the public–private partnership model for infrastructure; huge bank losses; huge losses from state electricity boards giving massive subsidies and failing to check electricity theft; and major problems in land acquisition, environmental clearances, and other clearances, which led to delays that killed some capital-intensive projects. The economy slowed, and that plus the anticorruption public mood led to the crushing defeat of the Congress Party–led coalition in the 2014 election after a decade of mostly successful rule.

The new government led by Narendra Modi of the Bharatiya Janata Party has sought to tackle some of the worst problems, and growth has picked up to an estimated 7.5 percent in 2015–16. That growth rate is slower than before, yet China has slowed even more dramatically to 6.5 percent. So India has become the fastest-growing major economy in the world, an unexpected and notable feat, even if it owes more to the slowing of China than to its own acceleration.[6]

Public anger over corruption and failed government services has risen, so the public mood in India today is far from triumphant. Although India's position in the world has been transformed beyond recognition in the past 25 years, much reform is still needed, above all reforms in governance, institutions, and the delivery of government services.

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THE MAIN SUCCESSES OVER THE PAST 25 YEARS

India was in such poor shape before 1991 that it takes an effort to recall how bad things were. Some of the biggest changes since then are described below.

Until 1991 many superpowers (notably the United States) equated India with Pakistan in foreign affairs, even though Pakistan had barely one-eighth of India's population. India's slow-growing, inward-looking socialism made it unimportant in global terms, save as an aid recipient. Pakistan's military ties with the United States made that country seem a more important global player. But today, the United States views India as a potential superpower. President George W. Bush backed India's entry into the nuclear club. President Barack Obama has backed India for a seat on the UN Security Council. The United States sees India as potentially the only country in Asia that can check a rising Chinese juggernaut in the 21st century. And *Newsweek* has called India a "potential superpower."[7]

Once a poor economic laggard, India now has the third-largest GDP ($7.98 trillion) in the world in purchasing power parity terms after China and the United States (Table 1).

Per capita income is up from $375 per year in 1991 to $1,700 today. India has long ceased to be a low-income country as defined by the World Bank, which uses a threshold of $1,045, and has become a middle-income country.

India's annual GDP growth rose from 3.5 percent in 1950–80 and 5.5 percent in 1980–92 to an average of 8 percent since 2003, with a peak exceeding 9 percent in the three years 2005–8 (see Table 2). The International Monetary Fund estimates India's GDP growth at 7.3 percent in 2015 and 7.5 percent in 2016, faster than China's rates (6.9 percent and 6.5 percent, respectively). In a depressed global economy, the IMF sees the United States and India as the two bright spots, as the two major economies holding up an otherwise slowing world.

Before 1991 India was derisively called a bottomless pit for foreign aid. Every few years,

Table 1. Five Biggest Countries in Purchasing Power Parity GDP, 2015 ($ trillion)

China	19.52
United States	17.95
India	**7.98**
Japan	4.74
Germany	3.85

Source: World Bank, *World Development Indicators* database, July 1, 2016, http://databank.worldbank.org/data/download/GDP_PPP.pdf.

Table 2. Annual Growth of GDP

1950–80	3.5%
1980–92	5.5%
1992–2003	6.0%
2003–15	8.0%

Source: Author's calculations from tables of the Government of India's Economic Survey, various years.

a food crisis or foreign exchange crisis would send Indian ambassadors and politicians scurrying around the world, asking like Oliver Twist for more. Today, aid has not vanished but has become irrelevant to the balance of payments or investment plans. Gross aid flows exceed $5 billion, but after debt servicing, the net inflow is barely $0.5 billion.

An unexpected new development has been the rise of India's own aid to developing countries (though some would call it quasi-commercial loans to sell Indian equipment). India's net aid giving is now well over $1 billion per year, with Bhutan ($813 million) being the biggest beneficiary in 2014–15. Prime Minister Modi has offered African countries a $10 billion combined line of credit and Bangladesh $2 billion. The country that used to be a bottomless pit for aid is now a bountiful financier.

Its commercial finance has been spurred by economic reforms that have attracted inflows of foreign exchange other than foreign aid. Total foreign investment (equity plus portfolio inflows) came to $51.2 billion in 2014–15. Foreign commercial borrowing in the same year came to $68.2 billion gross and $10.4 billion net, whereas remittances from Indians overseas exceeded $70 billion. The remittance boom was a consequence of globalization, of Indians going abroad. Remittances remained stable through the Asian financial crisis and Great Recession (2007–9) and have greatly helped counter the volatility of foreign portfolio capital (sometimes called hot money) in difficult times. Critics of globalization once claimed it would make India subservient to foreign masters. Instead, by encouraging the movement of persons and goods, it has created a remittance flow and export strength that makes foreign aid irrelevant.

In the bad old days, any major drought meant India was dependent on food aid. When two droughts occurred in a row, as in 1965 and 1966, India survived only because of record food aid from the United States. A 1967 best-selling book by William and Paul Paddock declared that simply not enough food aid existed to save all needy countries, and so hopeless countries like India should be left to starve, conserving food aid for countries that were capable of survival.[8]

The Green Revolution made India first self-sufficient and then a surplus producer of food. India suffered two consecutive droughts in 2014 and 2015, yet agricultural production actually rose slightly; India became the world's largest rice exporter in 2015, exporting 10.23 million tons. India has also become a substantial exporter of wheat and maize in recent years. That is a measure of its agricultural transformation. Paddock and Paddock never imaged that India, which swallowed almost the entire food aid of the world in the mid-1960s, would become a donor of food aid to North Korea in 2010.

India's poverty ratio did not improve at all between independence in 1947 and 1983; it remained a bit under 60 percent. Meanwhile, the population virtually doubled, meaning the absolute number of poor people doubled. That was a cruel reflection of the failure of the socialist slogan *Garibi Hatao* (Abolish Poverty). Poverty started declining gradually after 1983, but the big decline came after economic liberalization. In the seven years between 2004–5 and 2011–12, no fewer than 138 million Indians rose above the poverty line (Table 3).

India's poverty decline was 0.7 percentage points per year between 1993–94 and 2004–5, when GDP growth averaged about 6 percent per year. The annual rate of decline accelerated to 2.2 percent between 2004–5 and 2011–12, when GDP growth accelerated to over 8 percent per year. The link between fast growth and poverty reduction is striking.[9]

Between 2004–5 and 2011–12, the all-India poverty ratio fell by 15.7 percent. The decline was much higher at 21.5 percent for Dalits (the lowest Indian caste group) and 17.0 percent for scheduled tribes, traditionally the two poorest groups in India. The decline in the poverty ratio of the upper castes was much lower, at 10.5 percent. Muslims are another historically disadvantaged group. Their poverty ratio declined in that seven-year period by 18.2 percent, faster than the 15.6 percent for

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Table 3. India's Poverty Decline (Tendulkar Committee Methodology)

Years	Percentage of Poor	Number of Poor (millions)
1993–94	45.3	403.7
2004–5	37.2	407.1
2011–12	21.9	269.3

Source: S. Mahendra Dev, Suresh Tendulkar Lecture, 2016.

Table 4. Fewer Households Report Any Hunger in Preceding 12 Months

Years	Hunger Ratio
1983	17.3
1993–94	5.2
1999–2000	3.6
2004–5	2.5

Source: Angus Deaton and Jean Drèze, “Food and Nutrition in India: Facts and Interpretations,” *Economic and Political Weekly* (India), February 14, 2009.

Hindus. In as many as seven states, Muslims are less poor than Hindus.[10]

Table 4 shows a sharp decline in the proportion of people saying they have been hungry in some or all months—from 17.3 percent in 1983 to 2.5 percent in 2004–5. That statistic should be regarded as solid proof of falling hunger. Yet the International Food Policy Research Institute now publishes a supposed *Global Hunger Index* in which India fares rather badly with a score of 29 (on a scale ranging from zero for no hunger to 100 for complete hunger) against 12.6 for South Africa, 8.6 for China, 6.6 for Russia and less than 5.0 for Brazil.[11] That hunger index completely ignores data from India's National Sample Survey Office data showing that very few Indians declare that they are hungry.

