



India's challenges and potential

Since his landslide election victory in May 2014, India's Prime Minister Narendra Modi has realized many accomplishments. These include lifting certain restrictions on foreign direct investment, passing a bankruptcy law to help with the overhang of bad debt, withdrawing high-value bank notes from circulation in an effort to reduce corruption by targeting the underground economy, and replacing a hodgepodge of business taxes that varied from state to state with a single national sales tax.

However, many significant challenges remain. For starters, the massive undertaking of changing the nation's tax code could lead to significant short-term economic disruption. A truly bungled implementation could dent the government's approval ratings and hurt its ability to garner support for further reforms, such as easing restrictive land and labour laws.

On top of all this, India must deal with the major long-term challenges of water scarcity, electricity shortages, rampant pollution and job creation for its rapidly growing population. Dealing with these issues is vital not only for generating economic growth, but also for maintaining political stability.

Having India's economic growth rate finally catch up with China's is less impressive than first meets the eye

After decades of lagging performance, India's economic growth rate has finally caught up with China's. India's GDP increased from 6.5% in 2013 to 7.9% in 2015 before slowing down to 6.8% in 2016. In contrast, China's growth fell from 7.8% in 2013 to 6.9% in 2015 before slipping further to 6.7% in 2016.¹

Some economists are reluctant to take India's GDP figures at face value. They feel growth could be overstated by just over one percentage point. To be fair, the veracity of China's GDP numbers has also been questioned repeatedly.

India's GDP growth rate finally catches up with China's

Year over year real GDP growth, seasonally adjusted

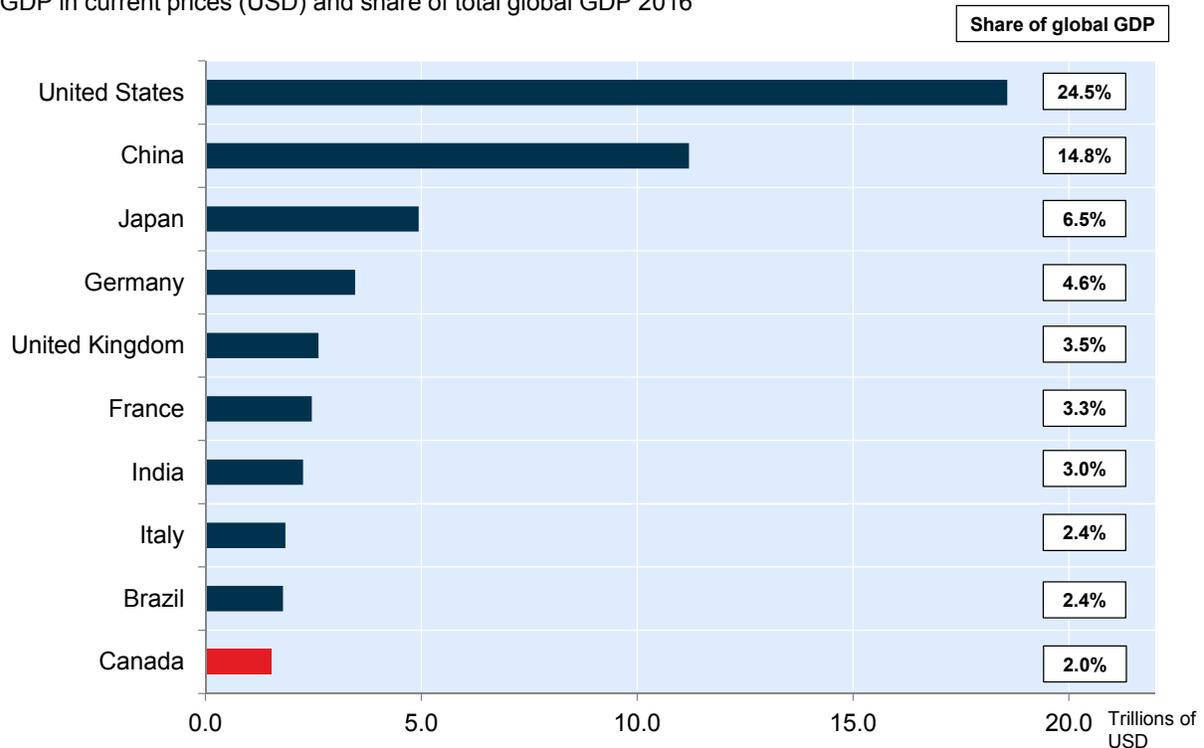


¹ IMF, 2017

When comparing the two countries, it is important to take into account their different levels of economic development. China has the world's second largest economy (\$11 trillion), while India's is ranked eighth (\$2.1 trillion).² After decades of double-digit annual economic growth, it is normal for China's economy to slow down as it approaches middle-income status and its population ages. China has also largely used up the low-hanging fruit of building up infrastructure and adopting foreign technology to propel growth.

