



Investment Management

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India in 2020

Active Perspectives on India's Evolution



In *India 2020: A Vision for the New Millennium*, A.P.J. Abdul Kalam and Y.S. Rajan detailed how India could become a developed country and one of the world's four largest economies by 2020. Last fall, nine of our team members traveled to India to meet with the management teams of more than 80 companies and explore where that vision stands. Then the COVID-19 pandemic struck, leading us to rethink our analysis. Here, our team shares their thoughts about India's potential.

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Introduction



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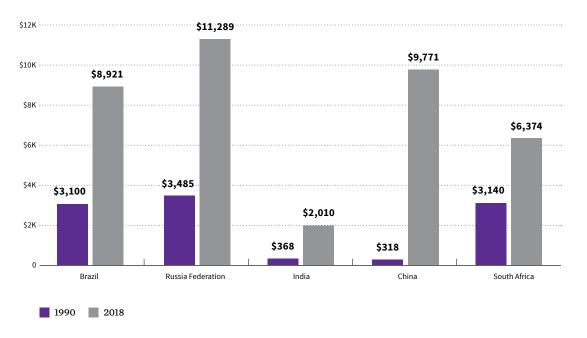
India 2020-in 2020

With the world's second-largest population, a democratic government, and a capitalist economy, India represented enormous untapped economic potential when *India 2020* was written more than 20 years ago. But during the ensuing two decades, that promise went largely unfulfilled. While India's economy grew significantly, it was just the seventh-largest economy in 2018 (between France and Italy)¹ and its per capita income is still far below the other countries that constitute the BRICS countries (Brazil, Russia, India, China, and South Africa), as shown in Exhibit 1.

EXHIBIT 1

Lagging the Other BRICS (Per Capita GDP, 1990 vs. 2018)

India's economy is now the world's seventh largest, but India significantly trails its fellow BRICS in terms of per capita GDP. This gap highlights India's potential—as well as the forces that have hindered its economic development.



Source: The World Bank. Data is in current U.S. dollars.

Over the past several years, however, numerous developments have reenergized the belief that India may be on the cusp of reaching a key point in its economic evolution. While COVID-19 will affect near-term developments, massive advances in digital infrastructure and connectivity, coupled with a series of governmental reforms, have laid the foundation for sustained growth as India transitions to a more formalized economy.

Introduction (continued)

"The messiness of India's ongoing transition to a more formalized economy presents a tremendous opportunity for fundamental, bottom-up investors."

This transition will be far from smooth, and investors will be reminded that growth is not linear. Crumbling physical infrastructure, poor air quality and other environmental concerns, unintended consequences of governmental policies, and the challenges of overcoming a legacy of crony capitalism will slow India's growth.

There are still many clogs in the pipes, but there is ample evidence that these obstacles are being addressed—albeit at drastically different rates and in a less-than-predictable fashion.

The messiness of India's ongoing transition to a more formalized economy presents a tremendous opportunity for fundamental, bottom-up investors. As the playing field becomes more level for businesses, and as new digital infrastructure unlocks latent economic energy, strong companies are likely to become even stronger and the gap between leaders and laggards may widen.

We believe this type of investment landscape calls for a research-intensive, active approach to identifying quality companies that demonstrate sustainable value creation. At William Blair, we have long viewed India as a source of intriguing alpha-generating opportunities for our portfolios, and we have made countless research visits to the country over the past 20 years. In November 2019, nine of our team members traveled to India to meet with the management teams of more than 80 companies and gathered additional data points about supply chains, consumer demand, and other economic drivers across India's key industries.

In this report, we share our findings about recent changes in India that have sparked new optimism about the country's economic development—and examine the significant headwinds that will likely impede this progress as these changes unfold (including the effects of COVID-19 on the domestic economy and global supply chains).

D.J. Neiman, CFA, Partner

CO-DIRECTOR OF RESEARCH, GLOBAL EQUITY TEAM, WILLIAM BLAIR INVESTMENT MANAGEMENT

Why India Is Evolving

India, the world's second-largest country by population, is home to 1.3 billion people. This exceeds the combined populations of the next five largest countries combined.² About half of India's population is below age 25, meaning that a huge number of Indians will be entering their prime in terms of productivity and consumption over the coming decade.³ The appealing size of India's total addressable market (TAM) is undeniable. However, the question has been—and continues to be—which companies have the ability to monetize the TAM.

