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COMPETITIVENESS

75  
Azadi Ka  
Amrit Mahotsav



COMPETITIVENESS  
**ROADMAP**  
FOR INDIA@100





# COMPETITIVENESS ROADMAP FOR INDIA@100



# About the India **Competitiveness Initiative**

The genesis of the “India Competitiveness Initiative” lies in the interaction Professor Michael Porter had with Hon’ble Prime Minister in 2017. India Competitiveness Initiative is a multi-year effort towards enhancing prosperity and ease of living for its citizens. The initiative is a collaborative effort between EAC-PM, The Institute for Competitiveness headed by Dr. Amit Kapoor, Prof. Michael Porter and Dr. Christian Ketels from Harvard Business School.



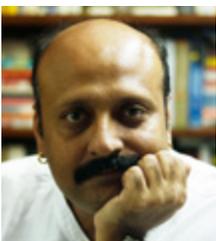
**Prof. Michael E. Porter**

**Prof. Michael E. Porter** is an economist, researcher, author, advisor, speaker and teacher. Throughout his career at Harvard Business School, he has brought economic theory and strategy concepts to bear on many of the most challenging problems facing corporations, economies and societies, including market competition and company strategy, economic development, the environment, and health care. His extensive research is widely recognized in governments, corporations, NGOs, and academic circles around the globe. His research has received numerous awards, and he is the most cited scholar today in economics and business. Prof. Porter developed the conceptual framework that has been applied in the India Competitiveness Initiative, and provided overall guidance and oversight to the project.



**Dr. Christian Ketels**

**Dr. Christian Ketels** is a global expert on economic competitiveness and strategy. He recently returned to Harvard Business School, where he serves as a faculty member and Principal Associate at Prof. Michael Porter’s Institute for Strategy and Competitiveness. He is a Director and Co-Chair of the Innovation Fund Denmark and chairs the Advisory Board of the TCI Network and the Scientific Advisory Board of Orkestra, the Basque Institute for Competitiveness. Dr Ketels has led a large number of national competitiveness projects around the globe. He has led the analytical work in the India Competitiveness Initiative, and drafted the India@100 Roadmap for Better Growth.



**Dr. Amit Kapoor**

**Dr. Amit Kapoor** is Honorary Chairman at the Institute for Competitiveness, India; Chair for the Social Progress Imperative & Shared Value Initiative in India. He is also Editor-in-Chief of Thinkers. He has worked with NITI Aayog and EAC-PM on multiple research efforts, including the Assessment of Aspirational Districts Program, Social Progress Index, State of Inequality Report, Innovation Index for States of India, Export Preparedness Index et al. Dr. Kapoor and his team implemented the analysis of Indian data sources for the India Competitiveness Initiative, and provided extensive feedback during the preparation of roadmap, working on competitiveness diagnostic in addition to managing the relationship with the Initiative’s stakeholder group and other Indian partners.



# Steering Committee Members



**Dr. Amit Kapoor**  
Honorary Chairman,  
Institute for Competitiveness, India



**Shri Amitabh Kant**  
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**Dr. Bibek Debroy**  
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**Dr. Nitin Nohria**  
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MD & CEO, Axis Bank



**Ashish Jhalani**  
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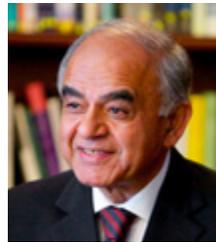
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## MESSAGE

### **Citius, Altius, Fortius**

Do enterprises compete, or is it countries that compete? Anyone who has read Michael Porter's work, from *Competitive Strategy* to *Competitive Advantage*, and then to *The Competitive Advantage of Nations*, will accept it is a bit of both. The warp and weft of the global market has always fallen short of the ideal of perfect competition and has become even less so, in recent times. Nevertheless, it is also true that there is greater competition in the global market. Porter's interest in competition was initially driven by his interest in sports. To use that analogy, there is a difference between competing in a national event and competing at the Olympics. Enterprises operate in an environment, markets are based in an institutional setting, framed by government policies. Therefore, if India's growth and development trajectory has to move to a Citius, Altius, Fortius level, both government policies, and enterprise reactions to those, come into play. National income has four growth drivers – consumption, investments, government expenditure and (net) exports. If an aircraft with four engines functions on three, that is sub-optimal. The aspirational target of \$5 trillion GDP is contingent on real growth of at least 8%, with additional assumptions about inflation and exchange rates. Consequent higher per capita income correlates with better standards of living, lower poverty, greater employment and improved human development indicators. It is therefore axiomatic that, notwithstanding the relatively malign global environment, exports will have to perform well. There was a time when pre-reform India was inward-looking and insular. No longer.

Since May 2014, the government has introduced various reforms to make India more competitive and improve both ease of living and ease of doing business. As India celebrates Azadi Ka Amrit Mahotsav and sets the template for Amrit Kaal, to set the trajectory for India in 2047, there are naturally internal exercises that have been undertaken, to review what India needs to do to become more competitive, and recommend what needs to be revamped. In essence, per capita income is nothing but the per capita productivity of Indians in working age groups and that is an outcome of efficient land, labour and capital markets, with the rest being determined by productivity. Alternatively, one can slice this sector-wise, with specific reforms for primary, secondary and tertiary sectors. Reforms involve not only the executive arm of government, but legislature and judiciary too. More importantly, India is a large and heterogeneous country, with inter-State and inter-regional differences and depending on resource endowments and movements up the development ladder, different States will tap different sources for growth, productivity enhancement and competition. This is a truism.

There is utility in bringing in an external view, to supplement internal exercises. There can be internal biases and an internal observer may judge imperfectly the extent to which potential energy is being transformed into kinetic energy. The position within the system prevents accurate assessment of the momentum. This is almost like the uncertainty principle of quantum mechanics. To that end, when Professor Michael Porter met the Prime Minister, the seeds of the India Competitiveness Initiative were sown and the initiative has been driven not only by Michael Porter, but also by Christian Ketels and Amit Kapoor. It should be stressed that the diagnosis is not based only on what was thought of in Harvard Business School. There have been extensive stakeholder meetings, spanning months, with those who have a stake in India's growth and development. Indeed, there is much at stake and EAC-PM (Economic Advisory Council to the Prime Minister) has been fortunate. An initial presentation, with subsequent discussions, took place at EAC-PM. EAC-PM is honoured that it has been invited to jointly publish this with Institute for Competitiveness. This diagnosis document is meant for discussion and debate, followed by delivery.

While there are different ways to examine India's competitiveness, this report is understandably based on the Porter framework, duly modified to factor in the many India-s that exist within India, that is Bharat. It assesses where India stands now, but doesn't leave it at that. Building on the diagnosis, it articulates a strategy for India at 100.

"'Come, it's pleased so far,' thought Alice, and she went on. 'Would you tell me, please, which way I ought to go from here?' 'That depends a good deal on where you want to get to,' said the Cat. 'I don't much care where' said Alice. 'Then it doesn't matter which way you go,' said the Cat." "'--so long as I get somewhere,' Alice added as an explanation. 'Oh, you're sure to do that,' said the Cat, 'if you only walk long enough.'" This document sets out where India wants to go, and the way to be taken. It isn't a question of walking without working up a sweat. Within a marathon, there is a bit of a sprint, since there is plenty of catching up to do. Citius, Altius, Fortius.

*Bibek Debroy*

Bibek Debroy  
Chairman, EAC-PM  
22 July 2022



अमिताभ कांत

**Amitabh Kant**

जी20 शेरपा

G20 Sherpa



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## MESSAGE

The growth journey that India has traversed over the last seven decades has not been simply fortuitous. It is a result of carefully sown seeds of policy reforms and sector-specific action goals embedded in the vision of equitable development and enhancing the lives of the people in the country. This has been especially true since 2014, whereon excessive focus has been laid on "Ease of Living", regional development and cooperative federalism. It is the very vision of collaboration and cooperation that has guided the aims and goals set for the country to put it on the trajectory of a middle-income country and beyond by 2047. As we place ourselves amid the celebrations of the 75<sup>th</sup> year of our country's independence, it is only imperative for us to design our growth journey over the next twenty-five years as the world closely follows us.

The genesis of the "India Competitiveness Initiative", lies in the meeting Prof. Michael Porter had with the Hon'ble Prime Minister and my subsequent visit to Harvard. This project has grown from a dream for India as it enters what will be the most crucial time for its development, growth and prosperity. In this light, Prof. Michael Porter of Harvard Business School has aided the government by preparing this document for India's competitive strategy as it sets out to achieve the goals for "India@100".

It is not a matter of only reaching a destination but also how that journey has been made, and this document supports us in the directions. With geopolitical tensions rising, new unprecedented challenges of health and climate crises facing the international community, and the intensification of networks of interdependence between countries, India is only expected to present a sustained growth model based on ease of living for its people and ease of doing business for its industries. At the same time, India's pursuance of becoming a net zero economy will only exemplify its global commitments. With the world constantly changing, India will only rise as a norm creator in the near future.

This national competitiveness strategy is built upon Prof. Porter's designed framework on competitiveness that is based on the idea of productivity, meaning an economy's capability to mobilise its available labour force and other assets to generate value. For a country like India, with its vast demographic advantage, productivity also implies that the labour force is engaged in productive economic activities and that they are not marginalised from the very source of growth – jobs. Making multiple entry points for the labour force with their varied skill sets is one of the priority areas for the country. This needs to be complemented with structural, institutional

and ecological reforms to ensure that India becomes a holistically resilient economy. Such arduous tasks also require concerted efforts from all pillars of our governance ecosystem – legislature, executive and judiciary – as well as from all levels of government, including state and local government support, to carry out these tasks. With the involvement of multiple stakeholders, the recommendations suggest multi-pronged actions at the level of analysing the evidence of leakages in our economy, which will further drive what kind of goals we prioritise. As reiterated, a clear strategic decision regarding the nation's competitive strategy and value will offer crucial guidance to ensure that particular policies are in line, that activities are prioritised, and that responses to shifting conditions remain compatible with a long-term aim.

This project has been a knowledge project, and it has been an honour to host Prof. Michael Porter for the lecture series conducted at NITI Aayog. It has also been a pleasure to be a part of the series of stakeholder meetings that had been organised at NITI Aayog. Above all, it has been an utmost pleasure for us to be able to collaborate with Prof. Michael Porter, Christian Ketels and Amit Kapoor in formulating this roadmap for India's growth trajectory by its centennial year, to delineate the form and shape of the Indian economy and to establish the kind of principle changes required for the transformation we are foreseeing. The document has set high stakes for everyone involved in the government and administrative machinery to uphold our country's remarkable economic journey and to leap higher to achieve our ultimate aim of shared prosperity.

Dated- 24-07-2022

Place- New Delhi



(Amitabh Kant)



H A R V A R D | B U S I N E S S | S C H O O L

**CHRISTIAN H. M. KETELS**

PRINCIPAL ASSOCIATE

INSTITUTE FOR STRATEGY AND COMPETITIVENESS

### **Learning to understand India with different eyes**

When embarking on a competitiveness project, it is important to be mindful about the contribution that an outside observer can make. Only in rare instances is it possible to unearth individual facts that are not already known by the local experts. This is particularly true in a country like India with a vibrant and sophisticated community of researchers tracking the country's performance and arguing about its way forward.

What one can hope to achieve is different: It is providing an external perspective that questions perceived wisdom and raises uncomfortable truths. And making sense of these facts through the lens of a different framework, sharpened by the experience of applying it across a wide range of countries. In short, it is about enabling scholars and decision makers within India to see their country with different eyes, generating new insights and informing more effective action. India is unique. While every country has its own circumstances, India stands out given its sheer size, complexity, and internal heterogeneity. This makes it hard to fit India into the traditional categories used to group countries by their stage of economic development or growth model. Understanding how India is unique and why it ended up here is more than a theoretical exercise. It is a critical part of getting at the root causes of India's current level of economic performance, and it is a fundamental when designing appropriate and effective policy actions to improve the country's competitiveness.

We hope that the analysis provided in this report and the supporting materials will prove helpful in informing these debates.

### **Learning about the future**

The work on Indian competitiveness is more than the simple application of a given framework to yet another country. India's competitiveness challenges and opportunities are in many ways a critical entry point to understand the competitiveness challenges and opportunities that the world is facing. Dealing with inequality and high levels of performance heterogeneity across regions within countries. Achieving higher levels of prosperity while sustaining our environmental foundations both locally and globally. Accompanying growth in GDP with growth in social progress. Becoming more resilient in the face of shocks and a fragmented global system.

How India is going to manage these issues will have a major impact on how the world is able to deal with them. It is because by its pure size, India's performance matters. But it is also because India can lead the way in showing what works for many others facing similar circumstances. India can and needs to be a laboratory for evolving competitiveness thinking in these directions.

We hope that this report and the ideas contained in it will provide inspiration and a sound starting point to venture down this path.

### **Learning with thoughtful partners**

In our work on Indian competitiveness, we were able to draw on a rich body of research done both within the country and internationally. The competitiveness framework provides a structure to "connect the dots" across the more than 150 recent academic papers and numerous research reports that we reviewed. It is inspiring to see how much work is being done on so many different aspects of Indian competitiveness, and how an overall picture emerges from putting these individual pieces into context.

We were also able to use datasets by the Reserve Bank of India and others to conduct targeted additional analysis in specific areas. India is in the midst of a data revolution, providing more and more facts to shed light on issues on which analysts and policy makers were essentially flying blind in the past. Still, there is a long way to go and in many areas India continues to lack sufficiently robust data. India should embrace this challenge and continue to invest in its data infrastructure. Data is critical to learn and inform action, not only to fame and shame.

Maybe the most important learnings have come from the interactions with our partners. Bibek Debroy, Amitabh Kant, and Rajiv Kumar have guided, challenged, and contributed to our thinking along the way – I am grateful to their commitment to this effort. The members of the Indian stakeholder group have provided invaluable input along the way, openly sharing their time and perspective both in formal meetings of the group and in individual interactions. Many other scholars, government officials, and policy makers have been willing to provide information and discuss our emerging findings. Finally, I would like to thank Amit Kapoor and his team at the Institute for Competitiveness, India – this joint effort has been a proud culmination of our collaboration and friendship over many years.

We hope that all of these partners will find the report useful and a trigger for their own thinking going forward. The true test of the value of this work is not unanimous agreement with all of its findings and recommendations. It is whether this work helps Indian leaders on their learning journey towards better understanding and enhancing Indian competitiveness.

## Moving beyond learning

This report is more than an analytical piece to understand India's competitiveness or the drivers behind the country's current performance. While this analysis is critical, it is only the foundation to then derive policy recommendations to change and improve India's competitiveness. This is a distinct, and arguably even more challenging, exploratory, and controversial part of the work.

The Roadmap for Better Growth includes a number of specific policy recommendations. We believe that these are important, concrete steps that India can and should take. But in our experience the fate of individual action recommendations on its own is not what is critical for the long-term impact of a growth strategy. This success depends on whether the strategy's underlying principles and direction is able to shape and where needed change the national discourse about competitiveness. These broader ideas are particularly critical for a roadmap that aims to shape India's growth strategy for the next twenty-five years, far beyond the time horizon of any specific policy or program.

We hope that the combination of diagnostics, specific action recommendations, and overall principles can help communicate the underlying logic of the India@100 strategy, and thus contribute to more effective policy choices being made.



Christian H. M. Ketels



**Dr. Amit Kapoor |**  
Honorary Chairman

India's enormous heterogeneity and cultural heritage, defined by the immense struggle for independence, have always inspired the world. India has always been considered a favoured partner and an ally by other nations, and as our country celebrates 75 glorious years of independence, the world awaits what lies ahead for India. The growth journey that our country has made has been a tale of ups and downs, opportunities utilised, and lessons learnt. For instance, if we are to look at India during the reform period, we find some critical changes in the market structure during the 1990s. India is no more a closed economy but rather a liberalised economy with the aim of further enhancing its competitive advantages that will place India right on the track to becoming a middle-income country by 2047- the centennial year of independence. This vision along with the goals of accelerated yet sustained growth and inclusive development, has been more pronounced since 2014. By 2021, India's share of global GDP (based on PPP) had risen to 7.3%, and it is only expected to go higher. The country's potential is not hidden from anyone, and as it inches closer to its hundredth year, it is of utmost importance to review the successes of the past while laying a roadmap for future economic transformation.

The "India Competitiveness Initiative" grew from the meeting between the Hon'ble Prime Minister and Prof. Michael Porter of Harvard Business School in May 2017, thus setting the ambitious goal for India's growth trajectory over the next twenty-five years – "*policies to aggressively push the nation towards middle-income and beyond by 2047*". This document, as part of the India Competitiveness Initiative, has set out to highlight the areas that need to be strengthened for the purpose of growth and making our economy more competitive. It guides the strategy for "India@100" through the results based on the cluster-level analysis. The analysis is based on the framework developed by Prof. Porter and centres on the idea of productivity. By productivity, it is meant how well a country is able to generate value through mobilising its assets and resources like the labour force. The "India@100" strategy is also embedded in the idea of inclusive growth and shared prosperity. Through this document, it is asserted that the competitiveness approach must serve as the cornerstone of India's economic and social policy moving ahead if it is to sustain growth over the long term.

The pathway to achieving India's growth target focuses on sector and location-specific reforms and policies as well as institution building. Given the fact that every region in India is driven by a different set of economic indicators and has different capabilities in terms of resource access and utilisation, the economic and social outcomes are highly diverse. A limited number of regions provide a significant portion of the nation's output and predominate in fields like innovation and exports. These differences are further exacerbated due to different policy decisions at the state level or the low level of decentralisation. The document lays down recommendations keeping in mind the unique advantages that India possesses, its distinctive federal structure and the larger goal of ease of living for the people.

It has been an honour to collaborate on this project with my colleagues from Harvard Business School – Prof. Michael Porter and Christian Ketels, and with my peers at EAC-PM and NITI Aayog. I will be failing in my duties if I do not thank Bill and Melinda Gates Foundation (BMGF), Square Panda and the ABP Network for their generous support, in addition to the members of the stakeholder's group as well as to all the people who attended the various meetings and rounds of discussion. Numerous stakeholder meetings and interactions with EAC-PM (Economic Advisory Council to the Prime Minister) and NITI Aayog, along with a series of lectures delivered by Prof. Michael Porter, have culminated in this roadmap that should be seen as an essential guide to inform the socio-economic policies for the next twenty-five years.



(Amit Kapoor)

24-07-2022

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# FOREWORD

*Professor Michael E. Porter*



## The ambition of this work

When we launched the India Competitiveness Initiative, I had in mind the conversation with Honorable Prime Minister where he had a highly ambitious goal for this effort: setting out a pathway to guide India on its growth journey over the coming 25 years. India has seen a sustained acceleration of growth over much of its recent past. But as a lower middle-income country it has ambitions to move significantly beyond these past achievements. India is a land of vast opportunities; this is something our work in this effort has provided many reminders of. But it is also a country that will have to change in many ways to fully realize these opportunities. The many reforms the government has launched over the last few years are a solid foundation to build on. The task for our work in this India Competitiveness Initiative is to give these reforms further strategic direction, and help unlock those bottlenecks that have limited their impact so far.

Over the years, I have had the opportunity to work in many countries on their national competitiveness strategies. It is always a privilege to work on something that is so central to a country's ambition and future, and we are very grateful to our partner Institute for Competitiveness, India for inviting us to work with them on this agenda. The India Competitiveness Initiative is tasked to affect the growth outlook for one of the world's most populous countries. Its ability to help the country accelerate its growth will have profound implications for more than 1.3 billion Indians; more than 15% of the world's population.

But an India that achieves higher performance has relevance far beyond India's borders – the entire world has a lot riding on India's success. If India turns the opportunities of its young and growing demographics into shared prosperity, it will become a model for many other emerging economies, especially in Africa. If India succeeds to achieve rising levels of prosperity while becoming a net zero economy, it will have mastered one of the most critical tasks the world is facing in its response to the climate change challenge. India, as it is building on its democratic values with friendly relationships and strong economic ties across the globe, can help to balance the geopolitical tensions in an increasingly fragmented global system.

For me, the India Competitiveness Initiative comes as the next important step in a long relationship that I have had with India. I regularly had the opportunity to share my observations on Indian competitiveness with Indian leaders. In fact, it was a very engaged discussion with Prime Minister Modi on the future of India's competitiveness in 2017, when I was hosted for NITI Lecture Series, that planted the seeds for this current effort. I also have been fortunate to engage with many Indian business leaders of the years, including in the context of the Porter prize that has over the last few years highlighted examples of successful company strategies in India. In the Social Progress Initiative, an effort I launched a few years back with some colleagues to provide a robust, evidence-based measure of social progress across countries, we have collaborated with the Institute for Competitiveness, India to provide deeper insights into social progress across India. I am grateful to see that these activities have helped inform efforts like the Aspirational Districts initiative and the broader thinking around the government's "Ease of Living".

## The competitiveness **framework**

The India Competitiveness Initiative has been guided by the competitiveness framework that I have developed and applied across the world over the last several decades. This framework focuses on productivity as the key driver of long-term prosperity. Productivity is understood broadly as an economy's ability to effectively mobilize its available labour force and other assets to create value. Productivity as we define it here is thus more than simply the value created by each employee. It is also driven by the ability to engage a large share of the available labour force into productive activities. This is particularly important for a country like India, where a large and growing labour force needs to find entry points to join the modern economy. And productivity is more than simply technical efficiency. It is the ability to find new and unique ways of creating value for citizens and customers.

More productive economies are more successful on global markets. But their success does not come at the expense of others in a zero-sum way; it contributes to wealth and opportunities globally. Openness and external orientation of an economy are critical because they enable

higher productivity; they open the door for countries to specialize on activities they do well, and access technology and advanced inputs from abroad. At the same time, greater competitiveness raises the benefits from engaging globally, because local firms will have better opportunities to successfully compete. Again, these different aspects are critical for India where exports have grown significantly but where there is also a strong concern that Indian firms will not be able to compete if their domestic markets become more exposed to foreign rivals.

The competitiveness framework provides a comprehensive perspective on the many different factors that determine a location's productivity and ultimately prosperity. These factors have a different but interrelated impact on productivity. Macroeconomic competitiveness creates opportunities for higher productivity; poor performance on any of its dimensions comes at a significant cost to prosperity. Microeconomic competitiveness is critical for firms to actually reach higher productivity - poor performance in some dimensions can be compensated to some degree by strengths in others. It is the specific interplay across individual microeconomic factors that matters.

The competitiveness framework provides a strategic perspective on how to translate the diagnostics on a country's competitiveness fundamentals into actionable insights to drive change. An economic strategy moves beyond improving individual policies. It outlines the value proposition of a location in the global economy, indicating where and how the location aims to compete. The location-specific patterns of current competitiveness determine how specific policy actions will impact productivity. Countries need to make choices on what actions to prioritize based on an understanding of these circumstances. No location can or should try to improve all dimensions of its competitiveness in parallel. An economic strategy based around a national value proposition helps countries make these prioritization choices in a coherent way.

Competitiveness upgrading is a marathon, not a sprint. There are no short-cuts, or simple solutions based on narrow interventions. But there is a potential to accelerate progress through a clear strategy that enables action to focus on what matters most at a given time.

## The drivers of success

Our work across the globe on national and regional competitiveness strategies has given us a unique ability to learn about "what works" to achieve lasting success. A first critical ingredient is to be ready to listen to the evidence, and align on a coherent conceptual framework to derive insights from it. Actions that follow schematic ideological views or copy what has been done elsewhere rarely work; there is a need for context-specific action that is grounded in sound diagnostics.

A second element is a clear strategic choice on how the country aims to compete, and what value proposition it aims to offer. This choice provides critical direction to ensure that individual policies are aligned, that prioritization of actions is happening, and that the responses to changing circumstances remain consistent with a long-term goal.

And third, leadership is critical. Leadership needs to include a willingness to learn and change, based on the evidence that emerges. Leadership also needs to engage and empower others. Competitiveness is the result of many independent actions towards a common goal, not simply the determined choices at the top. Public sector leadership needs to be willing to look beyond vested interests. While private sector leadership needs to be willing to pursue actions that enhance the overall competitiveness of the economy and not just one sector or company.

Our contribution from the outside can make a difference on the first, help to inform the second, and ideally inspire the third. But in all three dimensions it is ultimately Indian leaders that will have to decide and take action. We hope our work provides them with useful input as they take on this responsibility.

With my colleague Christian Ketels who led the competitiveness diagnostics and report drafting, I am grateful for the good collaboration with our Indian partner, Institute for Competitiveness, headed by Amit Kapoor in this effort. Our colleagues at the Institute for Competitiveness provided able research assistance on the ground, and helped drive a comprehensive new India Cluster Mapping analysis as part of the overall effort. We are also indebted to our partners in the Indian government, especially Mr. Amitabh Kant and Dr. Rajiv Kumar of NITI Aayog and Dr. Bibek Debroy of EAC-PM, and to the group of business leaders that have provided council as part of the initiative stakeholder group. Personally, I want to also thank my long-time friend and colleague Nitin Nohria, the former Dean of Harvard Business School. His advice and insights into Indian business have been invaluable.

# EXECUTIVE SUMMARY



ERECTED TO COMMEMORATE THE LANDING  
IN INDIA OF THEIR IMPERIAL MAJESTIES  
KING GEORGE V AND QUEEN MARY  
ON THE SECOND OF DECEMBER MCMII

The “Roadmap for Better Growth – India@100” is a response to the vision of Prime Minister Modi for pushing India towards a growth path that ensures India’s transformation into a middle income country by 2047. The India@100 strategy takes a broad view of the goals that India has set for itself, and then defines new principles for India’s development approach, identifies new policy priorities, and outlines a new architecture for implementation. The roadmap is grounded in a thorough analysis of India’s current competitiveness, applying the competitiveness framework that Prof. Michael E Porter has developed over the last few decades.

**Prime Minister Modi defined a task for the India Competitiveness Initiative that could hardly be more ambitious:**



**Develop a roadmap for India’s growth policies to aggressively push the nation towards middle-income and beyond by 2047, the 100<sup>th</sup> anniversary of India’s independence.**

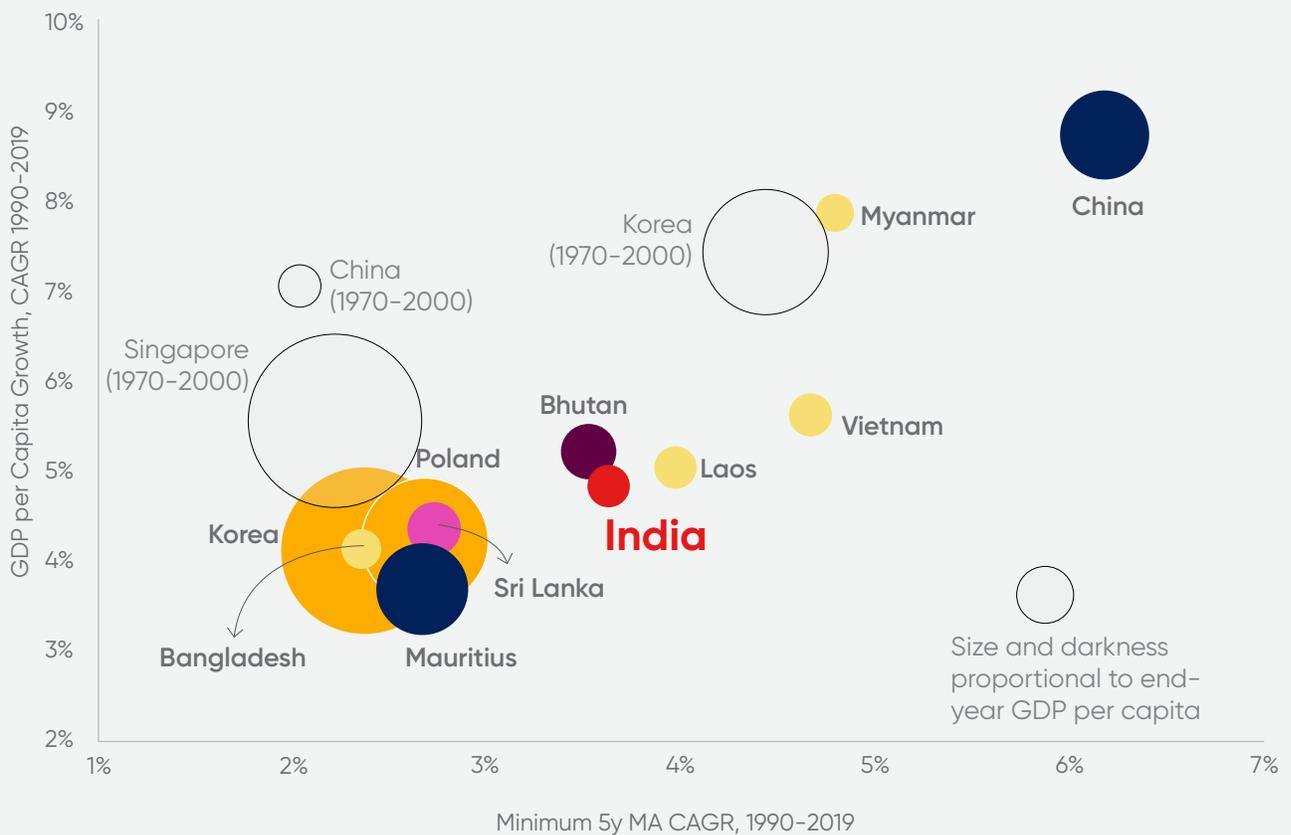


# India's Current Competitiveness

## Performance

India is one of the small group of countries globally that has achieved high and sustained economic growth over the last few decades. Growth has been accelerating over time but then slowed in the years immediately before the pandemic shock.

### Global Leaders in Sustained Prosperity Growth



Source: World Bank

Following the growth of recent years, India is now a lower middle-income country with average prosperity levels at \$2,000 (\$7,150 at purchasing power parity). A closer look reveals a complex mix of gains and remaining challenges. Poverty has fallen over time, while inequality has increased, with very high gains at the top of the income distribution. The pandemic has pushed millions back into poverty, at least for now. Social progress is lagging behind average prosperity, with dramatic weaknesses in environmental quality and the quality of basic education. Social policies have become less distortive, more targeted, and more focused on mobilizing bottom-up upgrading.

Prosperity is driven by productivity and labour mobilization. India's productivity growth – measured by changes in GDP per employee – has been robust and tracked overall GDP dynamics. Labour mobilization, however, is extremely low, especially for women, and has been falling over time, especially since 2005 when job creation dramatically decreased. Structural trends are holding India back: The sectoral transformation from agriculture to industry has been relatively slow, especially in terms of employment. Large firms have driven productivity growth but not job creation and the majority of employees are stuck in small, low productivity, and low growth firms, while there is a significant “missing middle”.

India has become fully integrated into the global economy through significant trade and FDI linkages; the inward-looking India is to a large degree a picture of the past. India's capital and knowledge stocks are in line with the country's current level of development but provide limited pull for reaching higher. However, the trend of decreasing investment intensity in both capital and knowledge over recent years is worrying.

## **The Many Indias – de-averaging across regions and sectors**

For a subcontinent like India, a national average can easily be misleading. Economic and social outcomes across India are indeed highly heterogeneous and there are few signs of convergence. A small group of regions accounts for a large share of national output and overwhelmingly dominates activities like exports and innovation. A large number of less prosperous regions appear largely unconnected to the modern Indian and global economy. Differences in business environment quality are significant and drive both sectoral mix and performance across and within sectors. Many aspects of business environment quality are driven by state-level policy choices and enabling and supporting effective choices at this level of government are critical for India to make progress in upgrading its competitiveness.

India's economy is an economy of clusters, i.e. geographical concentrations of related and supporting industries in specific fields of the economy. In a large number of cluster categories national value creation is dominated by a small share of leading districts. Differences in cluster

mix across regions are huge. Cluster mix is systematically related to economic performance, but every location is also unique in its composition. The most prosperous locations are focused on traded clusters, and are specialized in cluster-categories with the highest average wage levels. Traded clusters are economic activities that compete across locations and can choose from where to operate. While in other countries, local sectors report significantly lower wages and skill intensity than traded clusters, these gaps are more limited in India. Especially within local government, health care, education, and utilities register high wages; education and health care as well as high skills.

Urbanization levels have been rising but remain below the level of peers. Internal migration flows, too, are reported as relatively modest in comparison to international trends, and are focused on movements within rather than across states. Cultural factors might play a role in driving these outcomes, with many Indians staying in locations where their caste and the religious group provides a natural safety net.



## India's competitiveness fundamentals

India's competitiveness, as measured by many international rankings, is significantly ahead of its economic performance. This may signal the potential for significant future growth. But it is more likely that these rankings reflect the reality for only a small share of India's firms, not the economy at large.

On many individual dimensions of competitiveness, India performs in line with its peers. But India suffers from a particular mismatch: Factor input conditions around skills and infrastructure create opportunities primarily for firms that compete on low wages. But many administrative rules and regulations can only be met by companies that operate at a much higher level of performance. As a result, India fails to see the structural transformation it needs, and many companies remain stuck in informality and low scale.

Another way to describe this mismatch is that India performs surprisingly well in more sophisticated dimensions of competitiveness. But the country still lags in key fundamentals, in particular skills, some dimensions of infrastructure, and the costs of doing business. Those parts of India's economy that already have the assets and capabilities to compete in the global economy tend to do relatively well. Those that depend on more basic qualities of the business environment, however, find it hard to take the first steps towards the modern economy.

India has made headway on many factor inputs. In electricity, the country now provides sufficient overall generation capacity to serve nationwide demand. In education, enrollment rates are up as every Indian child is offered the opportunity to get schooling. But the benefits of these improvements too often fail to materialize because of distorted market structures or inefficient governance and incentive systems. In electricity, prices are subsidized for some and high for industrial users; many utilities are in financial distress and unable to ensure resilient and sustainable energy production. Access to proper education infrastructure through government-run schools is low, and even poor parents are keen on paying higher fees in a private school with better services.

Policy action has been taken on many key dimensions of competitiveness, and the aims of these policies are generally consistent with what is needed to achieve higher competitiveness. But their impact is being hampered by insufficiently integrated reform agendas, policy actors working at cross-purposes, and a lacking runway from policy principles to implementation. And there are weaknesses in the development approach that fails to recognize the new realities of the global economy. A key challenge is the weak institutional capacity of the executive and judiciary and an often-ineffective public-private dialogue.

# A Roadmap for Better Growth India@100

## The hill to climb: what will it take for India to realize its ambition?

India is a country that has shown its potential to deliver high and sustained economic growth. But India still classifies as a lower middle-income country. And while India will continue to grow based on its demographic profile and inherent growth dynamics, this current trend growth will not be sufficient to reach its goals and potential. There is a long path ahead to realize its ambition to reach middle income and eventually high-income status.

The competitiveness diagnostics have revealed three particular challenges that India will have to address: First the **shared prosperity challenge**. India's headline GDP growth has been strong and even accelerating. But weak social progress, rising inequality, and a lack of convergence across regions suggest that this growth has failed to translate into the expected improvements in quality of life for many Indians. Second the **jobs challenge**. India has a vast demographic opportunity with a young and growing working-age population. But it has increasingly struggled to create jobs for a large part of its labour force, especially women and the less skilled. Third the **policy implementation challenge**. India's government has pursued an ambitious agenda of economic reforms, largely focused on the relevant issues and based on mostly sound conceptual principles. But the impact on job creation terms of job creation and the growth of firms has fallen short of ambitions. In addition, India is facing a **shifting external environment** with rising geopolitical tensions and changing patterns of globalization, climate change and policies to achieve the transition to net zero, digital transformation and other technological changes all embedded in a complex macroeconomic context.

*The India@100 strategy proposes a set of new guiding principles, new priority policies, and a new implementation model to achieve the transformation that India will need to reach its ambitious goals in view of these external circumstances.*

## New Guiding Principles

The guiding principles for the strategic roadmap are set by clearly defined overall goals and the articulation of a new development approach to get there.

India's ambition to achieve middle-income and ultimately high-income status puts **prosperity** at the center of the proposed goals. The diagnostics have shown, however, that prosperity measured as average GDP per capita is insufficient and Indian leaders have set goals on "Ease of Living", regional development, rapidly increasing renewable energy production, and more. A range of four additional dimensions integrates these different aspects into an overall coherent articulation of India's ambitions:

- Prosperity growth needs to be matched by **social** progress
- Prosperity needs to be **shared** across all parts and regions of India
- Prosperity growth needs to be environmentally **sustainable**
- Prosperity needs to be **solid** and resilient in the face of external shocks

India's development approach on how these goals will be achieved is based on two key principles. First the **integration of the social and economic development agendas**. The India@100 strategy views these agendas as mutually reinforcing and fundamentally connected through job creation. India needs to focus on enabling the creation of competitive jobs for those currently outside of the active labour market. Jobs that provide pathways to higher productivity will over time enable individuals to earn their own livelihoods and become self-reliant.

