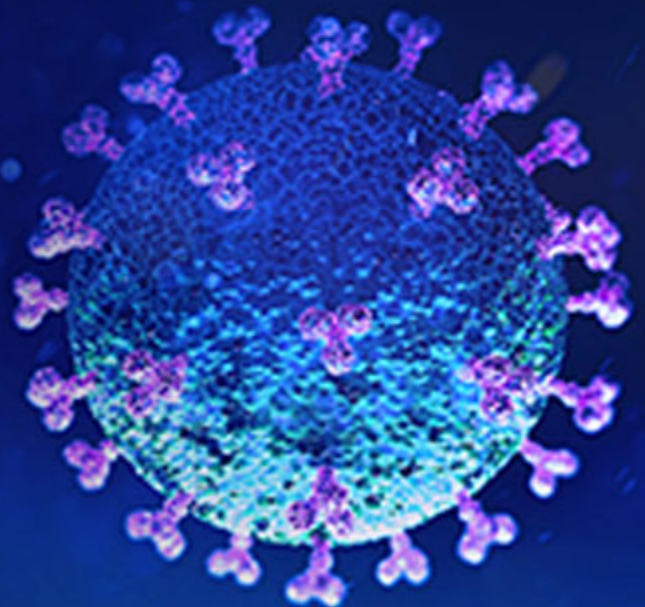




Potential impact of COVID-19 on the Indian economy

April 2020

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Foreword

Respond, not react

As our new financial year commences, the Novel Coronavirus (COVID-19) has infected more than a million people in more than 200 countries¹ - a scourge confronting all of humanity, impacting lifestyles, businesses, economies, and the assumption of common well-being that all of us have largely taken for granted.

Even before the onset of this pandemic, the global economy was confronting turbulence on account of disruptions in trade flows and attenuated growth. The situation has now been aggravated by the demand, supply and liquidity shocks that COVID-19 has inflicted. Once the pandemic is controlled, the shape and speed of the recovery in the U.S. and China will among the key factors determining the nature and traction of global economic recovery.

It is our expectation at this time that the course of economic recovery in India will be smoother and faster than that of many other advanced countries. Indeed, UNCTAD while releasing its latest report 'The COVID-19 shock to Developing Countries' has predicted that major economies least exposed to recession could be China and India².

While we are now focusing in India on securing the population from health hazards and on providing relief, especially to the poor, we also need to think long-term - to secure the health of the economy, the viability of businesses, and the livelihoods of people. Apart from providing robust safety nets for the vulnerable, a focus on ensuring job continuity and job creation will be imperative. And there is an urgent need to mobilise resources to stimulate the economy for increased demand and employment.

We have put together this paper as a first attempt to address what has changed. We foresee seven ways in which the business landscape is likely to evolve in the days to come.

- There will be a shift towards localisation
- Digital will get a real push
- Cash is king for businesses
- Businesses will move towards variable cost models
- Sensing and control capabilities will receive attention
- Supply chain resilience will become a central consideration
- Businesses will look to become more agile



Many of these tenets will be applicable to policy development and implementation at the country and state levels as well.

Among the most striking consequences of this pandemic have been the game-changing impacts wrought on our social behaviours, as well as on legacy networks and patterns of economic activity. Speed, agility, and innovation are required from governments, businesses and society in crafting responses to cope with this evolving new normal. We are very alive to the fact that many of the analyses and recommendations made in this report may soon be overtaken by events, and we will endeavour to modify these in line with the evolving environment.