The *Global Hunger Index* is actually more a measure of nutritional indicators such as underweight and undersized children, and those characteristics are by no means the same thing as hunger. Small size can have genetic roots, as has been argued by Niti Aayog (the new name for a reformed planning commission) chair Arvind Panagariya.[12] Besides, research by Dean Spears in India has proved conclusively that even when people get enough calories, open defecation and the disease it spreads prevent the body from absorbing the nutrients.[13] The problem, then, is not hunger so much as terrible sanitation. Focusing on hunger instead of sanitation amounts to barking up the wrong tree. The hunger ratio in India has fallen so low that National Sample Survey Office surveys no longer bother to measure it.

In 1991, it took two years for anyone to get a telephone landline connection. N. R. Narayana Murthy, head of top software company Infosys, recalls that in the 1980s, it took him three years to get permission to import a computer and over one year to get a telephone connection.[14]

Today, the cell phone revolution means instant access to communication even in remote villages. The number of cell phone connections has just exceeded one billion. India has among the cheapest cell phone rates in the world, barely two cents per minute, and second-hand cell phones cost just $5, so even the poor can afford to make calls. That advancement has facilitated migration out of and remittances to poor areas. Once unconnected India is now globally connected.

In 1991 India's main exports were textiles and cut-and-polished gems. Today, its main exports are computer software, other business services, pharmaceuticals, automobiles, and auto components. Most developing countries grew fast by harnessing cheap labor. India never did so, because its rigid labor laws inhibited labor flexibility, and they still do so today. Software and business services are estimated at $108 billion in 2015–16, up from virtually nothing in 1991. The range of business services has expanded from call centers and clerical work to high-end financial, medical, and legal work. Credit ratings agencies like Moody's and Standard and Poor's, which once gave India very poor ratings, now do a significant amount of their work out of India.

In 1991 Indian companies used obsolete technologies based on ancient licensing agreements and did very little research and development. Today, India has emerged as a global research and development (R&D) hub. General Electric has located one of its five global R&D centers in Bengaluru. Suzuki and Hyundai have made India a hub for small-car research and production. Microsoft and IBM are among the global companies using India as an R&D base.

Imports and exports, of both goods and services, have soared as a proportion of GDP because of India's opening up and consequent globalization. The World Bank estimates that in the period 2011–15, India's total trade (imports and exports) as a proportion of GDP was 49 percent, higher than the only two other continental-sized economies: China (42 percent) and the United States (30 percent). Many Indian politicians are still instinctively protectionist, yet the data show how much opening up has already happened.[15]

India has become a global hub for computer software development. Microsoft, Oracle, SAP, IBM, Accenture, and other top international companies use India as a base. IBM has more employees in India than in the United States, because Indian skills are often as good as—and much cheaper than—those in the West. That fact has led to many complaints that IBM is shifting jobs to India. Many Indian engineers and scientists who used to work for multinationals abroad have returned to work in the companies' Indian subsidiaries and branches. The former brain drain has turned into brain circulation.[16] The *Guardian* carried an analysis titled "India Is an Emerging Geek Power."

India is now a low-cost commercial satellite launcher. By October 2015, it had launched 51 satellites for foreign countries, with payloads of less than 1,600 kilograms. To gain market share, it needs to develop payload capacity of over 3,000 kilograms, and building that capacity is a work in progress.[17]

In 1991 India produced fewer than 50,000 engineers per year, mostly from government colleges. India's economic success after 1991 has spurred the creation of thousands of private engineering colleges, with estimated admissions of 1.5 million students per year.[18] The quality of the colleges is spotty, often dreadful. One oft-quoted rule of thumb is that half the graduates are useless, a quarter are usable, and a quarter are world-class. That outlook suggests massive waste. Yet producing up to a quarter million world-class engineers per year is a very solid base for future progress.

In 1991 Indian politicians and industrialists feared that economic liberalization would mean the collapse of Indian industry or its conversion into subsidiaries of multinational companies. Twenty-five years later, Indian companies not only have held their own but also have become multinationals in their own right. Dozens of Indian pharmaceutical companies—such as Sun Pharma, Cipla, Lupin, and Dr. Reddy's Labs—are now multinationals with higher sales abroad than in India. Through acquisitions, ArcelorMittal became the biggest steel company in the world. The Tata Group acquired Corus Steel and Jaguar Land Rover and in the process became the largest private-sector employer in the United Kingdom. Today, the global slump in metals and the dumping by China have made many acquisitions that were completed in the

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boom years look like bad deals. Yet the fact remains that Indian companies are now viewed as having global management skills worthy of global takeovers. Ironically, although Tata has decided to sell its steel assets in the United Kingdom, one of the potential buyers is Liberty House, founded by another person of Indian origin, Sanjeev Gupta.[19]

India is about to reap a demographic dividend that will give it a big edge over rivals. The number of working-age people between 15 and 60 is expected to rise by 280 million between 2013 and 2050, even as China's workforce dwindles from 72 percent to 61 percent of a soon-to-be declining population.[20] All the Asian tigers enjoyed a demographic dividend in their boom years, and all are aging now.

India's working-age population has started rising, yet participation in the workforce has actually fallen in recent years, especially for females. The reason is partly that more young people are now studying in high school and college instead of working. It is partly because, as families rise from low-income to lower-middle-income status, they pull their women out of manual work as a mark of social superiority. Indeed, young women who do not work can expect to get a better class of husbands in the arranged marriages that dominate Indian social behavior. However, as families move up to upper-middle-class status, their daughters become college graduates and re-enter the workforce. That change means that India's demographic dividend has been delayed, but will soon come, and its quality will improve because its workforce will be better educated. That holds promise for future GDP growth.

As Table 5 shows, the male work participation rate has remained unchanged in rural areas and has risen marginally in urban areas since 1983. But the rural female participation rate has crashed from 32.7 percent in 2004–5 to 24.8 percent 2011–12, a huge withdrawal, whereas the urban female rate—always among the lowest in the world—is down from 16.6 percent to 14.7 percent. Given that India has roughly 600 million females, the data suggest that over 40 million women pulled out of the workforce between 2004 and 2012. That number is more than the entire female population of all but a handful of countries in the world. That factor makes India's rapid GDP growth in the 2000s even more remarkable: all other miracle economies in Asia had rapid increases in workforce participation in their fast-growing phase.[21]

A sudden scarcity of rural labor has helped raise rural wages quickly, a phenomenon buttressed by rapid GDP growth and a National Rural Employment Guarantee Act ensuring 100 days of work per family on government projects after 2008. During the 11th five-year plan (2007–12), nominal farm wages in India increased by 17.5 percent per year, and real farm wages by 6.8 percent per year, the fastest growth ever. Those wage increases were an important cause of the record drop in poverty.[22]

The Indian word *jugaad* has crept into management literature. It originated when Indian farmers wanted an inexpensive vehicle and got the idea of strapping an irrigation pump on a steel frame with four wheels to create a

Table 5. Male and Female Work Participation Rates in India

Year	Rural Female	Rural Male	Urban Female	Urban Male	Total Female	Total Male
1983	34.0	54.7	15.1	51.2	29.6	53.9
1993–94	32.8	55.3	15.5	52.1	28.6	54.5
2004–5	32.7	54.6	16.6	54.9	28.7	54.7
2011–12	24.8	54.3	14.7	54.6	21.9	54.4

Source: S. Mahendra Dev, Suresh Tendulkar Lecture, 2016.

functioning vehicle called a *jugaad*. Many variations of that vehicle are assembled by small local companies in many rural towns using spare parts of existing vehicles. It represents grassroots homegrown ingenuity. The vehicle can ferry goods or carry up to 50 passengers.