### Shared Prosperity through Competitive Jobs

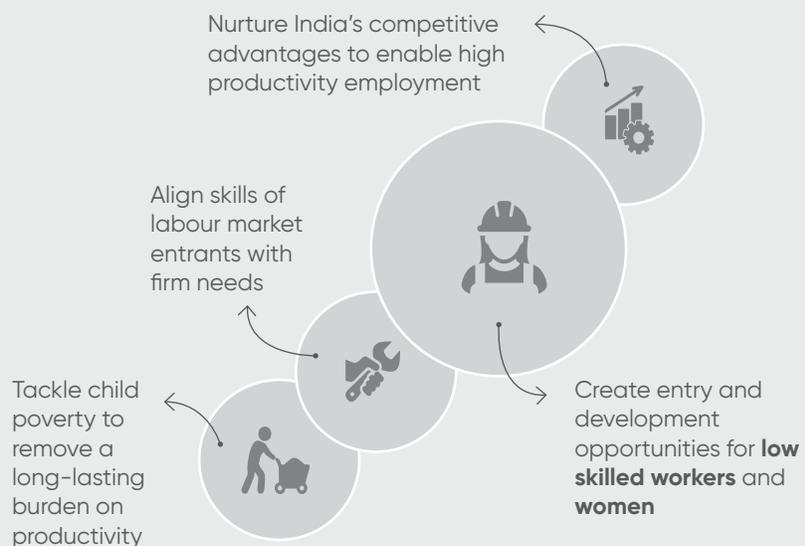
Social Development through opening up pathways towards competitive jobs for low-skilled and female workers

New Principles

Economic Development



Social Development



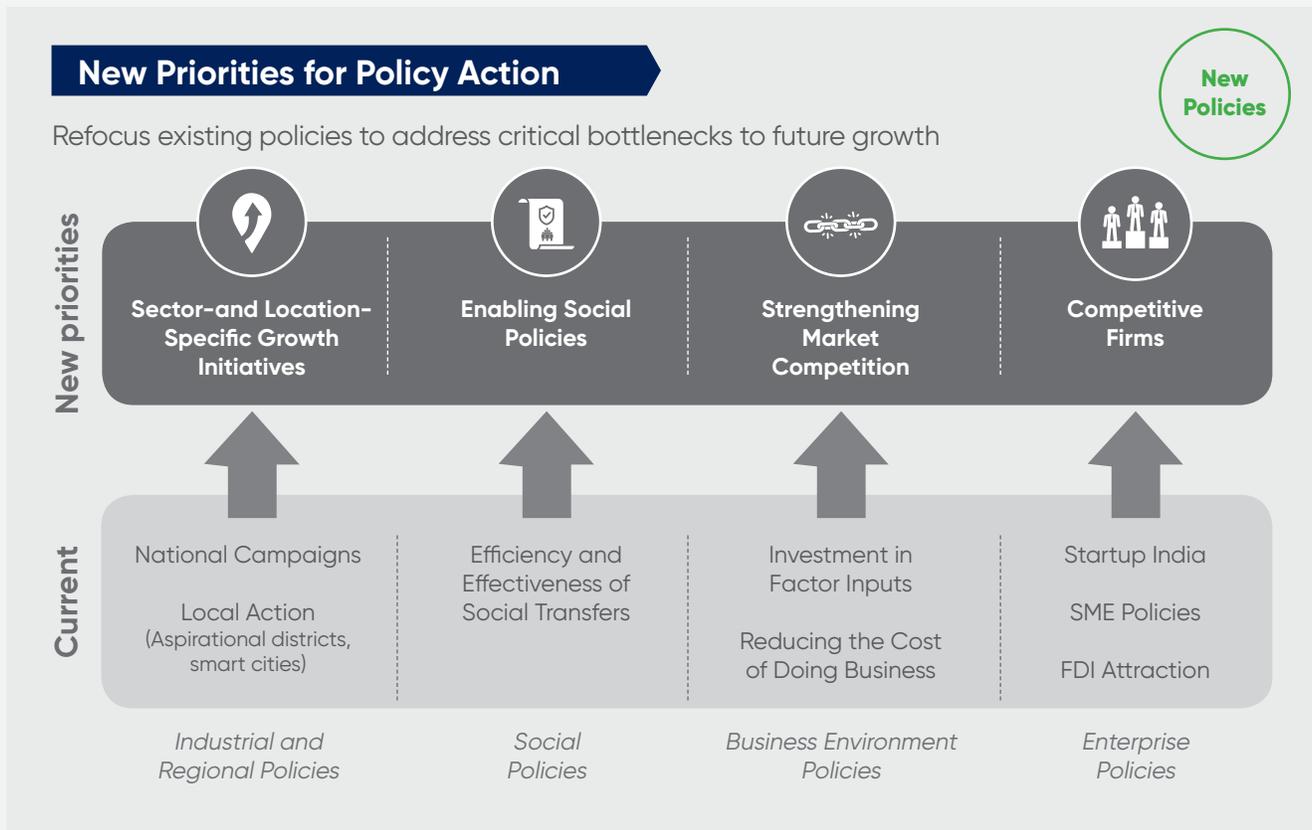
Second, **Structural Transformation 2.0** as a portfolio-based approach for driving job creation across a number of service and industrial sectors. Changes in technology and the structure of the global economy have reduced the power of the traditional growth model based on export-led industrialization alone.

The immediate priority is to identify sectors with an ability to provide entry level opportunities and growth opportunities for those currently outside the active labour force, particularly low-skilled workers and women. While these jobs will initially have limited productivity, they provide the critical first step on a pathway to better jobs. A second focus is on the need to systematically develop sectors aligned with India's current and future competitive advantages. While these industries will not provide jobs to the unskilled today, they will provide the source of jobs for a better skilled India tomorrow. Finally, there needs to be a set of policies targeted at children and young adults to provide them with the appropriate skills and capabilities for succeeding in the labour market.



## New Policy Priorities

The India@100 strategy translates these guiding principles into prioritized policy action. The first set of policies is focused on enabling **competitive jobs**. Competitive jobs earn their wages in the marketplace, support the livelihood of employees, and provide opportunities for developing capabilities and productivity over time. For competitive jobs to emerge, India needs to reframe some of its industrial, regional, social, and business environment policies. The second set of policies are focused on enabling the growth of **competitive firms**. Ultimately there will be no sustainable job creation if India does not enable more productive firms to emerge and scale. India will need to strengthen and reframe its enterprise, competition, and business environment policies to achieve this goal.



India needs to launch a new set of **sector- and location specific growth initiatives** to reframe some of its key industrial and regional policies. Sector- and location-specific initiatives can identify the specific needs of individual clusters and regions and then select from generic policy tools to pursue a coherent strategy for growth and competitiveness upgrading. They will require tight collaboration between public and private sector leaders.

The process for identifying promising fields for such initiatives needs to be open, competitive, and evidence-based. For low-skilled and female workers, critical criteria for attractive sectors are low entry barriers for women and low-skill workers, market opportunities, and the presence of existing competitive advantages. For higher productivity jobs, critical criteria include the evidence of existing competitive advantages, market opportunities, and an alignment with the aspirations of India's national value proposition. Leading clusters can drive activities in the selected sectors.

India needs **enabling social policies** that enhance the employability of labour market entrants and reduce barriers to look for a job. These policies will address urgent social needs across the country and trigger job creation opportunities. In some areas, that will require more resources, in others there is need for regulatory change. Together they exemplify the opportunities from complementary social and economic development and move beyond the current welcome but insufficient focus on enhancing the efficiency of social programs.

Childhood poverty and the lack of accessible healthcare services can result in stunting and other development impediments that reduce children's productive capabilities throughout their entire life. Low quality education and the poor fit of available skills with the needs of the Indian economy create huge barriers for labour market entry. The provision of childcare services and investments in public safety are often critical factors for women to consider looking for employment.

India needs to make **strengthening effective market competition** a more central element of its efforts to upgrade business environment conditions. Deeply distorted market structures across many sectors currently lead to poor outcomes, undoing the significant gains made in factor input conditions. Regulatory frameworks that are unfit for purpose and legacy market structures reminiscent of different times are holding India back.



Effective enforcement of competition policy requires an alignment with the new realities of digital markets and the existing market structures in India. Active policies to encourage entry and enable the scaling of competitive new firms are important given the imbalance between large incumbents and their fragmented competition. Market regulation needs to be used as a tool to encourage value-based competition that encourages firms to compete on productivity. In markets with a strong role of government, robust governance and incentive structures are needed to mimic market dynamics. Across these policies, astute reform management that recognizes the existing political economy of India is critical.

India needs to adopt a comprehensive approach towards enabling the growth of **competitive firms**. Enabling the growth of competitive firms will require deploying a range of supply and demand-side policies, moving beyond current enterprise and industrial policies.

Infrastructure investments to build physical and digital connectivity are critical for firms to be able to access new markets. Regulatory reforms and improved effectiveness of the judicial system have to be pursued to enhance the ease of doing business. Access to capital has to be dramatically strengthened to enable investment and scaling. Market opening domestically (regulation) and internationally (trade policy) can create important new growth opportunities for companies as digitalization reduces transaction costs of tapping into distant markets.

## New Institutional Architecture

Competitive jobs created by competitive firms require a competitive government to provide an enabling business environment and policy context. India lacks neither ambition nor policy targets, but it lacks effective structures and processes to turn these political goals into real changes in the circumstances firms face. The path towards competitive government rests on effective coordination within government, capacity within government, and coordination beyond government.

Strengthening **India's federal structure** is critical given the size and heterogeneity of the country, and there is an increasing realization that India needs more effective location-based policies. Recent reforms have increased the fiscal space for states, and there are interesting initiatives to encourage bottom-up initiatives. But there is no clear overall playbook on effective collaboration across levels of government in areas of concurrent policy authority. And despite the 74<sup>th</sup> constitutional amendment, there has been little if any effective decentralization from state to strong local or regional entities.

India needs to strengthen **coordination within the government** to overcome fragmentation in policy design and implementation. This will require empowering entities with coordination tasks. India has in the past had a more 'tiered' system of ministries, that could be revived in specific

areas. The government should review its internal coordination mechanisms, including the creation of a national competitiveness council chaired by the Prime Minister. This structure could be potentially embedded into an apex body.

**Public-private collaboration** is critical for policies to be designed with a full understanding of the actual consequences they will have for firms and markets and for policy actions to be able to trigger complementary actions by firms. Public-private collaboration has to be sheltered against the pressures of corruption and strive for narrow firm-level benefits vs enhancements of overall competitiveness. The sectoral growth initiatives are an important testing ground for public-private partnerships. They could be supported by a powerful government agency with the ability to coordinate across policy areas.



## Designing a Competitive Government



### Policy Actions

#### PRIORITY POLICY AREAS



**Strengthened federalism** needs to be reflected in roles, capabilities and structures



**Institutional capacity** needs to be built around new structure for cross government cooperation.



**Public-private dialogue** needs to move beyond the choice between silence and cronyism

- Clarify roles and responsibilities across levels of government
- Match policies with actual capacity to implement.
- Embed “One government” principle in structures and careers
- Use sectoral growth initiatives to establish new public private model of collaboration

#### PILOT ACTIONS

- **State/regional strategy challenge fund** offers technical support, co-financing and streamlined access to union funding programs for specific investments to states and regions that aim to develop a comprehensive economic development strategy. Locations are selected in an open competitive process based on their commitment to drive a strategic change process.
- **Regional competitiveness institute set** up regional “action - research entities” that are independent enough to provide regional governments with neutral advice on policy design and implementation but also close enough to them to be a trusted partner in their processes.
- **The Indian competitiveness Observatory** makes key policy relevant data across Indian states and regions available through a national platform. The observatory also enables joint learning and development efforts around evidence based policy.
- **The Microeconomics for Competitiveness- Indian leaders program** is an executive training offering to provide public and private leaders with a common language and conceptual framework to enable better collaboration on economic development.

## From Action Plan to Strategic Agenda

As a strategic roadmap, the India@100 strategy needs to move beyond a current action plan of fixed policy initiatives to be implemented by designated parts of government.

To become an all-of-government agenda, ministries and agencies should review how their activities relate to the roadmap.

To be flexible, the roadmap should be a living document with regular reviews. New initiatives and responses to crises should be tested against their ability to support its goals, leverage its priority policies, and draw on its new implementation model.

To provide guidance over the next 25 years, the roadmap's elements will play a different role over time. Priority policies will have an impact mostly in the near-term. The institutional model will influence the design and implementation of future policies. The principles can influence how India thinks about its circumstances and ways to improve when these circumstances look significantly different from today.

01



# INTRODUCTION

**Prime Minister Modi defined a task for the India Competitiveness Initiative that could hardly be more ambitious:**



**Develop a roadmap for India's growth policies to aggressively push the nation towards middle-income and beyond by 2047, the 100<sup>th</sup> anniversary of India's independence.**



The “Roadmap for Better Growth – India@100” responds to this charge. The roadmap is grounded in a thorough analysis of India's current competitiveness. It takes a broad view of the goals that India has set for itself, and then defines new principles for India's development approach, identifies new policy priorities, and outlines a new architecture for implementation. The roadmap is grounded in a thorough analysis of India's current competitiveness, applying the competitiveness framework that Prof. Michael E Porter has developed over the last few decades.

The roadmap comes at a time when making choices about the future path of the nation is particularly important. India achieved strong and accelerating growth over the last few decades, reaping the gains of different waves of reforms. But the slowdown before COVID raised concerns about the sustainability of the existing growth model. The pandemic was then a deep shock, not only economically but also in terms of the ability of India's public sector to provide core services and decent living conditions for its citizens. Now a robust economic recovery is hopefully underway, but India is like many others facing the uncertainties of a divided world and a fragile global economy. India needs a coherent strategic roadmap with a long-term perspective to navigate these difficult times beyond the tactical responses to short-term shocks and opportunities.

A roadmap that is effective in steering Indian growth policies will be highly consequential for India. There is little doubt that India will in any case grow at a robust rate over the coming years, outperforming many of its global peers. The fundamentals of demographic trends and India's economic profile relative to other parts of the global economy provide fundamental tailwinds. But India's ambitions and opportunities clearly reach beyond the growth dynamics that these underlying trends support. And even drawing on these trends without any self-inflicted or external disruptions will not be automatic. India needs a roadmap that drives fundamental changes beyond its current actions and structures.

An effective roadmap for Indian growth will also be highly consequential for the world. India's role in the global economy will inevitably rise, given its demographics and economic potential. In key levers of global progress like human talent and strategic sectors like IT services and pharmaceuticals, India plays an important role far beyond its borders. India is an important geopolitical balancing factor as a democratic Asian country with strong ties to many parts of the global community. In short, the world has a stake in India's success.

# Report structure

The report is divided into two parts. The first **diagnostics section** provides an assessment of India's current competitiveness, and is broken down into four parts:

- *The performance analysis* establishes a starting point for how India is doing on the outcomes that ultimately matter for its citizens. Additional analysis of the patterns of economic activity and the sectoral composition of the economy provides initial insights into underlying dynamics.
- *The heterogeneity analysis* provides a perspective on the differences across locations and clusters in terms of performance and profile. This decomposition provides further insights into underlying dynamics and action needs/opportunities
- *The analysis of competitiveness fundamentals* looks into the underlying drivers of performance outcomes, relating the current quality of these fundamentals to the relevant policy actions of the last few years. It is at this level where policy interventions need to achieve changes to have a sustained impact on outcomes.
- *The external context analysis* contains a discussion of key global trends and their impact on India's economic trajectory and competitiveness.



The second **strategy section** lays out the policy roadmap for India's future growth path and is broken down into five parts:

- The initial section outlines key barriers to India's current growth model and external trends that will impact its effectiveness in the future.
- The *guiding principles* section sets out a new conceptualization of **India's goals** and a new **development approach** that provides the underlying logic to achieve these ambitions.
- The *priority policies* section translates these principles into specific new policies focused on enabling the growth of **competitive jobs** and **competitive firms**. It outlines how existing policies need to be changed and amended.
- The *implementation model* sector outlines an agenda to create a **competitive government** more capable of designing and deploying effective policies. This will require changes in the public sector but also in the nature of public-private interaction.
- The *final section* discusses how to broaden the action agenda of new priority policies and a new implementation model to become a strategic roadmap that engages all of government and evolves over time.

The report is focused on the key overall analysis and recommendations. Additional material on the diagnostics and the strategic roadmap is available online. There is a more in-depth research on the Indian clusters, an extensive slide deck capturing the competitiveness diagnostics, literature references, and a range of more targeted memos on aspects of the diagnostics as well as specific dimensions of the strategy.

# I Methodology

The India Competitiveness Initiative applies the competitiveness framework developed by Prof. Michael E Porter over the last few decades, and applied across a wide range of countries and regions.

The competitiveness framework is centered on productivity as the key driver of long-term prosperity. Countries are competitive, if they are able to provide a context that allows firms to be productive, and individuals to share into the value being generated through their productivity. This context is largely shaped by microeconomic foundations, including the quality of the business environment, the sophistication of firms, and the presence of clusters. Macroeconomic competitiveness affects the overall context and a country's ability to leverage and build its microeconomic capabilities. Endowments are a given, driving a country's uniqueness as well as shaping the type of economic forces it is exposed to.

## What is Competitiveness?

### PRODUCTIVITY



#### Microeconomic Competitiveness

*Quality of the Business Environment*

*Economic Composition and the State of Cluster Development*

*Sophistication of Company Operations and Strategy*



#### Macroeconomic Competitiveness

*Sound Monetary and Fiscal Policies*

*Effective Public Institution*

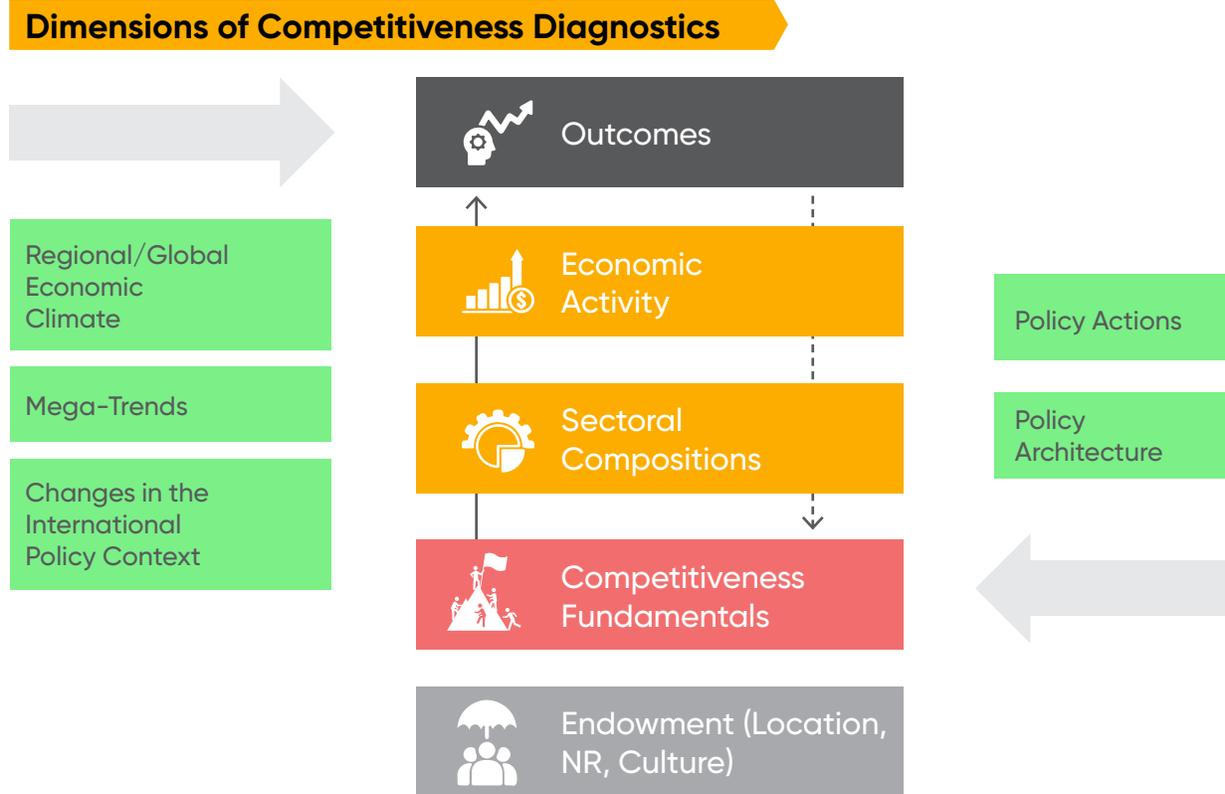
*Human and Social Development*

### ENDOWMENTS

Source: Michael E. Porter

The competitiveness framework emphasizes the need for a location-specific perspective. Every location is different, given its economic composition and the profile of its microeconomic foundation. The needs of locations are therefore different, reflecting their performance profile but also their possible development trajectories. Furthermore, the potential of different policy interventions are different, given the impact of existing circumstances on the value creation potential of specific policies. The competitiveness diagnostics provides a comprehensive

perspective on the specific circumstances in India. The lens it provides is grounded in a large body of academic research and has been successfully applied across countries and regions with widely different circumstances.



The strategic roadmap for India@100 is based on the observation that competitiveness is not simply a function of implementing best practices across all policy areas. The number of policy areas that matter is huge, and no region or country can (or should try to) make progress in all areas simultaneously. Instead, successful competitiveness upgrading requires an overall agenda with priority actions for creating a more distinctive and competitive position for a country or region. A strategic roadmap is thus about choices. These choices are informed by an understanding of the general dynamics of competitiveness, the Indian competitiveness diagnostics, and the country's ambitions and values.

The work has drawn on a wide range of sources. A large number of Indian and international data sources were used, and more in-depth studies were conducted on Cluster Mapping using the Periodic Labour Force Survey (PLFS) and on productivity decomposition using the Reserve Bank of India's KLEMS database. A literature review has captured the insights of more than 150 recent articles, studies, and research reports focused on India. A stakeholder group of Indian leaders provided critical guidance and insights, and interviews with additional experts added an important perspective.

02

# DIAGNOSTICS

## ASSESSING INDIA'S CURRENT COMPETITIVENESS

+3.0%  
+5.95

DRREDDY -2.9%  
2822.85 -82.65

GAIL  
119.7

# A Economic Performance

## Growth, prosperity, and social progress

Since the 1980s, India has been among the global leaders in sustained, accelerating economic growth. Prior to the 1980s, Indian growth languished between 3% and 4%. Since then, and especially since the reforms in the early 1990s, average growth rates by decade have accelerated to between 5.5% and 7.5%. In 2016, India reached its peak annual growth so far at 9%. Since then, growth has dropped to between 5% and 7% before dramatically slowing in 2020 as the pandemic hit. Recent growth forecasts suggest a robust recovery once COVID has been overcome before growth is assumed to revert to a trend growth level of around 6.5%.

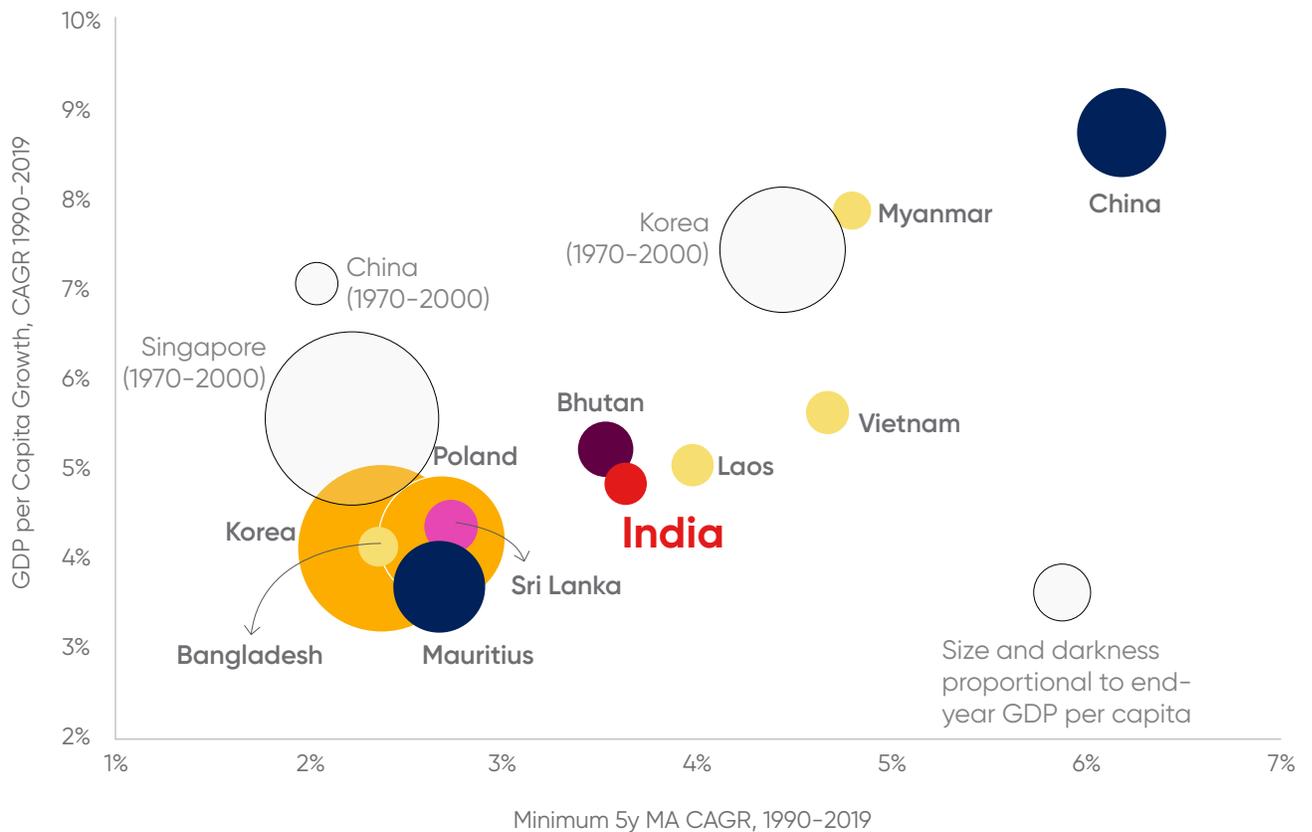
The reasons for the pre-pandemic growth slowdown have been intensely debated. A prime candidate is the twin balance sheet problem in financial institutions and parts of the corporate sector and its impact on investment. Credit as a share of GDP has been flat since 2008, after growing rapidly in the decade before. But initially there have been countervailing forces: Household consumption grew at an increasing rate between 2008 and 2016. Until 2013, rising exports kept up growth as well. After that, government consumption provided momentum until 2018. As a result of these opposing forces losing strengths, growth slowed in 2017 and then again in 2019.

The pandemic had a deep impact on the Indian economy. The hard lockdown in the early phase of the pandemic had dramatic consequences for the service-heavy and largely informal Indian economy. India's capacity for fiscal stimulus is limited, and the devastating second wave hitting the country in the summer of 2021 limited private consumption. In 2021 growth rates are now projected at close to 10%. The impact of the pandemic on trend growth is still hard to assess; for now, most forecasts see India's trend growth returning to the levels seen immediately prior to the pandemic.

## PROSPERITY, POVERTY, AND INEQUALITY

India is a lower-middle income economy, with an average GDP per capita level of around \$2,000 (current prices) / \$7,200 (Purchasing Power). Its prosperity level is at 18.5% of the global average, compared to less than 6.5% of the global average in the early 1990s when economic reforms started. India has been one of the global leaders in sustained prosperity growth. Only China, Myanmar, Vietnam, and Lao have, over the last three decades, achieved higher and more stable prosperity growth. In the three decades before 2000, only Korea achieved a higher performance than India recently.

### Global Leaders in Sustained Prosperity Growth



Source: World Bank

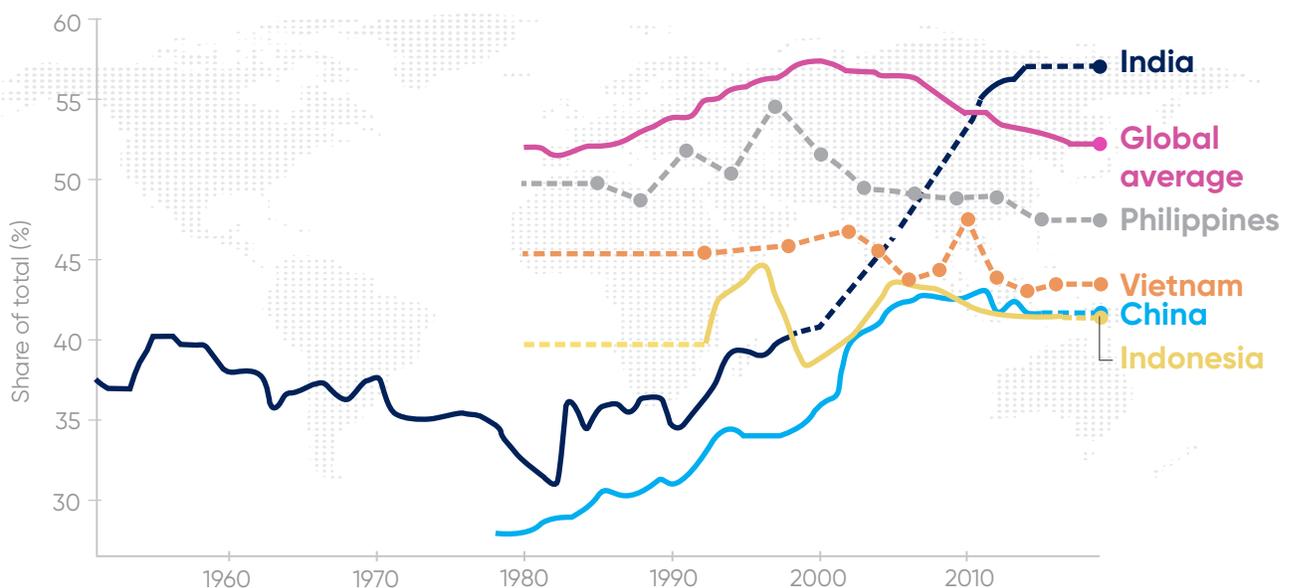
Despite this robust prosperity growth, India still faces significant poverty. Roughly 20% of its population is below the poverty line; the exact number depends on the definition of poverty applied. This is a large improvement compared to the more than 45% at the beginning of the reforms in the early 1990s, and has brought India in line with the average of lower middle-income countries. Poverty reduction has been about three times as fast after 1990 than before. But the absolute number of poor people in India remains large, with 95% of the population classified as either poor or low income. World Bank data suggests that the pandemic has pushed close to 75m Indians from low-income to poverty.

India continues to suffer from a high incidence of malnourishment, especially among children. 35% of Indian children under five years are subject to stunting, i.e. reduced growth due to poor socioeconomic conditions that limit intellectual and physical capabilities throughout life. While the incidence of stunting has dropped over time, it remains high relative to peers.

While poverty has fallen, inequality has significantly increased, especially since 2000. This trend has been in contrast with the dynamics globally and in other emerging economies. The rise in inequality has been most pronounced in urban areas. Inequality is higher for wealth and income than for consumption. Poverty and inequality have, in the Indian context, been largely unrelated or negatively associated. Inequality seems largely driven by rising wealth and income at the very top of the urban society of India.

## Income Inequality Across Selected Countries

Top 10% National Income Share, 1951-2019



Source: World Inequality Database

There is some evidence that in the period since 2010 income and consumption have been growing more strongly for lower income groups. As a result, inequality has fallen somewhat, but remains above the level in 2004-05. The Pandemic has been a deep shock, pushing significant numbers of Indian close to the poverty line or below.

India has low levels of intergenerational mobility, both in terms of income and education. Those born into poor and uneducated families tend to stay that way. Social mobility has increased somewhat, especially in the last two decades, but remains low compared to peers.

## ***SOCIAL PROGRESS***

Quality of life is affected by a wide range of non-GDP related factors and not only income. The Social Progress Index, introduced by Prof Porter and some of his colleagues, captures these factors quantitatively across countries. India ranks 115<sup>th</sup> among 163 countries on the overall measure of social progress, slightly below its GDP per capita ranking. But performance is dramatically weaker in some dimensions, in particular environmental quality, gender equality, and the quality of basic education. Here India performs poorly not only in absolute terms but also relative to its peers. On the other hand, India ranks among the global top ten countries in terms of quality-weighted universities.





# INDIA

## SOCIAL PROGRESS INDEX GDP PER CAPITA PPP

Score/Value

Rank

Strength/  
Weakness**58.81**  
\$6,118**115/168**  
111/163**BASIC HUMAN  
NEEDS**  
Rank 114  
Score/Value 71.32

	Score/Value	Rank
<b>Nutrition &amp; Basic Medical Care</b>	<b>76.04</b>	<b>124</b> ●
Undernourishment (% of pop.)	14	109 ●
Deaths from infectious diseases (deaths/100,000)	179.26	119 ●
Child stunting (% of children)	24.74	153 ●
Maternal mortality rate (deaths/100,000 live births)	150.45	119 ●
Child mortality rate (deaths/1,000 live births)	34.27	115 ●

	Score/Value	Rank
<b>Shelter</b>	<b>82.93</b>	<b>102</b> ●
Usage of clean fuels and technology for cooking (% of pop.)	64.2	99 ●
Access to electricity (% of pop.)	97.82	102 ●
Household air pollution attributable deaths (deaths/100,000)	59.59	115 ●
Dissatisfaction with housing affordability (0=low; 1=high)	0.25	18 ●

	Score/Value	Rank
<b>Water &amp; Sanitation</b>	<b>64.28</b>	<b>118</b> ●
Unsafe water, sanitation and hygiene attributable deaths (per 100,000 pop.)	69.76	137 ●
Access to improved water source (proportion of population)	0.92	108 ●
Access to improved sanitation (proportion of population)	0.72	115 ●

	Score/Value	Rank
<b>Personal Safety</b>	<b>62.04</b>	<b>105</b> ●
Transportation related fatalities (deaths/100,000)	17.68	100 ●
Perceived criminality (1=low; 5=high)	4.00	88 ●
Political killings and torture (0=low freedom; 1=high freedom)	0.59	117 ●
Deaths from interpersonal violence (deaths/100,000)	2.91	77 ●

**FOUNDATION  
OF WELL BEING**  
Rank 144  
Score/Value 50.59

	Score/Value	Rank
<b>Access to Basic Knowledge</b>	<b>58.43</b>	<b>135</b> ●
Equal access to quality education (0=unequal; 4=equal)	0.96	135 ●
Women with no schooling (% of women)	0.38	134 ●
Gender parity in secondary attainment (distance from parity)	0.41	139 ●
Primary school enrollment (% of children)	n/a	n/a ○
Secondary school attainment (% of population)	39.3	117 ●

	Score/Value	Rank
<b>Health and Wellness</b>	<b>49.45</b>	<b>127</b> ●
Life expectancy at 60 (years)	18.96	95 ●
Premature deaths from non-communicable diseases (deaths/100,000)	465.51	126 ●
Access to essential health services (0=none; 100=full coverage)	51.46	123 ●
Equal access to quality healthcare (0=unequal; 4=equal)	0.89	145 ●

	Score/Value	Rank
<b>Access to Information &amp; Communications</b>	<b>59.36</b>	<b>108</b> ●
Mobile telephone subscriptions (subscriptions/100 people)	84.27	130 ●
Access to online governance (0=low; 1=high)	0.86	29 ●
Media censorship (0=frequent; 4=rare)	1.49	126 ●
Internet users (% of pop)	20.08	140 ○

	Score/Value	Rank
<b>Environmental Quality</b>	<b>35.12</b>	<b>166</b> ●
Outdoor air pollution attributable deaths (deaths/100,000)	95.64	153 ●
Deaths from lead exposure (deaths/100,000)	23.4	155 ●
Particulate matter pollution (mean annual exposure, µg/m³)	91.5	165 ●
Species protection (0=low; 100=high)	63.01	110 ●

**OPPORTUNITY**  
Rank 93  
Score/Value 54.52

	Score/Value	Rank
<b>Personal Rights</b>	<b>69.01</b>	<b>94</b> ●
Political rights (0=no rights; 40=full rights)	34	44 ●
Freedom of expression (0=no freedom; 1=full freedom)	0.55	114 ●
Freedom of religion (0=no freedom; 4=full freedom)	2.36	137 ●
Access to justice (0=non-existent; 1=observed)	0.67	94 ●
Property rights for women (0=no right; 5=full rights)	3.93	107 ●

	Score/Value	Rank
<b>Personal Freedom &amp; Choice</b>	<b>53.1</b>	<b>125</b> ●
Vulnerable employment (% of employees)	73.79	142 ●
Early marriage (% of women)	13.84	116 ●
Satisfied demand for contraception (% of women)	73.7	68 ●
Perception of corruption (0=high; 100=low)	40	76 ●
Young people not in education, employment or training (% of youth)	30.75	145 ●

	Score/Value	Rank
<b>Inclusiveness</b>	<b>43.76</b>	<b>99</b> ●
Acceptance of gays and lesbians (0=low; 100=high)	0.53	38 ●
Discrimination and violence against minorities (0=low; 10=high)	8.2	137 ●
Equality of political power by gender (0=unequal power; 4=equal power)	1.9	93 ●
Equality of political power by socioeconomic position (0=unequal power; 4=equal power)	1.77	111 ○
Equality of political power by social group (0=unequal power; 4=equal power)	1.97	109 ●

	Score/Value	Rank
<b>Access to Advanced Education</b>	<b>52.22</b>	<b>92</b> ●
Expected years of tertiary education	1.43	91 ●
Women with advanced education (%)	0.2	115 ●
Quality weighted universities (points)	229	6 ●
Citable documents (documents/1,000)	0.14	96 ●
Academic freedom (0=low; 1=high)	0.46	120 ●

### Notes:

Overall index, component and dimension scores are on a 0-100 scale; indicators scores are raw values.