World: Largest economies in the world

GDP in current prices (USD) and share of total global GDP 2016



NBF Economics and Strategy (data via World Bank)

Indeed, given its much lower level of economic development, India should actually be growing at a much faster pace than China. But in order for this to happen, India needs to find the political will to implement the crucial economic reforms discussed in this report.

Is the BJP on the cusp of becoming India's natural governing party?

In 2014, the Bharatiya Janata Party (BJP) led by Modi became the first party to win a majority in the lower house (Lok Sabha) of parliament since 1984. It won 282 of the 543 seats, an increase of 166 from the previous election. In stark contrast, the Congress Party (CP), which had long dominated the political scene, won only 44 seats, 112 fewer than the last time.

But in order for legislation to be passed into law, it must also be approved by the upper house (Rajya Sabha), where the BJP does not hold the most seats for the time being. Unlike the lower house where members are directly elected by the public, the states nominate 233 of the 245 members of the upper house. The remaining 12 are presidential appointments. The BJP currently has 56 MPs in the upper house, versus 59 for the CP. The BJP-led National Democratic Alliance has 74 members in total.

The BJP's recent string of electoral state victories means that the balance of seats in the upper house is set to change in its favour. Over the past year alone, the CP has lost control of six states. In addition to the national government, the BJP and its allies now control 17 of India's 31 state legislatures, representing more than 60% of the country's population.³

² World Bank, 2017

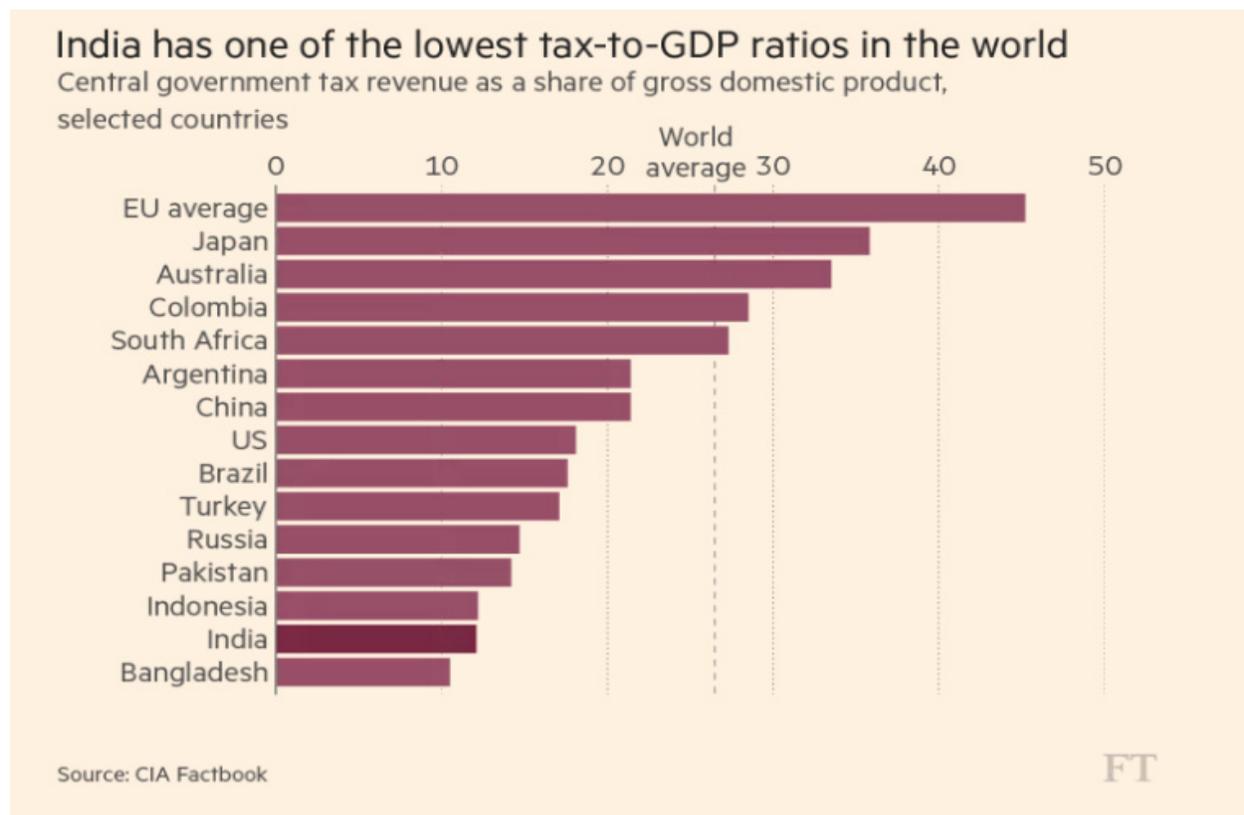
³ "Why India's opposition is nearly irrelevant," The Economist, April 27, 2017