Jugaad no longer means just the original vehicle. It has now come to mean, simply, innovation around obstacles of all sorts—in designing, selling, managing, and even surmounting government controls. Thus, *jugaad* includes forms of corruption and tax evasion no less than frugal engineering. By solving problems by hook or by crook, it raises moral issues but gets things done under the most difficult conditions.[23]

India has become a world leader in frugal engineering, a concept that did not exist in 1991. Frugal engineering is the capacity to design and produce goods that are not just 10–15 percent cheaper than in Western countries but 50–90 percent cheaper. Tata Motors has produced the cheapest car in the world, the Nano, which costs $2,000. It was a commercial flop and did not meet Indian consumer aspirations. But it was nevertheless an engineering feat. Bajaj Auto has developed a low-cost quadricycle that could put three-wheelers and small cars out of business. India's telecom industry is the cheapest in the world, with calls costing just two cents per minute. The Jaipur Foot is an Indian artificial limb that is sold at 100th the price of competing artificial limbs in the United States. Narayana Hrudayalaya and Aravind Netralaya are hospitals that provide heart and eye surgery, respectively, at one twentieth or less of the cost of surgery in the West—one reason for the emergence of what is now called medical tourism.[24]

The Bombay Stock Exchange, set up in 1875, is one of Asia's oldest. Yet before the economic reforms of the 1990s, it was viewed as a snake pit. A handful of brokers could rig prices at will, fake share certificates abounded, and settlement periods were extended for months on end if that suited the brokers controlling the exchange. A major scandal in 1992—when broker Harshad Mehta shamelessly rigged the market using illegal borrowings from government banks—led to a stock market overhaul. Various financial agencies created a completely new National Stock Exchange with high technical and ethical standards. It was fully electronic, with no trading floor at all, and bids and offers were matched automatically by computer, preventing a lot of old-style rigging. The National Stock Exchange went fully electronic before London and New York did: it was a state-of-the-art exchange, a rare case when India leapfrogged global bourses.

That change both slashed costs and ended most forms of rigging. The Securities and Exchange Board of India was created, along the lines of the Securities and Exchange Commission of the United States, and gradually brought order and trustworthy practices that were earlier absent. It decreed that paper share certificates must be dematerialized and held in electronic form by depositories, to end the menace of fake certificates. Settlement periods were compressed dramatically to T+2 (payment two days after a transaction), among the fastest rates of settlement in the world (the United States still has a T+3 period). To survive, the Bombay Stock Exchange had to clean up its act and also go electronic. So since the 1990s, India has developed one of the most efficient stock markets in Asia. The daily turnover has gone from a few million dollars to over $100 billion, which explains why portfolio flows into India have been among the highest in Asia.[25]

Before 1991 very high tax rates (up to a 58 percent corporate tax) plus a high wealth tax meant that businesses kept income off the books. Many listed companies diverted profits into the hands of controlling families by dubious means, cheating minority shareholders. Improving shareholder value meant higher stock market prices, which would have been welcomed in other countries but constituted a recipe for personal bankruptcy in India. High share prices meant high wealth tax liabilities that required promoters to sell shares to pay the tax, with the prospect of losing control.

After 1991 direct tax rates gradually came down substantially (to 30 percent plus

“India's telecom industry is the cheapest in the world, with calls costing just two cents per minute.”

> "Economic liberalization has facilitated the rise to the top of a vast array of new entrepreneurs."

surcharges for individuals and corporations). The wealth tax on shares was abolished, making it possible to raise shareholder value without being penalized for it. Indeed, by keeping all profits in a company instead of milking them, a company could raise share prices and attract foreign investors at a handsome premium, making honesty an ingredient for success. Foreign investors soon started paying much higher prices for companies with good governance than those with dodgy tactics.

So corporate honesty began to be rewarded for the first time, and that (rather than any moral imperative) made Indian business cleaner. It attracted household investment and enabled ordinary citizens to participate in the stock market boom that raised the Sensex (India's equivalent to the Dow Jones Index in the United States) from just 1,000 in 1991 to 28,000 in 2015. The corporate tax was cut from a maximum of 58 percent to 30 percent, yet corporate tax collections increased from 1 percent of GDP to almost 6 percent at one point. That was a major reason for the revenue boom that facilitated increased spending on education, health, and infrastructure.

Personal income tax rates also fell from 50 percent to 30 percent, but once again collections rose, from 1 percent of GDP to almost 2 percent. For the first time, real estate transactions in some cities were conducted entirely by check: earlier, a big chunk of the sale price was paid in black cash to escape high capital gains taxes and the stamp duty. The Bollywood film industry, once run entirely on black money financed by the underworld, is today reputed to make payments to top stars almost entirely by check.[26]

In many developing countries, a handful of crony capitalists (like Pakistan's notorious 22 families) have dominated industries, thanks to their political contacts. India was no exception until 1991, because the license-permit raj made all clearances a favor to those with clout. But since then, economic liberalization has facilitated the rise to the top of a vast array of new entrepreneurs. The best known are in software (such as Infosys, Wipro, and HCL), but many have also emerged in pharmaceuticals, as discussed earlier; in infrastructure (Adani, L&T); telecommunications (Bharti Airtel); steel (Jindal, Bhushan); and finance (ICICI Bank, HDFC Bank, Axis Bank, Kotak Bank, Yes Bank).

Most amazing of all has been the rise of Internet-based companies like Flipkart, Snapdeal, MakeMyTrip, Paytm, Ola Cabs, Zomato, Jabong, Naukri.com, and others, each valued at billions of dollars by international investors. Their market value vastly exceeds that of most traditional big business houses.

Some of the new businesspeople (notably in real estate and infrastructure) are called crony capitalists, and certainly they have strong political contacts. Yet they don't get safe monopolies in return (as in Mexico), and many of them have suffered disastrous falls in recent years (such as DLF, Unitech, Lanco, and IVRCL).

Kickbacks in India are more accurately called extortion by politicians than classical cronyism, because the returns to kickbacks are uncertain and sometimes disastrously negative. Economic liberalization and competition have led to the crash and sometimes bankruptcies of famous old companies (Hindustan Motors, Premier Automobiles, JK Synthetics, DCM), indicating stiff competition and survival only of the fittest. Of the 30 companies constituting the Sensex in 1991, only 9 were still there two decades later. This business churn indicates healthy competition across industry as a whole. Former prime minister Manmohan Singh said of the new entrepreneurs: "These are not the children of the wealthy. They are the children of liberalization."[27]

Economic liberalization has benefited Dalits, the lowest of the Hindu castes, once condemned to the dirtiest work, such as cleaning latrines, cremating the dead, and handling dead animals and their hides. A seminal survey in two districts of Uttar Pradesh revealed striking improvements in the living standards of Dalits in the past two decades. TV ownership was up from zero to 45 percent, cell phone ownership was up from zero to 36 percent, two-wheeler ownership (of motorcycles, scooters, and mopeds) was up from zero to 12.3 percent, and children eating yesterday's leftovers was down from 95.9 percent to 16.2 percent.

Even more striking was the improvement in Dalits' social status. The proportion of cases in which Dalits were seated separately at weddings was down from 77.3 percent to 8.9 percent. The proportion of non-Dalits accepting food and drink at a Dalit house went up from 8.9 percent to 77.3 percent. *Halwaha* (bonded labor) incidence was down from 32 percent to 1 percent. The proportion of Dalits using cars for wedding parties was up from 33 percent to almost 100 percent. Dalits running their own businesses went up from 6 percent to 37 percent. And the proportion of Dalits working as agricultural laborers was down from 46.1 percent to 20.5 percent.