Arun M. Kumar
Chairman and CEO
KPMG in India

1. COVID-19 Coronavirus pandemic, Worldometer, accessed on 4 April 2020

2. UN calls for \$2.5 trillion coronavirus crisis package for developing countries, UNCTAD news release, 30 March 2020

Contents

A	Impact on the global economy	04
B	Impact on the Indian economy	10
C	Sectoral impact	15
1.	Apparel and textiles	16
2.	Auto and auto components	18
3.	Aviation and tourism	20
4.	Building and construction	24
5.	Chemicals and petrochemicals	26
6.	Consumer, retail and internet business	29
7.	Education and skilling	32
8.	Financial services	35-41
	Banking and NBFCs	35
	Insurance	39
9.	Food and agriculture	42
10.	Healthcare	46
11.	Metals and mining	49
12.	MSMEs	52
13.	Oil and gas	55
14.	Pharmaceuticals	57
15.	Power	60
16.	Telecommunications	64
17.	Transport and logistics	67
D	Beyond COVID-19: Embracing the 'New Normal'	70

Disclaimer

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Our publication may make reference to 'KPMG in India analysis, 2020'; this merely indicates that we have (where specified) undertaken certain analytical activities on the underlying data to arrive at the information presented; we do not accept responsibility for the veracity of the underlying data. By reading the report the reader shall be deemed to have accepted the terms mentioned above.

Impact on the global economy (1/6)

It is expected that this pandemic will significantly affect extant social behaviours, spending patterns, travel habits, supply-chains, country-interdependence, and service delivery models, with consequential impacts on lifestyles, markets and the global economy.

The global economy was facing turbulence, and then the COVID-19 shock...



Real GDP growth rates %				
Top 10 countries by GDP		2017	2018	2019
1	U.S.	2.4	2.9	2.3
2	China	6.9	6.7	6.1
3	Japan	2.2	0.3	0.7
4	Germany	2.8	1.5	0.6
5	U.K.	1.9	1.3	1.4
6	France	2.4	1.7	1.3
7	India	6.5	6.7	5.3
8	Italy	1.7	0.7	0.3
9	Brazil	1.3	1.3	1.1
10	Canada	3.2	2.0	1.6

Notes: Annual growth rate y/y%

Source: Respective countries' National Statistics Office, Haver Analytics, KPMG's analysis 2020 based on secondary research

- COVID-19 is unprecedented in that it is a supply, demand, and market shock
- The global economy was undergoing turbulence in 2019, and now, in the wake of the COVID-19 pandemic, the risk of global recession in 2020 is high as nations shutdown economic activity to limit the spread of the infection
- As production is curtailed around the world, many firms will suffer shortage of necessary inputs
- A severe demand shock is underway, particularly across discretionary spending.

COVID-19 shows up in high frequency PMI data



Mfg PMI	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20
Europe									
France	51.9	49.7	51.1	50.1	50.7	51.7	50.4	51.1	49.8
Germany	45.0	43.2	43.5	41.7	42.1	44.1	43.7	45.3	48.0
Ireland	49.8	48.7	48.6	48.7	50.7	49.7	49.5	51.4	51.2
Italy	48.4	48.5	48.7	47.8	47.7	47.6	46.2	48.9	48.7
Spain	47.9	48.2	48.8	47.7	46.8	47.5	47.4	48.5	50.4
U.K.	48.0	48.0	47.4	48.3	49.6	48.9	47.5	50.0	51.7
Americas									
Brazil	51.0	49.9	52.5	53.4	52.2	52.9	50.2	51.0	52.3
Canada	49.2	50.2	49.1	51.0	51.2	51.4	50.4	50.6	51.8
Mexico	49.2	49.8	49.0	49.1	50.4	48.0	47.1	49.0	50.0
U.S.	50.7	50.4	50.3	51.1	51.3	52.6	52.4	51.9	50.7
Asia & Pacific									
Australia	52.0	51.6	50.9	50.3	50.0	49.9	49.2	49.6	50.2
China	49.4	49.9	50.4	51.4	51.7	51.8	51.5	51.1	40.3
Japan	49.3	49.4	49.3	48.9	48.4	48.9	48.4	48.8	47.8
Korea	47.5	47.3	49.0	48.0	48.4	49.4	50.1	49.8	48.7
India	52.1	52.5	51.4	51.4	50.6	51.2	52.7	55.3	54.5
Indonesia	50.6	49.6	49.0	49.1	47.7	48.2	49.5	49.3	51.9
Malaysia	47.8	47.6	47.4	47.9	49.3	49.5	50.0	48.8	48.5
Singapore	49.6	49.8	49.9	49.5	49.6	49.8	50.1	50.3	48.7
Vietnam	52.5	52.6	51.4	50.5	50.0	51.0	50.8	50.6	49.0

Source: IHS Markit, Haver Analytics (Feb 2020), KPMG's analysis 2020 based on secondary research

Note: The Purchasing Managers Index (PMI) is a monthly survey of industry that is a real-time snapshot of economic conditions. It is a diffusion index and a reading greater than 50 indicates expansion while a reading below 50 indicates contraction.