Efforts to do so have been slowed by the challenges related to operating in an economy that lacks the organization, connectivity, and basic infrastructure that are characteristic of developed economies. But major advances in India's digital infrastructure over the last several years, coupled with a series of governmental reforms, together suggest that India has entered a new phase of its economic development.

- 2 Source: U.S. Census Bureau. July 2019.
- 3 Source: World Economic Forum. "Financial Inclusion in India is Soaring. Here's What Must Happen Next." January 14, 2019.

Digital Infrastructure and Connectivity

One of the greatest hindrances to economic progress in India has been the lack of digital infrastructure. But that has changed dramatically over the last three years, thanks primarily to the efforts of Reliance Jio to build a wireless and fiber-optic network throughout the country. Cities and villages that previously had voice-only capabilities or no wireless connectivity at all now have access to a low-cost, reliable digital network that provides data service at speeds that, in many cases, far exceed what is available in developed countries. Exhibit 2 illustrates.

This Herculean investment by Reliance Jio is truly a game-changer for India's economic development. Indian consumers now use more gigabits of data per month than in many developed countries, at a fraction of the cost. And developers are creating applications that enable the services that have powered the digital revolution seen in the developed world during the past two decades.

EXHIBIT 2

How Reliance Jio Is Reshaping India's Digital Connectivity

Reliance Jio's investment in building digital infrastructure across India in the past several years has brought high-speed wireless connectivity to consumers and businesses across India.

	Before Reliance Jio	After Reliance Jio
Data		
• Speed	• 256 Kbps (Download Speed)	• 21 Mbps (Download Speed)
• Pricing	• INR 250 - 20,000 (Per GB of Data)	• < INR 130 (Per GB of Data)
Customer Revolution		
• Increasing Usage	• 240 MB (Average Data Usage Per Subscriber Per Month)	• 11.7 GB (Average Data Usage Per Subscriber Per Month)
• Expanding and Shifting User Cases	• Voice, SMS, Radio	 Audio and Video Streaming (Primarily Through Bundled Offerings by Telecom Players), Online Gaming, Social Media, News

Source: Reliance Jio Investor Presentation and William Blair, as of October 26, 2019. INR refers to Indian rupee.

Why India Is Evolving (continued)

For consumers, these advances include access to banking and credit services, digital payments and e-commerce, video streaming, advertising, and various aspects of the shared economy. These services are fueling increased consumer spending and enabling business models that are built on network effects.

Small and midsize Indian businesses now have access to real-time information and point-of-sale systems that power better decision-making for pricing, forecasting, and inventory management. This digital connectivity is helping condense inefficient, multilayered supply chains, while the ability to accept digital payments is reducing the friction and security concerns of dealing in what had been a largely cash-based society. In the agricultural sector, which still represents a huge portion of India's economy, digital connectivity in rural regions is enabling productivity gains through access to weather forecasts and current market information.

Governmental Policy

India has experienced meaningful economic reforms in the past few years. Prime Minister Narendra Modi and his government have aggressively implemented changes designed to formalize India's economy, improve financial inclusion, and limit the influence of graft and crony capitalism.

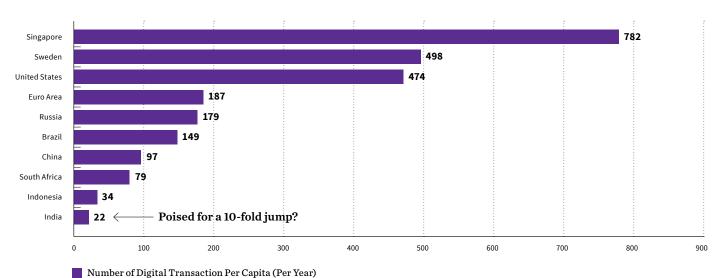
Demonetization: To reduce the country's reliance on cash transactions and fight corruption and tax avoidance, the Modi government announced in November 2016 that it would replace existing 500- and 1,000-rupee banknotes, which together accounted for about 90% of all rupee bills in circulation, according to India's central bank.⁴ This, along with direct deposit of government subsidies into recipients' bank accounts, has begun to reduce the influence of the "black economy" and its drag on economic efficiency.