Beyond all expectation, thousands of Dalits have emerged as millionaire businesspeople and established a Dalit Indian Chamber of Commerce and Industry. Its president, Milind Kamble, says that just as capitalism killed feudalism, it is also killing casteism. In the fierce competition of a free market, what matters is suppliers' prices not their caste. This fierce competition, brought about by economic reforms, has opened new commercial space that did not exist during the license-permit raj, and Dalits have been able to occupy part of the new space.[28]

In the two decades since 1991, India's literacy rate has shot up by a record 21.8 percentage points, to 74 percent (see Table 6). In the earlier two decades, it rose by less: 17.8 percentage points. India's literacy rate remains poor by global standards, but it has improved much faster in the era of reform than in the earlier era of socialism.

In the past decade, the improvement in all-India literacy (9.7 percentage points) was vastly exceeded by several poor backward states—Bihar (16.8), Uttar Pradesh (11.5), Orissa (10.4), and Jharkhand (16.1). Female literacy improved even more dramatically, by 11.8 percentage points across India, and at still higher rates in Bihar (20.2), Uttar Pradesh (17.1), Orissa (13.9), and Jharkhand (15.3).

Life expectancy in India is up from an average of 58.6 years in 1986–91 to 68.5 years. Infant mortality is down from 87 deaths per 1,000 births to 40. These are major improvements. Yet they lag well behind achievements in other countries.[29]

THE MAIN FAILURES OVER THE PAST 25 YEARS

Despite 25 years of economic reform, India remains substantially unfree and plagued by poor governance and pathetic delivery of all government services.

Neoliberalism or Neo-Illiberalism?

Leftist critics accuse India of going down the path of neoliberalism. The actual process could better be called neo-illiberalism. Although many old controls and licenses have indeed been abolished over the past 25 years, many new controls and bureaucratic hurdles have appeared, mostly in such areas as the environment, forests, tribal rights, and land and in new areas like retail, telecom, and Internet-related activities. Many state governments have failed to liberalize sufficiently. Hence, entrepreneurs complain bitterly of red tape and corruption.

A survey conducted in January 2016 by the Center for Monitoring Indian Economy

“In India, criminals take part in politics and often become cabinet ministers.”

Table 6. Literacy Growth in India (%)

	1950–51	1960–61	1970–71	1980–81	1990–91	2000–01	2010–11
Literacy	18.3	28.3	34.4	43.6	52.2	64.8	74.0

Source: Government of India, Census of India 2011, http://www.Censusindia.gov.in.

> “Areas that were comprehensively liberalized saw the disappearance of corruption.”

showed that projects worth Rs 10.7 trillion ($160 billion) were stuck for various reasons, up from Rs 10.5 trillion ($158 billion) in September 2015.[30] The Heritage Foundation's *Economic Freedom Index* places India at just 123rd out of 178 countries. Of the foundation's five categories—free, mostly free, moderately free, mostly unfree, and repressed—India falls into the "mostly unfree" category. The Fraser Institute's index of economic freedom ranks India at 114th of 157 countries. India's freedom score as calculated by the Fraser Institute has actually declined in recent years, from a peak of 6.71 in 2005 to 6.43 in 2013.[31]

The World Bank's 2016 *Doing Business* report puts India at 130th of 189 countries in the ease of doing business in the country. That change is an improvement from its earlier 142nd position, but it still leaves India in the bottom half of countries. India ranks especially low in the ease of getting construction permits (183rd), enforcing contracts (178th), paying taxes (157th), and starting a business (155th).[32]

Poor Governance, Pathetic Delivery of Government Services

Markets cannot function without good governance. With almost no exceptions, the delivery of government services in India is pathetic, from the police and judiciary to education and health. Unsackable government staff members have no accountability to the people they are supposed to serve, and so callousness, corruption, and waste are common. Politicians like a patron–client system in which they earn gratitude by helping constituents and sundry groups through the many controls and permits, rather than abolishing the controls and permits, which would level the playing field but also leave them less powerful.

THE JUDICIAL SYSTEM IS A MESS. Justice is supposed to be blind. In India, it is also lame. India holds the world record for legal case backlogs (31.5 million), which will take 320 years to clear, according to Andhra Pradesh high court judge V. V. Rao. India's Law Commission has recommended the appointment of 50 judges per million population (in the United States, the ratio is much higher at 107 per million). The current sanctioned judicial strength is just 17 per million, and unfilled vacancies are as high as 23 percent in the lower courts, 44 percent in high courts, and 19 percent in the Supreme Court. No wonder the staggering backlog of cases does not diminish, and most people are reluctant to litigate to redress their grievances.[33] The lower courts are hotbeds of corruption, and recently senior lawyers such as Prashant Bhushan have alleged that even Supreme Court judges are corrupt.

Lengthy procedures and constant adjournments mean that cases can linger for decades or even more than a century. In the case of the 1975 murder of L. N. Mishra, a prominent politician, 20 different judges took 38 years to reach a verdict, although the case was supposed to be heard on a day-by day basis. Of the 39 witnesses called by the defense, 31 died before the case ended. When the accused sought to have the case dismissed saying the long delay had made justice impossible, the court declared that 38 years was by no means too long.[34]

However, there are two bright spots. First, the judiciary is quick to decide on writ petitions against arbitrary government action, which has proved a great comfort to investors. Second, faced with an incompetent and corrupt administration that fails to deliver, judicial activism has frequently taken the shape of orders to the government on executive matters. Purists will object that the judiciary should stay within its area and not interfere in the executive branch. But for many Indians, court activism is the only way to get redress from a callous administration.[35]

THE POLICE SYSTEM IS A MESS. India has 123 policemen per 100,000 population, almost half the UN recommended level of 220 and far below the levels in the United States (352) and Germany (296). Huge unfilled vacancies are common in all states. In Uttar Pradesh, a state of 200 million people, the overall shortage is 43 percent, with the shortage of head constables being 82 percent and inspectors 73 percent.[36]

The police are notoriously inefficient and corrupt. In many states, they will not even register complaints without a bribe.

N. C. Saxena, who headed the 1962 National Police Commission, once wrote that the police had ceased to regard crime detection and criminal conviction as their key goals. The reason was that the agenda of home ministers in every state was very different. The top priority of home ministers was to use the police to harass political opponents. The second priority was to use the police and prosecutors to tone down or dismiss cases against their own parties and coalition members. The third priority was to use police for VIP security. And the last priority was to use police for crime detection—which yielded no political dividends and so received the least attention.

One consequence of a lousy police force and lousy courts is that virtually no influential person gets convicted beyond all appeals: he or she is likely to die of old age first. The system rewards lawbreakers and penalizes law abiders. And that erodes every walk of life from business and politics to education and health. Without better governance, economic liberalization will not work properly, because the first assumption of all market economics is the existence of rule of law. If not, the quasi-mafia and crony capitalists will rule supreme.[37]

POLITICS ARE CRIMINALIZED. In India, criminals take part in politics and often become cabinet ministers. That gives them huge clout and ensures that charges against them are not pursued. An analysis by the Association for Democratic Reforms looked at 541 of the 543 members of Parliament elected in 2014 and found 186 had criminal cases pending. In the earlier 2009 election, the figure was 158. Of the winners in 2014, 112 have been charged with serious offenses, such as murder, kidnapping, and crimes against women. Some of those charges may be false but not most. No party is clean—all have criminals aplenty, since those people provided money, muscle, and patronage networks that every party finds useful.[38]

Only institutional change can break the criminalization of politics. Exposure of criminal cases is not enough. India needs a new law mandating that all cases against elected members of Parliament and members of the Legislative Assemblies will receive top priority and will be heard on a day-by-day basis until completed. That law will make electoral victory a curse for criminals—it will expedite their trials instead of giving them the political immunity they seek. If such a law is enacted, we may well see criminal legislators and ministers resigning in order to get off the priority trials list. Such a reform can truly transform the existing perverse incentives.