### Comparing Countries

Over- and underperformance is relative to 15 countries of similar GDP per capita  
West Bank and Gaza, Cabo Verde, Angola, Uzbekistan, Nicaragua, Honduras, Morocco, Djibouti, Ghana, Laos, Nigeria, Mauritania, Côte d'Ivoire, Kyrgyzstan, Vietnam.

### Key

- Overperforming by 1 or more pts. ●
- Overperforming by less than 1 pts. ○
- Performing within the expected range ●
- Underperforming by less than 1 pt. ○
- Underperforming by 1 or more pts. ●
- No data available ○

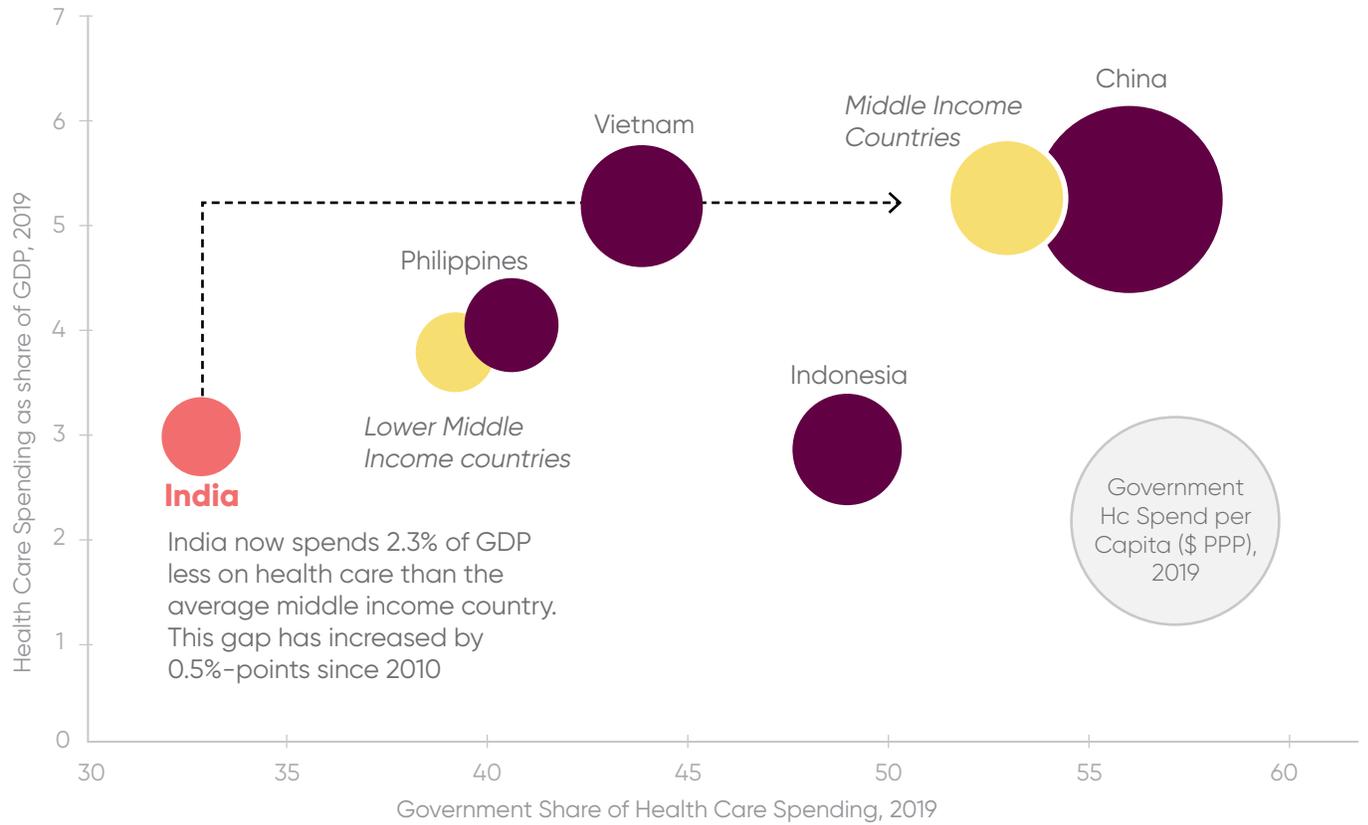
Air quality is extremely poor across India, especially in the cities, reflecting an inefficient and heavily carbon-based energy system as well as farming practices like stubble burning. India is also struggling with water shortages and eroding soil quality, driven by agricultural policies that encourage wasteful farming practices. India's CO<sub>2</sub> emissions are so far modest relative to China, oil producers and OECD countries. But rising energy needs in combination with a high carbon intensity of energy production and GDP signal significant challenges ahead.

On gender inequality, India has made some progress in recent years but continues to rank very low in international comparison. Indian women have made large gains in education and now have enrollment rates at all levels that are higher than men. But there are still 186 million women who are unable to read or write a simple sentence in any language, and the female literacy rate is at 65%, more than 15%-points behind men. Indian women have also seen their life expectancy move above men, and the mortality rate of girls below 5 years of age has dropped to a level only slightly above boys. But women continue to have lower access to health care, and the share of girls in newborns is 5% below biological norms.

The government has in recent years adjusted its policy mix in support of the poor, trying to overcome the high fiscal costs and significant inefficiencies of previous policies. Traditionally, there has been a focus on subsidized access to key consumption goods like food and energy, requirements to employ specific groups in the public sector (**'reservation' system**), and regulations to shelter small-scale firms in specific sectors. A key element of the new approach is the shift towards **direct financial transfers** to households in need, drawing on the "India Technology Stack", drawing on large penetration of mobile phones, the **Aadhaar personal ID-number**, and the **Pradhan Mantri Jan Dhan Yojana (PMJDY) Scheme** providing poor households with accounts. In 2017, energy price reforms introduced such transfers to compensate poor households for the liberalization of LPG markets. Another key element is different schemes to support poor locations: The **"SAGY" initiative** launched in 2014 drives rural development via the creation of 'model villages'. The **"Aspirational Districts" initiative** launched in 2018 supports some of the most challenged districts in India to raise their social performance. In addition, the government is focusing on specific social issues through efforts like **"Clean India"** (improve sanitation and hygiene), **Ayushman Bharat** (provision of healthcare services), and **POSHAN Abhiyaan** (reducing malnutrition), and continues to run **Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS)**, a job guarantee program in rural regions.

There remain concerns about the fiscal resources deployed to address social issues, in particular health care. Here India remains behind many of its peers. Private spending has filled some of the void government has left, but not all. These gaps have been laid bare during the pandemic, despite India's successful vaccination campaign.

## Health Care Spending



Source: World Bank

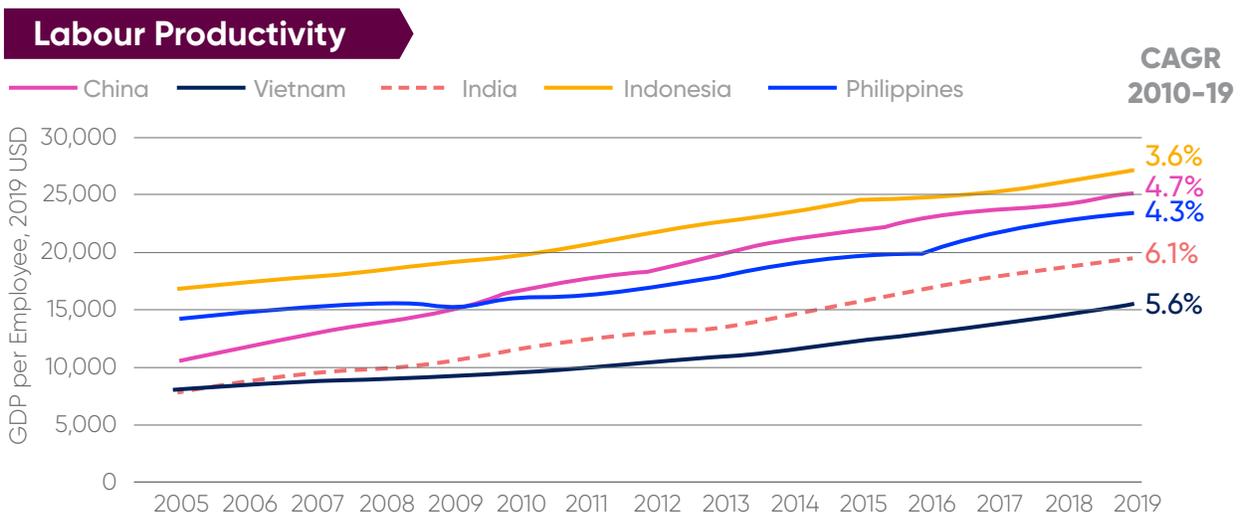


## Decomposing Indian prosperity growth

Prosperity growth can be decomposed into changes in labour productivity and in labour mobilization. For India, gains in labour productivity growth have over time become the key driver of output growth. In the 1980s, labour productivity growth contributed about 50% of growth. This share rose to 60% in the 1990s and 2000s and reached 80% over the last decade, unusual for an economy that has seen significant growth of its working age population.

### LABOUR PRODUCTIVITY

Labour productivity differences tend to be the main driver of prosperity differences across countries. For India, though, labour productivity is relatively high compared to peer countries. India's labour productivity is at 80% of the Chinese level, despite only reaching 50% of China's prosperity. India's labour productivity has grown to be close to 25% higher than Vietnam's, while Vietnam achieves 20% higher prosperity.



Source: Conference Board

India has registered robust and accelerating labour productivity growth over time. During the 1980s and 1990s, labour productivity grew by slightly more than 3% (CAGR). During the 2000s growth increased to more than 5%, and then to more than 6% in the last decade.

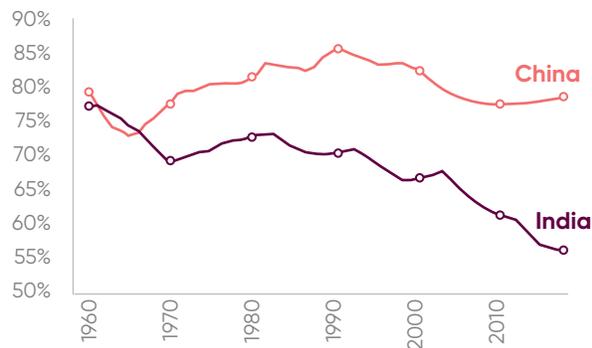
India's labour productivity benefits from relatively high capital intensity; China and Indonesia are outliers. On human capital, India lags behind; however, the data covers the entire working-age population, while human capital in the active workforce might be considerably higher. India has finally registered robust total factor productivity growth ahead of its peers – a measure of changes in labour productivity not explained by capital deepening or human capital improvements that is often associated with better management and use of technology.

## LABOUR MOBILIZATION

Labour mobilization is the critical weakness of the Indian economy. The share of the labour force in the working age has dropped from roughly 70% in 1990 to 56%. India now lags its peer by a significant margin.

### Labor Mobilization Since 1960

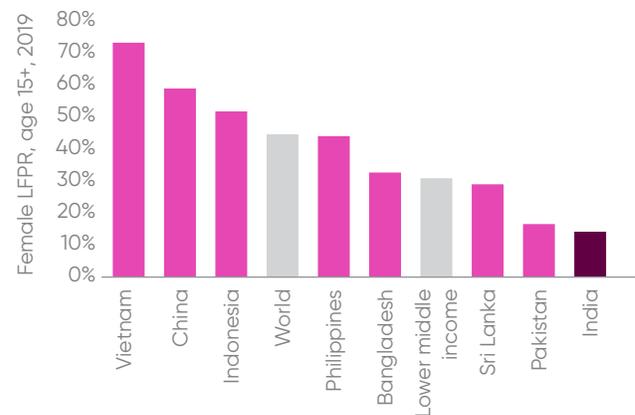
Employees as Share of Working Age Population



Source: Conference Board, World Bank

### Female labour Force Participation Rate

Selected Countries



Source: World Bank

The low and falling labour mobilization has dramatic implications for the economic value generated by India's working age population. Compared to China, a lower Indian labour mobilization explains 60% of the prosperity gap. Compared to Vietnam, India registers 15% lower value generation per working age citizen vs 25% higher labour productivity per employee. And the gap is widening: growth of GDP per capita over the last decade has also been lower than for Vietnam, while it has been higher for labour productivity by employee.

Labour force participation is particularly low for women. Indian women account for only 25% of all employees, and their wages are less than 50% of the national average. There are significant differences across sectors and to some degree across locations. There is huge heterogeneity among women: One large group is in low-wage sectors like agriculture, textile, apparel, and tobacco, where they earn even lower wages than the national average. Another large group of women is in higher-wage sectors like education, health care, and advanced services, where they earn wages that are closer to or even above the national average.

India reports high youth unemployment, despite the modest overall unemployment rate. This is worrying given that 130m young people are expected to join a labour force of roughly 900m over the next decade. Young people – especially young women – drop out of the labour force as they look for but do not find employment after finishing their education.

## **SECTORAL TRANSFORMATION**

An important driver of the aggregate changes in Indian labour productivity and employment is the structural transformation from agriculture to services and to some degree industry. This transformation has occurred for value-added but less so for employment.

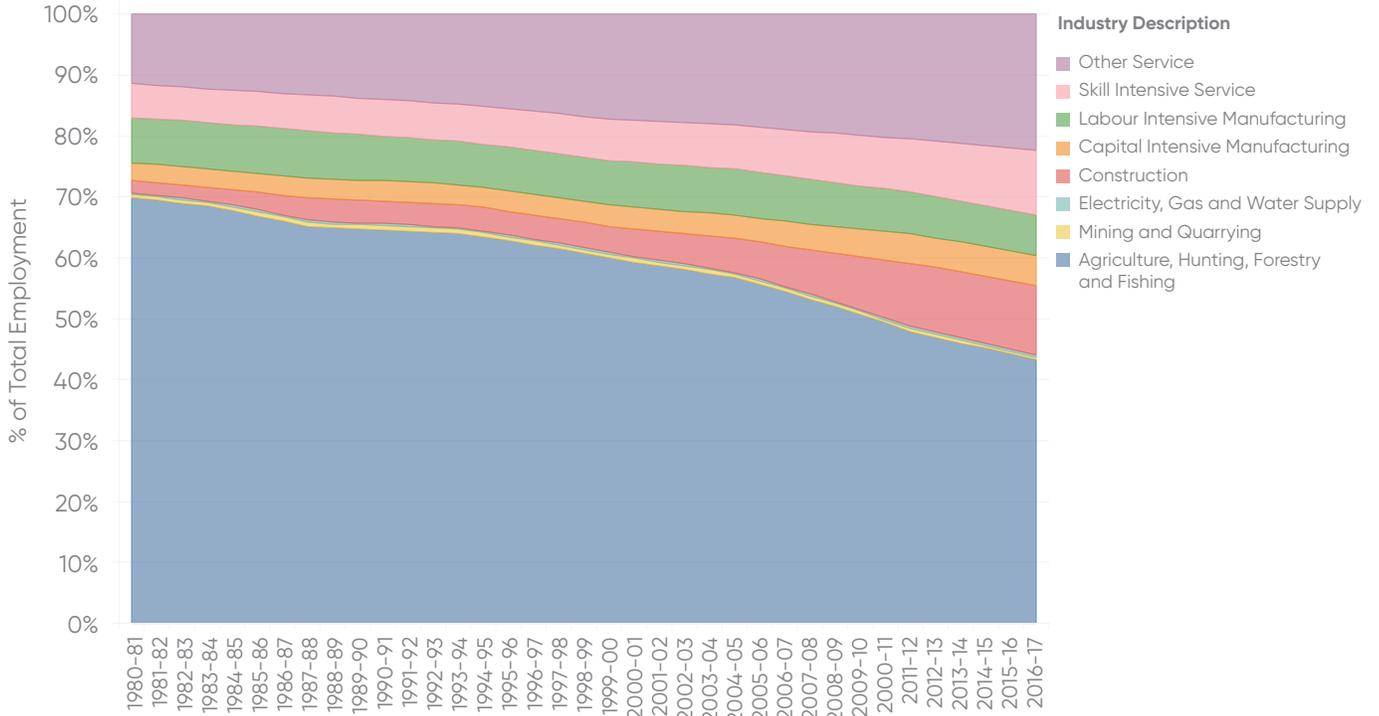
Agriculture now accounts for less than 20% of all value added but still more than 45% of employment. Services now account for more than 50% of value-added and 30% of all jobs. High-skill services contribute about half of this value-added, but less than a third of both employment and job creation. Capital-intensive manufacturing has gained value added but not jobs. And Construction has added jobs but not value-added. India is often seen as a country with an unusually large service and small manufacturing sector. The reality is more nuanced: Services are large in exports, but their share in value-added and employment tracks other lower middle-income countries and has fallen behind China. The share of manufacturing in value-added and of industry in employment has fallen, but is similar to the global average and has for the past decade been similar to Vietnam, a country that has stood out for its manufacturing export-driven growth



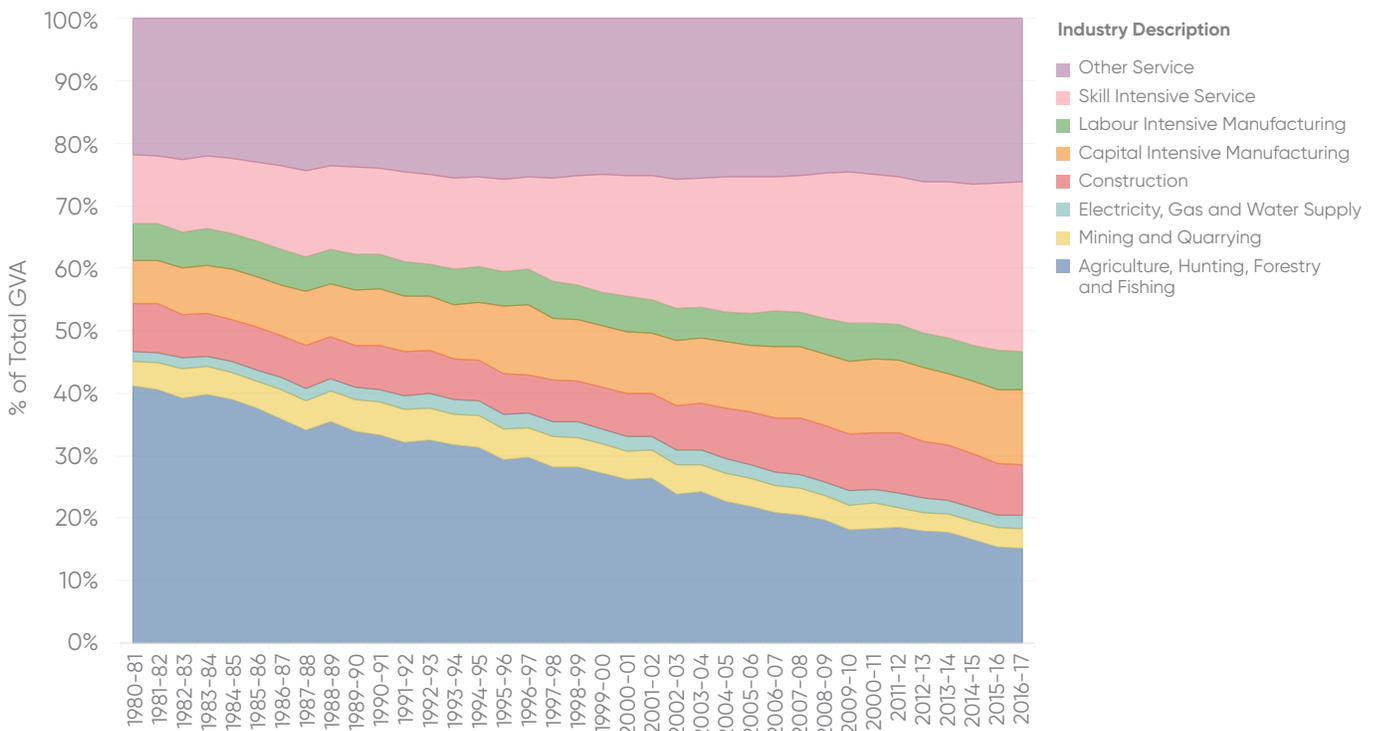
## Sectoral Composition of the Indian Economy

1980-2017

### Employment Share by Industry



### Share in Value Added by Industry



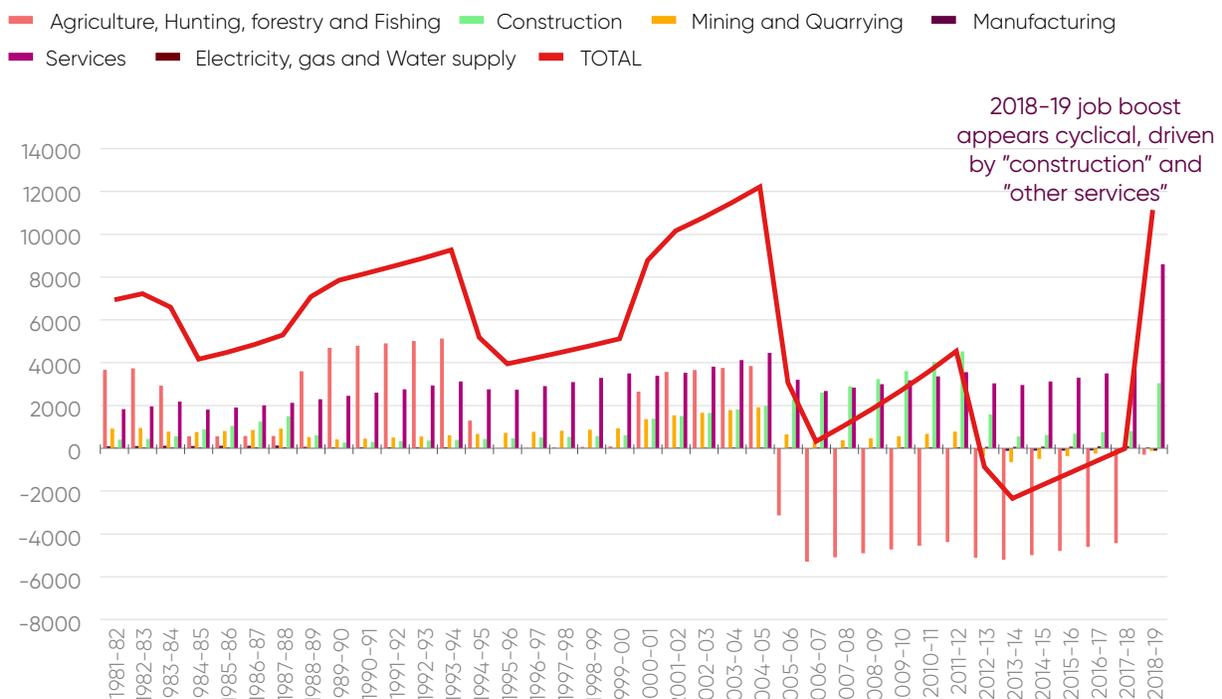
Source: RBI

For economy-wide labour productivity growth, the biggest individual drivers have been labour productivity growth within services and agriculture and the shift of employment from agriculture into other sectors. Together, these factors accounted for close to 70% of Indian labour productivity growth over the last four decades. Overall, labour growth within broad sectors accounted for roughly two-thirds of all labour productivity growth, while changes in the relative size of individual sectors contributed the other third. India is unusual in the relatively small role of manufacturing, especially labour-intensive manufacturing, and the high labour productivity level in services relative to manufacturing.

For economy-wide labour mobilization, the key driver is the successful shift from employment in agriculture into other parts of the economy. For India, this process has fallen short. The shift out of agriculture has only started in earnest since the early 2000s, at a time when labour productivity growth in agriculture started to accelerate. But other sectors have failed to create enough jobs to provide opportunities for those leaving agriculture and the between 6-10 million Indians entering the labour force every year.

Job creation in the service sector has been between 2 and 4 million per year. This is significant but insufficient to provide enough opportunities for those looking for work. Job creation in manufacturing, the other main source of potential job creation, has never moved above 2 million annual new jobs, and job creation has come to a virtual stand-still since 2005. Between 2005 and 2012, rising job creation in construction picked up some of this slack. But since then, construction and manufacturing together have not created any new jobs.

## Job Creations by Sector (1980–2019)



Source: RBI

## ***ENTRY, EXIT, AND FIRM GROWTH***

The reallocation of economic activities across firms is another key driver of aggregate changes in labour productivity and employment. India's economic performance is held back by low levels of dynamic allocative efficiency across firms. The growth of more productive firms is insufficient, while sub-scale, less productive firms persist in the market.

India's economy is dominated by a small number of large companies. 350 of them, 0.04% of the total, account for 55% of all company income. The 6,50,000 smaller companies account for only 1% of all income. But even in manufacturing these companies with less than 50 employees account for close to 85% of all employment in the sector, compared to 25% in China. Furthermore, Indian companies do not grow significantly over time, and even firms with low levels of performance do not exit the market. This leaves India with a large number of low performance and stagnant firms that offer few opportunities for job creation and job upgrading. Where India is lacking is in the presence of medium-sized companies, in many countries the backbone of economic activity. In India, these companies have registered the highest productivity growth over the last few years. But there are by far too few of them.

Intertwined with the lack of growth dynamism is the issue of informality. Low-performance firms see little benefits in "becoming formal", while informality is further trapping them in a low performance-low dynamism context. Formality is in itself a gradual process from paying VAT on products and services to paying income taxes for employees to adhering to the full range of government rules and regulations. The dynamics on many Indian markets remain tilted against formal companies, enabling informal rivals to compete more successfully.

At the same time, there is a different India of globally successful companies and of a growing number of tech-based start-ups that are racing to tap into Indian and global equity markets. There are also countless examples of successful Indian entrepreneurs that have created growing (and formal) companies outside of India.



## India's trade, investment, and innovation

*A country's performance on trade, investment, and innovation provides important insights into the past, present, and future of its competitiveness. The prior two are important signs of past and present competitiveness, the latter of future potential.*

### TRADE

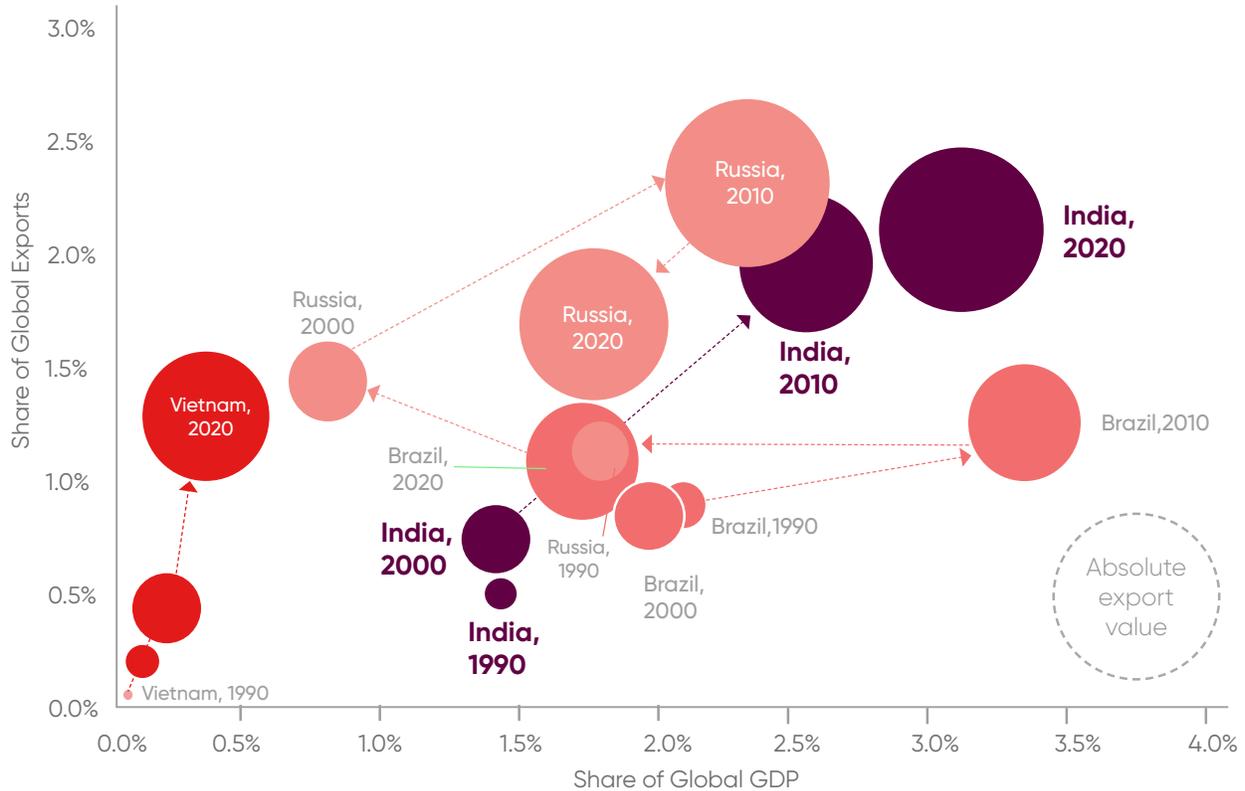
India has long been viewed as a domestically oriented economy with relatively limited engagement with the global economy. But this has changed significantly over the last decades. India has long been viewed as a domestically oriented economy, with relatively limited engagement with the global economy. But this has changed significantly over the last decades. India's share of global exports has during this period increased from 0.75% to more than 2. Growth has been especially pronounced for services, particularly IT services. India stands out with services accounting for more than 40% of its exports, compared to less than 25% for global trade on average. Exports now account for 18% of Indian GDP, compared to 13% twenty years ago. Slightly more than 15% of Indian domestic value added serves foreign demand, much more so in ICT services, where it is above 50%.

But the data does reveal that exports have become a less important driver of growth in the Indian economy: Over the last decade, India's share in global trade has been essentially flat, while its share of global GDP increased from 2.5% to 3.1%. Indian export growth in real terms has dropped from 14% CAGR between 2000 and 2010 to 3.5% since then (6% if only looking at the pre-pandemic period). India is, with a share of exports in GDP at 18%, less trade-oriented than many of the other leading exporting nations globally; it had reached its top value so far in 2011 at 24.5%. China recorded its maximum export share in GDP in 2006 at 36%; it now stands at 18.5% as the economy has become significantly more focused on the growing domestic market. Small export-oriented countries reach much higher values; Vietnam, where exports are now at 106% of GDP, and Poland (55%) have seen consistent growth of their export shares.



## Global Economic Footprint

Selected Economies over time

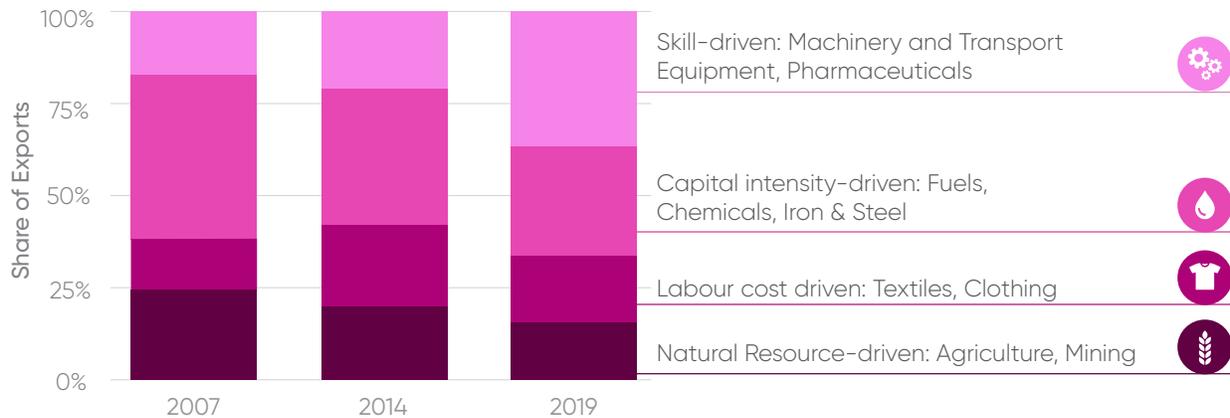


Source: World Bank

India's integration into global value chains is limited, especially following a drop over the last five years. Indian exports use relatively few foreign inputs. The limited capacity of domestic suppliers reduces India's capacity to exports. Only Indian IT service exports play a significant role in other countries' exports, being used by a wide range of foreign industries. Outside of IT, Indian exports tend to serve foreign end demand directly rather than being part of sophisticated global value chains.

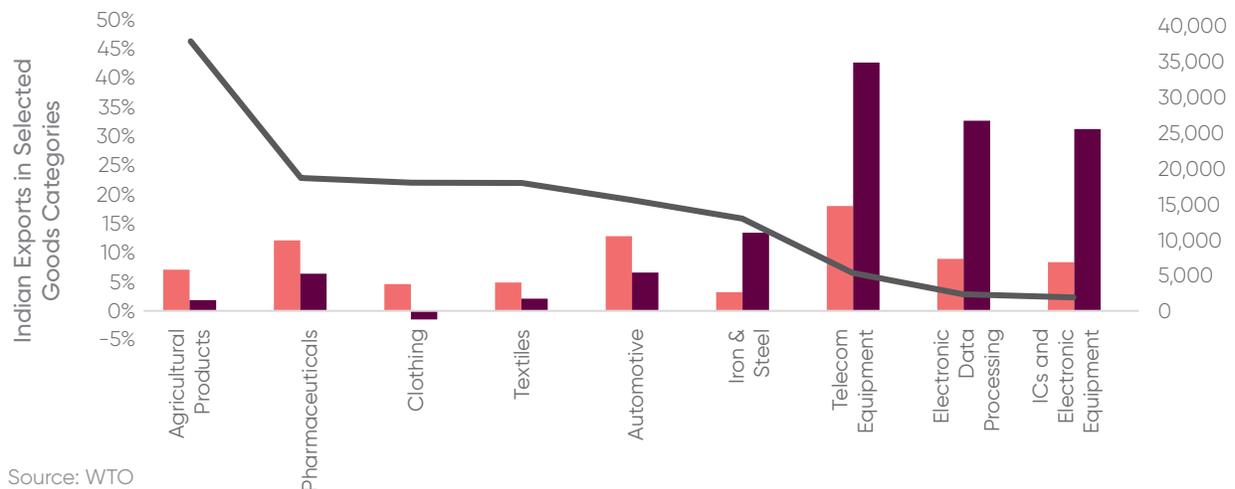
India's export mix has over time shifted towards more skill-intensive sectors like pharmaceuticals, machinery, and transportation equipment. The growth in service exports, too, is signally a shift towards skill-intensive sectors. India's export portfolio thus seems to move further away from the country's comparative advantages in terms of abundant low-skill labour. Export growth has been most dynamic in smaller technology-intensive industries, where India still has a small presence on the global market.