4 Source: *The Wall Street Journal*. "India to Replace Largest Bank Notes." November 9, 2016.

EXHIBIT 3

India's Reliance on Cash

Several years after demonetization, India still significantly lags other large countries in terms of adoption of digital payments. India's Unified Payments Interface (UPI), however, is enabling rapid advances in the adoption of banking accounts and mobile-based payments.



Source: Report of India's High Level Committee on Deepening of Digital Payments; *The Washington Post*, "India Going Cashless Could be a Model for the World." June 6, 2019. India's data is from March 2019. For other countries, data is from 2017.

Why India Is Evolving (continued)

Goods and services tax: In 2017, India implemented a new goods and services tax (GST). The tax is designed to streamline India's complicated system of state and federal levies and improve tax collection from companies that operate within India's informal economy.

Corporate tax rate cut: In September 2019, India cut its headline corporate tax rate from 30% to 22%. Prime Minister Modi announced on Twitter that the tax cut would "give a great stimulus to #MakeInIndia, attract private investment from across the globe, improve competitiveness of our private sector, create more jobs and result in a win-win for 1.3 billion Indians."⁵

Bankruptcy precedent: A November 2019 ruling by India's Supreme Court involving Essar Steel confirmed the rights of secured creditors in bankruptcy proceedings. The ruling provides "relief to lenders and sets a precedent that could speed-up the resolution of other insolvency cases," according to Reuters. Historically, businesses in India could continue to borrow even when they were failing. Bribes to officials in the Ministry of Finance often would result in new loans, leaving the state-owned banks with bad loans.

Unified Payments Interface: The National Payments Corporation of India launched its Unified Payments Interface (UPI) in 2016. This fast ACH system, part of the government's efforts to support digital payments and extend banking services to underbanked citizens, enables users to send money without providing bank details. UPI has attracted major investments from Google, Amazon, Ant Financial (Alipay's parent), and other tech giants looking to promote adoption of their digital wallets.

In addition to these recent initiatives, the Modi government has prioritized improving financial inclusion for India's large unbanked population. Launched in 2014, the Pradhan Mantri Jan Dhan Yojana initiative has given millions of Indians access to no-frills bank accounts and other basic financial services. As a result, the percentage of Indians with access to bank accounts increased from about 40% in 2011 to nearly 80% in 2017, according to the World Bank.

India's Aadhaar program, launched in 2009, now provides unique identification numbers based on biometric data for more than 90% of India's population and has been essential in helping address "know your customer" requirements of the financial services industry, according to the World Economic Forum.⁸

Financial inclusion and the shift toward digital payments are helping address the widespread corruption and "leakage" that have been a drag on India's economic growth. For example, the leakage of funds for pension payments dropped 47% when payments were made through biometric smart cards rather than being distributed as cash, according to the World Bank.9

- 5 Source: Reuters. "India Cuts Corporate Taxes to Boost Manufacturing and Revive Growth." September 20, 2019.
- 6 Source: Reuters. "India's Top Court Clears Path for ArcelorMittal to Acquire Essar Steel." November 14, 2019.
- 7 Source: World Bank Group. "Global Findex Database 2017."
- 8 Source: World Economic Forum. "Financial Inclusion in India is Soaring, Here's What Must Happen Next." January 14, 2019.
- 9 Source: World Bank Group. "Global Findex Database 2017."

Realities That Will Constrain India's Growth

Despite optimism resulting from India's new digital infrastructure and transition to a cashless, rules-based economy, there are many factors that will constrain the country's economic growth and progress.