Given that one-third of MPs in the upper house retire every two years, it is projected that the BJP will become the largest party in this chamber (68 members) by June 2018.⁴ This date could mark the moment the government and its allies attempt to push forward other major economic reforms.

Finally, it is important to note that India's decentralized political system means that Prime Minister Modi cannot advance his agenda anywhere near as fast as the leaders in China where power is concentrated in one party. The Indian government must negotiate with a myriad of groups, including factions within the BJP, coalition members and states. Further, given that India is a democracy, it cannot engage in major infrastructure/investment projects without first consulting the local population. Chinese authorities do not have this obligation.

Modi's massive tax gamble

India's tax system has long been infamous for its inefficiency. In the World Bank's latest survey of the ease of paying taxes in 190 economies, India ranked 172nd, vs. 131st for China, 45th for Russia and 181st for Brazil. India also has one of the world's worst tax-to-GDP ratios: 16.6% vs. an OECD average of 34%. This deprives the government of much-needed revenue to invest in education, health care, and infrastructure.



Source: "Narendra Modi embarks on a great tax gamble," FT, June 26, 2017

India's economy is in the process of implementing the most significant tax reform since the country gained independence in 1947. The new Goods and Services Tax (GST) is replacing a myriad of taxes that differ from state to state with a single nationwide sales tax. Under the old system, trucks waited for hours to pay taxes at state checkpoints before being allowed to cross. By easing commerce across state lines, it is hoped that this tax system will unify India's economy of 1.3 billion people.

⁴ "With impressive poll victories, BJP on track to gaining majority in Rajya Sabha," The Hindustan Times, March 13, 2017

The GST is also expected to deal a blow to the underground economy by bringing smaller businesses into the tax net. More specifically, larger companies are expected to exert more pressure on their suppliers to declare income because it will only be possible to claim certain tax rebates if every step of the supply chain is officially recorded.

The final design of the GST is more complex than many expected

While most countries with a GST have a single rate for goods and services, this is not the case for India. Instead of a single national rate, there are four. Companies will also have to file three tax returns a month in the states where they are present. In order to win approval for the new tax system from all of India's 29 states and seven territories, the government was forced to make a number of compromises.

Another major challenge will be teaching smaller companies how to file their taxes online. Many of them do not have computers and/or internet access. The government estimates small businesses account for 45% of manufacturing and employ more than 117 million people.⁵ We can expect the government to give these small businesses repeated extensions to comply in order to help them adjust to the new system and also to avoid a public backlash.

If the new tax gets mired in implementation problems or fails to deliver a significant improvement in economic growth, it could tarnish Modi's reputation and impede his ability to deliver further reforms.

The financial sector is burdened by bad debt

The government estimates that approximately 17% of debt (\$150 billion) either cannot be repaid or must be restructured.⁶ This is largely due to loans that were funneled (often under political pressure) into large-scale infrastructure projects without due diligence in an effort to cushion India from the impact of the global financial crisis. State-run banks account for 73% of total assets and 80% of non-performing loans.⁷ Having their balance sheets weighed down by bad debt means that loans to companies have actually shrunk for the first time in over two decades.