## India Goods Exports across Sector Types



Source: WTO

## Recent Dynamics in Indian Exports



Source: WTO

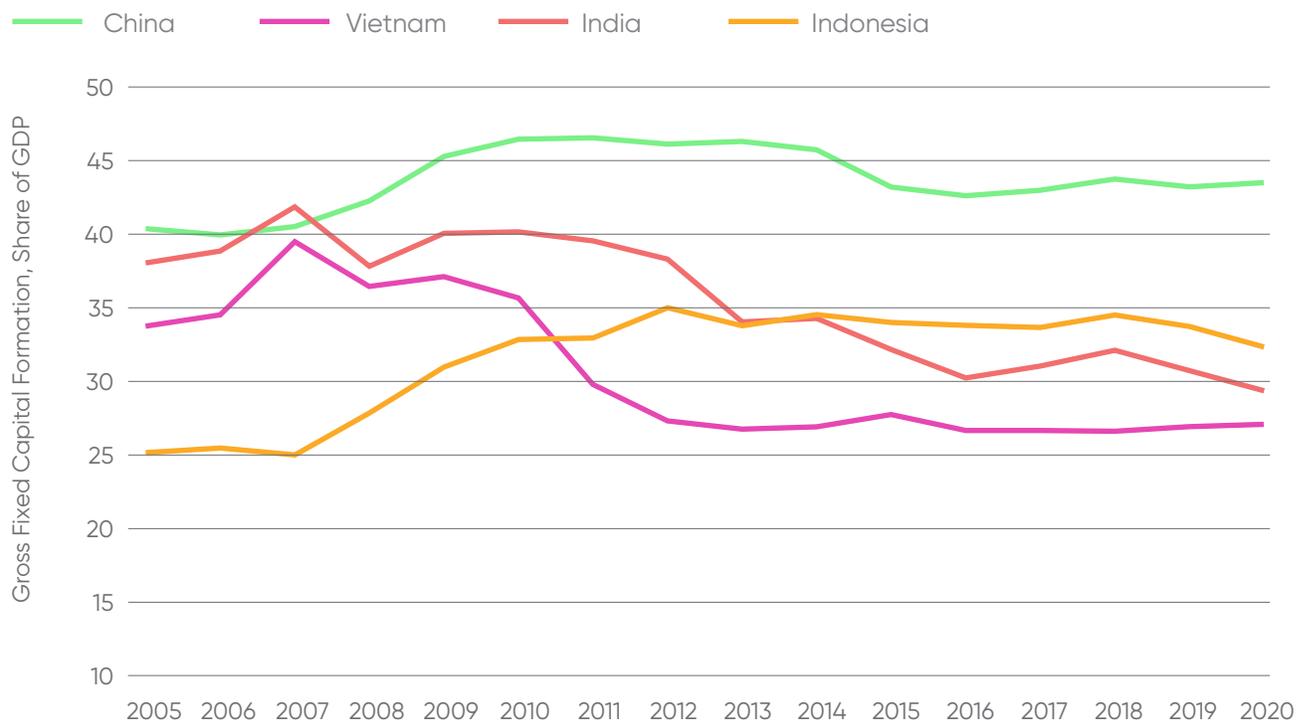
India's largest export market is the US, followed by the EU, the UAE, China, and the remainder of Asia. For the US and the UAE, jewelry is a key export good, for China commodity inputs, and for Europe, a mix of textiles, machinery, and pharmaceuticals. India's imports have a very different geographical make-up: China is the largest supplier, having essentially replaced first the US (1990s) and then the EU (2000s, 2010s) as India's main supplier.

The government has, under the **Atmanirbhar Bharat Abhiyaan (Self-reliant India campaign)**, provided **production-linked incentives** to enhance Indian manufacturing capacity and exports in ten sectors. India's **trade policy** has become more focused on defending Indian companies from what is perceived as unfair competition on their home markets. India has become a frequent user of **anti-dumping (AD) and countervailing duty (CVD) policies**, has introduced more preferences for domestic suppliers in its **public procurement**, and requires **data** related to Indian operations to be kept and processed in India.

## INVESTMENT

India's capital stock per employee has increased significantly over the last twenty years. But relative to China, it has dropped from more than 75% of the Chinese level to about 55%. And China's capital intensity remains far below the US. A significant concern is the drop in the Indian investment rate since the global financial crisis.

### Investment



### Inward FDI

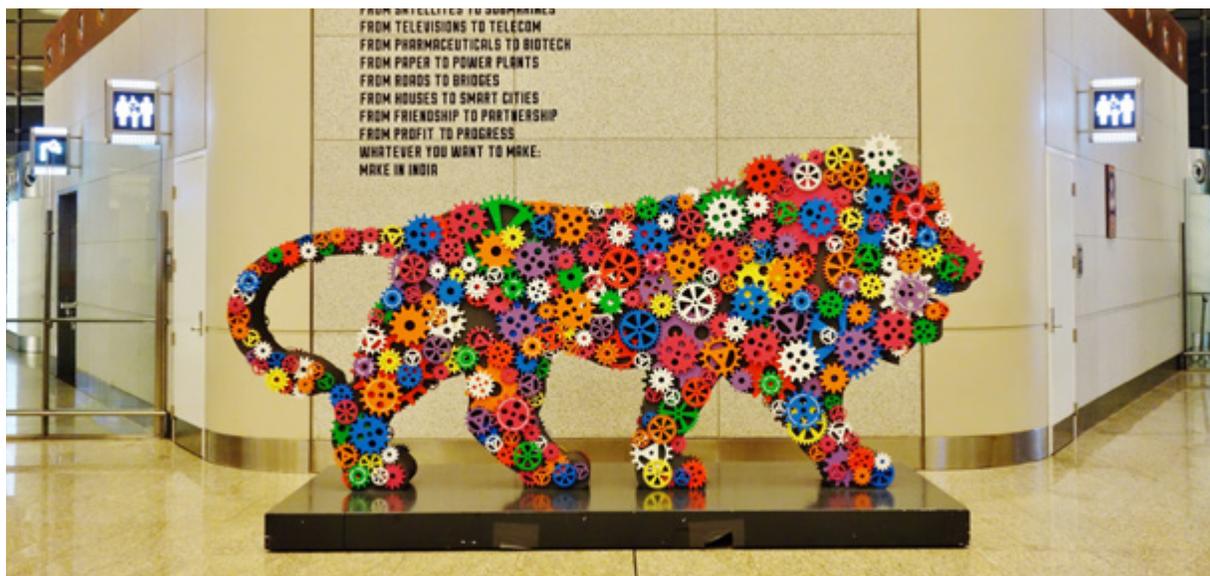
	Flows as share of GDP, 3y MA	Stock as share of GDP	Stock per Employee
<b>India</b>	<b>1.9%</b>	<b>18%</b>	<b>\$920</b>
Vietnam	6.2%	66%	\$3,260
Philippines	2.1%	30%	\$2,540
China	1.0%	13%	\$2,390
Indonesia	1.9%	23%	\$1,810

Source: World Bank, UNCTAD

One potential reason is a dearth of profitable investment opportunities, reflecting a business environment that makes such investments unprofitable for investors. Another factor is the high cost of capital; recent data reported in the Economic Survey showed much higher capital costs for Indian companies than their peers in China and Western countries. These may play a role but are unlikely to explain the pre-pandemic drop. Most business environment conditions have not deteriorated, and the **corporate tax rate** has been reduced from 30% to 22% in 2019. The rising problems in India's financial systems due to the twin balance sheet imbalance, however, can explain the more recent drop in investment rates.

India's inward FDI stock has historically lagged most of its peers. This has changed over the last 10–15 years. The country has in 2019 moved into the global top ten countries by FDI inflows. Still, the level of inward FDI per employee remains far below peers. FDI inflows over the last few years have been equivalent to about 5% of Indian gross fixed capital investment. The recent increase in FDI has been associated with a growing importance of acquisitions relative to greenfield investments. This may signal a stronger focus on activities that serve the Indian market, rather than using India as a platform to serve global demand.

India has, over the last few years, launched major policy initiatives to attract more foreign investment. The flagship **Make in India** program launched in 2014 has combined a focus on investment attraction in specific sectors with a drive to reduce the costs of doing business. Changes of **FDI regulations** in 2016 and 2020 have in general improved access to India for foreign investors; as other countries, India has though sharpened its review process for investments from China. Another key issue has been the commitment made in 2014 to refrain from **retrospective taxation** which had affected some large investors; however, there are still a number of judicial cases pending pitting the Indian government against foreign investors on tax and other liabilities.



## **INNOVATION**

India ranks high on some highly watched international rankings of innovation capacity; in the 2021 Global Innovation Index, for example, it comes 46<sup>th</sup> and thus much higher than on prosperity. India has ambitious national science programs in space exploration and nuclear technology. Many Indians have excelled in research positions outside of India. Indians account for 1/3 of all immigrant-founded engineering and technology companies started in Silicon Valley between 2006-12, and lead many of the world's leading tech companies.

But India performs much less when looking at R&D investments. India's overall spending on R&D is modest as a share of GDP, and has been falling during the last decade. Other lower middle-income countries are catching up, including Vietnam which has ramped up its R&D spending significantly. India also has a modest number of researchers in relation to the country's population. On this measure, it has already fallen behind its peers by income; Vietnam's researcher intensity is almost three times as high as India's.

A key factor is the low R&D investment made by Indian firms. Companies account for less than 40% of the modest Indian R&D spending, compared to more than 65% in the most R&D intensive economies. India has 29 companies among the global top 1000 firms by R&D spending, which is slightly below its share of global GDP. These firms spend much less on R&D compared to their sales, their capex and their country's GDP than their global peers. 80% of their R&D spending occurs in two sectors: automotive and pharma.

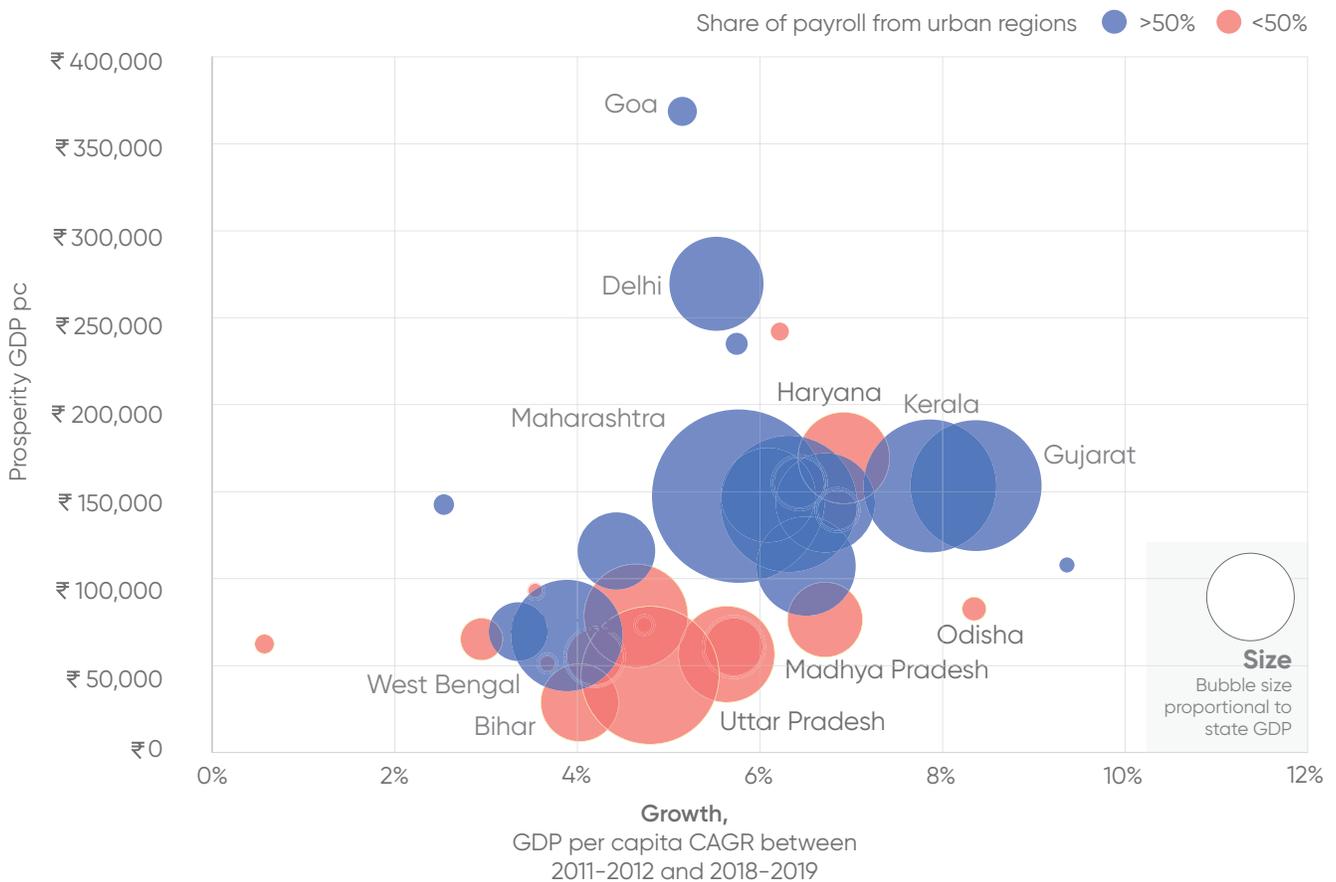
Innovation has been an area of considerable policy action. In 2016, NITI Aayog launched the **Atal Innovation Mission (AIM)**, the Government of India's flagship initiative to promote a culture of innovation and entrepreneurship in the country. In 2017, the government launched "**Innovate in India (i3)**", a 250 million USD program supported by the World Bank to bring together industry and academia in promoting entrepreneurship and Indian manufacturing companies in the biopharmaceutical sector. In 2020, a process started to formulate a new **Science, Technology and Innovation Policy 2020 (STIP2020)**.

# B The Many India's: Regions and Clusters

## Economic performance across India

Indian States and Territories differ widely in their economic performance. Even excluding some of the urban city regions, prosperity levels differ by a factor of 4. This is about twice as much as across EU member states or US states.

### Economic Performance of Indian States



Source: RBI, PLFS, Team Analysis

Strikingly, these prosperity differences across locations have been growing over time. Higher-income states have, on average, grown by more than 1%-point more annually than lower-income states. While this has occurred in some advanced economies as well, most of the world has instead experienced convergence.

Looking at non-GDP related dimensions of well-being, captured in the social progress index, reveals significant differences across states and territories as well. While these tend to correlate with economic prosperity, Kerala and Tamil Nadu are states that perform significantly better on social progress than their prosperity level suggests. One key factor associated with higher social progress is the urbanization rate.

Labour mobilization, labour productivity, and the labour share in production all affect the overall economic output generated in a location. On all of these dimensions there are significant differences across Indian states: Labour mobilization rates, the share of employees in the working age population are for most states among 25% to 40%<sup>1</sup>. Also relevant is the age profile; here the differences are more modest, with between 60% and 65% in working age.

Wages range between INR 75,000 and 250,000. A more detailed analysis reveals that about 60% of the difference between a regional and the national average are explained by economy-wide locational factors, and 40% by the mix of sectors in the respective economy.

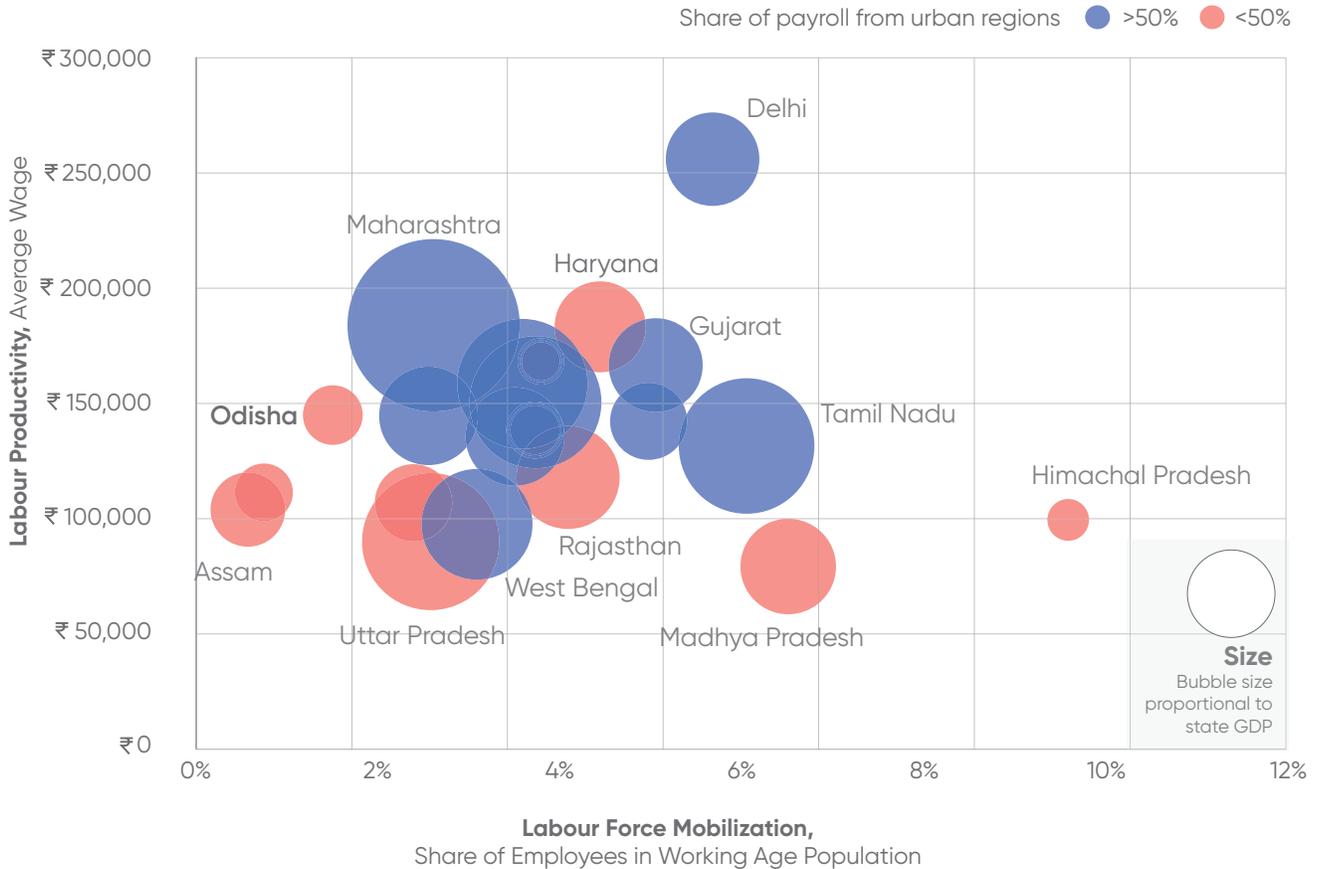
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<sup>1</sup> The available labour market data is fragmented. On working age population, we use the 2016 projections of the most recent Census. On employees, we use the total employee numbers from the PLFS.



## Labour Productivity and Labour Force Mobilization

Indian States



Source: RBI, PLFS, Census of India, Team Analysis

Indian states also differ significantly in other dimensions of economic activity. 50% of all **exports** are accounted for by two states, Maharashtra and Gujarat. Gujarat also dominates **gross fixed capital formation**, accounting for about 25% of India's total, followed by Maharashtra and Tamil Nadu. On **innovation**, too, there are huge differences. Maharashtra alone accounts for 25% of all Indian patenting. The top five states by absolute patenting account for 65% of Indian patenting, compared to a 40% share of GDP. Their per capita patenting rate is 5 times higher than the average for the rest of the country.

Regional economies can be distinguished by the relative importance of traded and local industries; in the case of India also by the relevance of agriculture. On both payroll and employment, the differences across India are large: In Bihar, traded activities account for less than 20% of all jobs and wages paid. In Gujarat, this share is about 50% for payroll and above 40% of employment. In four states, agriculture accounts for more than 30% of all jobs, while it accounts for less than 10% in more than 20 states and territories.

Differences in business environment quality, from skills to physical infrastructure to rules and regulations set at the state and local level, are large. They drive both the productivity of specific economic activities and the mix of activities that emerge in a location.

Educational attainment is highly uneven across states. They are large not only in aggregate but there is also high heterogeneity in relative performance across different subjects. There are differences in spending, but also in the broader functioning of the educational system. Teacher absenteeism, for example, has been found to vary between less than 15% in Maharashtra and more than 40% in Jharkhand. These differences are also visible in the occupational mix across states. Again, differences are highly noticeable, and they are clearly associated with both wage levels and the sectoral composition of an economy.

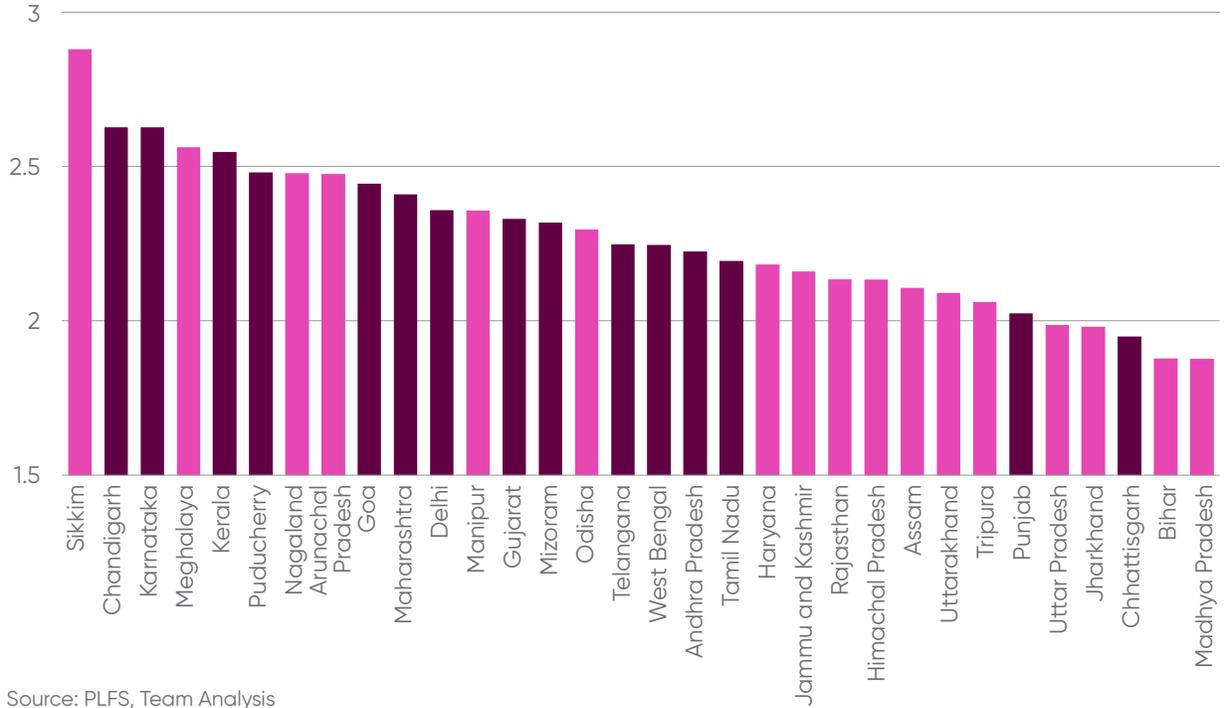
Employment is also affected by the nature of labour market regulations. Here, too, differences across India have been large for a long time. Research has also shown that companies have responded in different ways, for example by making more use of temporary working contracts in locations where that option exists.



## Labour Markets across States

### Skill Score

Share of payroll from urban regions ● >50% ● <50%



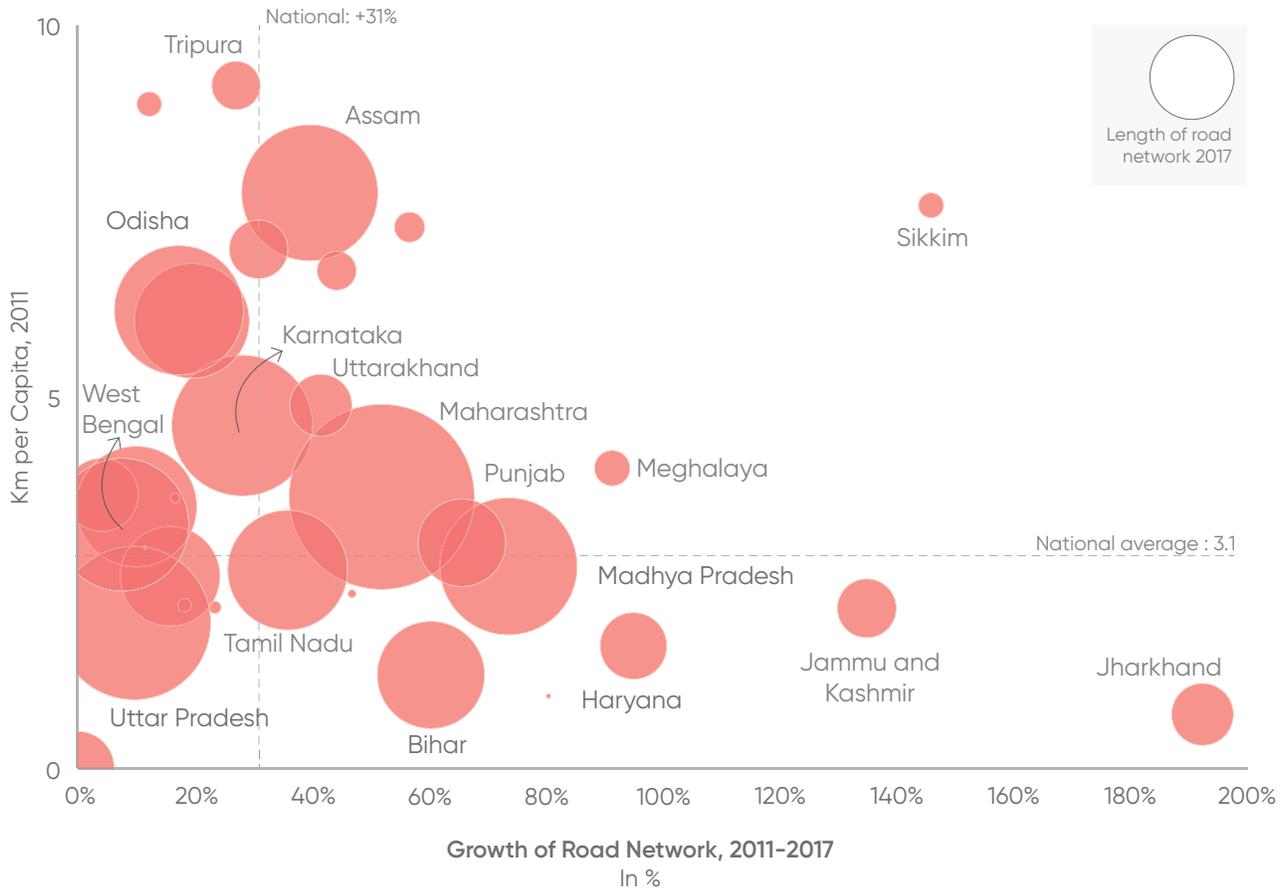
Source: PLFS, Team Analysis



Road infrastructure and electricity supply are two examples of areas in which a broad national trend translates into different realities across Indian states and territories. On roads, the density of the road network has increased over time. This is visible across all locations, but improvements have come at different speeds. On electricity, India has as a nation made significant strides in aligning capacity with demand. But huge differences remain in losses during transmission and distribution, with significant implications for the economics of the locations' respective electricity systems.

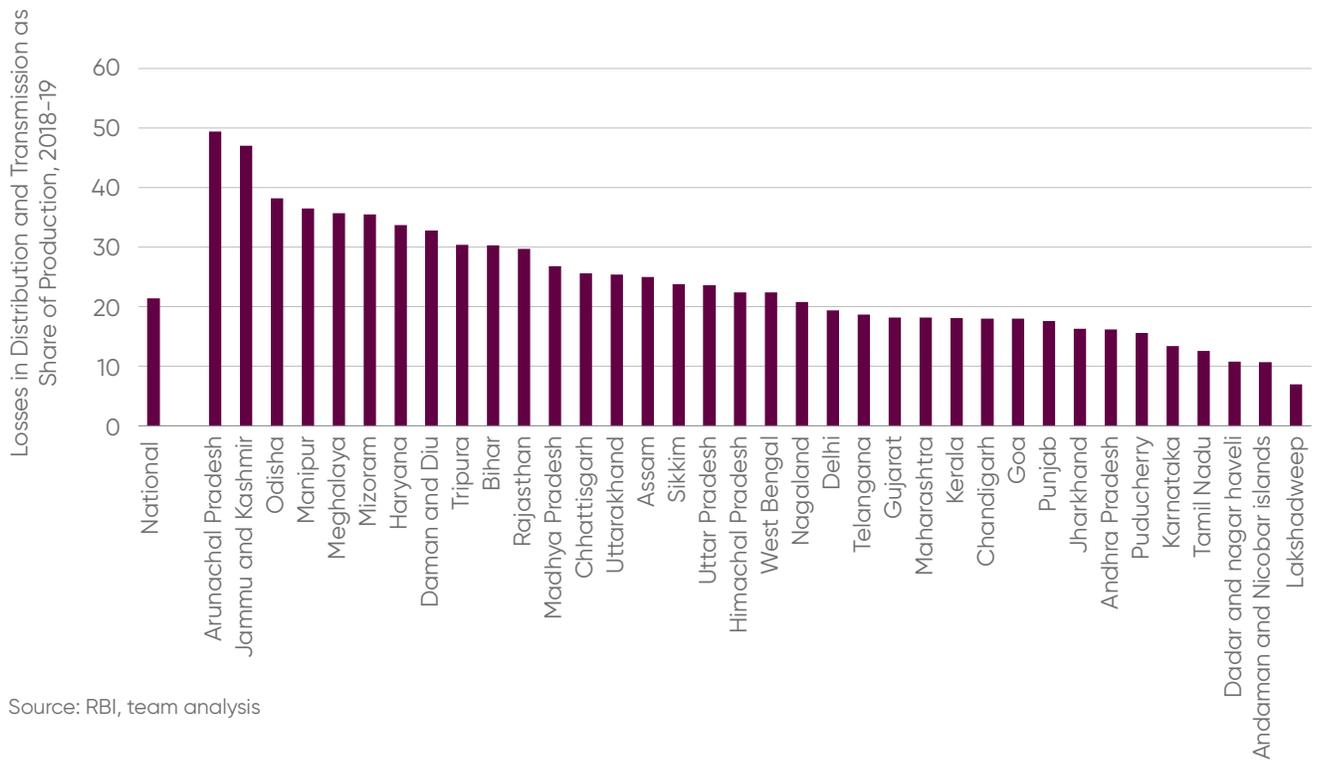
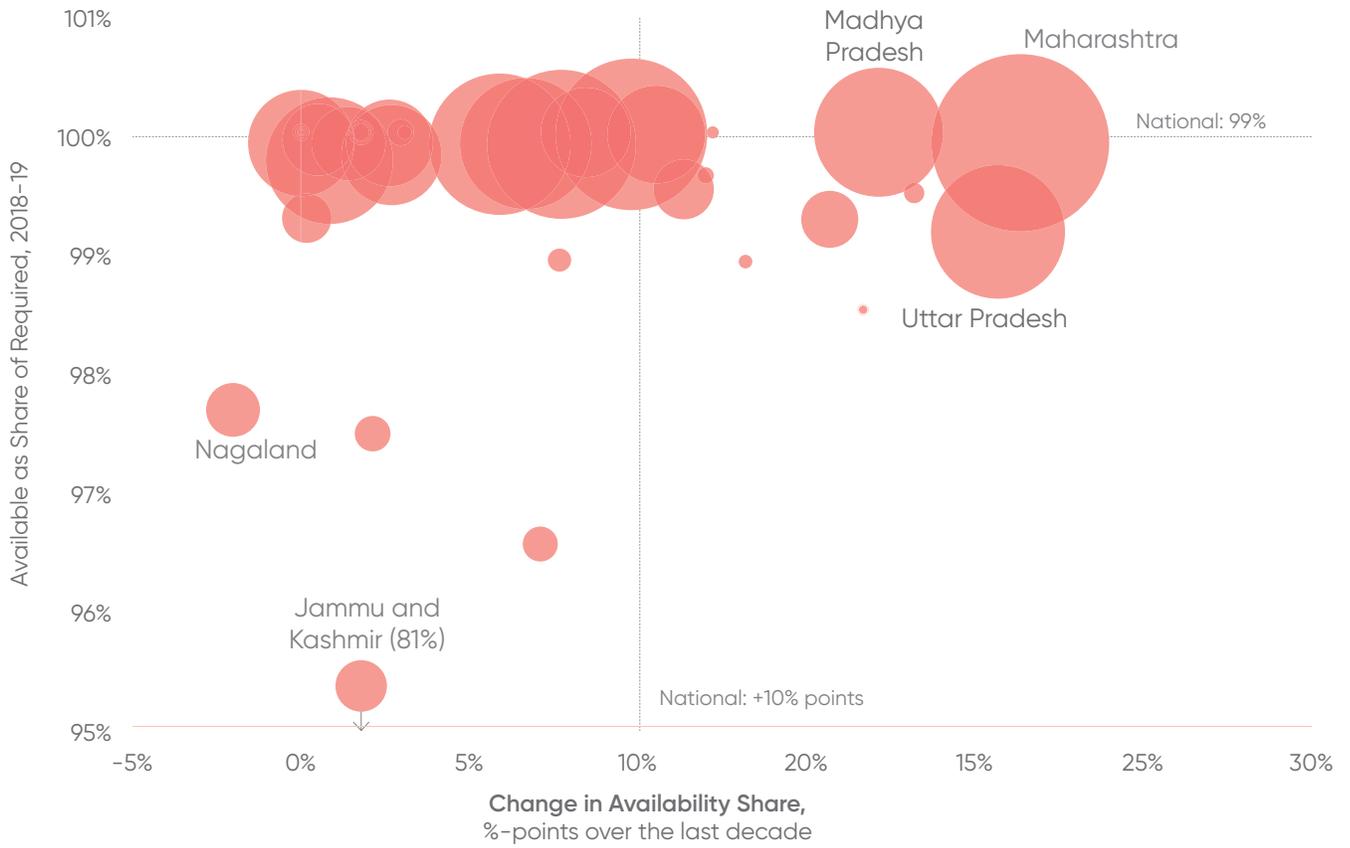
## Road Infrastructure

### India States



Source: RBI, Team Analysis

## Electricity



Source: RBI, team analysis

Differences exist also in other dimensions of the regulatory framework. For the cost of doing business, these differences have been shown to exist in the comparison of high and low growth states. Across all indicators, from setting up a business to getting environmental approvals to connecting to infrastructure and paying taxes: the time it takes and the obstacles reported are significantly higher in low-growth states.

Finally, there is also huge variability in terms of policy tools applied across India. More resources have been made available to states as a consequence of the decisions put forward by the **14<sup>th</sup> Finance Commission**. Many initiatives by the union government aim to mobilize state and local action by either providing more legislative decision space, like in labour market regulations, or by providing a national policy framework where national resources aim to mobilize state resources as well. Niti Aayog has been explicitly positioned as a resource at the union level to inspire and enable more effective policy choices at the state and local level. The **Aspirational District program** is an example of this approach, where it uses analytical and technical support to help some of the most challenged districts in India to enhance their performance, driven by local action and initiative.