CORRUPTION HAS EXPERIENCED A RECENT BACKLASH. Corruption in countries often gallops upward with GDP, and India in the past 25 years has been no exception. In one sex scandal, the governor of a state had to resign after the madam of a brothel circulated photos of him with three naked girls. Why did she do so? Because the governor had promised her a mining license, and when he failed to deliver, she exposed him in revenge. Only in India is the supply of naked girls a potential qualification for getting a mining license.[39]

The comptroller and auditor general (CAG), who for decades had produced little-read audits of government finances, suddenly started calculating the possible revenue lost by the government by allocating spectrum on a "first come, first served basis" (in reality favoring friends who were tipped off on the deadline) instead of auctioning it. He estimated the loss at Rs 1.76 trillion ($26.2 billion). Later, the CAG estimated the loss to the government from coal mines being "allotted" by ministerial discretion instead of being auctioned at Rs 1.86 trillion ($27.8 billion).

The Supreme Court joined the anticorruption party by castigating discretionary allotments of any natural resource and cancelling spectrum licenses for which foreign companies had paid millions of dollars. The court also held individual bureaucrats responsible, sending a chill through the entire bureaucracy, which hitherto had assumed they were protected by the decisions of their ministers.

> **"Every year, the central and state legislatures enact more laws and regulations without abolishing thousands of obsolete ones."**

> **"Studies show that subsidized farm credit is being diverted by farmers to nonfarm uses, and some farmers simply borrow cheap and on-lend at higher rates."**

An anticorruption crusade led by Anna Hazare, a veteran social activist, attracted massive public response. The anticorruption uproar led to complete paralysis in decision-making: no bureaucrat or minister wanted to sign any file for fear of being accused of corruption. The stink of corruption led to the decimation of the Congress-led United Progressive Alliance government in the 2014 election, which brought Narendra Modi of the Bharatiya Janata Party to power.[40]

Critics claim that economic reforms brought in the massive corruption. In fact, areas that were comprehensively liberalized saw the disappearance of corruption. Before 1991, bribes were needed for industrial licenses, import licenses, foreign exchange allotments, credit allotments, and much else. But economic reform ended industrial and import licensing, and foreign exchange became freely available. Lower import and excise duties ended most smuggling and excise tax evasion. However, the economic boom hugely raised the value of all natural resources and the telecommunication spectrum, thus raising kickbacks for their allotments.

Many infrastructure areas earlier reserved for the government were opened to private-sector participation, often in public–private partnerships, and many of them were bedeviled by crony capitalism. Businesspeople said most areas became cleaner after liberalization, but some areas worsened—namely, natural resources, real estate (which was always highly corrupt and highly regulated), and government contracts. Transparency International's *Corruption Perception Index* rated India 34th of 41 countries in its first report in 1995, improving to 45th of 52 countries in 1997. Its position further improved to 84th of 168 countries in 2015 and stood at 76th of 168 countries in 2016. So India has moved from being in the bottom quintile of countries to the top half. Extensive corruption in recent years in some sectors cloaks a general improvement in the fully liberalized sectors.[41]

Narendra Modi was elected on an anticorruption platform, and businesspeople say extensive corruption has largely ended in New Delhi. But it continues in state capitals that control 62 percent of all government spending. And for the average person, the worst corruption is that of low-level government functionaries.

Even as liberalization has abolished regulations and associated corruption in traditional areas, it has seen the rise of hundreds of new controls related to the environment, health, safety, forests, tribal areas, and land acquisition. Every year, the central and state legislatures enact more laws and regulations without abolishing thousands of obsolete ones. Many state governments have brought in new price controls. So India remains a difficult country in which to do business.

LOUSY GOVERNMENT SERVICES LEAD TO LOUSY SOCIAL INDICATORS. The quality of the delivery of government services remains poor. The big improvements in private-sector competitiveness are not even remotely replicated in government service competitiveness. India's social indicators remain dismal. It has slipped even compared with the other five countries of South Asia (Bangladesh, Bhutan, Nepal, Pakistan, and Sri Lanka—see Table 7.) Yet India has the fastest economic growth in South Asia. Back in 1990, only one of its neighbors, Sri Lanka, had better social indicators, but now India looks to be second worst, ahead of only trouble-torn Pakistan.

Indian social indicators have improved faster in the past 25 years of liberalization than in the earlier socialist era, but the improvement is clearly insufficient. Government services of all sorts remain basically unreformed and are delivered by a callous, unsackable bureaucracy. Prime Minister Modi shows no sign of taking on this bureaucracy. Chief ministers who have tried to take on the trade unions of the civil service have typically been forced to retreat.

Surveys have shown that half of government schools have no teaching activity at all: teacher absenteeism is chronic, which induces high pupil absenteeism.[42] Teachers in government schools are highly paid even by international standards, yet they neglect their duties with impunity. As Table 8 shows, the ratio of

Table 7. India's Ranking among Six South Asian Nations (Top = 1, Bottom = 6)

	In 1990	Circa 2011
GDP per capita	4	3
Life expectancy	4	5
Infant mortality rate	2	5
Under age 3 mortality rate	2	5
Maternal mortality rate	3	4
Total fertility rate	2	4
Access to better sanitation	4–5	5
Child immunization (DPT)	4	6
Child immunization (measles)	6	6
Mean years of schooling at age 25+	2–3	4
Female literacy at age 15+	2–3	4
Proportion of underweight children	4–5	6

Source: Jean Drèze and Amartya Sen, *An Uncertain Glory: India and Its Contradictions* (New Delhi: Penguin, 2013), p 49.

Note: In some cases, the rank is ambiguous for want of data from Nepal and Bhutan. DPT = diphtheria, pertussis, and tetanus.

“Poor infrastructure is India's Achilles' heel.”

Table 8. Primary School Teacher Salaries as Ratio of per Capita GDP

Country/Area	Reference Year	Ratio of GDP per Capita
OECD average	2009	1.2
China	2000	0.9
Indonesia	2009	0.5
Japan	2009	1.5
Bangladesh	2012	1.0
Pakistan	2012	1.0
Nine major Indian states	2004–5	3.0
Uttar Pradesh	2006	6.4
Bihar	2012	5.9
Chhattisgarh	2012	4.6

Source: Jean Drèze and Amartya Sen, *An Uncertain Glory: India and Its Contradictions* (New Delhi: Penguin, 2013).

Note: OECD = Organisation for Economic Co-operation and Development.

> “India is producing millions of unemployable school and college graduates.”

Table 9. Public Health Spending as a Percentage of GDP

Region	Percentage of GDP
India	1.2
Sub-Saharan Africa	2.9
East Asia and the Pacific	2.5
Middle East and North Africa	2.9
Latin America and the Caribbean	3.8
Europe and Central Asia	3.8
World average	6.5
European Union	8.1

Source: Jean Drèze and Amartya Sen, *An Uncertain Glory: India and Its Contradictions* (New Delhi: Penguin, 2013).

teacher salaries to GDP is an average of 3.0 in nine major states, against just 1.2 in the Organisation for Economic Co-operation and Development, 0.9 in China, 1.5 in Japan, and 1.0 in Bangladesh and Pakistan.

Many teachers are deep into politics, and many become legislators. Teachers staff polling booths during elections, which is one reason no party wants to crack down on teachers: they may retaliate by collaborating with rivals in stuffing ballots. Yet these same teachers often do not teach at all: desperate poor families are pulling their children out of free but useless government schools and putting them in private schools, which are somewhat better. One study of 74 countries (the Program for International Student Assessment PISA Plus survey of 2009) placed India last, even though India in this case was represented by its two best states. The government's reaction was to stop participating in future surveys.[43]

In 2015 India's *Annual Status of Education Report* said that only 48.1 percent of children in their fifth school year could read a text appropriate for their second school year. Arithmetic remains a challenge. Only 44.1 percent of Class 8 students in rural India managed to solve a division problem in 2014, compared with 46 percent in 2013.