Economist.com

"Talk of a bad bank in India," The Economist, March 2, 2017

⁵ "Ready or not, Indian businesses brace for biggest-ever tax reform," Reuters, June 27, 2017

⁶ "Narendra Modi is a fine administrator, but not much of a reformer," The Economist, June 24, 2017

⁷ "Turning Economic Risk into Opportunity in India," Geopolitical Futures, March 23, 2017

Steps taken by government to deal with problem

- **Plans to create a bad bank.** This would house the bad loans taken away from the original lenders. In order for a bad bank to work, two things are required: cash and truthfulness. Cash to recapitalize the impacted banks and truthfulness to assign a realistic value to the bad debt in question. Fitch, a credit rating agency, estimates that approximately \$90 billion is needed to recapitalize India's banks.
- **A new bankruptcy law came into effect December 2016.** Its aim is to make it easier to dissolve an insolvent company and recover assets. The law requires bankruptcy to be completed within 270 days of a default. Prior to the adoption of this law, it took average of 4.3 years to resolve an insolvency in India, versus about one year for UK., while the recovery rate for creditors in Indian insolvencies was only 25%, compared with 77% for high-income nations.⁸ Analysts estimate that it will take another two years to fully implement the law. Only then will it be possible to assess its impact more fully. **Reports that the Reserve Bank of India notified 12 large debtors in June that the new bankruptcy law would be applied to resolve 2 trillion rupees (\$31 billion) of bad debts is a positive sign that the government is serious about enforcing this law.**⁹

Historically, debt-burdened countries that have bitten the bullet and written off their bad loans in a timely manner have performed much better economically than countries that have chosen not to revalue their impaired assets.

India's sovereign debt levels

India's sovereign debt as a percentage of GDP has remained stable since the financial crisis. Between 2008 and 2016, India's sovereign debt declined slightly from 74.5% to 66% of GDP. India's total debt (private and public) has also been stable over this period, at 135% of GDP. In comparison, China's total debt as a percentage of GDP rose from 140% in 2008 to 255% of GDP by the end of 2016. China's foreign exchanges reserves are, however, much higher than India's (\$3 trillion vs. \$386 billion).

At 22.9% of GDP, India's external debt compares favourably to that of many other emerging-market economies. Moreover, 52% of this external debt is denominated in U.S. dollars, while another 34% is denominated in Indian rupees.¹⁰

However, the looming recapitalization of its financial sector will either raise these debt levels or shrink its foreign reserves.

The agriculture sector is also weighed down by bad debt

Another factor that could negatively impact the country's finances further is Modi's intention to write off \$40 billion of bad debt accumulated by farmers (a very important political constituency) before the next election in 2019.¹¹

While the agriculture sector accounts for only 16.5% of GDP, it employs close to half of the population. This inefficiency is largely due to subsistence farming. With an average farm size of only 1.33 hectares, India cannot compete in the global market against farmers in South and North America where farms average 50.7 and 186 hectares, respectively.¹² Many Indians are prevented from leaving their farms due to a lack of job opportunities in manufacturing and other sectors, which in turn prevents the farms from being consolidated into larger units.

⁸ "India passes national bankruptcy law," Financial Times, May 12, 2016

⁹ "Clock is ticking on India's bad bank debts under bankruptcy laws," Financial Express, June 19, 2017

¹⁰ IMF, 2017

¹¹ "India to forgive billions of dollars of farm debt," Financial Times, June 7, 2017

¹² "Trade Profile: India's Struggle to Create Jobs," Stratfor, May 23, 2017

Many restrictions on FDI have been lifted

In June 2016, the government announced the elimination of several restrictions on foreign direct investment. Foreign investors can now purchase:

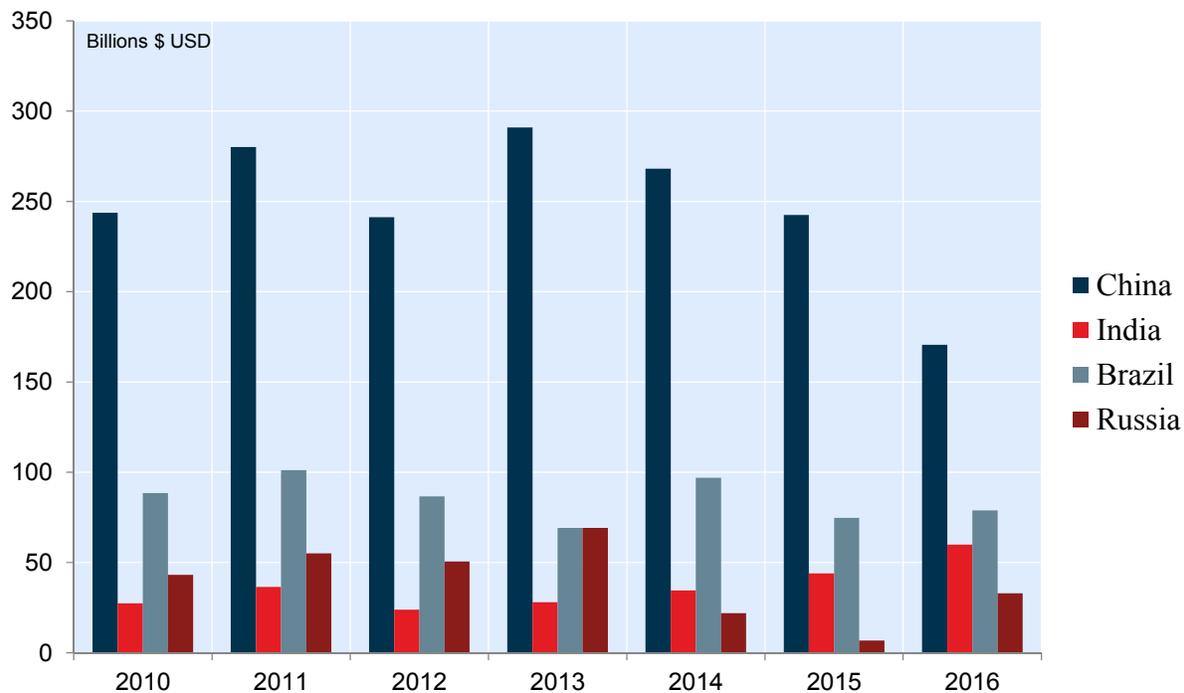
- 100% of military-equipment companies, up from 49%
- 100% of companies in the aerospace sector, up from 49%
- 74% of existing pharmaceutical companies, up from 49% (Proposals for 100% ownership will be considered on a case by case basis.)
- 100% of companies in broadcasting services, up from 74%

Foreign-owned retailers now have a three-year grace period to comply with local-sourcing rules requiring them to buy at least 30% of their materials from Indian vendors. "Cutting-edge technology" retailers such as Apple will get an additional five years to comply. **It remains to be seen how these laws will actually be enforced.**

India attracted \$60 billion in FDI in the year to March 2017, up \$44 billion the previous and \$28 billion in 2013.¹³

India's FDI inflows compared to its BRIC rivals

Foreign direct investment, net inflows, (BoP, current US\$)



NBF Economics and Strategy (data via World Bank & Reuters)

Modi's plans to increase manufacturing face several hurdles

In 2014, Modi announced plans to increase the manufacturing sector's share of GDP to 25% by 2022, up from its current level of 16% (versus 35% for China).¹⁴ However, there are several major challenges the government must overcome to attain this goal.

¹³ "India scraps foreign investment board in push for more FDI," Reuters, May 24, 2017

¹⁴ "The Difficulties of Retooling the Indian Economy," Stratfor, July 23, 2016

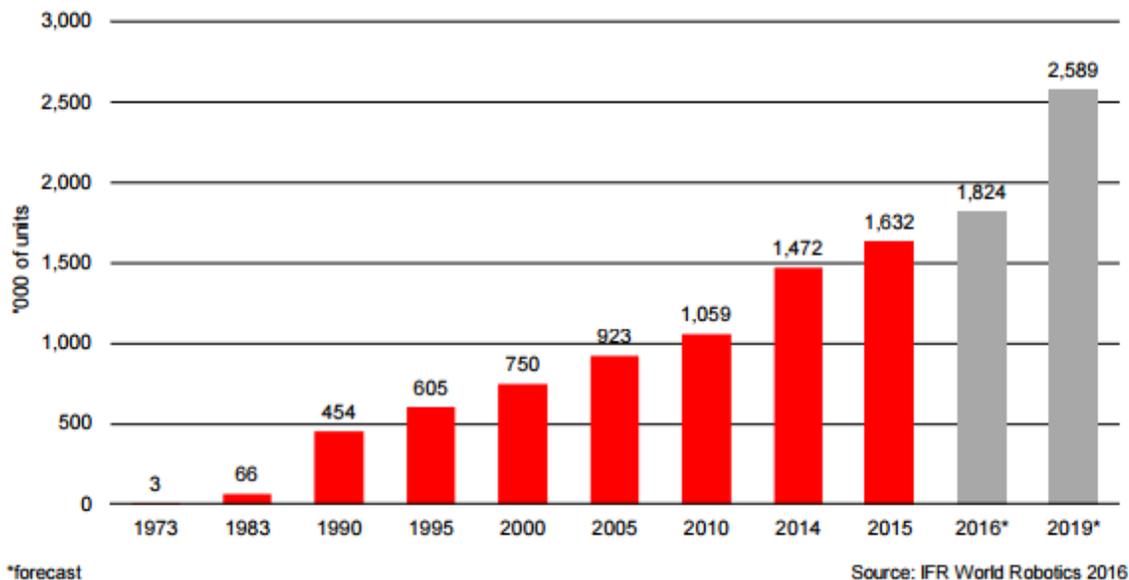
Eliminate restrictive labour laws that make it difficult for firms to fire employees. In India, companies with more than 100 employees generally cannot fire people without government permission. This encourages manufacturing companies to either stay small or expand via automation. Only about 10% of the people in manufacturing work in factories with more than 200 employees, compared with over 50% in China. A few states, such as Rajasthan (69 million people), have raised the threshold for when permission must be obtained for layoffs from 100 to 300 workers.