Physical infrastructure: While India's digital infrastructure has made a quantum leap forward, the dilapidated state of the country's physical infrastructure is a major barrier to economic activity. Decaying roads and gridlock traffic impede the movement of goods across the country, and an outdated power grid is a major challenge to India's efforts to enhance local manufacturing. India is experiencing a mass migration to its largest cities, but these urban centers lack the infrastructure to support a surging population. Exhibit 4 illustrates. The Indian government estimates that it will need \$1.5 trillion in infrastructure investment for the 10-year period ending in 2026, and there are major questions about how these projects will be funded.¹⁰

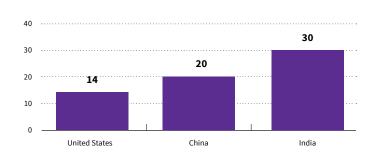
Legacy of crony capitalism: The Modi government's concerted effort to formalize India's economy must overcome decades of business practices and consumer behavior that had adapted to a largely underground economy plagued by crony capitalism. These practices will not be eradicated overnight. Since it will take many years for Indians to adapt to and embrace the norms that define a formalized economy, periods of economic uncertainty may threaten progress.

Unintended consequences of reforms: As with all governmental policies, there are unintended consequences that need to be managed. India is confronting these challenges on multiple fronts. Demonetization caused liquidity in India's banking system to surge, and the resulting "irrational exuberance" on the part of lenders led to a rapid deterioration in the quality of their loan portfolios. Small businesses and consumers in India have been affected by a credit crunch, as lending from non-bank financial companies—which at one point accounted for one-fifth of new credit—fell 30% for the 12 months ending in March 2019. Separately, the November 2019 Essar Steel ruling is a positive step in establishing orderly rules for bankruptcy, but it remains to be seen how quickly or efficiently these rules will be implemented.

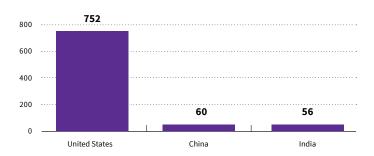
EXHIBIT 4

Infrastructure Investment By Country India's infrastructure has historically lagged that of the United States and even China.

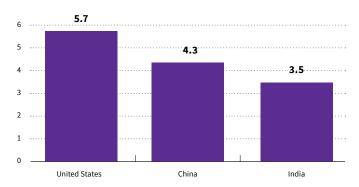
Hours to Travel 1,000 Miles



Railroad Density



Quality of Port Infrastructure (1-7)



Source: Michael J. Silverstein. *The \$10 Trillion Prize: Captivating the Newly Affluent in China and India.* Boston: Harvard Business Review Press, 2012. Hours to travel is at an approximate average speed of 75 miles per hour (United States), 50 miles per hour (China), and 35 miles per hour (India). Railroad density refers to kilometers per 1 million people. Quality of port infrastructure is rated from 1 (extremely underdeveloped) to 7 (well developed and efficient by international standards). Data is as of 2010.

¹⁰ Source: S&P Global. "The Missing Piece in India's Economic Growth Story: Robust Infrastructure." August 2, 2016.

¹¹ Source: Financial Times. "India's Shadow Banking Crisis Sparks Credit Crunch."

Realities That Will Constrain India's Growth (continued)

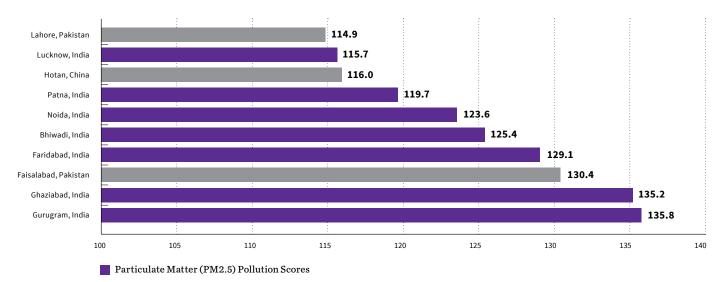
Air quality and environmental concerns: Twenty-two of the world's 30 most polluted cities are in India. This affects more than just the health of India's residents; it chokes off economic growth. For example, more than 30 flights were diverted from Delhi on a single day in November 2019 because of poor visibility due to air pollution, and schools were closed and construction halted because of the poor air quality. 13

- 12 Source: AirVisual. World's Most Polluted Cities 2018 (PM2.5).
- 13 Source: BBC News. "India Air Pollution At 'Unbearable Levels', Delhi Minister Says." November 4, 2019.

EXHIBIT 5

World's Most Polluted Cities

Air pollution is a major threat to economic activity—and quality of life—in many of India's largest cities.