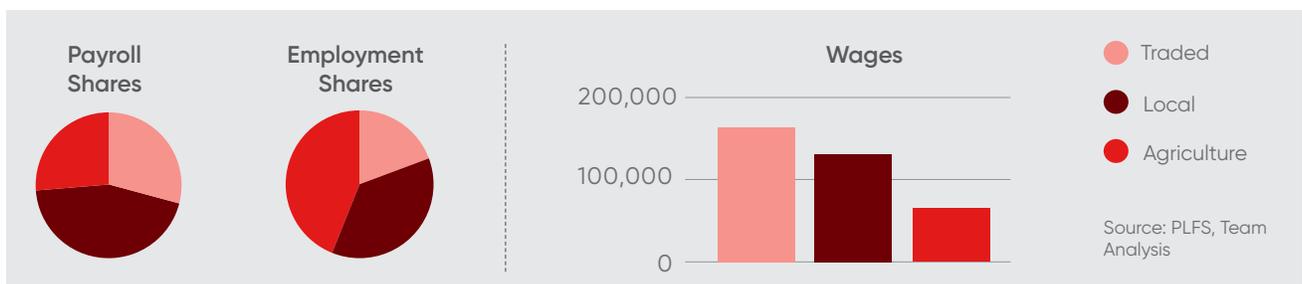
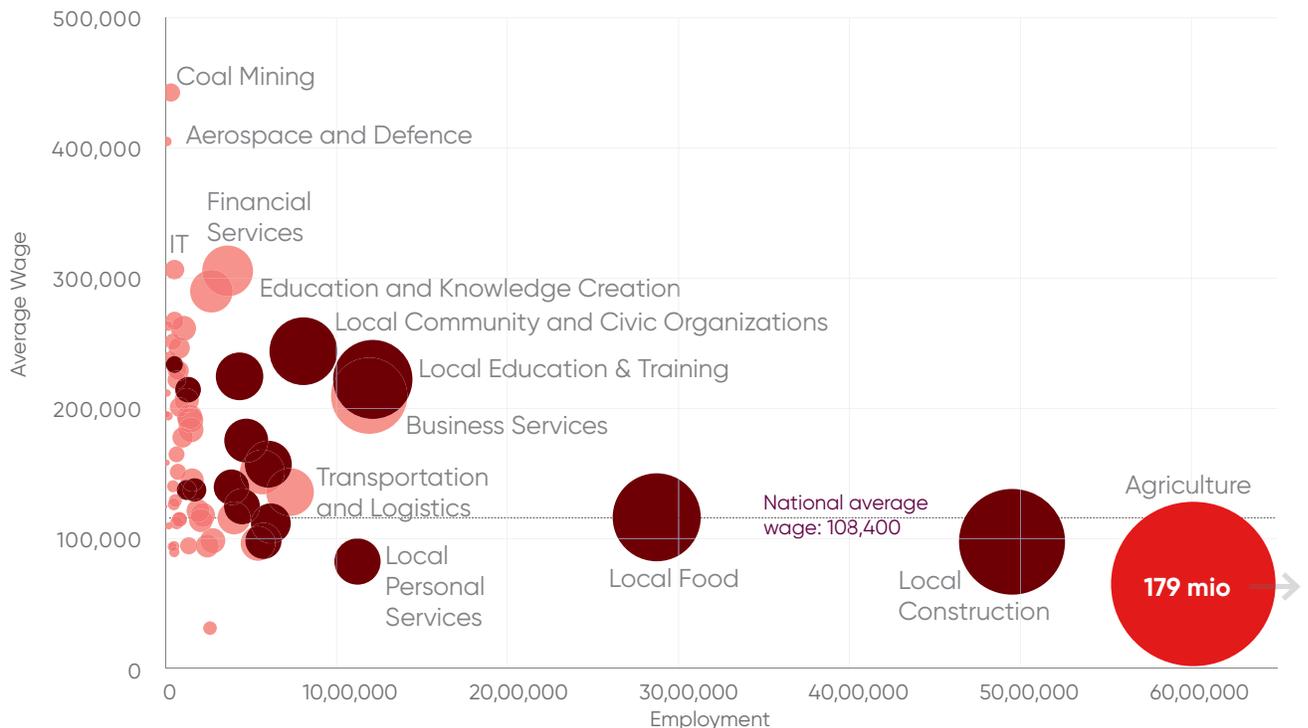


## India's cluster portfolio

Clusters are defined as groups of related and supporting industries located in proximity to another. Translated into a modern context by Michael Porter in "The Competitive Advantage of Nations", they have over the last decades been proven a key tool to understand the economic geography of an economy. At the highest level, industries are defined as 'traded' if they tend to geographically concentrate. They are defined instead as 'local' if their presence tends to follow the distribution of overall economic activity. Industries are then further grouped in cluster categories based on their linkages.

India's economy has its largest share in local industries, similar to many other countries. Agriculture is unusually large in India. In advanced economies agriculture is considered a traded cluster but in the Indian context it has large local features; it is reported here as a third category. Indian traded clusters have overall higher wages than the rest of the economy, again similar to peers and fully consistent with their higher capital and skill intensity.

### India's Cluster Portfolio

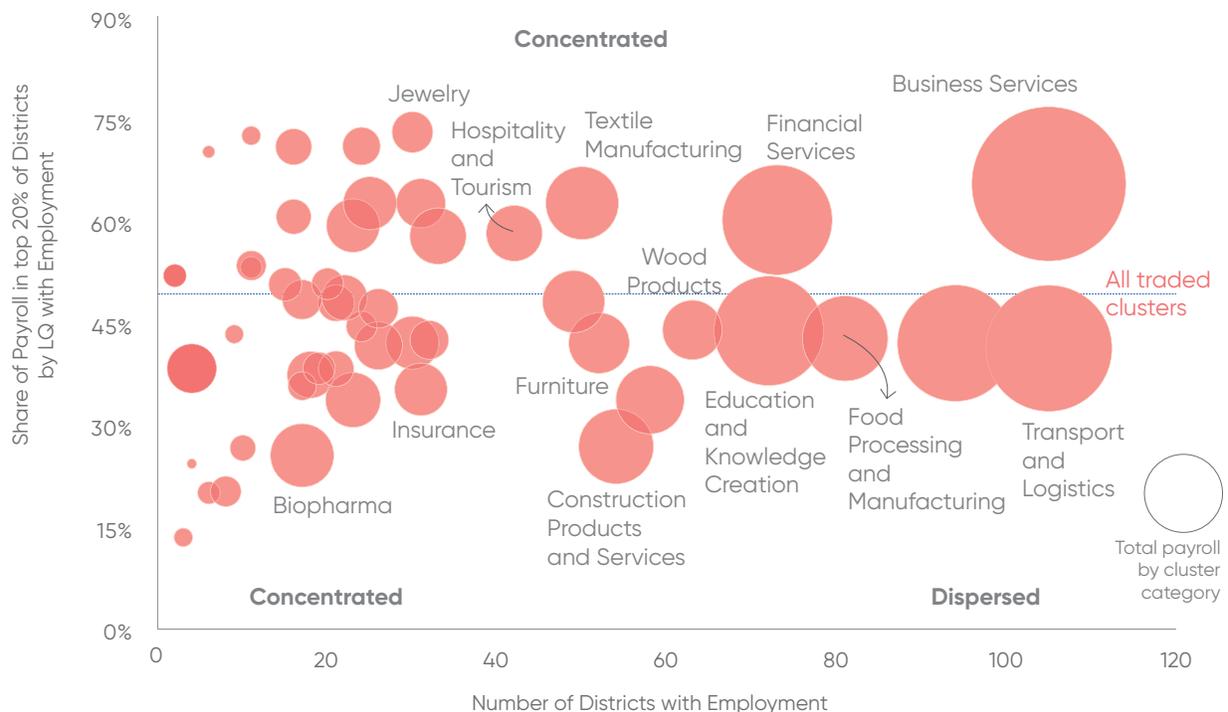


Cluster categories differ in their skill intensity and employment structure. For India, there are large differences in the skill intensity of employees across cluster categories but relatively small differences between the average of traded and local clusters. Skill intensity is associated with differences in wage levels. Where there are outliers, they appear consistent with cluster-specific capital or knowledge intensity. There are also large differences in the share of regularly salaried employees, often associated with more formal employment relationships. A higher share of such employment contracts is significantly associated to higher wages. Here the differences between traded and local cluster categories are larger but the differences within both groups are again much higher than the differences across averages.

Traded clusters are characterized by their tendency to concentrate activities in a limited number of places. "IT and Analytical Instruments", for example, is present in only 80 out of India's 676 districts covered in the data, and the top 16 districts by LQ account for 70% of the national payroll. "Business Services" has a presence in many locations, but 60% of its value added (measured here by payroll) is concentrated in the top 20% (or about 100) districts by specialization. "Food Processing", "Distribution and E-Commerce", and "Transportation and Logistics" are conversely present in more than 400 districts, and the leading regional clusters by specialization are less dominant in terms of payroll.

## Concentration of Economic Activity in Traded Clusters

### Payroll by Leading Districts



The distribution of districts by number of strong clusters is highly loop-sided: A significant number of Indian districts has no strong clusters at all, many districts have a small number of strong clusters, and a few districts have a large number of strong clusters. The less than 50 districts with 8 or more strong clusters account for 3% of all districts, 3.5% of employment, 6.2% of payroll, and 10% of all strong clusters. The 21% of all districts that have no strong cluster account for 13.4% of payroll. Districts with higher average wages tend to have more of their payroll coming from strong clusters.

The huge differences in regional economic performance across India are associated with large differences in cluster portfolios and strengths. This becomes highly visible when sorting Indian districts by average wage as the bottom (lower 45%), middle (next 45%), and top leading 10%. The analysis of their respective cluster portfolios reveals dramatic differences. Traded clusters account for 25% of payroll for the low-income group, 40% for the medium-income group, and 60% for the high-income group. Traded cluster wages are broadly similar to local industry wages for the first two groups, while they are about 50% higher for the group with the highest prosperity levels. Finally, there is a significant difference in the specialization patterns within the portfolio of traded clusters: the low-income group is focused on clusters associated with natural resources and low labour costs, the middle group on clusters that are more capital and scale intensive, while the top group is focused on clusters driven by high skills-intensity. Overall, this is consistent with districts moving towards both different competitive advantages and clusters as they reach higher levels of economic development.



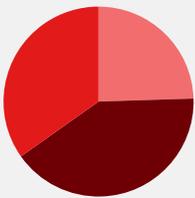
## Profile of Districts by Prosperity Group

### BOTTOM

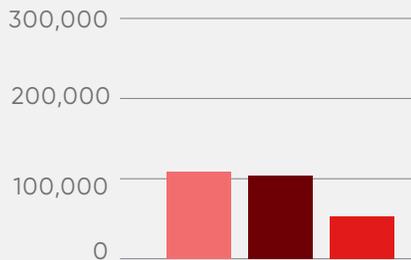
Number of districts: 305  
 Average payroll: 51bn  
 Share of national payroll: 33%  
 Average wage: 78,000  
 Avg number of employees: 650,000

● Traded ● Local ● Agriculture

#### Payroll Shares



#### Wages (Rs)



#### Top traded clusters

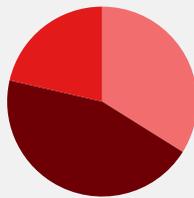
- Tobacco
- Forestry
- Vulcanized and Fired Materials
- Wood Products
- Non-Metal Mining
- Metal Mining
- Footwear
- Food Processing and Manufacturing
- Transportation and Logistics
- Coal Mining
- Textile Manufacturing
- Furniture

### MEDIUM

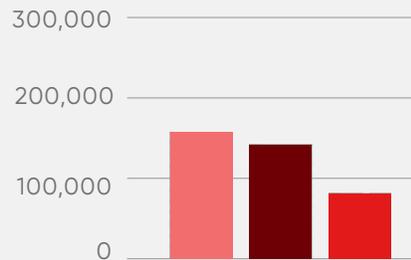
Number of districts: 305  
 Average payroll: 73bn  
 Share of national payroll: 47%  
 Average wage: 126,000  
 Avg number of employees: 580,000

● Traded ● Local ● Agriculture

#### Payroll Shares



#### Wages (Rs)



#### Top traded clusters

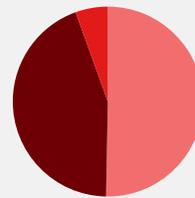
- Trailers, Motor Homes and Appliances
- Fishing and Fishing Products
- Automotive
- Aerospace Vehicles and Defense
- Production Technology and Heavy Machinery
- Upstream Metal Manufacturing
- Education and Knowledge Creation
- Video Production and Distribution
- Metalworking Technology
- Plastics
- Biopharmaceuticals
- Music and Sound Recording

### MOST PROSPEROUS

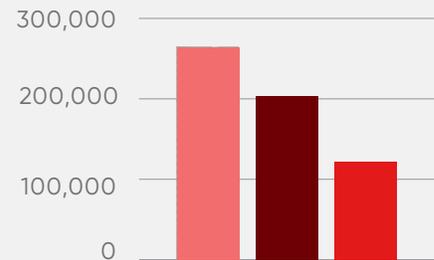
Number of districts: 70  
 Average payroll: 129bn  
 Share of national payroll: 20%  
 Average wage: 220,000  
 Avg number of employees: 580,000

● Traded ● Local ● Agriculture

#### Payroll Shares



#### Wages (Rs)



#### Top traded clusters

- Medical Devices
- IT and Analytical Instruments
- Biopharmaceuticals
- Aerospace Vehicles and Defense
- Marketing, Design and Publishing
- Upstream Chemical Products
- Printing Services
- Oil and Gas
- Communications Equipment and Services
- Performing Arts
- Hospitality and Tourism
- Financial Services

## The Role of Urbanization

Urbanization is a crucial aspect of economic development and economic geography. Urban areas have to be shown as key sources of economic performance and dynamism. For India, the relatively low speed of urbanization is one of the country's unique features. India registers relatively modest internal migration flows, and a large share of these flows is within individual states. One possible explanation is the social structure of the country, where individuals are highly embedded in their caste and local community and thus less likely to move.

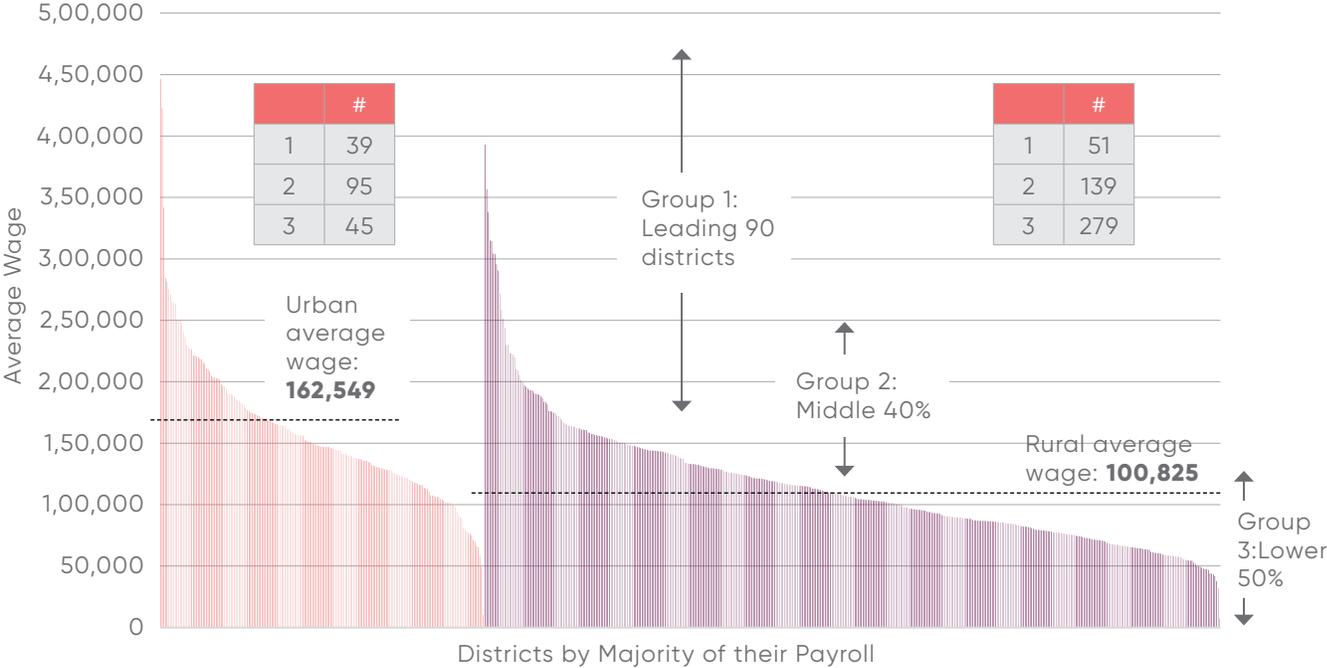
Slow urbanization matters because the economic structures of largely urban vs largely rural districts differ in significant ways. Dominantly urban districts account for more than 55% of all wages paid in India, about 45% of all jobs, but only about 30% of all districts. Typical urban districts are considerably larger in terms of employment and have significantly higher wages. Urban districts stand out for their much larger focus on traded clusters: they account for 50% of payroll in these districts, compared to 25% in rural districts. In two-thirds of all traded cluster categories, urban districts account for more than 65% of all employment. Within traded clusters, urban districts achieve higher wages within individual cluster categories and are more focused on cluster categories that tend to pay higher wages, like IT. The higher level of economic activity thus generated also pulls up local wages in urban districts. On average, traded wages are in urban districts about 17% higher than local wages. In rural districts, they are at roughly the same level.

Skill intensity is often seen as one of the key differences between rural and urban districts. Indeed, rural districts have, on an average, a significantly lower skill intensity than their urban peers. But this difference is almost entirely driven by cluster-mix: Urban districts are more specialized in skill-intensive traded clusters. For given cluster categories, the differences in skill intensity are small. Labour market structures, too, are often seen through the rural-urban lens. However, labour mobilization rates are almost identical across these two groups. Unemployment is somewhat higher in urban than in rural districts. The real differences are in the type of employment relationship for those that are in active employment: In rural regions, self-employment (50% of rural employees) and casual workers (30%) dominate, while urban districts are dominated by regular salaried employment (50% of urban employees).

It is tempting to view the urban-rural divide as the key dimension to understanding the significant heterogeneity of economic outcomes across India. But this would be a mistake. While this divide clearly matters, there is large heterogeneity within the groups of urban and rural districts. There are both urban and rural districts in all three of the groups of districts defined by their prosperity (here measured by average wage). In fact, there are more rural districts in each of these groups, including in the group of the 90 districts with the highest level of prosperity. The most prosperous rural districts have agricultural activities that pay more than three times the national average agricultural wage. In their case, it is agriculture that is the engine of the location's economy, pushing up local industry wages.

## The Many Indias

### Prosperity Differences across Rural and Urban Districts



Source: PLFS, Team Analysis



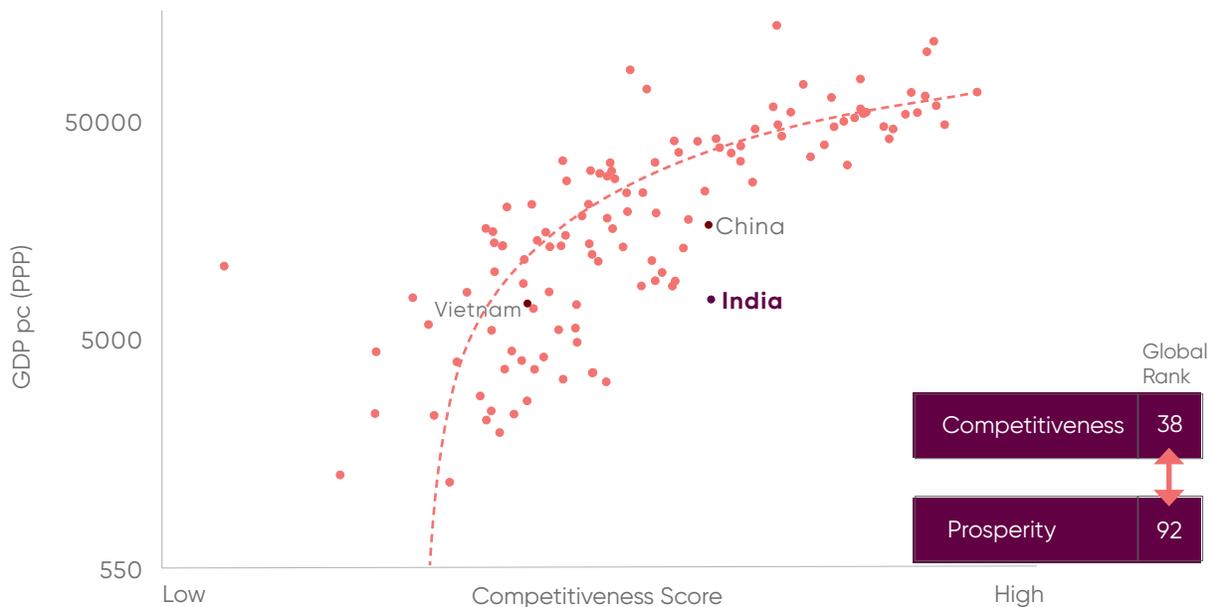
## C Competitiveness Fundamentals

Competitiveness, the ability to support a high standard of living for large parts of society based on value creation, depends on a wide range of factors. Attempts to capture the overall level of competitiveness quantitatively differ both in their coverage of factors and in the way a country's performance on individual factors is aggregated into an overall score.

India tends to score relatively high on many of these rankings. In fact, it performs systematically higher on these measures of competitiveness than it does on GDP per capita. China achieves significantly higher levels of prosperity than India, given similar levels of measured competitiveness, while Vietnam achieves a similar level of prosperity with much lower competitiveness. India prosperity gap has increased over the last few years.

### The Policy Implementation challenge

India's Competitiveness to Prosperity Gap



Source: Global Competitiveness Report data for 2018, ISC analysis based on Delgado et al. 2008, SPI data 2020

An optimistic interpretation of this evidence is that India has a significant upward potential in terms of economic growth: High levels of competitiveness relative to current prosperity can indicate significant potential for firms to translate favourable business environment conditions into higher productivity and value creation.

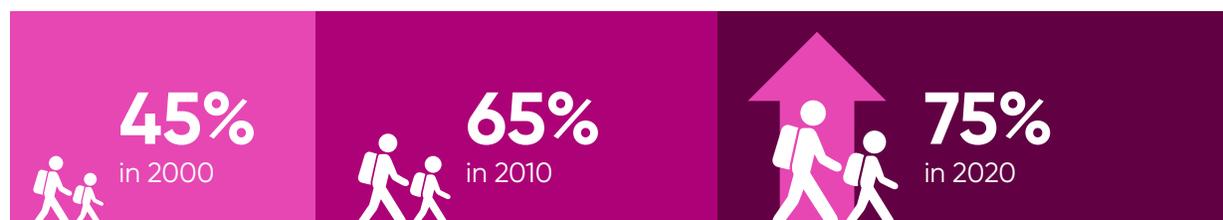
Unfortunately, however, it is much more likely that these rankings are misleading in the Indian context. The data captures the rules and regulations to be found in legal texts and government circulars, not the way that they are implemented in practice. And it reflects the reality for only a relatively small subsection of the Indian economy. Correspondingly, the productivity of the formal economy is reasonably high. But large parts of the Indian economy and society lacks the ability to tap into the opportunities that the more developed dimensions of India's business environment provide.

India has over the last few years made significant progress in key areas of competitiveness, particularly in factor input conditions. But deeply distorted market structures continue to lead to poor outcomes despite the strong investments made in areas from electricity to education. Regulatory frameworks are unfit for this purpose and legacy market structures that represent a different time hold India back. Government policy has attempted to tackle some of these distortions, even in areas that are politically highly sensitive. But there has been significant resistance to embrace reforms.

## Skills and Education

India's economy is held back by an education and skill system that struggles to meet the needs of students and firms. The education system has been expanded significantly over recent years, with the secondary enrollment rate in 2020 at 75%, compared to 65% in 2010 and 45% in 2000. Learning outcomes, however, are below peers and seem to have stalled or even decreased over time, signalling severe weaknesses in offering quality education. Parents are reacting, with a growing share of children enrolled in private rather than public schools.

### Education enrollment rate over years



On the labour market, students leaving schools and universities then find their skills to be of limited value. In fact, unemployment rates in India are increasing in the formal education level of students. More than 40% of all Indians 15–24 years of age are neither in education, employment, or training, far above South Asian (30%) and global (24%) averages. Firms reporting of skill shortages is very high compared to other countries, and they assess only about 50% of graduates as employable. At the same time, a small number of Indians excel in top research, entrepreneurship, and management positions abroad.

Limited resources are only a small part of the answer. While India spends, in absolute terms, much less on education than China, its education spending relative to GDP is comparable to the average of its peers. Access to education itself is also not the issue: India has made strides in increasing the number of educational institutions, and the enrollment rates at different levels of education are again quite comparable to peer countries.

The challenges are quality and mismatch. Educational attainment levels are low, also compared to other low middle-income countries and particularly to countries that have achieved high growth. Students lack skills, and the skills they have are not in line with the skills needed by companies. These issues are endemic across most levels of education, with the exception being the very top of higher education. Even more worryingly, there is some evidence that educational attainment has dropped in recent years. The impact of the lockdown during the Pandemic on children's education has added further concerns.

### Educational Attainment, Children 6–14



Source: ASER

Education policy has in the past focused on access and equality, providing rights to education. This policy focus was well motivated – India needed to give more opportunities for education, especially in groups that had lacked access in the past. And this policy was successful in reaching its goals: enrollment rates are up, the size of the education system has grown, and on a range of equity measures of access to education India now ranks ahead of its peers. But it ultimately failed to provide students with the skills they need.

The market has responded as India has seen private sector entities move into the education space, both for-profit companies and social entrepreneurs/NGOs. They have been active across the full range of educational needs, including the lower end of schooling. But it has been an uneasy co-existence of public and private players: the ban on profits has made it difficult for private players to sustain and scale their operations, while bad experiences with private actors exploiting weak regulatory oversight have made politicians more worried about opening the sector. At the same time, public schools suffer from low incentives and high teacher absenteeism. Wages in local education are high relative to other local sectors.

The Indian government has launched significant policy initiatives on education and skills in recent years. The **New Educational Policy** is a step in this direction. It focuses particularly on foundational learning, i.e. K-12 education in the initial formative years, providing the key basic skills needed to operate in the modern economy and society. India has also decided to rejoin the OECDs **Programme for International Student Assessment (PISA)** to gain internationally comparable data on educational attainment; India had left the program after poor results in 2009. The **Skill India Initiative** then focuses on addressing the skill mismatch in the labour market, drawing in private sector leaders to help shape the skill pipeline for specific sectors of the economy.

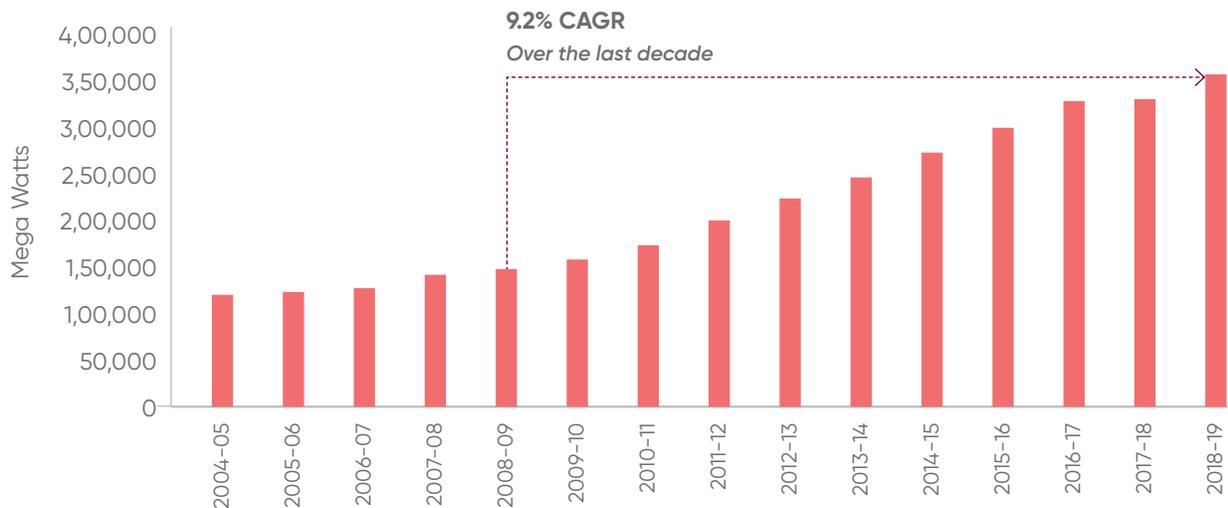
But as in other areas, while the ambitions of these policies point in the right direction, they are facing significant challenges: Implementation is fragmented, not the least across states which carry core responsibilities for the education system. There is a lack of clarity on priorities and pathways. Budgeting spreads out financing very thinly, avoiding political choices at the cost of achieving very little impact. The pandemic has had a devastating effect on education, especially in rural regions. India needs to not only reclaim these losses; but also to tackle the large structural issues that were in place before.

## Physical infrastructure, digital infrastructure, and energy

India has long been seen as suffering from a large infrastructure deficit. While there are still significant needs ahead, India has made significant progress in many of these areas. The key constraint is no longer on the input side, but the policy and market context. Making progress on creating more effective market structures is made difficult by weaknesses in Indian institutions, both the executive and the judiciary.

### Electricity

#### General Capacity



Source: RBI, 2021

#### Available as Share of Required



Source: RBI, 2021

Infrastructure spending by the central government is somewhat higher than the spending of Indian states, and has been growing more strongly following the global financial crisis. Private sector spending on infrastructure has grown even more, especially in energy generation and telecommunication networks; it is now more important than state-level spending. But the overall investment boom slowed in the years prior to the pandemic.

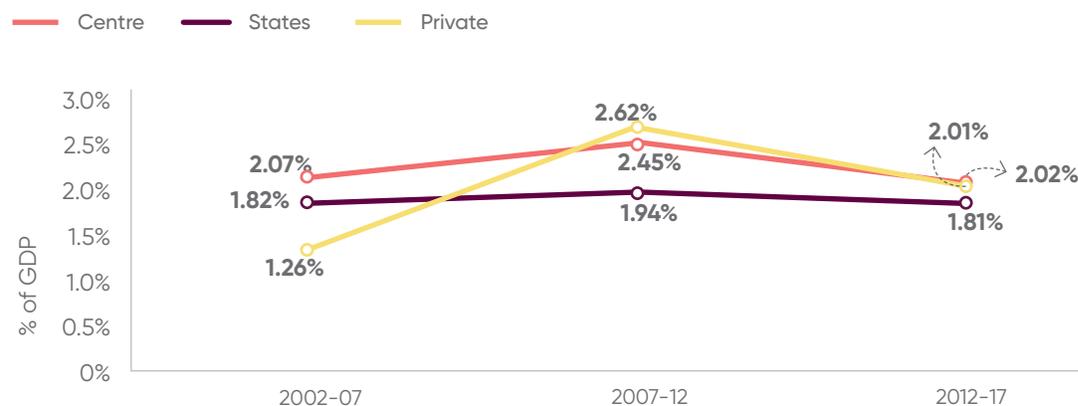
In energy, the private sector has invested heavily in renewables which are now more cost-effective than coal. This has left many of the previous investments into coal-based power plants, often by companies owned by state governments, economically unsustainable. The sector now accounts for 12% of all non-performing assets (NPAs) in the Indian banking system. The financially exposed position of the coal-based power sector is also a key reason for the current shortage in coal stockpiles at power plants; owners let stockpiles fall when demand was limited, and were then unable to quickly increase them as energy demand increased. For energy users, the electricity market remains highly distorted, with subsidized or free power for some sectors compensated for by high prices to the industrial sector.

In telecommunication, aggressive rivalry has driven down the prices for mobile data to the lowest in the world. At the same time the government has taken out significant payments from the telecommunication sector through license fees. Administrative and judicial decisions have created uncertainty about the level of payments to be made, and has made the investment in network capacity more expensive. As a result, there is now, in mobile telecommunications, a very real potential for a duopoly emerging in case payments to the government push the third operator into bankruptcy.

In transportation infrastructure, a large focus has been the use of Public-Private Partnerships (PPP) to leverage private financing. PPP is an important tool but it is also complex, with high demands on sound governance and the capacity of the executive.

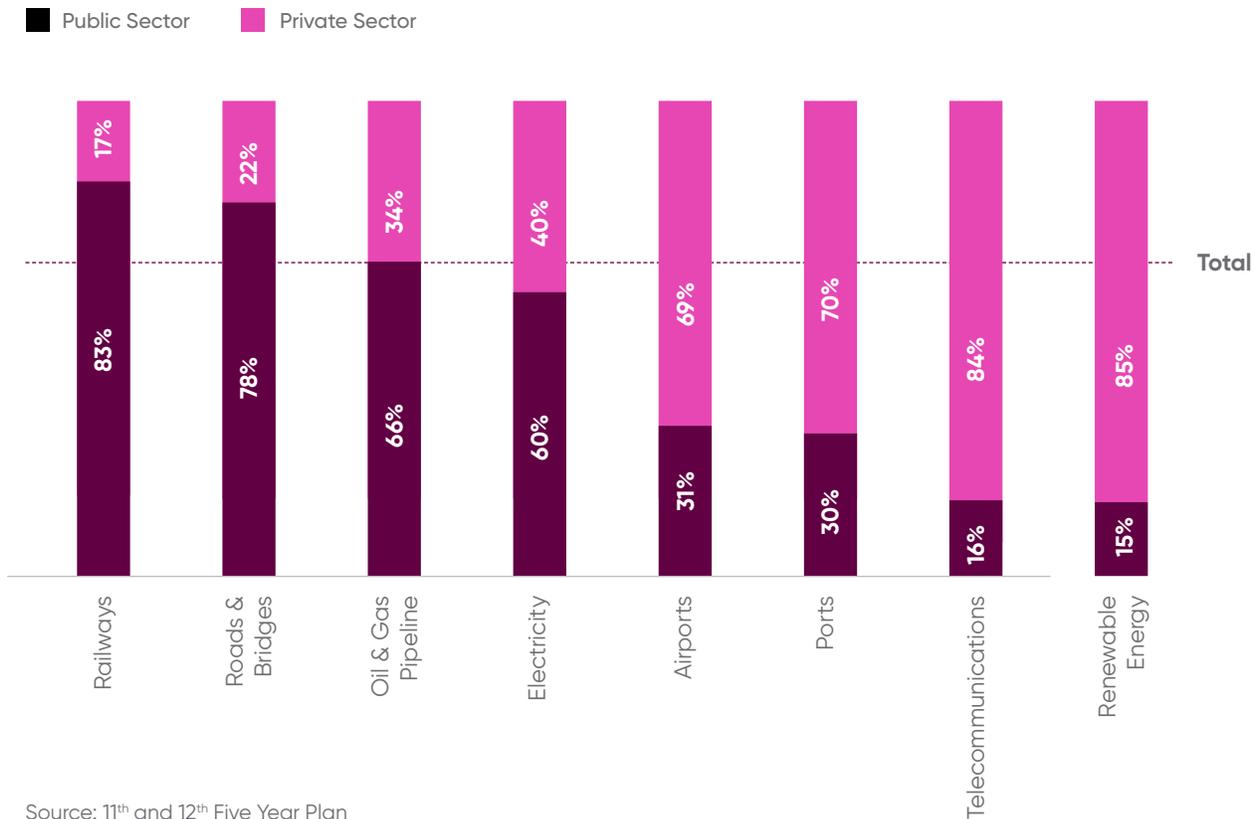
## Infrastructure Spending in India

Spending by funder over time



Source: 11<sup>th</sup> and 12<sup>th</sup> Five Year Plan

## Source of Funding by Infrastructure Category, 2012-17



Source: 11<sup>th</sup> and 12<sup>th</sup> Five Year Plan

Policy action focuses on the financing side, where the **National Infrastructure Pipeline** sets out ambitions for investment, and the **Asset Monetization Pipeline** (AMP) plans for raising private capital. **PM GatiShakti, a National Master Plan for multi-modal connectivity**, was announced in October 2021, identifying key infrastructure projects to be pursued as well as outlining a new institutional structure for a more integrated planning and execution process. On digital infrastructure, **Digital India** aims to provide connectivity infrastructure while also providing digital services to citizens.