India's public spending on health, which elsewhere commonly provides health care access to the poor, has always been among the lowest in the world. India has world-class hospitals for the elite, but the masses are at the mercy of quacks and dubious practitioners of traditional indigenous medicine. Table 9 shows how far India lags behind other regions in public health spending.

Given this low rate of public spending, the quality of public health is poor, and health indicators in India are typically worse than in neighboring countries of South Asia. India has some of the worst nutritional indicators in the world. Anemia affects over 80 percent of the population in several states, including many in the richest one-third. Child malnutrition, measured by low weight for age, affects 46.7 percent of all Indian children, worse than in most African countries.

A family health survey suggests that virtually no improvement in child malnutrition occurred between 1998–99 and 2005–6, despite rapid GDP growth. However, data from the National Nutritional Monitoring Board show some improvement. By global standards, Indian children suffer from stunting, low weight, and wasting. The puzzle is that malnutrition and anemia affect high-income groups too. Calorie intake is falling despite rising income—poor people want to switch to superior, tasty foods rather than get more nutrients out of basic foods. One reason for the measured malnutrition is that open defecation spreads diseases that inhibit the absorption of food nutrients. Better sanitation is vital and is a public health issue. Nutrition is a bigger problem than hunger, so nutritional education and fortification of food with vitamins, iron, and iodine should be on the agenda.[44]

Subsidies, freebies, and waste are still a problem. Formal subsidies as defined by the central government have fallen from 2.5 percent of GDP to 1.6 percent. But that definition excludes a variety of goods and services provided below cost, and which are often free. The National Institute of Public Finance and Policy has estimated subsidies, broadly defined as nonrecovered costs of services and goods, at 13.4 percent of GDP, of which barely half are for merit goods and half are for nonmerit goods.

Subsidies for public health education and basic services are surely warranted. But many other subsidies are nonmerit goods, and they include free or highly subsidized electricity and water, fertilizers and petroleum products, higher education, food and other benefits for well-off people, and a bewildering variety of freebies given by various state governments.

The latest election manifesto of the All India Anna Dravida Munnetra Kazhagam, which rules the state of Tamil Nadu, includes the following freebies: cell phones for ration card holders, laptops with Internet connections for 10th- and 12th-grade students, maternity assistance of Rs 18,000 ($269), increased maternity leave (from six to nine months), 100 free electricity units every two months, waiver of all farm loans (at a cost of Rs 400 billion or $5.9 billion), increased fisher folk assistance to Rs 5,000 ($75), a 50 percent subsidy for women to buy mopeds or scooters, an eight-gram gold coin for women getting married, and a free woman's kit, including sanitary napkins. Note that the state government already provides 20 kilos of free rice per family; a free mixer, grinder, and fan per family; subsidized kitchens; and subsidized goats or cows for rural families.[45]

The most important government programs, like subsidized food and a rural employment guarantee scheme, are plagued by waste, corruption, ghost rolls, and a huge leakage of benefits. The government itself estimates that it takes three rupees (Rs) to get one rupee to the poor. The list of subsidies and freebies excludes tax breaks of all sorts, many of which make no sense, estimated at Rs 623 billion (US$9.3 billion) in the 2016 budget. Losses of state electricity boards have soared to Rs 3 billion (US$44.8 million). A scheme for cleaning up electricity losses has been launched but is likely to fail, as did an earlier rescue in 2002. The fertilizer subsidy alone has sometimes been 1.5 percent of GDP, more than all public health spending combined.[46] Subsidized fertilizer is being smuggled out to Bangladesh, a poorer country that has no such subsidy. Recent studies show that subsidized farm credit is being diverted by farmers to nonfarm uses, and some farmers simply borrow cheap and on-lend at higher rates.[47]

Political parties know subsidies are excessive and irrational but claim they have to continue them to survive in elections. Competition for freebies is a political race to the fiscal bottom. And it has no easy fixes in a democracy. Consequently, the limited resources of a still-poor country are constantly being wasted on a massive scale instead of being used to build the economy, social infrastructure, and effective safety nets.

THE INFRASTRUCTURE IS A MESS. Poor infrastructure is India's Achilles' heel. Any time economic growth takes off, it runs into an infrastructure constraint. From 2004 to 2014, the government aimed to overcome the problem through a massive expansion of public–private partnerships and boasted that India had more such partnerships than any other country. Alas, many of them are now bust, and many others have been abandoned.

The 12th five-year plan (2012–17) envisaged $1 trillion of investment in infrastructure, of which half was to come from the private sector. That goal now sounds like a pathetic joke. The gargantuan losses of many infrastructure

> **"The vast majority of successes have been private-sector successes, whereas the vast majority of failures have been government failures."**

> **"Without better institutions, India will be unable to sustain high growth."**

companies now threaten to sink the banks that lent to them. About 10–20 percent of the loans of public-sector banks have been restructured or are under some form of stress.

With the slowdown of economic growth after 2008, many infrastructure projects suffered from excess capacity. Delays in land acquisition and environmental clearance plunged others into the red. No less than 30,000 megawatts of power capacity was stranded for want of coal and natural gas. State electricity boards have given massive subsidies to farmers and other users and have simply not paid power distribution companies, which have racked up Rs 3 trillion ($44.8 billion) in losses.

In India, delays in clearances and land acquisition make early stages of infrastructure very risky. Yet such projects have historically had a high debt-to-equity ratio, so any delay is financially fatal. The Modi administration has given the government a major role in financing fresh equity in infrastructure, with the private sector mainly executing government contracts. Clearances and land acquisition have picked up. Bank loans to state electricity boards have largely been replaced by state bonds, relieving bank stress.

Arvind Panagariya, head of Niti Aayog, details the plan to eliminate rail capacity and speed issues:

> Of stuck projects worth Rs 3.8 trillion, this government has already unblocked Rs 3.5 trillion worth of projects. Consequently, road construction has risen from 8.5 kilometers a day during the last two years of the previous government to 11.9 kilometers in 2014–15 and 16.5 kilometers in 2015–16. The construction of national highway projects awarded has risen from 3,500 kilometers in 2013–14 to 8,000 kilometers in 2014–15 and 10,000 kilometers in 2015–16. The average rate of expansion of rail tracks has risen to 7 kilometers per day . . . the construction of the first high-speed rail between Ahmedabad and Mumbai, the modernization of 400 major railway stations, the construction of dedicated eastern and western freight corridors of 1,305 km and 1,499 kilometers, respectively, and laying down of 1,875 kilometers of new railway lines.[48]

Public–private partnership projects are picking up once more but have the potential to once again get bogged down, and any rescues will raise outcries that crony capitalism has returned. The current practice of auctioning such projects at a fixed tariff for 25 years does not work, since conditions keep changing, and any change in contract draws accusations of crony capitalism. India needs an independent institution that can renegotiate infrastructure projects and be seen to be honest.[49]

The land problem is being overcome by replacing forcible land acquisition by voluntary land pooling, in which farmers give up land but get back a part of it after development, which has commonly increased the land price tenfold. The new capital of Andhra Pradesh has acquired over 30,000 acres through land pooling.[50]

Coal production rose by 32 million tons in 2014–15 against an increase of 31 million tons in the previous four years together. Coal shortages have ended, and most parts of India have surplus electricity for the first time in decades. However, state electricity boards have not been reformed as a condition of their rescue, and they have the potential to once again go deep into the red because of politically ordained subsidies. In sum, infrastructure problems are slowly lessening, but major challenges remain.[51]

THE SKILL SHORTAGE IS WORSENING. India is supposedly going to reap a bonanza from its demographic dividend. UN estimates suggest that changing demographics will give India an additional 280 million people in the working-age group (15–64 years) between 2010 and 2050, even as China's workforce declines in absolute numbers. But this dividend will prove worthless unless the new workers are skilled and can find useful jobs.