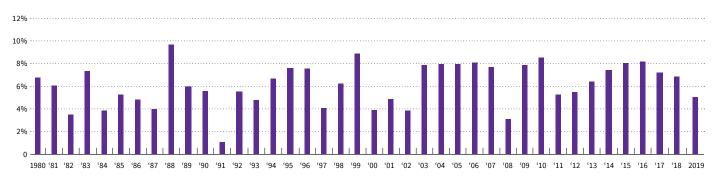


Source: AirVisual. Cities are ranked by average particulate matter (PM2.5) pollution scores in 2018.

EXHIBIT 6

Uneven GDP Growth Reflects Challenge

The uneven pace of India's growth reflects the challenges of transitioning to a more formalized structure outside of a centrally planned economy. This volatility may create additional opportunities for high-quality, durable franchises to gain market share from lower-quality competitors.



India's GDP Growth by Year

Source: The World Bank, as of April 2020.

Sector Insights

The tailwinds—and headwinds—to development in India are affecting the investment landscape in distinct ways across sectors. The common theme, however, is that as digital connectivity unlocks new sources of growth and as the playing field in India becomes more level from a policy perspective, high-quality companies may have more opportunity to expand their competitive advantages.

Financial Services: Huge TAM and Four Rs

India represents a highly attractive TAM for financial services because of its low levels of penetration for banking, credit, and digital payments. Experian estimates that more than half of the country's 1.3 billion residents are potential credit customers. Furthermore, as recently as 2017, less than 10% of Indians with bank accounts used their mobile phones to complete financial transactions, compared with about 50% in developed countries and China, according to the World Bank.¹⁴ The government's investment in the Unified Payments Interface (UPI) and Reliance Jio's investment in a high-speed fiber-optic network have set the stage for a rapid expansion of India's financial services industry.

Indian banks continue to work through the "Four Rs" process to address the country's hangover of bad loans: Recognition, Recapitalization, Resolution, and Reform. This wide-reaching effort by banking regulators to strengthen the financial system has proceeded in fits and starts, but ultimately it should enhance the longterm investment opportunities in India's financial services industry. We believe the companies best positioned to capitalize on India's massive financial services TAM will be those with strong corporate cultures and management teams, as well as a disciplined approach to growth and innovation. The flight to quality and focus on balance sheet strength have been particularly pronounced among lenders, and there has been a significant divergence in funding costs across institutions over the past 12 months.

 ${\bf 14}\ \, {\bf Source: World\,Bank\,Group.\,"Global\,Findex\,Database\,2017."}$

Technology, Media, and Telecom: Can an Elephant Dance?

Reliance Jio's transformation from an energy company to a diversified technology and consumer company has the potential to challenge the fundamentals across several sectors in India. This has already occurred within the telecom industry, where consolidation has taken place and data pricing has been spiraling downward. The threats to incumbents are not limited to just the technology, media, and telecom industries. As more Indians gain access to high-speed wireless data, sectors such as education and healthcare will become ripe for disruption.

Real Estate: Consolidation Gains Steam

One of the prevailing themes of the formalization of India's economy is a surge in consolidation activity across sectors. This is especially true in the real estate industry. Large developers, most of which made it through the credit crisis relatively unscathed, are gaining market share. Over-leveraged developers, on the other hand, are struggling to gain access to capital and refinance debt. A slowdown in new residential construction projects is causing the unsold inventory levels to decrease. While sales have been resilient, many consumers are deferring purchase decisions as property values stagnated over the last four years. Housing affordability has increased significantly, which can have a trickle-down effect on the overall economy.

Chemicals: Opportunities Amid Environmental Concerns

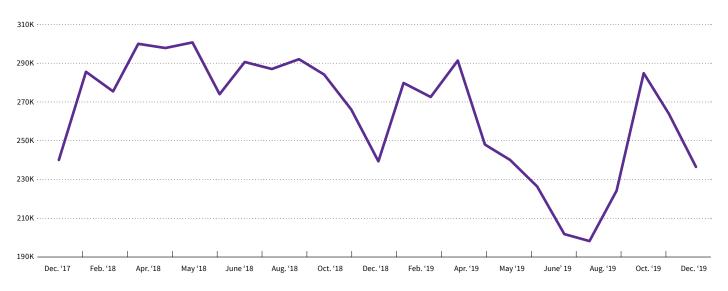
India's chemicals industry stands to benefit from the government's efforts to promote local manufacturing, known as the "Make in India" initiative. In addition, Indian chemicals companies are well positioned internationally; the United States and Europe have uncompetitive cost structures and strict pollution controls, while China is imposing stricter environmental controls. As a result, many multinational corporations are derisking their sourcing arrangements, looking to add India as a chemicals supplier. These are all powerful tailwinds for India's chemicals industry, but the country must reconcile this growth while addressing air pollution and other environmental concerns.