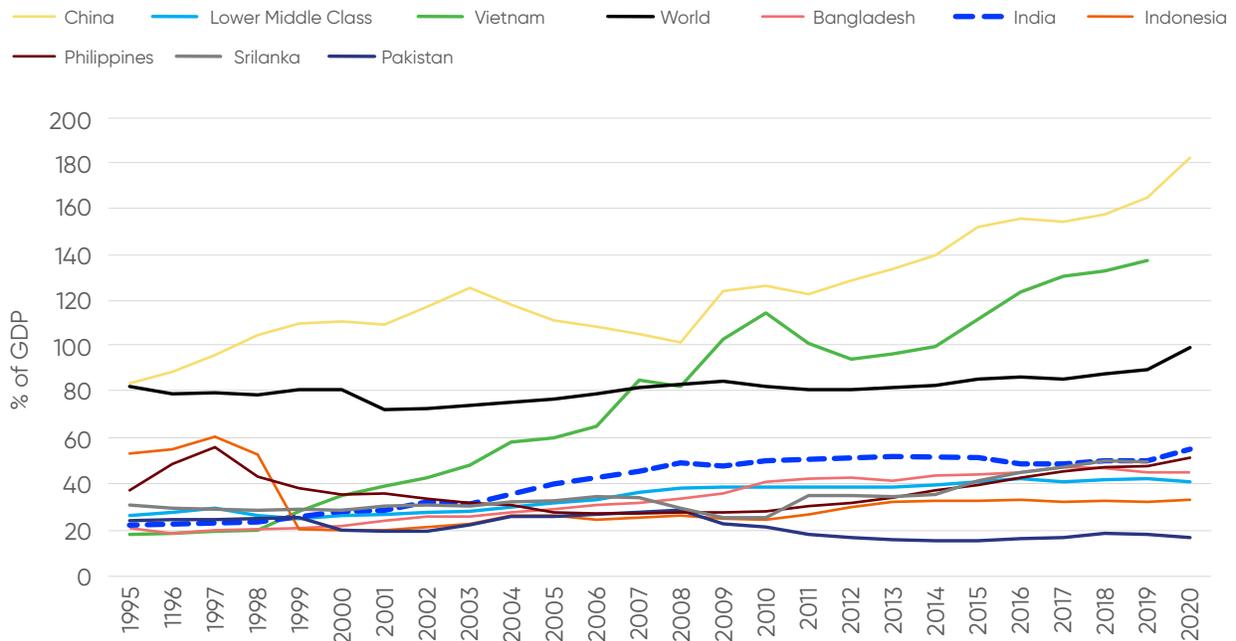
Key policy areas where there has been less progress are regulation and governance as well as market interventions. On the cost side, land rights regulations have led to delays and created uncertainty for many infrastructure projects. Slow and unpredictable judicial processes have made these problems worse. On the revenue side, policy interventions in the market process have added complexity. This is particularly evident in the energy sector, where a combination of public ownership and price regulations undermine profitability. There is broad awareness of many of the challenges outlined here but with no clear strategic pathway to address them. This tends to result in policy actions that are reactive and focused on symptoms, not root causes.

## Access to capital

India's financial system has significant weaknesses, but its overall quality is in line with the country's current stage of development. The debt to GDP ratio, a broad measure of the depth of financial markets, is low compared to China and Vietnam but well in line with other low middle-income economies. The market capitalization of listed domestic firms on India's equity market is high, while the bond market is practically non-existent. Venture capital investment has grown significantly and is in absolute terms now behind only the US, China, and the UK.

Large companies and parts of business groups have ample access to credit, through the well-developed equity markets but also through the banking system or the internal capital market of their group. There is also an increasingly large pool of risk capital for entrepreneurs with high growth ambitions. Real interest rates are broadly in line with peer countries. However, large parts of the economy lack access to these sources of finance. And the flow of credit to the economy has significantly slowed over the last few years. Public sector banks in particular have slowed their flow of credit, seizing market share to private banks.

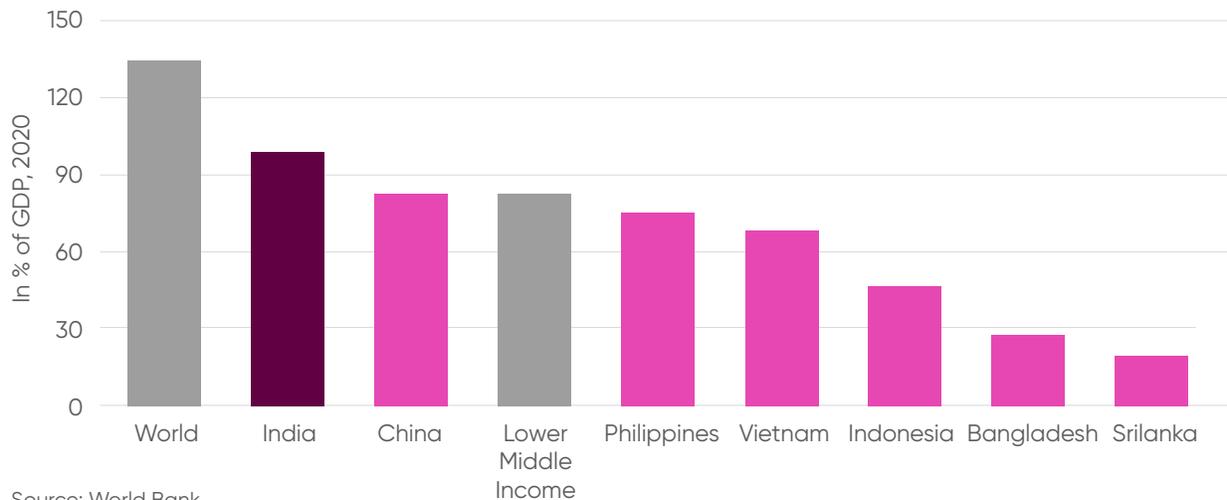
### Bank Credit to the Private Sector



Source: World Bank

## Market Capitalization of Listed Companies

Selected countries



A large share of the population has access to a bank account, often via a technology stack enabled by Aadhaar personal identification number, mobile banking solutions, and direct transfer social programs. But the actual usage of this impressive infrastructure seems modest, with many of the accounts created essentially inactive.

The nationalization of banks in 1969 and 1980 left the Indian financial system dominated by publicly owned banks. At the time, the intention was to ensure access to capital for specific sectors of the economy there were perceived to be underserved, like agriculture. During the 1990s, several reforms created deep and well-functioning equity markets. In November 1994 the National Stock Exchange was created and soon grew larger than the Bombay Stock Exchange (BSE), which had existed since the late 19<sup>th</sup> century.

Between 2005 and 2008 there was a large increase in credit provided through the banking system. Problems started to mount as debt-financed infrastructure projects were held back by issues around land titles and regulation. In the telecom sector, a combination of huge capex needs and regulatory/tax uncertainty led to mounting concerns about non-performing assets (NPA). The RBI's 2015 **Asset Quality Review** unearthed a large share of NPAs and led to a drop in credit flow. Most of the NPAs were held by public sector banks. Plans for a clean-up were launched between 2015 and early 2018, but the resolution process got stuck. Non-Bank Financial Corporations (NBFCs) stepped in aggressively, taking in short-term funds from the banking sector and lending them out for longer term. The IL&FS crisis in late 2018 then unearthed significant NPA issues in this part of the financial system as well. NPAs account for close to 10% of all outstanding loans in the Indian banking system, far higher than in peer countries. Weaknesses

in governance are weighing on the Indian financial system. Governance of the public sector banks has often lacked transparency and due process. There have been severe cases of fraud and insider dealings, both in public and private banks, followed by sometimes aggressive police action against bank executives. In response, there has been a tendency by banking executives to delay decisions, including on lending, instead of taking risks.

Financial inclusion has been a key focus of **Pradhan Mantri Jan Dhan Yojana** (PMJDY), which envisages universal access to banking facilities with at least one basic banking account for every household, financial literacy, access to credit, insurance and pension facility. Its functioning has been enabled by the Aadhaar personal ID-number, and stimulated by the growing use of direct transfer programs as a tool of social policy. There have also been specific policies to ease access to credit for farmers, following up on the Kisan Credit Card scheme.

An initial focus was creating a clear process for resolving NPAs through the 2016 **Insolvency and Bankruptcy Act**. Some steps have been taken to privatize public banks, but mostly the approach has been to **merge public banks** in order to create entities better equipped to deal with NPAs. Recently, however, the government has announced the creation of a '**Bad Bank**' to acquire NPAs. Steps have been taken repeatedly to enhance the governance of public sector banks, but follow-through has been inconsistent.

There are movements in the right direction, but no fundamental solutions to either the immediate problem in terms of the clogged-up credit channel nor the overall structural issues in the financial system. These challenges not only affect short-term growth dynamics but are a structural weakness that contributes to the lack of scale-up among Indian firms.

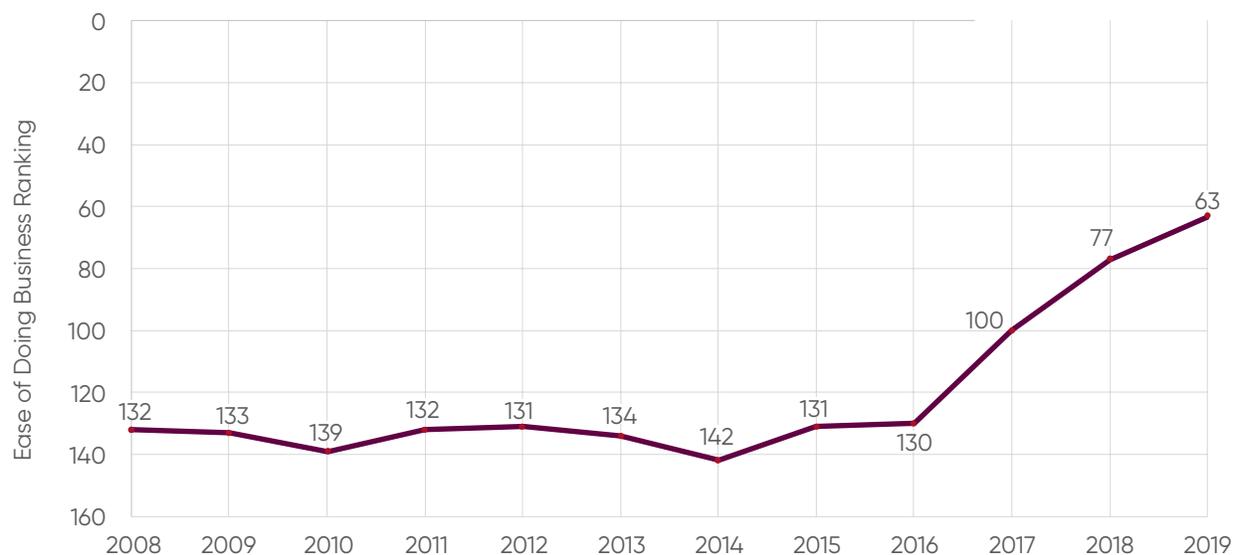


## Costs of Doing Business

India has long been associated with high costs of doing business. While the reforms since the 1990s have opened many markets, a significant legacy of rules and regulations increasing the costs of operating persists. These rules affect in particular companies that are scaling towards achieving medium size – smaller companies remain informal and larger groups can build up the capacity to deal with the regulatory costs.

Liberalization since 2015 has helped India improve on international rankings measuring the cost of doing business. But the experience for companies on the ground remains difficult. Even where the rules have been eased, slow and unpredictable judiciary processes, as well as heterogeneity across different parts of government, create high costs. Despite some improvements, India continues to suffer from weak regulatory enforcement, i.e. the speed and predictability with which laws are being applied by the executive and the judicial system.

### Doing Business: India's Position over Time



Source: World Bank

While many rules and regulations need improvement, the sources of India's high costs of doing business run much deeper. They are driven by a combination of lack of capacity in the public sector, the weakness of the judicial system leading to a huge backlog of cases, overlapping or even conflicting authorities across different parts of government, corruption, and residuals of anti-business attitude in the public sector. Some visible progress has been made due to the liberalization of rules. The increasing use of digital tools to provide public services has also reduced corruption and the time and costs of accessing these services. But these changes can do little

to address the deeper challenges outlined above. The ongoing legal cases between the Indian government and foreign investors are creating further suspicion outside of India as to whether the improvements are real.

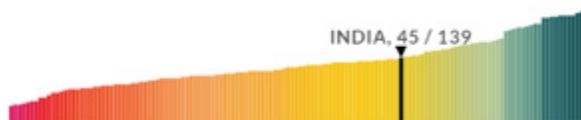
A major roadblock is the lack of swift enforcement of rules and regulations through the judicial system. The number of pending cases has dramatically increased over recent years. A recent Indian Economic Survey presented data indicating that the number of company cases pending had gone up 14 times between 2008 and 2016. The number of consumer disputes had gone up 18 times.

## Rule of Law Index: Regulatory Enforcement in India

Government follows the formal rules

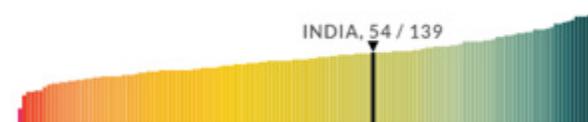
### Due process is respected in Administrative proceedings

Measures whether the due process of law is respected in administrative proceedings conducted by national and local authorities in issue areas such as the environment, taxes, and labour.



### The government does not expropriate without lawful process and adequate compensation

Measures whether the government respects the property rights of people and corporations, refrains from the illegal seize of private property, and provides adequate compensation when property is legally expropriated.



Source: World Justice Project

But enforcement through the judicial system is ineffective, subject to improper influence, and slow

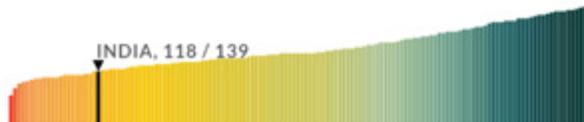
### Government regulations are effectively enforced

Measures whether government regulations, such as labour, environmental, public health, commercial, and consumer protection regulations are effectively enforced.



### Government regulations are applied and enforced without improper influence

Measures whether the enforcement of regulations is subject to bribery of improper influence by private interests, and whether public services, such as the issuance of permits and the administration of public health services, are provided without bribery or other inducements.



### Administrative proceedings at the national and local levels are conducted without unreasonable delay.

Measures whether administrative proceedings at the national and local levels are conducted without unreasonable delay.



High costs of doing business are not just like a tax on all economic activities in India. They hit smaller companies disproportionately, keeping them informal and small. This stunted firm demographic have severely negative implications for overall economic performance.

## Market regulations

India has a long tradition of regulatory rules and subsidies to limit free market exchange and push market activities in specific directions. Licensing requirements steered investment to particular sectors, provided advantages for small companies or specific groups in society, or further investment in rural regions. Subsidies or administrated prices were an important tool of social policies, with the aim to increase the prosperity of the poor. Reservations of public sector employment for so-called 'other backward casts' (OBCs) have been an important tool for affirmative action, and have started to proliferate since the early 1990s.

Many market regulations have been removed since 1990, especially in terms of licensing requirements. What is left as well are regulations in factor markets (labour, land), utilities (water, energy), or product markets of particular social importance like agriculture. Recent liberalizations have started to tackle some of these challenges but have, especially in the case of agriculture, run into severe political opposition.

On subsidies, there have been some recent changes in energy markets. Major reforms of gasoline and diesel subsidies took place in 2010 and 2014, and in 2017 price subsidies for gas were replaced by direct transfers to poor households.



## Product market regulation in India, an international comparison

	India	OECD average	OECD emerging market <sup>1</sup>	Euro area <sup>2</sup>	Eastern Europe <sup>3</sup>	Latin America <sup>4</sup>	United States
<b>Overall Indicator</b>	<b>2.85</b>	<b>1.49</b>	<b>1.98</b>	<b>1.49</b>	<b>1.82</b>	<b>2.08</b>	<b>1.03</b>
State control	3.47	2.12	2.46	2.40	2.74	2.16	1.19
<b>Barriers to entrepreneurship</b>	<b>2.57</b>	<b>1.46</b>	<b>1.89</b>	<b>1.43</b>	<b>1.44</b>	<b>1.94</b>	<b>1.20</b>
Barriers to trade and foreign investment	2.56	0.97	1.66	0.75	1.35	2.31	0.73

1. Czech Republic, Hungary, Korea, Mexico, Poland, Slovak Republic, Turkey.

2. Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxemburg, Netherlands, Portugal, Spain.

3. Bulgaria, Czech Republic, Hungary, Romania, Slovak Republic, Turkey.

4. Brazil, Chile, Mexico.

Source: OECD (2009)

Market regulations, in particular the regulations on markets for labour, land, water, energy, and agricultural products, have long been used in India to balance what are perceived to be inequities in power across the different parties to a market transaction. While setting these objectives is well within the realm of the political process, the policies used to achieve them to a large degree fail their objectives and incur large costs.

Labour laws impose higher costs on larger firms and thus create disincentives to become formal and to scale. Very large firms have found ways to get around this using contract labour but for growth-oriented small and medium-sized firms the costs are significant. Much of labour law is set at the state level, and differences in their policies are clearly associated with differences in labour market outcomes.

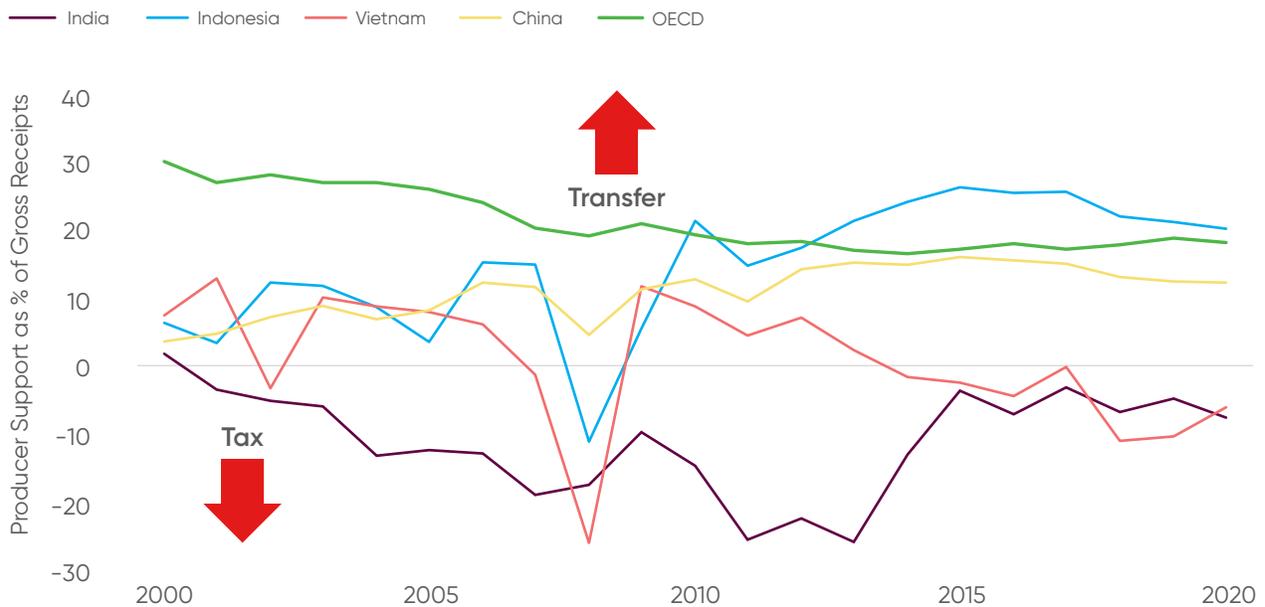
Less often discussed but also important are regulations related to skill requirements for specific activities. India has adopted an approach similar to many advanced economies requiring relatively high formal levels of education in regulated activities like health care. This drives up wages for scarce human resources and drives technology development towards substituting low skill labour. As a result, important parts of the labour market become closed for less skilled employees. And skill-intensive technological change reduces their options over time, working against the current profile of the Indian labour force.

Land laws often make it hard to acquire land for development. In some places, a more active rental market has eased these distortions. But the costs again remains significant, and penalize investments in infrastructure and production facilities that require land. Removing such barriers, for example, by opening up agricultural land for industrial use, has made a significant difference in economic development outcomes.

For water and energy, the challenges are in pricing rules that distort effective market processes. Agricultural users have free access, leading to waste and disincentives to provide these utilities. Industrial users in turn face high prices to cross-subsidize production. The government has in some specific areas started to use direct transfers to households in need rather than subsidized access; this has had positive results, for example, in the provision of LPG containers to rural households.

In agriculture, regulation was set in an era where India had a significant shortage of production relative to its consumption needs, and there was a focus on keeping prices for agricultural goods low for the population. Government regulated the market in many ways, including by setting guaranteed prices, for some crops above and for others below world market prices, limiting the entry of industrial agro-businesses, and subsidizing specific inputs like water, energy, and fertilizer. In sum, these policies are assessed to have a negative financial impact on farmers, a stark contrast to many other countries. The result has been a lack of restructuring of the agricultural industry, a high level of rural distress with many farmers exposed to poverty, and growing environmental constraints, especially on water usage. At the same time, India's food production is sufficient to meet domestic demand and has significant potential in serving global markets.

## Agriculture Subsidies



Source: OECD (2021)

The Indian government has taken a wide range of actions to liberalize key markets. A mix of **reforms in the energy sector**, including the reduction of subsidies and the shift from price interventions to direct transfers to households, have increased the efficiency of markets. But the legacies of a deeply distorted market remain very visible in financially stretched utilities, with short-term behavior exacerbating the impact of shocks as was visible during the heat wave in April/May 2022.

The introduction of a national **Goods and Services Tax (GST)** has made a significant difference to product and service markets. It aligns tax rates across Indian states, and thus reduces the barriers to trade across India. The streamlining of 38 previous into four **labour codes** provides significantly more room for Indian states to liberalize their labour markets. In agriculture, there has been some shift towards direct transfers to poor farmers with the scaling up of the **PM-KISAN program since 2018**. The **reform of farm laws** aimed to remove key barriers firms have faced on agricultural markets. But concerns about these reforms enabling large private firms gain dominant market positions with detrimental consequences to farmers led to strong opposition, and eventually, the reforms were repealed.

The political tensions around removing regulations and subsidies remain high. And change often depends on political decisions and implementation at the state and local level, not simply on national legislation.



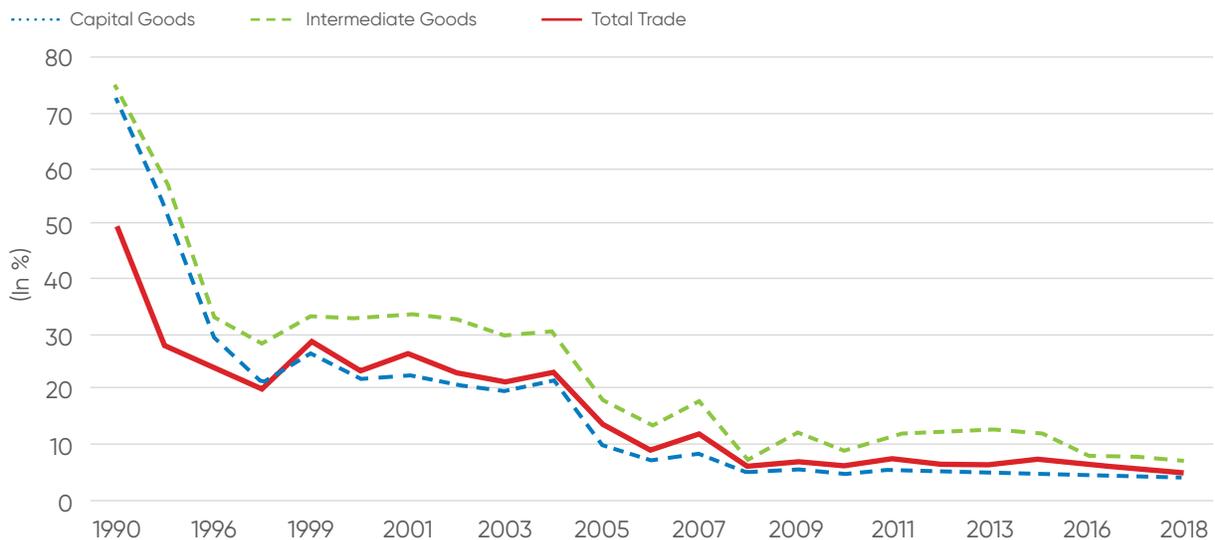
## Trade and FDI policy

The Indian economy is significantly more open to foreign trade and investment than it has been historically. The barriers still in place remain significant, especially in terms of non-tariff barriers, but are not entirely out of line with peer countries. However, since 2015 there has been a distinct change in rhetoric and policy practice leading to further market opening being put on hold. While it is less a return to traditional protectionism, it represents a shift towards a more robust industrial policy aiming to build export-oriented sectors.

### Openness to Trade and Investment

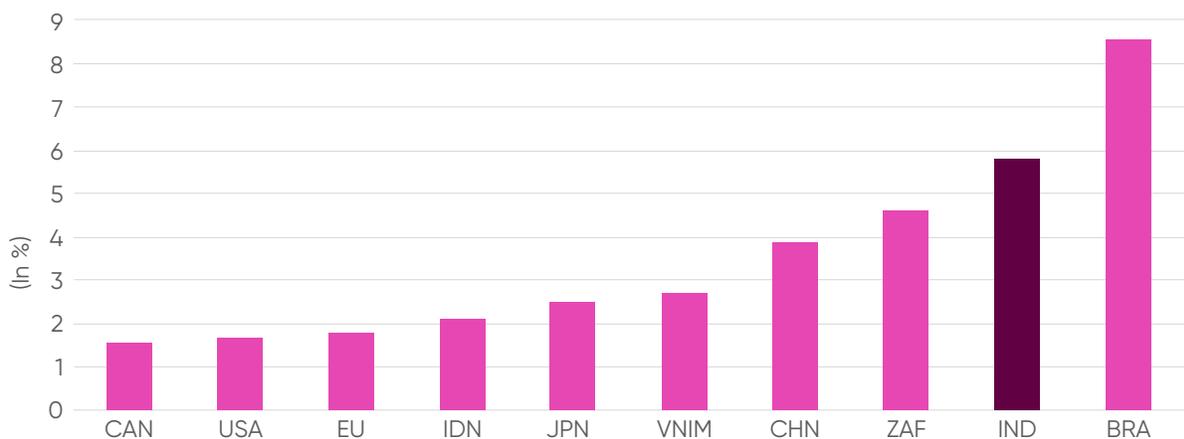
#### India over Time

##### Effectively applied Tariffs



#### Selected countries, 2017

##### Effectively applied Tariffs, 2017



Source: OECD/UNCTAD, 2021

## Indian Bilateral Investment Treaties



Source: OECD/UNCTAD, 2021

Successive Indian governments have pursued slow but persistent liberalization in the past, following the opening during the 1990 reforms. Since 2015, however, the government has become more sceptical about the benefits of this approach. There have been concerns about the growing assertiveness of China and about the limited success in establishing India as a key element of global value chains.

This policy change has led to a halt of further regional free trade agreements, most visibly with India pulling out of the RCEP agreement. India has also discontinued a large number of bilateral investment treaties that are central to enabling FDI flows. It has become one of the largest users of anti-dumping/countervailing duty (AD/CVD) policies, with about 25% of all cases brought before the WTO.

The **Make in India Initiative** launched in 2014 focuses on FDI attraction, removing barriers to FDI in specific sectors, and reducing the costs of doing business. Since 2017, new procurement laws have introduced preferences for the use of domestic inputs, data localization rules have required firms to process much of the data associated with their Indian operations domestically, some tariffs have been increased, and new FDI regulation has increased the hurdles for FDI from China. The **'Self-Reliant India' ('Atmanirbhar Bharat') doctrine** launched in 2020 provides under the Production-Linked Incentives scheme subsidies to build up local production in India as a substitute to imports, to grow Indian exports in these sectors. Negotiations on trade and investment agreements are largely on hold, even though there are talks with the US and the EU.

The challenge for India is to establish a set of policies that enables the attractiveness of India as a base to serve global markets without stifling local rivalry and access to more competitive foreign goods and services.

## D External Context

The global economy has been exposed to a string of deep shocks over recent years. The global financial crisis, with repercussions a few years later during the “taper tantrum”, was a deep macroeconomic shock. The pandemic has then been a health care crisis with deep economic repercussions. And the political response to the Russian invasion of Ukraine, following the heels of increasing tensions between the US and China, has brought geopolitical concerns into focus.

India’s prosperity will not only be affected through the direct impact of these shocks on India’s competitiveness fundamentals. It will also be affected by the pandemic’s impact on global trends – from macroeconomic circumstances to technology, geopolitics, and climate change – that in turn change the value of these fundamentals.

### Global macroeconomics

The global economy is undergoing a period of profound change. On the demand side, market growth is shifting from North America and Europe to Asia. On the supply side, the huge increase in the effectively available global labour force is flattening out. China plays a central role in all of these trends. It is growing as a market, moving beyond its past role as a production site, and its labour force has peaked. Its growth model is shifting from resource-, investment-, and export-intensity to a stronger focus on efficiency, domestic consumption and services. These trends have the potential to drive a significant restructuring of global markets, trade, and global economic geography.

The macroeconomic environment of balancing demand and supply is changing, too. There are concerns about consumption structurally falling short of existing production capacity. As a mirror image, the real interest rate balancing savings and investment has been dropping. Many countries have responded through lenient monetary and expansionary fiscal policy. In the short term, this is conducive to a robust growth acceleration after the pandemic. But over time a policy mix of low-interest rates and ample liquidity is also creating the risk of future financial market imbalances.

For India, these changes provide a range of opportunities: A global post-pandemic growth bump can be a conducive environment to pursue further policy reforms in India. The rise of Asia puts India at the centre of the global economy’s key growth story. India’s quickly rising labour force will provide a key asset when global labour markets will be tightening. The changes in China’s growth model will likely reduce pressure on global resource and energy markets, which should benefit India as a major importer of both. India is also a clear option for the huge amounts of capital on global markets that are looking for investment opportunities.

## Digitalization

Digitalization is reshaping many industries and markets, enabling new products and services, new business models, and new value chains. Digital technologies, including AI, are increasing the demand for highly skilled human capital. They also raise the value of having access to data as the key fuel of many digital processes and as a way to train AI algorithms. Combined with new production technologies (Industry 4.0), they increase flexibility and reduce the benefits of scale. They provide full benefits in integrated eco-systems, connecting individual activities based on common standards and interfaces.

For India, digitalization brings significant advantages but requires also an approach that takes account of the country's specific circumstances. India already has deep digital capabilities and a strong position on the global market for IT services. Simply growing with the global demand offers high returns. But domestically, the rising demand for skills in the wake of digitalization is a challenge for India. A growing IT services export sector will further deepen the gap between (the few) skilled and (the many) unskilled Indians. As a market, India needs digital solutions that can capital and skills, not labour as in advanced economies. And as a source of data, it needs to balance its interests in retaining control of a key asset with the needs of companies that are operating globally integrated systems.



## Geopolitics, global value chains, and the next phase of globalization

Since 1990, the global economy has been shaped by increasing trade liberalization and the reduction of policy intervention. These changing policy circumstances have allowed global value chains to emerge, creating huge efficiency gains and provided a way for many emerging economies to engage with the global market.

The political consensus around market liberalization and global institutions underpinning this model of globalization is eroding. Political leaders are questioning the benefits of the existing model of globalization for their countries. Here, too, China is playing a central role. It is seen as having leveraged the opportunities of the global system to its own advantage while not playing by its rules to provide opportunities for others. China's geopolitical ambitions have further increased these tensions, in particular its relations with the US. Economic and political relations are further getting intermingled.

As a result, the policy choices made have started to move in a different direction. Trade and investment relations have become more complex and more influenced by policy interventions. Liberalization continues but in a more selected way among countries that see a clear mutual benefit. Government policies are taken in many countries with the explicit objective to build domestic capacity, serve domestic markets domestically, and reduce reliance on foreign countries. The changes in economic fundamentals and technology discussed above have played an additional role in reshaping global value chains. The traditional production and supply bases in Asia are becoming more relevant as markets. New digital production technologies reduce the benefits of low labour costs and scale.

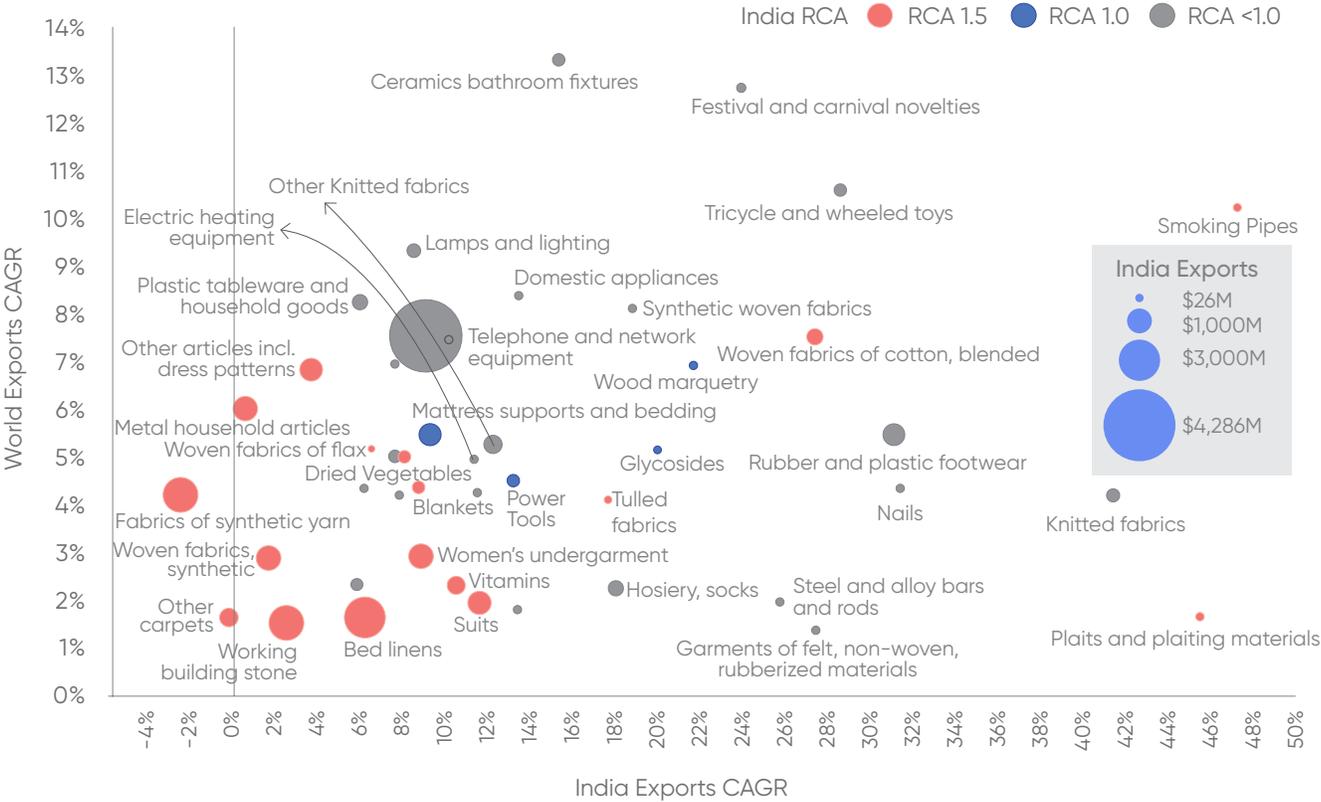
The pandemic has been an important trigger for many firms to review their global supply chains more forcefully. It has exposed the dependence of companies and countries on few key suppliers. The efficiency gains of such a narrow supply base are now compared against the high risks of disruptions. Global supply chains have evolved over decades and are costly to change. But based on the recent experience and pushed on by policy action, many companies are now adjusting their global sourcing.

# India's Opportunities as an Alternative Supplier

## Market Perspective

### Selection Criteria

Market attractiveness (World Export CAGR 2010-19 > 0%)  
 Geopolitical opportunity (Chinese market share, 2019 > 30%)  
 Indian capabilities (India's RCA 2019 > 1.5 OR India's export CAGR 2010-19 > 5%)  
 Indian relevance (Indian exports 2019 > \$25m)



## Strategic Perspective

### Selection Criteria

Products considered essential to achieve core national goals

	China's relative positions	India's relative position
<p>Pharmaceuticals</p>	<ul style="list-style-type: none"> <li>33% of API sales to Europe</li> <li>40-100% of all API plants for 1/3 of for US critical pharmaceuticals</li> </ul>	<ul style="list-style-type: none"> <li>India already a strong second source</li> </ul>
<p>Semiconductors</p>	<ul style="list-style-type: none"> <li>38% of Assembly, Testing, and Packaging</li> <li>52% of Printed Circuit Boards</li> </ul>	<ul style="list-style-type: none"> <li>India far behind as a producer and market</li> </ul>
<p>Renewable Energy</p>	<ul style="list-style-type: none"> <li>75% of all EV batteries</li> <li>70% of all solar panels</li> </ul>	<ul style="list-style-type: none"> <li>India far behind as a producer and market</li> </ul>

Source: ISC Analysis

For India, this new context provides a range of opportunities. As a traditionally non-aligned country and as a democracy India is an attractive trading partner for many countries around the world. Its location in South Asia puts it in an advantageous position to serve growing markets. India will have the best opportunities in areas where companies are looking for alternatives given the dominant position of China on global export markets, where global demand is growing and new capacity will anyway have to be provided, and where India has, due to existing market positions or recent growth, revealed competitive advantages. Looking at narrow product categories that meets these criteria, most of them are in relatively traditional, labour-intensive areas. But they also include telephones, a category where India has quickly gained ground as a consumer and a production site. In areas considered “strategic” by many countries, India has a strong position in pharmaceuticals. In semiconductors and even more so in renewable energy generation equipment, it will, over time, be able to leverage its growing domestic market demand. But so far India remains far behind China and others in these sectors.