Reform complicated land acquisition laws. Any sale of land requires the approval of at least 70% of affected owners and must also pass a social-impact test. Compensation is set at double the market value for urban property and four times the value for rural land. Modi attempted to amend the legislation but was forced to back down in the face of fierce opposition. Some progress has been made at the regional level where a handful of states have amended their land laws in order to speed up land deals.

Infrastructure bottlenecks. India has made some headway on this front. Thanks in part to improved infrastructure, India advanced 16 places to the 39th spot among the 138 countries ranked by the World Economic Forum Global Competitiveness Report for 2016-2017. China ranked 28th. However, India still has much room for improvement. Logistics account for 16%-18% of production costs, compared with only 8%-10% in China.¹⁵ Improving the quality of infrastructure will become even more pressing as India's population continues to urbanize. In 2014, India opened parts of its previously closed railway sector to 100% foreign ownership in an effort to improve its transportation infrastructure.

India's race against robots. Historically, most countries have climbed up the economic development ladder by using low-cost labour to attract large-scale manufacturing investment. However, growing automation of the industrial process means cheap labour is gradually becoming less of a competitive advantage. All of this increases the urgency for India to pass economic reforms sooner rather than later in order to benefit from manufacturing while it still depends on a substantial human component. The greater the level of automation, the more that cheap electricity, quality infrastructure, highly trained workers and respect for IP protection will gain in importance as sources of competitive strength.

Worldwide estimated operational stock of industrial robots



¹⁵ A.T. Kearney (consulting firm) & "Govt aims to leverage technology to reduce logistics costs," Livemint, June 12, 2017

India's strong IT sector faces growing challenges from artificial intelligence

One area where India has long held a competitive edge is information technology services. Indian IT firms provide services ranging from entering/analyzing data to providing customer support for western corporations. In all, the IT sector accounts for 9.3% of the country's GDP (\$150 billion).¹⁶ Unfortunately, this sector is not labour-intensive, employing only about 3.7 million of the nation's labour force of roughly half a billion. **One particular risk that looms on the horizon for Indian IT firms is that many corporations are increasingly relying on automation technology to carry out routine IT support work and repetitive back-office tasks previously performed by humans.**

For better or worse, demographics is destiny

The United Nations forecasts that India's population will increase from its current level of 1.3 billion to 1.5 billion by 2030 and 1.7 billion by 2050. In comparison, China's population will stay roughly at its current level until 2030 (1.4 billion) and then decrease slightly to 1.3 billion by 2050.

On the positive side, India will have a much larger working-age population than China and fewer retired people as a percent of the population to support. The recent history of Japan demonstrates that an ageing and shrinking population hurts economic growth.

However, a growing labour force is an advantage, rather than a handicap, only if it possesses the skills needed to help grow the economy. Despite the fact that India is famous for its elite doctors and programmers, it has not been able to provide quality education to the masses. For example, half of ten-year-old Indians cannot read a paragraph meant for seven-year-olds.¹⁷ Further, 26% of the Indian population is illiterate, compared with under 5% of the Chinese population.¹⁸

If India is to have a hope of generating jobs for the over one million Indians joining the labour force each month, it will have to do a much better job of educating its population. Otherwise, India's demographics will go from being a potential advantage to being a major source of political instability. The United Nations estimates that 280 million more people will enter India's job market by 2050.

India's massive energy challenges

An estimated 230 million Indians have no access to electricity,¹⁹ while another 700 million living primarily in rural areas regularly get less than 6 hours of electricity a day.²⁰ Price controls are one of main reasons for this situation. Being forced to sell electricity at below cost has left providers burdened with massive debts. State-run utilities held a combined debt of 4.3 trillion rupees (\$67 billion) as of September 2015, according to the latest available data.²¹ This has reduced their financial ability and willingness to expand electricity production.