Sector Insights (continued)

EXHIBIT 7

India Vehicle Sales Hit a Major Bump in the Road

Vehicle sales in India have slowed considerably since 2019. This slowdown is partly driven by the collapse of India's shadow lending industry.



Year-Over-Year Motor Vehicle Sales in India

Source: Society of Indian Automobile Manufacturers, as of December 2019.

Automotive: Volatility Illustrates the Bumpy Road to Growth

It may be tempting to assume that China's path to economic development provides clues to what India's roadmap will look like; however, because India is not a centrally planned economy, its growth trajectory will likely be more volatile, featuring sharp peaks and troughs in both demand and investment. The automotive industry provides a stark example. India was once considered one of the world's most promising markets for auto sales, attracting investment from many of the world's largest vehicle manufacturers. But the collapse of India's non-bank lending industry caused auto sales to plummet in 2019; in August, year-over-year sales of passenger cars fell 32%. ¹⁵

15 Source: Society of Indian Automobile Manufacturers. December 2019.

Trends That COVID-19 May Accelerate

Many of the long-term structural changes to the Indian economy resulting from COVID-19 will depend on the postpandemic assessments that are made by policymakers and the political reception of their actions. This process has not yet begun to play out, but in the meantime, we have been assessing the ways the investment landscape may change. For example, as a consumer, you may not spend much time thinking about the series of connections and interactions that take place within a few seconds after you swipe your credit card, click "complete purchase" on a screen, or tap your smartphone on a sensor. But cashless transactions have been a huge area of growth, and we expect this trend's pace to pick up globally as people avoid hand-to-hand transactions. We could also see a radical makeover in healthcare and a new role for surveillance programs in mitigating the risk of future pandemics.

Uneven Development Calls for a Focus on Quality

We believe India is a textbook example of the importance of active management when investing in emerging markets.

One might look at the impact of the new digital infrastructure and governmental reforms and conclude that now is the right time to "go long India." We agree that India is going through an evolution in its economic development. We also know that there are many problems that will continue to impede the country's growth for years to come.

India's transition to a more formal, organized economy is progressing, but it will be a messy, nonlinear process. The country's TAM is undeniably compelling, but the ability to monetize that TAM will vary significantly by sector and from company to company. The chaotic nature of India's development represents opportunity for us, as active investors, to capture alpha.

Digital connectivity and policies supporting the move to a digital, rules-based economy are allowing strong companies to become stronger in India. The gap between leaders and laggards is expanding. Quality companies with proven management teams and durable, sustainable advantages are widening their competitive moats, gaining market share, and growing through consolidation. Governmental reforms—and the resulting transition to a cashless economy and the shift away from crony capitalism—are creating a more level playing field for companies operating in India. This means companies are more likely to thrive or fail on their own merits, rather than on their connections to governmental officials or their ability to navigate an informal economy.

"Because India is not a centrally planned economy, its growth trajectory will likely be more volatile."

D.J. Neiman, CFA, Partner

"Digital connectivity and policies supporting the move to a digital, rules-based economy are allowing strong companies to become stronger in India. The gap between leaders and laggards is expanding."

William Benton, CFA, Partner

We believe that our focus on sustainable value creation through a growth lens has positioned us to invest in India's development with precision and conviction. We do this by focusing on both offensive and defensive aspects of quality—most importantly, a company's ability to generate high returns on its invested capital.

India's economic transition will not be smooth. The nature of the country's development means that identifying high-quality companies that can thrive in this new competitive reality is paramount. We are excited about India's potential—and confident in our ability to identify companies that will create sustainable value that contributes to the country's ongoing development.

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