The competition for the economic activities that may be re-located is intense. Vietnam, for example, has been very successful in attracting investments to build alternative supply bases. And regionalization benefits countries like Mexico and Poland. Furthermore, the employment effects of an export-led model may be more limited given the new technologies available.

## Climate change and policies for carbon neutrality

The latest report of the IPCC, the UN's Intergovernmental Panel on Climate Change, finds that climate change driven by greenhouse gas (GHG) emissions from human activity has already led to a temperature increase by around 1 degree relative to the pre-industrial age. An increase of more than 2.5 degrees is projected in an intermediate scenario of GHG emissions plateauing at current levels before falling in the years past 2050. Climate change leads to changes in weather patterns, including the occurrence of extreme weather conditions, and negatively impacts other dimensions of the natural environment, including biodiversity.

The policy response to climate change has included regulatory action, investments into the transition towards carbon-neutrality, changes in the fiscal treatment of different energy sources and carbon emissions, and more recently the announcement of carbon-border taxes to counter the relocation of emissions to countries with lower standards. These policy changes have significant implications across industries, markets, and countries. Energy-intensive sectors like the automotive industry and steel production are being disrupted. New companies are emerging and as new products and production processes change, the mix of capabilities and assets need to succeed. In energy markets, massive investments have been triggered into renewable energy production, and many existing coal-based energy production assets

have become economically unviable. For oil and gas, overall investment activity has dropped, and focus has shifted from oil to natural gas production. There is also a pronounced change in supply behaviour, as countries with large oil and gas resources now view these resources not as a finite, scarce asset but as a resource that might never be fully exploited. As a result, their incentives to increase current production has increased, especially for countries with low production costs.

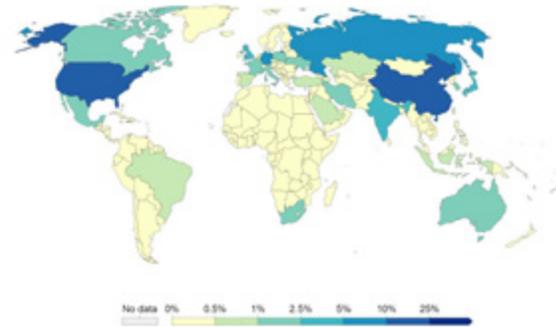
For India, both climate change and the policies triggered in response pose a significant challenge. India's prosperity losses due to rising temperatures are among the highest globally, given the country's natural conditions. India's exposure to policy changes at the global level is mixed: On the one hand, the country ranks high on its 'climate change performance', reflecting low current per capita emissions and strong growth in renewables. The income effects of a global CO<sub>2</sub> tax or a Carbon Border tax by OECD countries would be modest. On the other hand, the low climate efficiency of current energy production and rising energy needs make India one of the largest contributors to future carbon emissions. A global CO<sub>2</sub> tax of USD 50 has been estimated to reduce Indian CO<sub>2</sub> emissions by 830mio tons, the third largest globally and a sign of the changes required by Indian companies and consumers.



Low Indian emissions so far relative to China, oil producers and OECD countries

### Share of global cumulative CO<sub>2</sub> emission, 2020

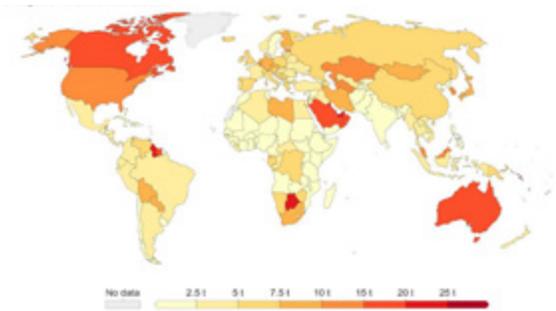
Each country or region's share of cumulative global carbon dioxide (CO<sub>2</sub>) emission. Cumulative emissions are calculated as the sum of annual emissions from 1750 to a given year.



Source: Our World in Data based on the Global Carbon Project. OurWorldInData.org/c02 and other greenhouse-gas emissions • CC BY

### Per capita greenhouse gas emissions, 2018

Emission are measured in carbon dioxide equivalents (CO<sub>2</sub>eq). This means non-CO<sub>2</sub> gases, are weighted by the amount of warming they cause over a 100-year timescale. Emissions from land use change \_ which can be positive or negative \_ are taken into account.

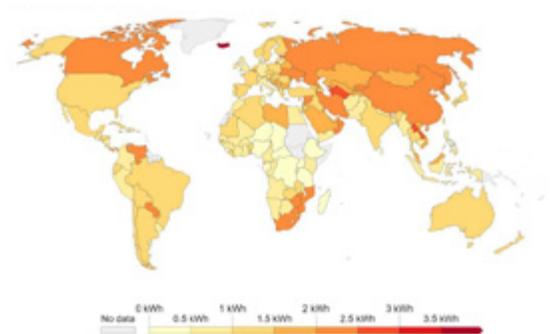


Source: Our World in Data based on the Global Carbon Project. OurWorldInData.org/c02 and other greenhouse-gas emissions • CC BY  
 Note: Greenhouse gases are weighted by their global warming potential value (GWP100). GWP100 measures the relative warming impact of one molecule of a greenhouse gas, relative to carbon dioxide, over 100 years.

High carbon intensity relative to energy production and GDP relative to OECD

### Energy intensity, 2018

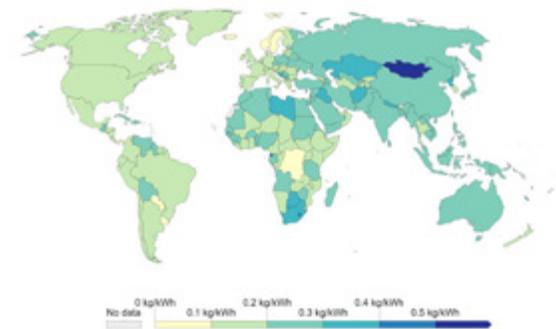
Energy intensity is measured as primary energy consumption per unit of gross domestic product. This is measured in kilowatt-hours per 2011\$ (PPP)



Source: Our World in Data based on BP, World Bank, and Maddison Project Database. OurWorldInData.org/energy • CC BY

### Carbon intensity of energy production, 2020

Carbon intensity of energy production is measured as the quantity of carbon dioxide emitted per unit of energy production. This is measured in kilograms of CO<sub>2</sub> per kilowatt-hour.



Source: Our World in Data based on the Global Carbon Project, BP and ENR Energy Data Portal. CC BY

Specific challenges exist in a number of key areas: First, Indian agriculture will suffer from changing environmental conditions. And India will need to adjust market regulation, which currently encourages wasteful use of natural resources, especially water, and over-use of fertilizers. Second, India has growing energy needs that must be met while minimizing the impact on climate change. There is ample capacity for solar energy and to a lesser degree wind energy. For the latter, India needs different technology than Europe given its lower wind speeds. Ambitious policy action is required in order to enable a transition towards carbon-free energy that meets demand and avoids disruptions. The rising efficiency of renewable energy has created huge amounts of stranded assets in coal-based utilities. And third, India's international trade and investment relations will also be affected. Where India fails to build carbon-neutral energy and production systems, it will in the industrial sectors it aspires to develop face rising trade barriers, especially in advanced markets. But if India aggressively pursues the opportunities to leverage international investment and technology collaboration for efforts that reduce CO<sub>2</sub> emissions in India, it will be able to garner economic and environmental benefits.

03

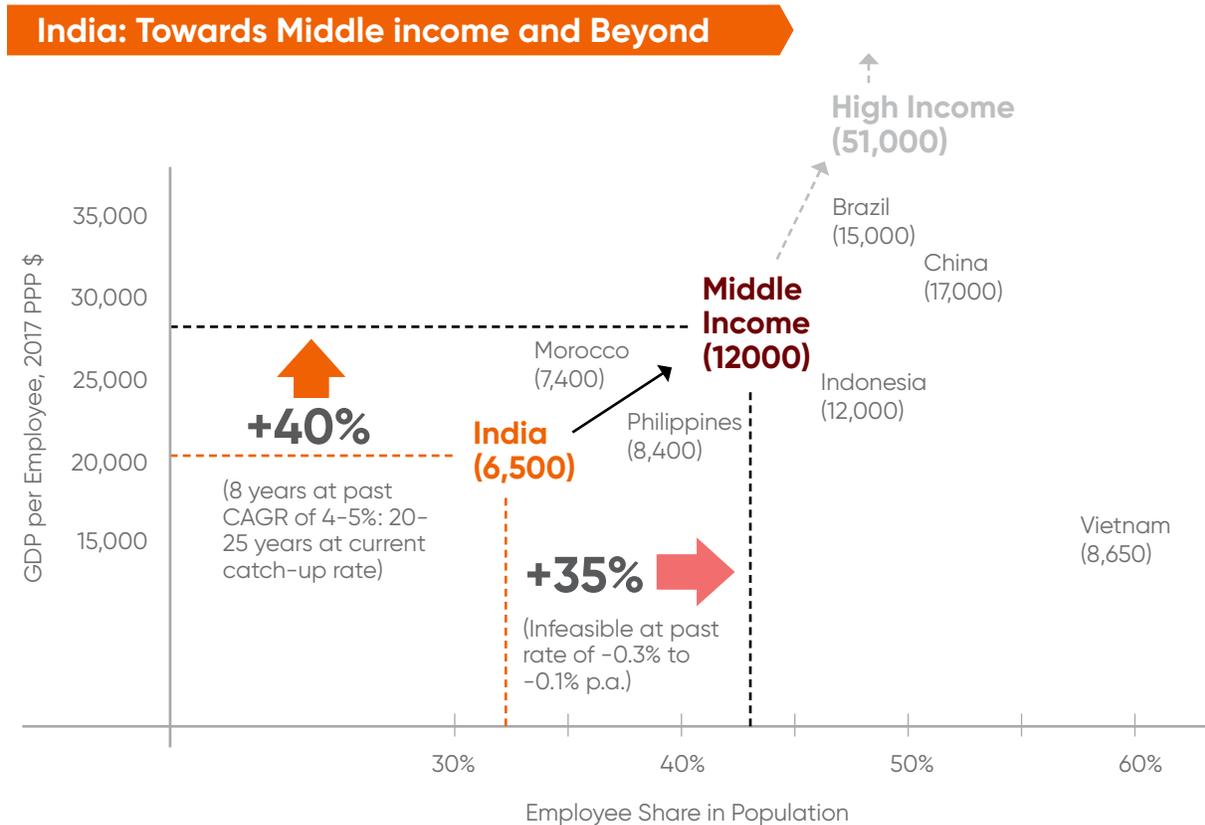
**A ROADMAP FOR  
BETTER GROWTH  
THE INDIA@100  
STRATEGY**



# A The hill to climb

India is a country that has shown its potential to deliver high and sustained economic growth: India is among only a dozen countries globally that has achieved an average annual per capita growth rate above 3.5% over the last 30 years and has during that period never seen its 5-year moving average annual prosperity growth rate drop below 2%. Over many years growth has indeed been accelerating.

Still, India has a long path ahead to realize its ambition to reach middle-income and eventually high-income status. Becoming a middle-income country would translate into 80% high prosperity (measured at PPP terms) compared to where the country is today. It would translate into a \$ 7 trillion economy (measured in FX terms), 2.5x the size of today. Becoming a high-income country would mean becoming a \$ 60 trillion economy; 20x the size of today, and more than 2.5x the current size of the US economy.



\*Number in brackets is GDP per capita, 2017 PPP \$  
 Source: World Bank



While India has achieved significant GDP and average prosperity growth, this growth has not been sufficiently shared across society. Inequality has been rising dramatically. The poor have seen their living conditions improve because of more effective policies to help those in need. But many of them are only slightly above the poverty line, and their gains disappeared during the pandemic. Most income gains were registered at the very top of the income distribution. Similar trends have been visible in other countries as well, but India stands out for the extent of this imbalance.

India's average level of prosperity is not matched by its social progress, i.e. those components affecting the quality of life that are not directly related to GDP. Again, government policy has indeed targeted "Ease of Living" but the data so far shows India both lagging behind in prosperity on overall social progress, and specifically on areas related to environmental quality, health care, and inclusion.

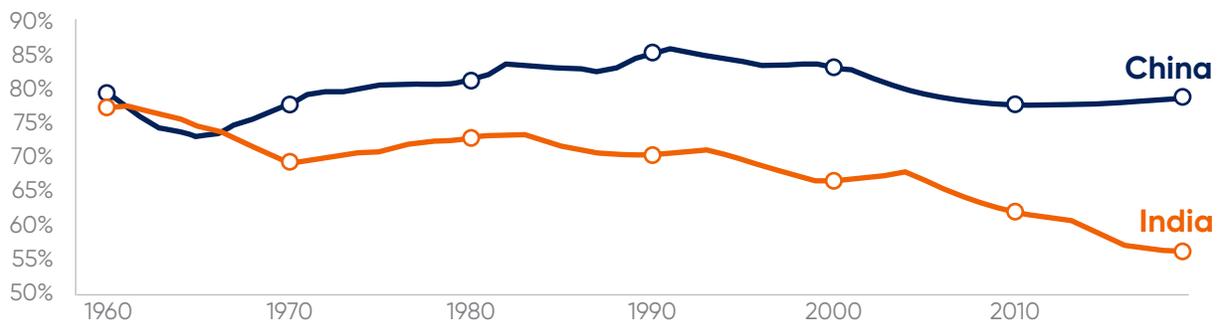
Finally, across India's regions, there are no signs of systematic convergence in income and living conditions. In fact, regional disparities have, in some dimensions, increased from already high levels. Large parts of India remain unconnected to the modern Indian and global economy, despite improvements in infrastructure connectivity and rollout of basic services.

## The Jobs Challenge

The second key challenge is the failure to provide enough good jobs. This is connected to shared prosperity – job trajectories that allow growth in value creation over time are the key to sustained prosperity gains. And it is key to unlocking the demographic opportunity India now has, with rising absolute (and relative) numbers of Indians in working age. But job creation has essentially been flat over recent years, especially in those manufacturing and advanced service sectors that were supposed to drive growth.

### The Jobs Challenge

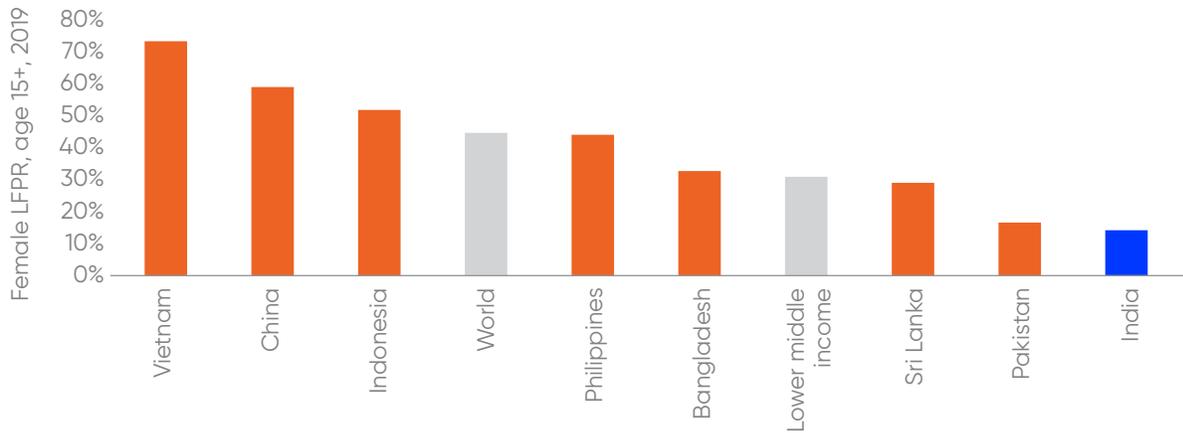
Employees as Share of Working Age Population



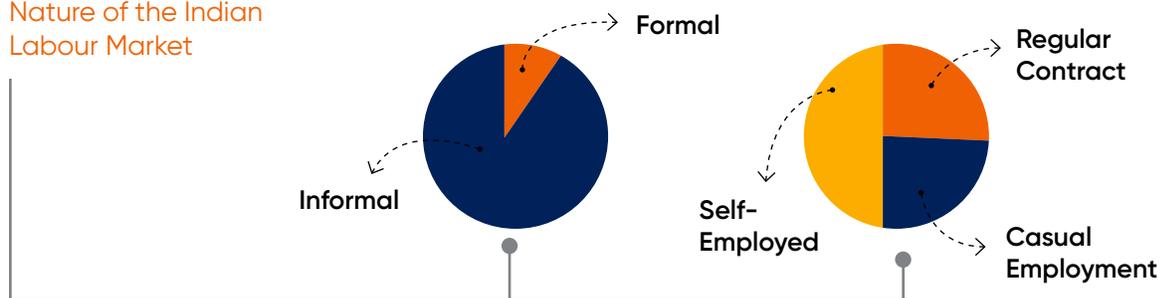
Source: Conference Board, World Bank, PLFS

## Female Labour Force Participation Rate

### Selected Countries



### Nature of the Indian Labour Market



Source: Conference Board, World Bank, PLFS

India has seen a dramatic decline in labour mobilization over the last four decades. While similar trends have been visible in other countries, too, India stands out for the size of this drop and for experiencing such dynamics at relatively modest levels of income. People dropping out of the labour force do not have access to any generous social support; they instead have to eke out a living in household through self-sustaining activities with very low levels of productivity.

A particular challenge is the low female labour force participation rate in India. Again, this is a pattern that is not unusual in South Asia but India stands out for the extent of the challenge that exists. This is not the sole reason for India's overall low labour force participation; much of the recent drop occurred among working-age males. But it is an important one and in other countries, rising female participation has been a key driver of growth.

Finally, the jobs that exist are to a very large degree informal and irregular. This is a challenge, because such jobs do not provide the opportunities to build human capital and enhance performance over time. They also provide lower incentives to make investments into physical and other assets that would drive higher productivity.

## The Policy Implementation Challenge

The third key challenge is the failure to achieve sufficient impact from the policies that are being enacted, particularly on creating shared prosperity and jobs.

India's strong aggregate growth in recent years has not been the result of luck. It has been driven by policy choices that have unleashed the dynamism of the Indian economy. The early 1990s saw a critical change in opening the Indian economy to market forces, both internally and externally. These changes created many new opportunities for those Indian companies and individuals that had the ability to actively pursue them. More recently, especially since 2014, the focus has broadened to upgrading the underlying competitiveness of the Indian economy. These efforts have included infrastructure and skill upgrading, opening domestic markets, addressing the administrative costs of doing business through bureaucracy and corruption, and enhancing the efficiency of social policies. These actions have targeted many of the key levers India has to pull to accelerate its economic performance.

Why, then, have outcomes fallen short of what is needed to achieve India's ambitions and expectations? The reforms required and initiated over the last few years are more demanding in terms of implementation than the initial market opening reforms, three decades ago. They require action and often coordination across many different levels of government, as well as across functionally specialized ministries and agencies. Their impact often depends not simply on executing given policies uniformly across the country but on adapting them to the specific circumstances in each state, district, or city. This puts high demands on the capabilities of a much larger group of individuals across the public sector.



**The Policy Implementation Challenge**



Weak skills and infrastructure



Domestic markets heavily regulated



High cost of doing business



Capital channeled to a few sectors



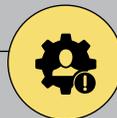
High barriers to trade and FDI

**Closed India**

**Low demands on implementation capacity**



**Some domestic markets opened up**



Weak skills and infrastructure



High cost of doing business



Financial markets slowly opened



**Falling trade and FDI barriers**

**High benefits for individuals and firms globally competitive**

**Post-1997**

**Since 2014**

Efforts to enhance skills, infrastructure



Further domestic markets opening



Reduction of cost of doing business



Financial sector oversight in focus



More activist trade and FDI policy



**High demands on implementation capacity, specifically collaboration across levels and parts of government**

## Reaping the winds of change: Global and domestic trends

India's future performance will depend not only on how well it addresses the challenges of today. It will also depend on how well it responds to the changes in the context that it will be facing over the years to come. Predicting the future ahead is a fool's errand, maybe now more so than in the recent past. But preparing for the future is possible and necessary. India needs to ensure that its policy choices are robust in view of these changes ahead, and are not based on an outdated ideas of what it will take to achieve economic development.

For India this future will offer new opportunities as well as challenges. India's demographic profile is a major growth enabler, especially given the opposite trends in China and elsewhere. India's strong IT skills position it well to serve the rapid digitalization of the global economy. India economy has large energy needs that have to be met while moving India towards carbon neutrality. FDI and trade will continue to provide growth opportunities, but the pathways towards export-led growth based on low labour costs will be increasingly narrow. A more fractured global economic and political system requires careful manoeuvring.



## **B** New Guiding Principles

The India@100 strategy proposes a set of new guiding principles, new priority policies, and a new implementation model to achieve the transformation that India will need to reach its ambitious goals over the coming decades.

The direction for the strategy is set by its guiding principles. These principles include a clarification of the overall goals for India's economic development and an articulation of the development approach that is underpinning policy action.

### **New Goals: A Broad Ambition for India's Future**

An effective strategy for India needs to be based on a transparent articulation of the country's economic development goals. These goals should outline an ambition that is bold, energizing, and reflective of the aspirations of the country.

India's ambition is to achieve middle-income and ultimately high-income status. Prosperity is, therefore, at the centre of the proposed goals. The diagnostics has shown, however, that prosperity measured as average GDP per capita is insufficient. And Indian leaders have set goals like "Ease of Living", regional development, and rapidly increasing renewable energy production.



A range of four additional dimensions integrates these different aspects into an overall coherent articulation of India's ambitions:

- Prosperity growth needs to be matched by social progress
- Prosperity needs to be shared across all parts and regions of India
- Prosperity growth needs to be environmentally sustainable
- Prosperity needs to be solid and resilient in the face of external shocks



All policy actions should ultimately be motivated by their ability to contribute to these goals. Many actions will support one or more of them, without a negative impact on others. But there can be trade-offs. Articulating these goals enables a more transparent and evidence-based discussion of how these trade-offs should be managed over time. The four additional dimensions are all multidimensional, and less easy to track in one figure than average GDP per capita. Indian leaders can and should define metrics that capture them directionally to help track performance and guide decision-making.

The diagnostics suggests that currently India lags significantly behind on creating shared prosperity. This is also reflected in lagging social progress, which tends to be more important for those with lower income levels. Policies that focus on these dimensions should be prioritized now. The diagnostics also show that sustainability will become a dramatically rising challenge for India, both directly in its impact on living conditions and indirectly as a necessary condition for competing on global markets. Policies must start putting India on a growth path towards net zero carbon emissions and environmental sustainability more broadly. Resilience will likely also gain importance as the global context is becoming more fragmented and volatile.

## A New Development Approach: Broad Progress through Structural Transformation 2.0

An effective strategy for India needs to clarify the underlying development approach the country aims to pursue. This approach outlines the crucial hypothesis on how specific changes in the Indian economy will translate into achieving the strategy's goals.

The first pillar of the new development approach is the **integration of the social and economic development agendas**. The India@100 strategy views both these agendas as fundamentally connected. A successful strategy pursues policies in these areas that are mutually reinforcing. Economic growth that does not achieve social development fractures society and ultimately erodes the very foundations of prosperity. Social progress that is not conducive to economic development becomes economically unsustainable.

India needs to focus on enabling the creation of competitive jobs for those currently outside of the active labour market. Jobs that provide pathways to higher productivity enable individuals to earn their own livelihoods and become self-reliant.

India has made great strides in improving the efficiency of some of its core social programs, using the "India Stack" to better target those in need. But these policies are no substitute for efforts that enable those Indians at the bottom of the income distribution to start a journey towards self-reliance and prosperity through their own economic activity.

### Shared Prosperity through Competitive Jobs

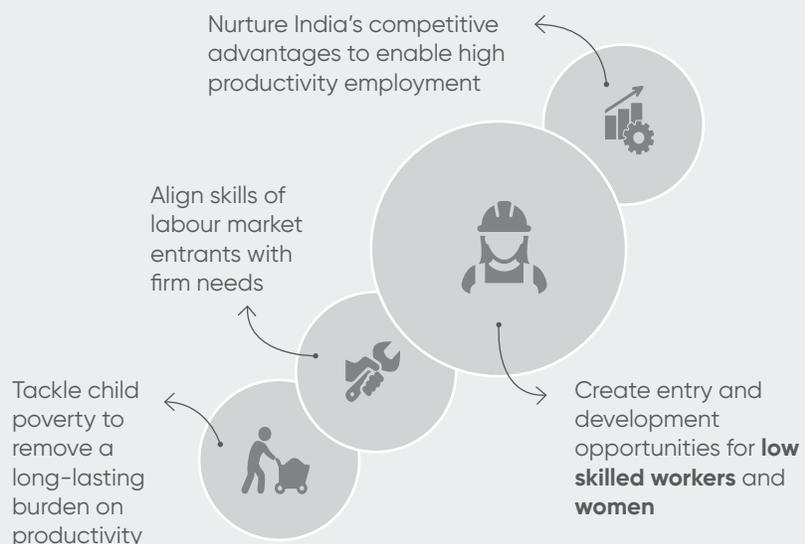
Social Development through opening up pathways towards competitive jobs for low-skilled and female workers

New Principles

Economic Development



Social Development



The second pillar of the new development approach is **Structural Transformation 2.0**, a perspective on how individual sectors in the Indian economy will contribute to job creation and growth aligned with the realities of the global economy. The India@100 strategy acknowledges that the old model of industrialization has limited economic power given changes in technology and globalization. Industry remains important but lacks the ability to absorb large numbers of employees, especially lower skilled workers. Services are becoming critical sources of job creation already at lower stages of development. But there is a danger that employees in services get stuck in informal, low-productivity jobs that provide no development opportunities.

India needs to pursue job creation opportunities across a portfolio of service and industrial sectors. The immediate priority is to identify sectors that can provide entry level opportunities for those currently outside the active labour force, particularly low-skilled workers and women. Within these sectors, there needs to be a focus on policy actions that can enable growth to create new jobs and upgrading to create better jobs. Furthermore, there is a need to systematically develop sectors aligned with India's current and future competitive advantages. While these industries will not provide jobs to the unskilled today, they will provide the source of jobs for a better skilled India tomorrow.

India has launched a range of policies to support industrialization, in particular, the Make in India initiative with its focus on investment attraction, Production Linked Incentives, and efforts to reduce the Costs of Doing Business. These policies aligned with traditional export-led structural transformation need to be complemented by a wider set of efforts able to support job creation under the new global economic circumstances.

## Structural Transformation 2.0

Structural Transformation through sector-based growth across a portfolio of services and industries

New Approach

### Premature Deindustrialization

### Skill-Biased Technological Change

### "Trouble in the Making"

### Servitization



Create entry and development opportunities for **low-skilled workers** and **women**

- Agriculture
- Textile, Clothing
- Education, Health Care
- Construction
- Logistics and Distribution



Nurture India's competitive advantages to enable **high productivity employment**

- IT services
- Biopharmaceuticals
- Telecom and IT products
- Renewable energy equipment
- Electronics

## © New Policy Priorities: **Competitive Jobs, Competitive Firms**

The India@100 strategy translates guiding principles into prioritized policy action. The first set of policies is focused on enabling **competitive jobs**. Competitive jobs earn their wages in the marketplace, support the livelihood of employees, and provide opportunities for developing capabilities and productivity over time.

The second set of policies is focused on enabling the growth of **competitive firms**. Ultimately there will be no sustainable job creation if India cannot enable more productive firms to emerge and scale.

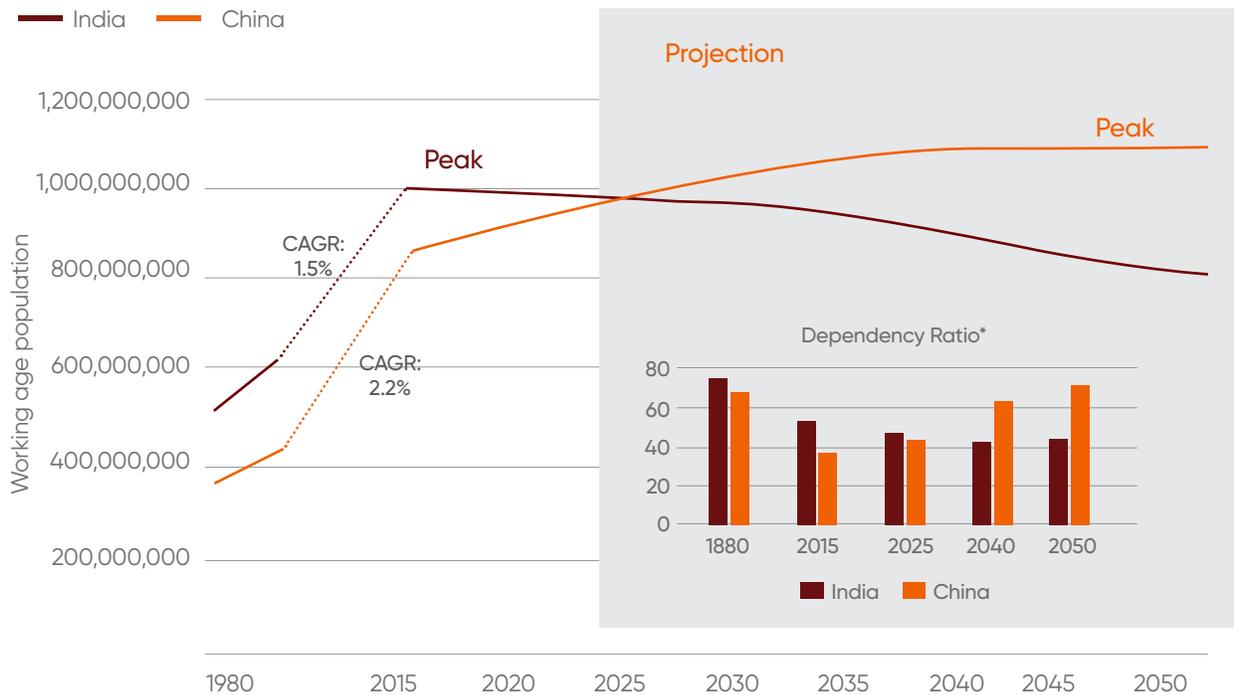
The third set of policies focused on creating a **competitive government** will then be discussed in the next chapter of the report. A competitive government is defined as being able to design and implement the policies need for competitive firms to create competitive jobs.



## Policies for Competitive Jobs

The creation of competitive jobs is at the heart of India's economic development agenda. India's working-age population is growing by roughly 10 million annually, soon surpassing China's working-age population in total numbers. India's job creation has reached 10 million only once over the last 15 years, with many years of virtually zero net jobs added.

### Working Age Population Trends: India vs China



\*Dependency Ratio = Number of non-working age citizens relative to 100 working-age citizens

Source: World Bank

The policies needed to create competitive jobs differ by target group, defined in terms of individuals' labour market status. India's new development approach has identified **low-skilled and female workers** currently outside of active employment as a priority. A second group is of **higher productivity jobs that leverage current and emerging Indian** competitive advantages. As they provide limited answers to India's job challenges of today, they will be a critical part of achieving higher prosperity tomorrow. A third group are the **children and young people in education** that will enter the labour force in coming years; the profile of their capabilities can still be aligned with the evolving needs of the Indian economy.

## SECTOR- AND LOCATION SPECIFIC GROWTH INITIATIVES

India's economy is characterized by huge heterogeneity of circumstances across sectors and locations. National policies like the Make in India or Skills India Initiative are focused on appropriate levers in terms of business environment qualities. But their policy focus is too narrow and generic to address the full needs of distinct sectors and clusters. There are promising initiatives to empower local decision-makers, like the Smart Cities and One-District-One-Product initiative. But these efforts are often insufficiently well aligned with national instruments and funding streams.

India needs to launch a new set of sector- and location specific growth initiatives. These initiatives can identify the specific needs in a given context, and then draw on the appropriate set of generic policy tools to pursue a coherent strategy for growth and competitiveness upgrading. These initiatives will require tight collaboration between public and private sector leaders; they offer complimentary insights and capabilities that are all needed to design and pursue an effective action agenda.

The process for identifying promising fields for such initiatives needs to be open, competitive, and evidence-based. For **low-skilled and female workers**, critical criteria for attractive sectors are low entry barriers for women and low skill workers, market opportunities, and the presence of existing competitive advantages.

### Creating Jobs: Health Care Services



#### Aim

- Extend the supply of health care services
- Leverage females and low-skill workers in supporting health care delivery



#### Approach

- Regulatory changes necessary to open up activities for low-skill employees
- Strengthen public investment/spending for health care services
- Leverage digital tools
- Open up delivery for both public and private providers
- Value-based health care principles
- Drive pilots, learn from experience, and scale successful efforts

The data on female employment across cluster categories or sectors provides insights into where job opportunities might exist. Some are in export-oriented industries like apparel and textiles. India has an established position in world markets but has been falling behind rivals like China, Vietnam, and Bangladesh. Others are in domestic services like health care and education. In these areas, the needs in India are high, and the diagnostics have revealed relatively low current spending on health care. A sector-specific analysis can identify the particular actions needed to unlock the potential for creating competitive jobs in this area.

For low-skilled workers, the analysis of the current skill intensity of sectors indicates that entry barriers for them are lowest in areas like agriculture, construction, and parts of logistics and transportation. For the first two in particular, the foremost opportunity is in upgrading the quality of existing jobs and adding employment opportunities in related and supporting industries. In agriculture, exports are a key growth area. In construction, services related to building more renewable energy infrastructure and lower-cost housing can provide future demand.

## Improving Jobs: Agricultural Exports



### Aim

- Enhance quality of jobs
- Create jobs in related and supporting sectors



### Approach

- Focus on specific market niches, regions, and clusters
- Mobilize partnerships from public and private sector
- Create integrated action plans that coordinate a range of policy tools
- Draw on existing plans as far as possible
- Drive pilots, learn from experiences, and scale successful efforts
- Evolutionary changes vs structural reforms



There are a number of pilot initiatives that could be pursued alongside full-scale sector growth initiatives. These initiatives tackle specific issues and could be implemented in specific regions where groups of private and public leaders are willing to experiment with new policy concepts.

- **Female Employment Initiative** offers to enable services (safety, childcare) to remove barriers to female employment in specific sectors and locations
- **Job guarantees plus** tests ways to change current job guarantee schemes to create private sector employment with pathways into permanent jobs
- **Clean Construction** tests simplified regulations for developers meeting quality standards over time, adding formal jobs and build needed housing

For **higher productivity jobs**, critical criteria include the evidence of existing competitive advantages, market opportunities, and an alignment with the aspirations of India's national value proposition.

The export data indicates a number of high productivity sectors in which India either has already achieved significant market share or registered significant growth in recent years. The most visible is IT services, where India has gained a large share in a growing global market. Another one is in pharmaceuticals, where India is important both as a supplier of APIs (active pharmaceutical ingredients) and pharmaceutical end products. India still has a smaller market share but rapidly growing exports in product categories related to telecommunications, electronics, and IT equipment. Here India has opportunities to position itself as an alternative to China. In some markets like mobile phones a large and growing domestic market provides a critical foundation for attracting activity.

An area with large domestic and international market potential is equipment related to reducing carbon emissions. India has ambitious plans to grow energy production from solar and wind. So far, a lot of the equipment comes from abroad, especially China. Support schemes like Production Linked Incentives and Tariff Protection aim to incentivise the buildup of local production and supply chains. But the so far limited domestic market size and questions about the reliability of demand appear to be holding back their effectiveness. An investment pact in Renewable Energy with foreign partners in the OECD could be a way to overcome these barriers.