Those that hope Modi will remove price controls in the electricity sector point to how he took advantage of the drop in oil prices to eliminate subsidies for diesel fuel, which accounts for about 40% of India's total fuel demand. The real test will be whether the government can maintain this policy if and when oil prices rise substantially. The International Energy Agency estimates that India relies on imports for 80% of its oil consumption.

¹⁶ "Why automation can be a threat to India's growth," BBC, May 19, 2017

¹⁷ "India has made primary education universal, but not good," The Economist, June 8, 2017

¹⁸ "China, India and the clash of two great civilizations," Financial Times, June 5, 2017

¹⁹ "What the U.S. can learn from India on climate change and energy access," Reuters, June 26, 2017

²⁰ "Rural India needs solar power for more than just lighting, study finds," Reuters, May 26, 2017

²¹ "India's Power Surplus Might Not Be a Good Thing," Bloomberg June 5, 2017

India's air pollution problem

India is home to nine of the world's ten most polluted cities. Last November, Delhi's annual average measure of PM_{2.5}, a fine dust that is the most toxic component of air pollution, reached a high of 1000 micrograms per cubic meter, 40 times the level considered safe. The damage from sustained exposure to such high concentrations of PM_{2.5} is equivalent to smoking more than two packs of cigarettes a day.²² **The smog (which is made up of nitrogen and sulfur dioxides) has many sources. These include diesel-powered vehicles, coal-fired power plants (without pollution-control filters), mass burning of agricultural waste, and combustion of dung, wood and other fuels for cooking and heating.**²³

In an effort to reduce pollution, the government recently announced that it aimed for all cars to be electric by 2030 (an almost impossible target) and for 40% of electricity to come from renewable energy sources over the same time period. Coal currently accounts for 61% of India's electricity. Bans on burning garbage and agricultural waste are also in place but are often ignored or poorly enforced.

Solar power in particular has received a lot of attention. Better technology and increasingly cheaper panels have significantly reduced the price of solar power over the past decade. India plans to install thousands of small-scale solar-power grids across the country to bring basic electrical power to communities. Proponents of this strategy say this would allow these communities to avoid having to build power grids in the same way that parts of the developing world skipped building fixed telephone landlines and went straight to mobile phones.

While these small-scale solar grids have the potentials to provide homes in targeted areas with several hours of electricity a day, the intermittent nature of solar power means it will not be sufficient to power a large business and/or factory. Barring a breakthrough in electricity storage technology, this would require access to significant and continuous electricity generated by coal, gas or uranium. It is perhaps with this in mind that the government recently announced plans to build 10 nuclear reactors to roughly double the country's current nuclear capacity (which accounts for 2% of electricity production).

India's water challenges

The shortage of water is yet another challenge facing India. The country has 17.9% of the world's population but only 4% of its available freshwater resources. This means it has even less freshwater than China, which has 18.5% of the world's population but 7% of its freshwater.

This shortage has been exacerbated by pollution and significant water subsidies. The Indian government estimates that only 15% to 20% of its sewage is treated.²⁴ Also, despite the fact that India is one of the most water-stressed countries in the world, its citizen's pay some of the lowest water prices anywhere.

This means that, on the demand side, consumers have little incentive to conserve water while, on the supply side, investors have little motivation to build pipes and treatment plants. The overuse of water is further encouraged by the provision of virtually free electricity to farmers who pump water from underground aquifers.

Left unchecked, India's growing water issues could undermine its attempts to industrialize. Indeed, much of the public resistance to industrial and power projects stems from concerns that already scarce water supplies will be strained further.

²² "Smog Chokes Delhi," New York Times, November 7, 2016

²³ "Unraveling the Myriad Causes of North India's Pollution Pall," Yale Environment, February 9, 2017

²⁴ 85 per cent of country's sewage goes into water bodies: Govt, the Indian express, March 25, 2017