India's primary schools are in pathetic shape, and so dropouts are excessive, and those completing school are barely educated. College expansion has been massive, especially of private colleges in recent decades, but the quality is spotty and the education, often useless. Consequently, India is producing millions of unemployable school and college graduates who don't want to do manual work but don't have the skills for white-collar work either. India is now witnessing a demand from relatively well-off castes—such as the Jats in Haryana and Uttar Pradesh, the Gujars in Rajasthan, and the Patels in Gujarat—for reclassification as "backward castes," so that they qualify for a quota in government jobs and top educational institutions. When the town of Amroha invited applications for 114 jobs as "sweepers," it received 19,000 applications, including some from people with MBAs and B.Tech. degrees.[52]

Recognizing the problem, the National Skills Development Corporation, a government agency, is financing private companies that do vocational training, but that has not worked. In the absence of a credible certification system, employers are unwilling to pay a wage premium for workers with vocational training certificates. Quality has to replace quantity, and that has always been a weakness of all government services and government-financed schemes. Posts in government colleges have long been influenced by politicians and sometimes given in return for kickbacks. The explosion of private engineering colleges after the software boom means India has almost 1.5 million engineering seats on offer, of which barely two-thirds are filled. Some employers say only 10 percent of engineering graduates are employable as software engineers. Quality is a huge future challenge for which the entire institutional framework of education needs overhauling.[53]

CONCLUSION

How can we sum up 25 years of economic reform? Three major trends are visible. First, the vast majority of successes have been private-sector successes, whereas the vast majority of failures have been government failures, mainly in service delivery. Second, wherever markets have become competitive and globalized, the outcomes have been excellent. But many areas remain unreformed, a few areas have been marked by backsliding, and those along with new forms of regulation are combining to create what can be called neo-illiberalism. Third, the weak quality of Indian institutions is increasingly a problem, and without better institutions, India will be unable to sustain high growth.

Consider each of those three trends in further detail. The private sector has performed outstandingly in the past 25 years, taking advantage of new opportunities created by liberalization and globalization. Indian companies more than held their own against foreign newcomers, and the vast majority of big Indian companies have become multinationals, making acquisitions globally.

The computer software and business services sector has been outstanding and has become India's largest and most famous export sector, fetching $110 billion in 2015–16 against India's entire merchandise exports of $261 billion. The auto industry, highly protected for decades, has opened up and become world-class: India is now a global hub for the production and design of small cars. The pharmaceutical industry feared being wiped out by the acceptance of drug patents after the creation of the World Trade Organization in 1995. But in fact it flourished in the new climate and now supplies 20 percent of the U.S. consumption of generic drugs. Most Indian pharmaceutical companies export more than they sell at home, and dozens have become multinationals through foreign acquisitions and organic expansion.

Reliance Industries Ltd. has set up the biggest export-oriented oil refineries in the world and has higher refining margins than the famed refineries of Singapore. Dozens of completely new corporations have emerged out of nowhere and have soared to the top (the latest being e-commerce giants like Flipkart). India has become a global hub for R&D and for frugal engineering.

India has also witnessed several private-sector failures, notably of companies in public–

"Court cases go on forever, few criminals are convicted beyond all appeals, and contracts are very difficult to enforce."

"Government banks still control 70 percent of bank lending, have the worst record of bad loans and financial losses, and yet are convenient cash cows for politicians."

private partnerships in infrastructure. Crony capitalism has become a problem in many areas where political discretion flourishes. However, both cronyism and public–private partnerships could be called examples of government failure rather than private-sector failure. On balance, India's private sector has done a world-class job of transforming India.

By contrast, government failure has been widespread. All tiger economies witnessed a big improvement in the provision of public goods, which was needed to encourage private dynamism and sustain growth. But in India, the provision of all government services remains poor, and so India has slipped in social indicators compared with its slower-growing neighbors in South Asia. Even remote Indian villages have an adequate supply of shops providing cigarettes and tea. But they have no adequate supply of education, health, public safety, or judicial redress.

Why? Because the sellers of tea and cigarettes are accountable to the consumers they serve, and their income depends on satisfactory service provision. But government services are provided by salaried, unsackable staff, who are not accountable to those they serve, and who are justly notorious for corruption and callousness. They are accountable only to ministers in state capitals, where powerful trade unions ensure that there is no penalty for nonperformance. India needs new laws and institutions to ensure accountability of government servants of all consumers: this alone will raise the quality of government services. Cash transfers to the needy can be a vast improvement over leaky, corrupt subsidies for items ranging from food grains and fertilizers to farm credit and rural electricity. India needs new laws and institutions to ensure accountability to consumers. In education, two obvious remedies are vouchers to poor families and honest licensing of private schools to empower parents.

The second area of concern is the emergence of neo-illiberalism. Wherever the government has created competitive, globalized markets, the outcomes have been outstanding. In the 1990s, the government gradually opened up the economy, abolishing industrial and import licensing, freeing foreign exchange regulations, gradually reducing import tariffs and direct tax rates, reforming capital and financial markets, and generally cutting red tape. Those changes enabled India to boom and become a potential economic superpower. But some areas were never liberalized, such as land and natural resources, and those areas have been marked by massive scams and crony capitalism that have created widespread public outrage. The resulting uproar has hugely slowed decisionmaking. New rules, however, are making it mandatory to auction some natural resources rather than to allot them by ministerial discretion. That is a major improvement, but the reduction of ministerial discretion needs to be extended much further.

Many old price and quantitative controls should be abolished, and yet more are being enacted. Extensive controls permeate the entire chain of agricultural inputs, outputs, and processed agricultural goods (notably sugar). New price controls have been clamped on seeds and even on royalties paid by seed companies to suppliers of technology.[54] The tax regime is uncertain, and many cases of retrospective taxation have tarnished the investment climate.

India is among the biggest users of antidumping measures permitted by the World Trade Organization. Even as old controls have been liberalized, dozens of new regulations are issued every year relating to new areas like the environment, health and safety standards, forests, and tribal areas. As with the old controls, the new controls are issued in the name of the public good and are then used by politicians and inspectors to line their pockets. The courts are so angry with corruption that they have increasingly intervened in many of these areas and have started issuing detailed new regulations (especially regarding natural resources), adding to controls and uncertainty. Instead of a million regulations badly enforced and wracked by corruption, India needs fewer regulations well enforced.

The third concern is the quality of India's institutions. The police-judicial system is pathetic, court cases go on forever, few criminals are convicted beyond all appeals, and contracts are very difficult to enforce. This situation favors lawbreakers at the expense of law abiders and now taints every walk of life from politics (which is full of criminals) to business, the bureaucracy, professions, and almost everything else.

The bureaucracy is notoriously corrupt and slow moving, marked by widespread absenteeism. Staff positions fall vacant and remain unfilled, leading to huge backlogs of work. Major reforms are needed to make the civil service accountable to citizens, with penalties (including firing) for nonperformers and wrongdoers. The bureaucracy lacks skills in almost every sector—from education and health to transport and electricity. The political class must find ways to induct experts from outside into the civil service. Bureaucrats complain of current rules that make them criminally liable for government decisions that lead to private gains for any corporation, even if they have not derived any personal benefit. Those rules hinder quick decisionmaking and must be abolished.

Public-sector corporations remain large, wasteful, and unreformed. Government banks still control 70 percent of bank lending, have the worst record of bad loans and financial losses, and yet are such convenient cash cows for politicians that no party wants to privatize them.

Educational and regulatory institutions need to be strong and independent. But in India, their quality is increasingly eroded by political interference and the appointment of political favorites rather than independent experts. Quick justice requires plea bargaining; quick resolution of bad loans and bankruptcies requires good faith in restructuring contracts; and many long-term contracts need periodic revision in good faith. But corruption is so rife—and accusations of corruption so widespread—that no negotiation in good faith is possible, and so the process of litigation and contracts in limbo goes on seemingly forever. India needs deep institutional reforms to remedy these ills and to produce a more honest, accountable, and sensitive system of institutions.