- The global impact of China's slowdown was felt around the world; a Purchasing Managers' Index (PMI) reading below 50 indicates recessionary conditions
- The virus outbreak has disrupted manufacturing supply chains and sharply curtailed energy and commodity demand
- What was previously a manufacturing-only recession has now spread to the services sector
- March PMI data for both services and manufacturing reflect the growing economic stress as social distancing causes a sharp decline in demand.

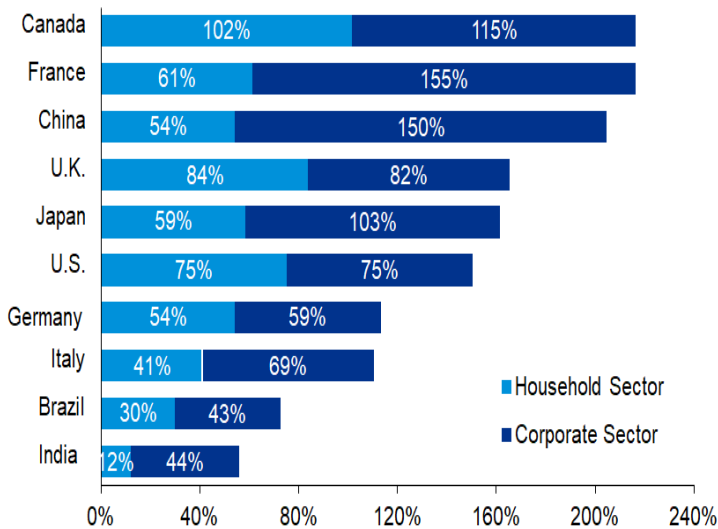
Impact on the global economy (2/6)

Elevated debt levels make social distancing more costly



Private non-financial sector credit

(% of GDP)



Source: BIS, Haver Analytics (Q32019), KPMG's analysis 2020 based on secondary research
Excludes Luxembourg, Netherlands, Sweden and others with higher ratios due to smaller GDP size

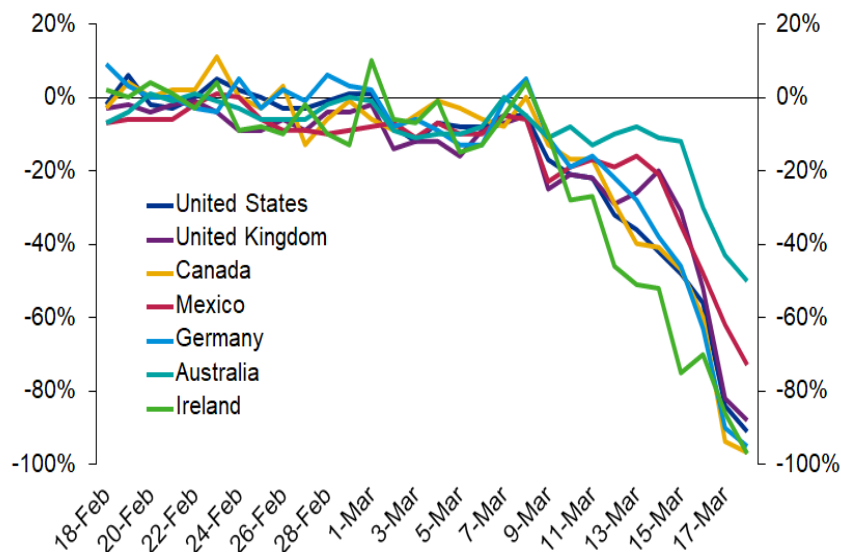
- Government efforts to extend credit terms for households and businesses may not come in time to prevent significant debt defaults
- The higher the debt levels, the more costly and economically damaging social distancing would be for an economy
- U.S. debt capital markets have seen significant strain as COVID-19 spreads globally
- Outflows from high-grade, high-yield and municipal bonds have been significant. Spreads for corporate bonds have widened hundreds of basis points
- Additionally, treasury market strain is also being seen in ways that did not manifest during the global financial crisis of '08
- In India, given the low income levels especially in the unorganised sector and the absence of adequate social security, their vulnerability is very high.