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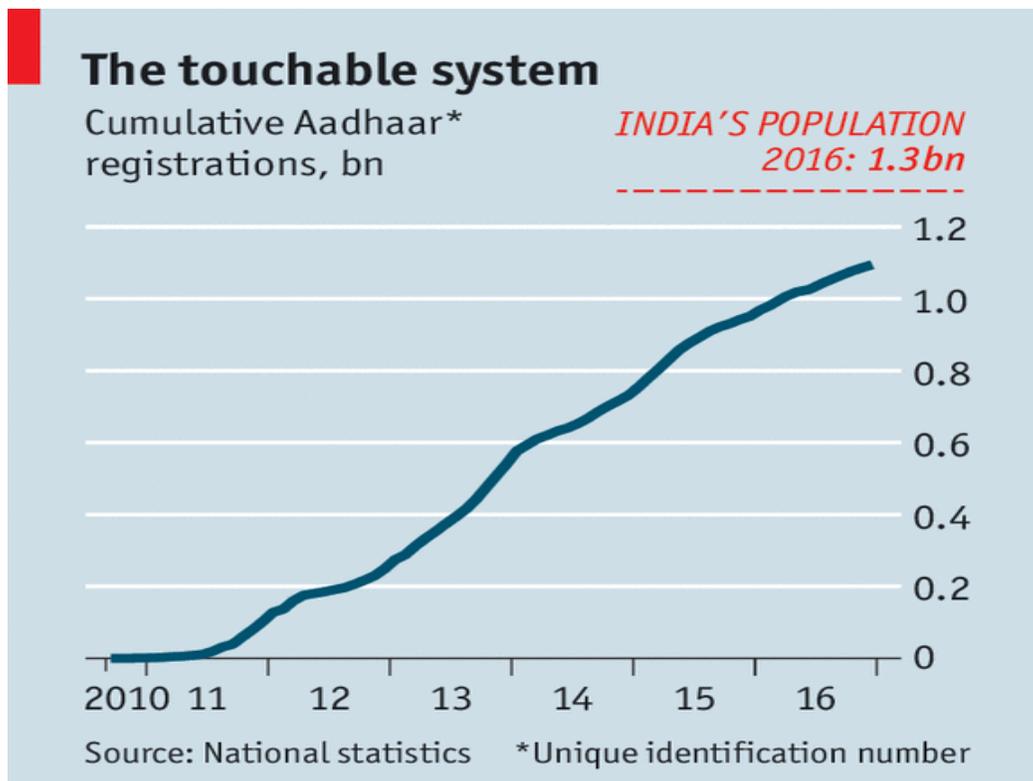
Source: Your Water Footprint, Stephen Leahy

India's massive digital ID rollout could be a game changer

India has the world's largest domestic biometric identification system, known as Aadhaar. Since 2010, the government has collected fingerprints and iris scans from more than one billion of its citizens. Each of them has been assigned a 12-digit identification number. This should eventually allow Indians to receive government aid via direct payments to their accounts, thus eliminating corrupt intermediaries who often siphon off a portion of the funds for themselves. To cite but one example, a large percentage of the subsidized food the government provides is stolen by corrupt bureaucrats and then sold on the black market. One government study estimates that only 27% of the money used for social programs reaches the intended beneficiaries.²⁵

If successful, the biometric identification system will also provide the government with the means to replace costly water and electricity subsidies to these sectors with direct deposits of cash payments into peoples' accounts. Higher prices would moderate demand and attract much needed investment to these sectors, while the impact of higher prices on the poorer and working classes could then be offset by direct cash payments, thus reducing the risk of a political backlash. However, there are fears this technology could be used to invade the privacy of ordinary citizens.

²⁵ "India's ID system is reshaping ties between state and citizens," Economist, April 15, 2017



Economist.com

Conclusion

India is a study in contradictions. On the one hand, it is a country with young demographics, abundant and cheap labour and a global competitive IT sector. These advantages have been reinforced by Modi's attempts to improve the business climate by, among other things, loosening restrictions on FDI, implementing a new bankruptcy law, and reforming the tax code.

On the other hand, India still has a very long to-do list. In the near term, it includes attempting to keep economic disruption arising from the tax code implementation to a minimum. The greater the chaos, the harder it will be to garner political support to reform restrictive land and labour laws. Without these reforms, India's manufacturing industry will be hard-pressed to acquire land for new factories and/or will continue to shy away from hiring workers for fear that they will not be able to lay them off during economic downturns.

Even more importantly, India must implement policies to begin addressing a number of critical challenges, each of which has the potential to derail India's economic prospects. These include increasingly stressed water supplies, electricity shortages and creating enough jobs for India's growing working-age population in the age of automation. From an investment perspective, significant financial resources must be funneled to these areas not only to generate growth but also to maintain political stability.

Key factors to watch:

- Indications that India's switch to a nationwide sale tax has not overly disrupted the economy and hurt support for the government.
- Potential moves to push through labour and land law reforms once the BJP becomes the largest party in both houses of parliament (scheduled to happen June 2018)
- Indications that the biometric identification system is working as planned, which would allow the government to eliminate inefficient and costly water and electricity subsidies in favour of direct deposits to individual citizens in need

India's economic growth prospects are largely dependant on how much progress it is able to make on these three fronts.

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