In their seminal book *Why Nations Fail*, Daron Acemoglu and James Robinson say that the quality of a country's institutions ultimately determines whether a nation succeeds or fails. Many poor countries have managed to achieve rapid economic growth in their initial stages even with weak institutions of the sort India has. But once a country enters middle-income status, as India now has, it must improve its institutions or suffer economic slowdown.[55] Doing the simplest things to improve productivity has already been achieved, and the future of productivity depends not just on technology but on the creation of strong, reliable, meritocratic institutions that are not easily subverted by money, muscle, and influence.

The 25 years from Narasimha Rao to Narendra Modi have moved India from low-income to middle-income status. To reach high-income status, India must become a much better governed country that opens markets much further, improves competitiveness, empowers citizens, vastly improves the quality of government services and all other institutions, jails political and business criminals quickly, and provides speedy redress for citizen grievances. That is a long and difficult agenda.

NOTES

1. *World Economic Outlook: Too Slow for Too Long* (Washington: International Monetary Fund, 2016).

2. Swaminathan S. A. Aiyar, *Escape from the Benevolent Zookeepers* (New Delhi: Times Group Books, 2008).

3. Arvind Panagariya, *India: The Emerging Giant* (New York: Oxford University Press, 2010).

4. T. N. Ninan, *The Turn of the Tortoise: The Challenge and Promise of India's Future* (New Delhi: Penguin, 2015).

5. Ibid.

6. *World Economic Outlook*.

7. Fareed Zakaria, "India Rising," *Newsweek*, March 5, 2006.

8. William Paddock and Paul Paddock, *Famine 1975! America's Decision: Who Will Survive?* (Boston: Little, Brown, 1967).

9. S. Mahendra Dev, "Economic Reforms, Poverty and Inequality in India," Symbiosis School of Economics, Pune, India, February 26, 2016.

10. Arvind Panagariya and Vishal More, "Poverty by Social, Religious and Economic Groups in India and Its Largest States, 1993–94 to 2011–12," Working Paper no. 2013-02, School of International and Public Affairs, Columbia University, New York, 2013.

11. *World Hunger Index 2015* (Washington: International Food Policy Research Institute, 2016).

12. Arvind Panagariya, "The Myth of Child Nutrition in India," Columbia University, New York, 2012.

13. Dean Spears, "Effects of Rural Sanitation on Infant Mortality and Human Capital: Evidence from India's Total Sanitation Campaign," Princeton University, Princeton, NJ, 2012.

14. "Start-Up Stories: NR Narayana Murthy, Infosys," BBC News, April 4, 2011.

15. World Bank, "Trade (% of GDP)," http://data.worldbank.org/indicator/NE.TRD.GNFS.ZS, May 15, 2016.

16. Swaminathan S. A. Aiyar, "The Hidden Benefits of Brain Circulation," *Times of India*, November 29, 2009.

17. Angela Saini, "India Is an Emerging Geek Power," *Guardian*, March 3, 2011.

18. Ambika Choudhary Mahajan, "1.5 Million Engineers Pass Out in India Every Year, Fewer Getting Hired," *Dazeinfo*, October 28, 2014.

19. James Wilson, "Liberty House Confirms It Will Bid for Tata Steel," *Financial Times*, May 1, 2016.

20. "Demography: China's Achilles Heel," *The Economist*, April 21, 2011.

21. S. Mahendra Dev, "Economic Reforms in India."

22. Ashok Gulati, Surbhi Jain, and Nidhi Satija, "Rising Farm Wages in India: The 'Pull' and 'Push' Factors," Commission for Agricultural Costs and Prices, Government of India, New Delhi, April 2013.

23. Swaminathan S. A. Aiyar, "The Elephant That Became a Tiger: 20 Years of Economic Reform in India," Cato Institute Development Policy Analysis no. 13, July 20, 2011.

24. C. K. Prahalad, *The Fortune at the Bottom of the Pyramid: Eradicating Poverty through Profits* (Philadelphia: Wharton School Publishing, 2004).

25. D. P. Warne, "Foreign Institutional Investors and Indian Stock Market Reforms," *International Journal of Marketing and Technology* 2 (2012): 201–10.

26. Aiyar, "The Elephant That Became a Tiger."

27. Ibid., p. 7.

28. Devesh Kapur, Chandra Bhan Prasad, Lant Pritchett, and D. Shyam Babu, "Rethinking Inequality: Dalits in Uttar Pradesh in the Market Reform Era," *Economic and Political Weekly* 45 (2010): 39–49.

29. Swaminathan S. A. Aiyar, *From Narasimha Rao to Narendra Modi* (New Delhi: Times Group Books, forthcoming).

30. Tadit Kundu, "No Progress on Stalled Projects while New Announcements Plunge," *The Mint*, January 6, 2016.

31. *2016 Index of Economic Freedom* (Washington: Heritage Foundation, 2016); James Gwartney, Robert Lawson, and Joshua Hall, *Economic Freedom of the World: 2015 Annual Report* (Vancouver, BC: Fraser Institute, 2015).

32. *Doing Business 2016: Measuring Regulatory Quality and Efficiency* (Washington: World Bank, 2016).

33. Pradeep Thakur, "Vacancies in Judiciary Hit Judge-People Ratio," *Times of India*, April 17, 2016.

34. Swaminathan S. A. Aiyar, "Strong Lokpal, Weak Judiciary Recipe for Failure," *Times of India*, December 25, 2011.

35. Aiyar, *From Narasimha Rao to Narendra Modi.*

36. Deepak Gudwani, "World Largest Police UP Has Half the Strength," *DNA India*, April 4, 2013.

37. Ibid.

38. Charlotte Alfred, "India's New Parliament Has the Most Members Facing Criminal Charges in a Decade," *Huffington Post*, May 23, 2014.

39. Swaminathan S. A. Aiyar, "Don't Cancel Coal; Blocks Levy Heavy Royalties Instead," *Times of India*, September 2, 2012.

40. Aiyar, *From Narasimha Rao to Narendra Modi.*

41. *Corruption Perceptions Index 2015* (Berlin: Transparency International, 2015).

42. "Absenteeism, Repetition and Silent Exclusion in India," CREATE India Policy Brief no. 3, Consortium for Research on Educational Access, Transitions and Equity, Brighton, UK, January 2011.

43. Jean Drèze and Amartya Sen, *An Uncertain Glory: India and Its Contradictions* (New Delhi: Penguin, 2013).

44. Ibid.

45. Swaminathan S. A. Aiyar, "The Alcoholic Mammaries of the Welfare State," *Times of India*, May 8, 2016.

46. Ibid.

47. Ashok Gulati and Prerna Terway, "Wake Up, Smell the Leakage," *Indian Express*, April 11, 2016.

48. Arvind Panagariya, "The Turnaround in Infrastructure," *Business Standard*, May 8, 2016.

49. Aiyar, *From Narasimha Rao to Narendra Modi.*

50. Swaminathan S. A. Aiyar, "Naidu Proves Land Pooling Is Better than Acquisition," *Times of India*, August 8, 2015.

51. Arvind Panagariya, "The Turnaround in Infrastructure," *Business Standard*, May 8, 2016.

52. Nazar Abbas, "19,000 Graduates, Postgraduates, MBSs, B Techs Apply for 114 Sweeper Jobs in UP Town," *Times of India*, January 21, 2016.

53. Aiyar, *From Narasimha Rao to Narendra Modi.*

54. Mayank Bhardwaj, "Monsanto Threatens to Exit India over GM Royalty Row," Reuters, March 4, 2016.

55. Daron Acemoglu and James A. Robinson, *Why Nations Fail: The Origins of Power, Prosperity, and Poverty* (New York: Crown, 2012).

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