Social distancing leads to a collapse in activity



Change in total restaurant diners

year-over-year - % change

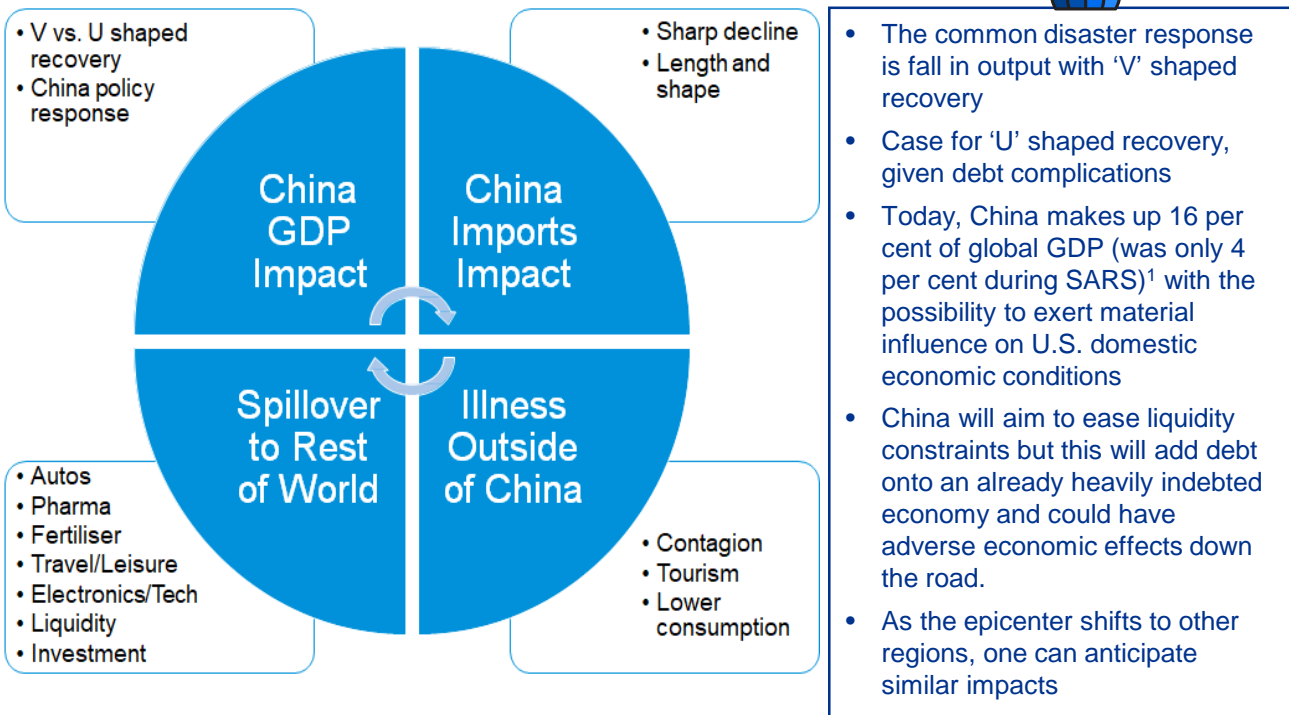


Source: OpenTable (18 March 2020), Haver Analytics, KPMG's analysis 2020 based on secondary research

- In developed countries, restaurants are a useful proxy for person to person retail activity
- Global restaurant diners were down 89 per cent year-over-year as on 18 March. Data suggests that a near-100 per cent decline is likely in the short term
- Many restaurants, already operating on thin margins, will be forced to lay off staff and/or close in the coming weeks
- Weekly unemployment claims in the U.S. surged 33 per cent wk/wk data released for the week of 14 March.