## Jobs and Sustainability: Investment Pact Renewable Energy



### Aim

- Support expansion of affordable, reliable, and carbon-neutral energy for India
- Create jobs in India in the production of renewable energy equipment
- Contribute to global carbon reduction



### Approach

- Foreign partners providing technology, production expertise, and funding.
- Indian government provides guarantees for overall level of equipment purchases
- Indian regions compete for providing approved sites for production in conjunction with energy purchase agreements

India's long-term economic success rests on developing a coherent national value proposition, laying out the specific opportunities and business environment qualities that it provides as a place to do business. Today, India has gained strong positions in several global industries, reflecting specific advantages that it has developed. The most prominent example is IT services, where Indian companies have become leading global suppliers and Indian locations, Bangalore especially, have become dominant back-office and development hubs. A range of other specific characteristics can become the foundation of an attractive overall national value proposition.



Nurture India's competitive advantages to enable **high productivity employment**

*Indicative*

Towards a

## National Value Proposition for India

that resonates globally

- **Demographics that drive growth;** rising market demand and labour supply are a given
- **Existing strengths that are well aligned with the needs of a digital and globally connected future;** home to companies successful on the global market, a large number of highly-skilled graduates, strong global diaspora
- **An independent, democratic partner in an era of increasingly politicized global economic relations;** India large enough to matter and steer its own course, but also small enough to not be considered a major threat
- **A country with momentum that promises continued improvements in competitiveness fundamentals;** yes, many challenges but reforms are going in the right direction

### **ENABLING SOCIAL POLICIES**

Efforts to trigger job creation at different stages of individuals' labour market journey need to be supported by enabling social and economic policies. Approaching these policies from the goals of enabling the creation of competitive jobs provides a different perspective on setting priorities and aligning them with sector- and location-specific initiatives.

For **children and young people in education**, the focus needs to be on policies that enhance their development opportunities and employability over time. One critical concern in India is childhood poverty, that through stunting and other impediments to development reduces children's productive capabilities throughout their life. There has been progress in reducing rates of stunting, but India still ranks below many its peers. Addressing childhood poverty is a social as well as an economic imperative. And India has shown that it is able to significantly improve its social policy interventions where the relevant actions have been made a political priority.

Indonesia's Program Keluarga Harapan (Family Hope Program) is a conditional cash transfer program that has achieved significant reductions in stunting. India can build on these practices and combine them with the 'India stack' technology solutions that India has successfully applied in other areas of social policy.

Another critical concern is the low quality of education and the poor fit of available skills with the needs of the Indian economy. The New Education Policy and Skills India have focused on these issues. But it will be critical to achieve higher impact from these efforts. Priority now needs to be given to effective implementation mechanisms. Location- and sector-based structures like the sectoral growth initiatives previously discussed will be critical for effective action on upgrading workforce skills.

Peru provides with the Innova Schools an interesting model for providing cost-effective quality education to students from low-income families. India can draw on examples like these, as well as on the dynamic community of NGOs and social enterprises focusing on improving education across India. There are particularly interesting cases for the innovative use of digital technologies aligned with the Indian context.

## Enabling Social Policies

### Priority Action Areas



Providing social services, in particular health care, is in itself an important source of job creation. The barriers for **female workers** are relatively low, given the high share of women already employed in the health care sector. For low skilled workers, however, regulatory rules often require skill-intensive modes of providing health care. Here regulatory changes need to focus on the scarce, high-skill doctors on critical tasks, and use technology to substitute skills, and not just labour. This could broaden the capacity to offer more health care services in more places, without reducing quality of care and while generating new job opportunities. Enabling social policies are also important to open the labour market to **female workers**. The provision of childcare services and investments in public safety are often critical factors in enabling them to look for employment.

### Pilot initiatives

- *Shared Value India* encourages social enterprises and major businesses' CSR efforts in addressing vital societal challenges, in particular, those related to child poverty and skill upgrading programs for the most vulnerable groups
- *Mobile learning everywhere everyone* experiments with the use of digital technologies and local languages to enhance access to educational programs

## ENHANCING EFFECTIVE MARKET COMPETITION

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India has over the last few years taken important steps to improve its overall business environment, investing in several dimensions of factor input conditions and taking steps to reduce the cost of doing business. The location- and sector-specific growth initiatives as well as enabling social and economic policies are instruments to leverage these improvements for competitive jobs, especially for those Indians currently outside the modern labour market.

But India will need to do more. The country's reform efforts must move beyond a focus on input conditions and lower cost of doing business. They need to enable Indian markets to unleash the power of competition as a driver of value generation. What is needed is not simply a removal of existing rules and regulations. It is the creation of a regulatory framework that rewards value creation to customers, enables allocative efficiency, and incentives innovation.

There are a number of policy areas that India should focus on to achieve improvements in the functioning of markets. Effective enforcement of competition policy requires an alignment with the new realities of digital markets and the existing market structures in India. Active policies to encourage entry and enable the scaling of competitive new firms are important given the

imbalance between large incumbents and their fragmented competition. Market regulation needs to be a tool that encourages firms to compete on productivity and value. In markets with a strong role of government governance and incentives structures are needed to mimic the effects of market dynamics.

Across these policies, reform management that recognizes the existing political economy of India is critical. More regional experimentation to better assess the implications of reforms is needed. Careful policy design needs to ensure that markets are not only freed up but structured to reward value creation towards societal needs. Astute change management needs to consider compensating actual or perceived “losers” of reforms.

## Policies for Competitive Firms

Job creation on the back of sector- and location-specific initiatives as well as better business environment conditions will only occur if India is able to encourage the scaling up of more productive firms. And it will require an increasing share of companies to leave informality and apply the full range of public rules and regulations.

India’s current policies are focused on entrepreneurship, reducing the costs of doing business, and on supporting MSMEs. All are welcome but fail to focus on the key challenges that India is facing in its firm demographics.

- Entrepreneurship is already high in India. But many of these small companies never achieve scale. And while the growing number of tech-based start-ups going public is very positive, it is also reinforcing the divide between a highly skill-intensive but small segment of the Indian economy that is doing very well and the large remainder in which low skilled workers find few opportunities.
- Reducing the costs of doing business is necessary but the current approach has significant limitations. Reforms are too much based on narrow formal changes, while the reality on the ground remains much less affected. And an orientation on some key rules captured by national or international assessments misses the need for a more systemic change in regulations. A positive step has been the digitalization of government services and reporting requirements.
- Finally, India has many individual schemes directed at Micro, Small, and Medium Sized Enterprises, but too often these policies lack a clear focus on scaling the most competitive SMEs. An overarching national policy for MSME in India is only now under discussion. In June 2021, the World Bank launched RAMP (Raising and Accelerating MSME Performance), a \$500 million program to support a \$4 bn nationwide initiative by the Government of India to revitalize the MSME sector.

A comprehensive approach towards enabling the growth of competitive firms has to recognize that a range of supply and demand-side policy levers have to be deployed in a coherent way. Removing administrative costs is not enough as long as business environment weaknesses reduce the advantages that formal, productive firms have against the informal rivals. Removing barriers to trade can enable incumbents with significant initial performance advantages to dominate markets, especially when dynamic entrants lack access to capital and other resources.

On the supply-side, reducing the cost of doing business, especially for medium-sized, growing, and formal firms remains critical. Rules and regulations have to become less of a barrier to growth and formalization. But it is also the application of these rules, and their enforcement through the judicial system that has to change. Red tape, corruption, and a slow and unreliable court system hit growing firms particularly hard. Furthermore, it will also require improvements in infrastructure conditions like infrastructure and skill availability to enable productive firms to scale their operations. Access to capital has to be improved; the banking system remains far too skewed towards large firms and a small group of tech-based start-ups. Competition policy needs a focus on enabling entrants and keeping market structures from being overly dominated by established companies. Mentoring and other support mechanisms can provide small growing companies access to know-how and linkages.



## Enabling the Growth of Competitive Firms



### Policy Actions

#### PRIORITY POLICY AREAS

##### Supply Side

- Cost of Doing Business, judicial system reform
- Infrastructure, workforce skills
- Access to capital
- Competition policy

##### Demand side

- Domestic market opening
- Trade and investment policy
- Public procurement

##### Principles

- Focus on effective implementation
- Enable experimentation, learning, and then scaling of policies
- alignment of national policies with sectoral growth initiative to achieve policy synergies

#### PILOT ACTIONS

- **Scaling Indian Suppliers** establishes systematic efforts in collaboration with large domestic and foreign firms to qualify Indian for engagement in their virtual chains
- **Mentors India** connects Indian SME leaders with peers and partners in larger companies to gain insights on how to successfully manage firm growth
- **SBA India** is leveraging the experience of other countries to develop dedicated programs, especially tied to public procurement, that enables and challenge SMEs to grow
- **India Firmographics** would be launched as a joint effort of the Reserve Bank of India and CSO to develop robust measures of firmographics and on key drivers of SME growth

On the demand side, firms with growth potential need access to markets. Within India, this requires infrastructure investment and regulatory changes. The GST reform has been a major step forward. Beyond India, trade policy and facilitation remain important tools to unlock new market opportunities. Trade has traditionally been dominated by large firms, but digitalization provides increasing opportunities for smaller companies to serve foreign markets. Public procurement is another key market that can be more actively leveraged.

The location- and sector-specific growth initiatives discussed earlier can provide a useful platform to launch efforts for enabling competitive firm scaling in specific fields. These initiatives can help identify the specific policy actions needed, and connect small companies with the available resources and communities.

There are a number of pilot initiatives around supplier development, mentoring, and government programs directed at SMEs that could be used to gain specific experiences on how to best support the scaling of competitive firms in the Indian context.

## D New Institutional Architecture: **Competitive Government**

India needs a new institutional architecture to drive more effective implementation. Many of the policies launched over recent years have appropriate ambitions. But they have had insufficient impact. The policies proposed in this strategy will likely face the same fate if they are approached in the same way as the policy initiatives of the past.

The approach to overcoming the implementation challenge proposed here rests on three elements. First, reframing key policies to better target central levers associated with India's key policy goals. Second, enhance coordination across government and between the public and the private sector to better match policy interventions with specific needs. And third, align policy design with existing implementation capabilities to enhance the quality of follow-through. The latter two are the focus of this section; the first was addressed in the previous discussion of priority policies.

### The India@100 Strategy

Towards More Policy Impact: A Three-Stage Approach

#### India's Policy Impact Challenge

- Large amount of **policy action**
- Generally focused on the **right issues** and with the **right aims**
- But impact is **falling short** of ambitions and expectations

#### And how to address it

#### Reframe

some central policy directions

- Integration of social and economic policies to better hit key goals
- Broader sectoral focus through Structural Transformation 2.0 to align with new realities

#### Strengthen the quality of **policy design** processes

- Improve public-private dialogue in the policy design process
- Deploy more location and sector-specific policies

#### Enhance **coordination** across government

- Clarify the vertical roles and responsibilities of levels of government
- Tackle the horizontal fragmentation of government across functional silos

## Towards more effective policy design

India's policy reforms are generally focused on the right issues and are based on an appropriate view of general insights on what is needed to achieve impact. But they too often fall short in achieving impact, because they fail to be grounded in a full understanding of the relevant firm and market dynamics, and of the specific locational and sectoral circumstances. A better public-private dialogue and institutional platforms for location- and cluster-specific action are needed to overcome these barriers.

### **PUBLIC PRIVATE DIALOGUE**

Effective economic policy design and implementation requires an effective dialogue between the public and the private sector. The private sector has a lot of critical information about concrete barriers that are holding back job creation and growth. It can assess how firms will respond to specific policy interventions. And it controls the decisions on firm-level investments and market strategies that policy changes need to trigger in order to achieve the intended outcomes. The public sector needs to draw on these insights to design policies that are in the public interest, deploying the unique legal and fiscal tools that government has at its disposal.

The dialogue between the public and the private sector in India is inhibited by a number of often deep-seated challenges. Trust in each other is low, and the two operate too often in separate silos:

- Within the public sector, there are remains of old anti-business sentiments that existed in the pre-1990 era. While the old socialist mindset plays politically less of a role now, India needs to resist the temptation of scapegoating of businesses as unpatriotic if their decisions go against the political intentions of the government.
- Within the public, there is a perception that markets are 'rigged' with powerful firms and individuals getting better deals. Some complain about crony capitalism, where some private business leaders benefit from their close links to political leaders; others see the entrenched interests of the leaders of publicly owned firms that draw on political cover to avoid market competition.
- Within the private sector, there are views about the ingrained inefficiencies and the lack of capability in the public sector that are holding back growth. There is also a tendency of individual firms or industry associations to pursue narrow self-interest in the interaction with the government, instead of efforts to benefit the competitiveness of a wider sector or the Indian economy overall.

Each of these views can point to some examples supporting their claims. But each of them is also failing to see the many instances of where reality is in fact different. India needs a more structured approach to acknowledging the challenges that exist, strengthening the practices that have already overcome them, and launching new structures that establish a better dialogue.

India has range of promising practices to build on: Effective engagement with the private sector on policy design and implementation is visible in specific issues, for example in the sectoral skill councils that drive workforce skill upgrading. NASSCOM has been an example of a private sector association that has been able to mobilize a policy agenda that was focused on improving the growth opportunities for an entire sector, not simply the private interests of existing individual members. There are also a number of new institutional structures like the Board for Advance Ruling (BAR), the Advance Pricing Agreement (APA) team, and new dispute resolution scheme (“DRS”) introduced in the Finance Act 2021 that all aim to create more stability and predictability in public policies and their application.

These examples show what is possible. But it is essential to recognize how important it is to make them the norm. The challenges to effective public-private dialogue outlined above remain very real, and the temptation to blame rather than collaborate the other is high.



"Vice President's Secretariat, 2018, The Vice President, Shri M. Venkaiah Naidu addressing the 98th Annual Session of the Associated Chambers of Commerce and Industry of India (ASSOCHAM), in New Delhi on October 16, 2018, The Press Information Bureau (PIB), 16/10, <http://pib.nic.in/newsite/photo.aspx?photoid=132382>. Published under Government Open Data License - India (GODL): [https://data.gov.in/sites/default/files/Gazette\\_Notification\\_OGDL.pdf](https://data.gov.in/sites/default/files/Gazette_Notification_OGDL.pdf)"

## **LOCATION-, SECTOR-, AND CLUSTER-SPECIFIC POLICY PLATFORMS**

Effective policy implementation requires aligning policy interventions with the specific needs of individual locations, sectors, and clusters. It has become increasingly important for India, as the country has moved further beyond a state where development needs were largely related to fundamental and cross-cutting issues. This is particularly so in India with its heterogeneity. The analysis of India's cluster landscape has shown that locations differ dramatically in their cluster composition, and sectors have a very clear geographic footprint with a few locations dominating. Accordingly, what policy actions are needed that is highly location- and cluster-specific.

India has implemented a range of sectoral policy tools and initiatives. Make in India has organized its investment attraction activities around sectors, and it can draw on sector-specific tools like the Production Linked Incentives. Skills India has launched sector-specific skill councils to strengthen vocational training. India also supports some local clusters, often focused on SMEs in more traditional sectors

These current efforts are useful as channels to deliver government policies in a more targeted way. But they are not yet effective in developing growth agenda for specific locations, sectors, and clusters. What they too often lack, is a bottom-up perspective from the view of the location or cluster that defines specific opportunities and challenges, and then draws on the appropriate mix of national and state-level policies to address them. There are some examples of how this could look like: A high level expert group of private sector leaders developed an export growth strategy for agriculture that argued for sector (crop)- and location-specific initiatives and identified specific interventions to pursue.

Other countries provide useful examples for how such a location- and cluster-based approach can be implemented: Peru has been successful in mobilizing its agricultural sector around a specific initiative around asparagus. Latin America and Europe have hundreds of cluster initiatives, many of which play a role as a strategy interface between general policy instruments and the specific needs of locations, sectors, and clusters. There is a wide variety of institutional models; there are overall principles of effective cluster organizations but for the specific structure the most important requirement is to align it with the existing political institutions, and structural circumstances. For large countries like India an essential task is to combine efforts to trigger local action with efforts that connect with the national policy debate.

## Towards more effective policy coordination

Effective policy implementation requires the coordination within government. The operational drivers of a specific policy program might be under the complete control of one government agency or regional government. But their impact on goals like job creation that government ultimately cares about depends in almost all cases on the wider set of complementary policy actions undertaken by other parts of government. India struggles to achieve the necessary alignment of actions across government, both vertically across different levels of government and horizontally across different functional ministries and agencies.

### **INDIAN FEDERALISM**

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India's constitutionally defined policies fall either into the domain of a specific level of government or are a concurrent responsibility. The fiscal federalism structure underpinning these responsibilities must manage both the higher revenue generation opportunities for the center vs state governments in relation to their spending commitments, and the significant differences in terms of prosperity and development needs across the country.

Over the last decade, India has seen a range of policy choices and initiatives that have increased the opportunities for location-based policies. Most fundamentally, the changes made in 2015-16 based on the recommendations of the Fourteenth Finance Commission gave more direct tax share to states, reduced 'tied' grants from the union government to the states, and created Niti Aayog as a Think Tank replacing the Planning Commission with its own fiscal instruments. Another key change was in 2016 the introduction of the Goods and Services Tax (GST) and the establishment of the GST Council for the central and state governments to deliberate and jointly take decisions.

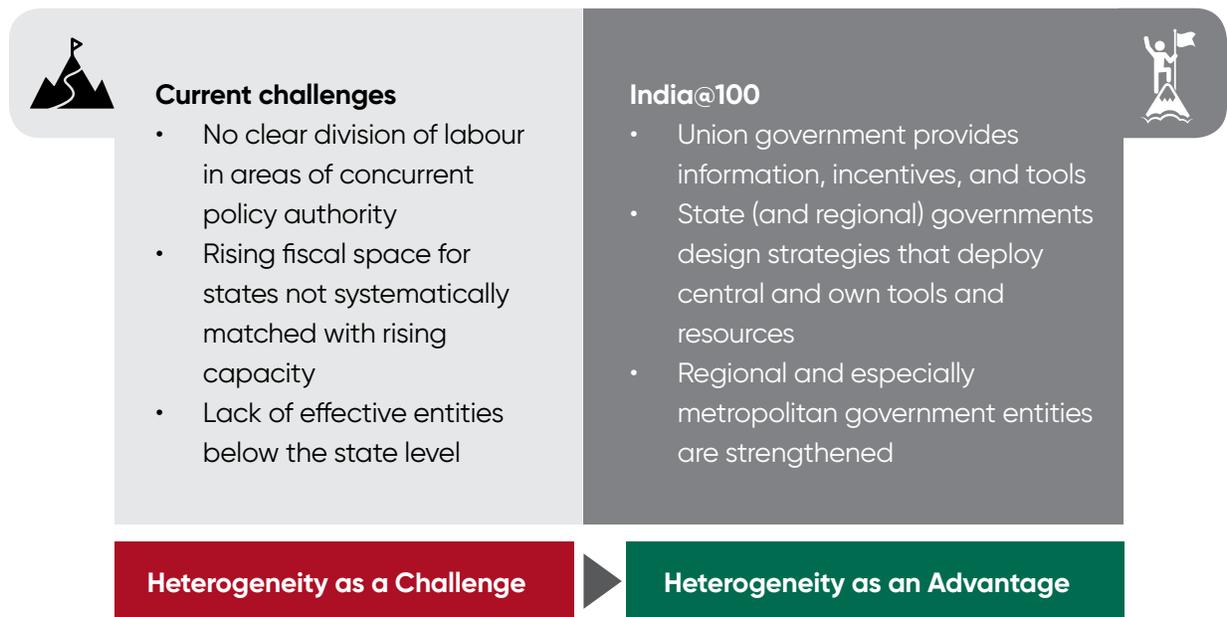
Niti Aayog has launched new initiatives like the Aspirational Districts and Smart Cities Mission that encourage bottom-up action through creating visibility and providing data on what happens locally. These efforts suggest that individual capacity at the local level is largely sufficient (and can be complemented where needed) but institutional capacity in terms of governance is often lacking. While the experience from these programs is encouraging, their impact is held back by two distinct limitations: They lack the ability to mobilize additional resources and work entirely through providing visibility and soft encouragement. And they drive fragmented actions, not comprehensive strategic action agendas to fundamentally raise locations' competitiveness.

An additional challenge is the insufficient devolution of decision powers and fiscal capacity to the third level of government, i.e., local and metropolitan entities. Despite the 74<sup>th</sup> constitutional amendment, there has been no effective decentralization from state to strong local/regional entities. This is a particular challenge for large metropolitan regions: Urbanization in India is far

behind peer countries, and the urban planning choices that will be made now will have implications over a long period of time.

Overall, India has created more room for decentralized action but lacks a coherent structure for location-specific policies and effective collaboration across levels of government in areas of concurrent policy authority. Such a structure needs to align fiscal authority with capacity for effective implementation. It requires institutions with the appropriate geographic and policy scope and sufficient clout. How these institutions should look like in detail depends on the specific institutional and political context.

## Towards Strengthened Indian Federalism



India should embed principles for effective location-based policies in existing and new policy actions in areas of concurrent policy authority. National missions launched by the union government need to be transparent on funding, governance, and execution roles across the different levels of government involved. Clarity on these principles, including the resources mobilized, can help shape realistic expectations towards the impact of specific efforts. State and local level policies need in turn to spell out which tools and funding instruments from the central government they intend to leverage.

The task to further develop effective collaboration across different levels of the Indian government needs to be clearly assigned within the government system. Whether this is best done through a

new entity or an existing one should be discussed. The international experience shows that such bodies need to have strong political clout to be successful. Often that means also direct influence on fiscal flows. Its initiatives around creating visibility for local action, providing information and analytics to inform local decision-making, and tracking progress to incentivize performance remain critical. There is room to strengthen these efforts by linking certain projects or initiatives at the state and local level more clearly with fiscal resources of union ministries. Finally, there might be room for creating Governing Councils as a forum where union and state-level leaders can discuss the regional profile of India's economic development policies.

India needs to live up to the promise of the 74<sup>th</sup> constitutional amendment and create a strong third tier of government, particularly in its key metropolitan regions. How the governance structures at this level should look depends on the specific institutional and political context: Creating strong new regional entities is one option; creating specific minister-level positions in state governments with responsibility for crucial urban centres could be another. The allocation of a share of the GST revenues to the third level of government would be an essential step in giving the local and regional government sufficient capacity for action.

India can, on its journey towards stronger federal structures, benefit from the experience of a range of other countries. Each of them has their advantages and disadvantages, and its institutional structures are heavily dependent on the specific circumstances that exist. But together, they can inspire the creation of structures that are fit for India.

- In the *European Union*, a New Regional Policy has over the last few years moved from "compensating" poorer regions to enabling all regions to grow. Public funding from the EU is conditional on regions submitting regional "smart specialization" strategies that lay out location-specific plans for upgrading existing activities and moving into new, more advanced sectors. The EU also provides regional data, analytical tools, and a collaboration platform for regions.
- In the *United States*, cities and metropolitan regions have emerged as strong drivers of economic and social development and effective sources of policy experimentation. Often this has required building new coalitions of neighbouring government entities to enable coordinated actions. The American Rescue Plan's Build Back Better Regional Challenge has recently selected 60 regional alliances that will compete for a total of 1bn US-Dollar funding.
- *China* as well as *Vietnam* are examples of emerging economies where location-specific policies and regional experimentation have played a significant role in driving economic development. In China, this approach has been driven by a strong centre setting overall direction, providing resources, and creating strong incentives while tasking local leaders with the responsibility for implementation. In Vietnam regions have arguably had more policy clout and there was more direct competition across regions without a controlling central government voice.

- *Colombia* is a country that structurally is less dependent on one city as its economic hub than many of its peers. It has created an institutional structure for competitiveness upgrading in which a national competitiveness council is complemented by regional competitiveness councils. There is also an important structure of regional chambers of commerce that play critical public policy roles. This has enabled both national policy action and locally embedded initiatives that are aligned with the specific circumstances in individual parts of the country.

### Pilot initiatives

- **State/Regional Strategy Challenge Fund** offers technical support, co-financing, and streamlined access to union funding programs for specific investments to states and regions that aim to develop a comprehensive economic development strategy. Locations are selected in an open, competitive process based on their commitment to drive a strategic change process
- **Regional Competitiveness Institutes set** up regional “action-research entities” that are independent enough to provide regional governments with neutral advice on policy design and implementation but also close enough to them to be a trusted partner in these processes. Basque Institute for Competitiveness ORKESTRA as an example and potential partner for pilots.
- **The Indian Competitiveness Observatory** makes key policy-relevant data across Indian states and regions available through a national platform. The observatory also enables joint learning and development efforts around evidence-based policy.

## **POLICY MAKING ARCHITECTURE**

India’s institutional capacity for effective policy design and implementation suffers from the public sectors fragmentation into several policy ‘silos’. At the union government level, there are currently 52 ministries and 57 departments. For comparison, the U.S. has 15 federal departments, and the European Commission has 20 directorate generals with policy-making and implementation roles. A larger number of ministries can enable higher levels of specialization. But it also increases the number of interfaces across departments and the challenges in pursuing “all-of-government” initiatives. There is a danger that too many parts of government pursue the narrow interests of their respective policy area, while there is no institutional mechanism to focus government actions on the common goals of the nation. This becomes further reinforced by career paths’ of senior officials that stay within departments rather than across different parts of government that have to work together.

The presence of these silos has become increasingly costly as the challenges that policy makers are facing have become more interrelated, requiring coordinated policy across a range of functional policies. The efforts to develop more robust Indian manufacturing industries is an example. It requires sector- and often cluster-specific efforts around skill development, infrastructure provision, regulatory reform, trade policy, public procurement policies, and specific tax or investment support schemes. The overall impact of these policies requires on their alignment, and thus the effective coordination across the individual ministries and agencies that govern functional policies.

India has launched a number of ambitious policy missions under the direct leadership of Prime Minister Modi. In important ways, these missions aim to overcome the coordination challenges within government by leveraging the Prime Minister's power as a key asset to achieve alignment. The operational responsibilities for the missions then tend to be assigned to designated secretariats or agencies. They use the "soft power" of the Prime Minister's ability to mobilize action, while having limited resources or legal authority to enforce coordination. Niti Aayog plays a comparable role, also empowered by the involvement of the Prime Minister. It acts as a coordination mechanism, but mostly through communication and information with limited budget or legal power.

The Smart Cities and Aspirational Districts initiatives are examples of how such an approach can create visibility and enable local action. They show that it is often not the lack of local capacity that holds back change. At the same time these efforts also show the limits of an approach that does not provide significant new resources, and that lacks the formal clout to drive broader based strategies engaging other parts of government. Many of the efforts triggered remain individually useful activities that however do not add up to a comprehensive strategy for the economic development of these locations. India's approach towards reaching the Sustainable Development Goals (SDGs) has at the state-level created promising efforts to address issues that require across different parts of government. This has been achieved by flexible cross-government working groups, empowered by the leadership of Chief Ministers.

Overall, India continues to struggle with a policy process that is too fragmented and draws too little on private sector insights. There are efforts to change this, but more is needed to make progress on this critical part of India's broader policy implementation challenge.

## Towards A New Architecture for Indian Policy Making



### Current challenges

- Large number of separate ministries, departments, mission, commissions, etc.
- Policy initiatives focused on specific functional policy areas, while challenges increasingly require systemic solutions across them



### India@100

- Creation of new structures with authority to align actions across functional fields and ministries
  - Could be new entity, like A\* star and earlier EDB in Singapore
  - Could be more "goal-based", like in India's SDG process
- Important role for apex bodies in coordinating across these structures

Functional Structure

Goal-based Structure

Different countries have chosen their pathways to coordination across a functionally organized public administration, and to enable effective public-private dialogue. What works best depends on the specific circumstances, including culture, political dynamics, history and the economic challenges facing a country at a given time. But what is universal, is that successful economies seem to all have created a dedicated institutional structure within government to implement its strategy.

- *Singapore's* remarkable success in driving growth since gaining statehood in 1965 is closely associated with the effective government structure it was able to create. The Economic Development Board (EDB) was a powerful agency to drive the country's FDI attraction strategy early on; it had the clout to align necessary changes in terms of infrastructure. A\*Star then become central as the country moved towards a stronger focus on innovation and knowledge-driven industries, with the previous chairman of EDB becoming the new chairman of A\*Star. Singapore had a general policy to move public sector leaders around to ensure that all of them were focused on the overall interests of Singapore, not the agenda of any single agency.
- *Finland* responded to a major economic crisis in the 1990s with a strong focus on science, technology, and innovation. A Science and Technology Policy Council (STPC) chaired by the Prime Minister and including key government ministers and officials as well as universities and industry representatives coordinated these efforts.

- *Colombia* has created a system of both national and regional competitiveness councils, focused on policy design and coordination. The regional councils play an important role in translating national policies into location-specific actions across the country. A parallel private sector competitiveness council creates a national contact point for these public sector structures.
- In *Peru*, sector-specific “mesas ejecutivas” institutionalized public-private dialogue to help resolve specific issues that were hampering productivity and job growth in the private sector. The convening power of a minister and the clear focus on “technical” issues excluding taxes and subsidies enable effective coordination.

### Pilot

- India has in the past had a more “tiered” system of ministries, where for example the lead ministry on infrastructure was supported by more specialized ministries on roads, railways, and other modes of transportation. The government should explore whether such a structure could be tested in a particular policy area
- The government should review its internal coordination mechanisms, including the creation of a national competitiveness council chaired by the Prime Minister. This structure could be potentially embedded into an apex body
- The sectoral growth initiatives mentioned earlier could also be supported by a powerful government agency with the ability to coordinate across policy areas. This provides an important testing ground for sector-specific public-private partnerships

## E A strategic roadmap

As a strategic roadmap, the India@100 strategy needs to move beyond an action plan of fixed policy initiatives to be implemented by designated parts of government. This section outlines how to engage all of government over time.

### From Strategic Initiatives to All-of-Government Strategy

#### The India@100



- Specific policies, tools and programs prioritized, adjusted, or newly launched based on the objectives of the strategy

Specific agencies and project teams



- Policies and programs to be announced and aligned with the objectives and priorities of the strategy
- Responses to external shocks to be informed by the objectives and priorities of the strategy

All of government

### All of government

The action agenda prioritizes an often-small sub-set of government's overall activities. The success of the strategy depends not only on the appropriate selection and effective implementation of these core activities. It is also driven by its ability to achieve a broader alignment of what the government does elsewhere with the goals, policies, and structures that the strategy outlines.

All ministries and government agencies should be instructed to review how their activities relate to the strategic objectives outlined in the strategy. Their objectives should incorporate the ambition to create more competitive jobs, firms, and government, based on the characteristics described in the action plan. New programs and legislative initiatives should be systematically tested against their ability to support these goals, leverage the specific activities outlined in the action plan, and cooperate with the structures and processes set up to implement them.

## Responding to changes

The action agenda has been designed as a reaction to a set of circumstances that will have changed already by the day it is published. The success of the strategy depends not only on an action plan that aspires to foresee and prepare for the future. It is also driven by the ability of the strategy to provide effective guidance and structures to inform policies that respond to new conditions in ways that remains true to the strategic goals outlined, and that are consistent with and draw on the actions and structures already proposed.

The aims and principles outlined in the India@100 strategy should provide orientation and guidance when deciding upon India's response to new circumstances.

The strategy should be a living document, with regular updates that discuss changes in circumstances, learnings, and how they affect the strategy. During crisis like the current increase in energy and food prices, programs and legislative responses should be systematically tested against their ability to support the strategy's goals, leverage the specific activities outlined in the action plan, and draw on the structures and processes set up to implement them.

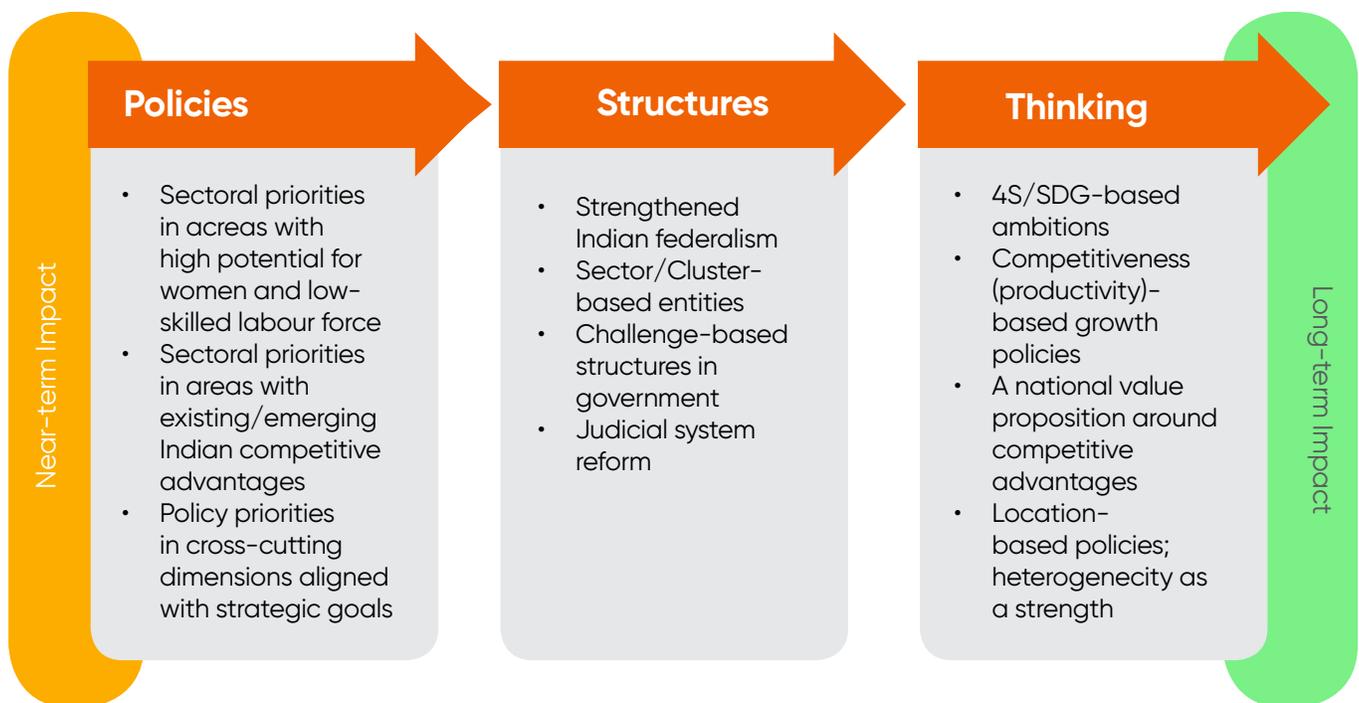


## Impact at different time frames

The India@100 action agenda is in many of its elements time-bound: activities will run temporary until they have achieved their goals or have for other reasons become less relevant. The success of a strategy with the very ambitious goal of guiding India towards the 100<sup>th</sup> anniversary of regaining independence depends on its ability to also draw on other impact channels that can influence actions and outcomes over a long period of time.

### The India@100 Strategy

#### From Strategic Action Plan to Roadmap



The channels through which the India@100 strategy aims to achieve impact have a different roles over time. The specific policies and action initiatives proposed will have an impact mostly in the near term. The institutional structures and changes in processes proposed will have a longer runway, influencing both policy actions today but also the design and implementation of future policies that will emerge over time. The conceptual approach and framework underpinning the strategy can have the most long-term impact. They can influence how India thinks about its circumstances and ways to improve, also at a time in the future when these circumstances and thus the policy priorities might look significantly different from today.

## What's next?

# Taking the first steps

The distance between today and 2047 appears long. But it is shorter than the time that has past between the economic reforms of the early 1990s and today. India has no time to wait. And there might be a window of political and economic opportunity now, in the middle of a parliamentary term and with some support from the post-pandemic growth bounce. There are a couple of first steps to build momentum on the path of implementing the roadmap outlined in this report.

One group of activities needs to be around initiating a national dialogue around this strategy. The strategy is about choices, and it will be critical to create awareness and buy-in for both the strategic roadmap and the competitiveness diagnostics that it is informed by. There will be discussions and disagreement on specifics. That is fine and indeed sign of an engaged discussion. Much will have been achieved if there is a consensus about the need and principle nature of a strategic roadmap, and a productive, evidence-based discussions about its specific elements.

Another group of activities should focus on deepening the specific proposals that are brought forward in the strategy. Part of this will happen within the government and require a dialogue with those ministries and agencies directly mentioned in specific priority policies and with others to explore their response to the general principles outlined. Another part will involve the private sector, focused on specific sectoral and cluster-based initiatives to develop concrete action agendas in the priority areas identified.

There will need to be overall guidance to both sets of activities. A specific project group constituted for this purpose might be the most appropriate way to drive the roadmap ahead.



Note: All images used in the report are for representation purpose only.



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