Impact on the global economy (3/6)

Potential economic spillovers to the rest of the world from China



Wuhan is a significant producer of high value-added goods

2018 Output	Share of National Output
Sulfuric Acid	13.7%
Yarn (2017)	12.2%
Industrial Products, Hydropower Electricity	12.1%
Chemical Fertilizers	11.8%
Plain Glass	10.8%
Air Conditioners	9.3%
Cloth	8.9%
Motor Vehicles	8.9%
Cars	8.6%
Chemical Pesticides	8.2%
Salt	7.4%
Home Refrigerators	6.2%
Cigarettes	5.6%
Soda Ash	5.2%
Cement	5.0%
Ethylene	4.8%
Beer	4.6%
Power Generation	4.1%
Micro Computer Equipment	3.6%
Crude Steel	3.4%
Rolled Steel	3.4%
Pig Iron	3.4%

- Wuhan is a major industrial hub, and an integral part of the global supply chain
- Analysing the impact of the Fukushima earthquake of 2011 (global supplier of metallic paint) and the Thailand flood of October 2011 (global supplier of computer chips), we can conclude that the loss of production within a small geographic and economic area has the potential to create a magnified ripple effect if the product is critical to supply chains globally
- In the case of Hubei, the per cent of output is both significant and magnified due to its central placement in Chinese and global supply chains.

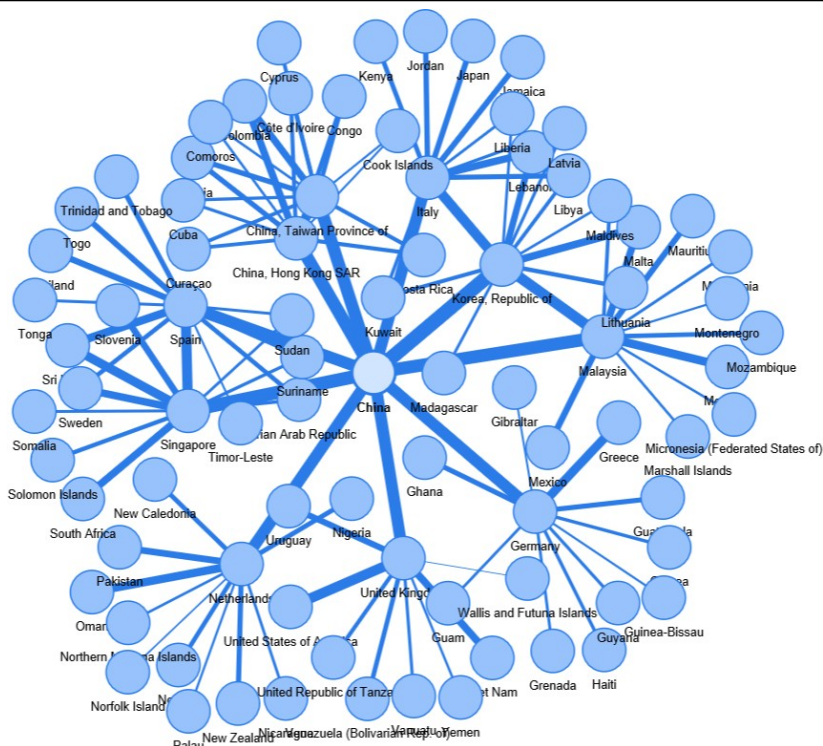


Source: China National Bureau of Statistics, accessed on 23 March 2020

1. The coronavirus is already hurting the world economy. Here's why it could get really scary, CNN, 10 February 2020

Impact on the global economy (4/6)

China's nodal position in shipping routes impact global supply chains

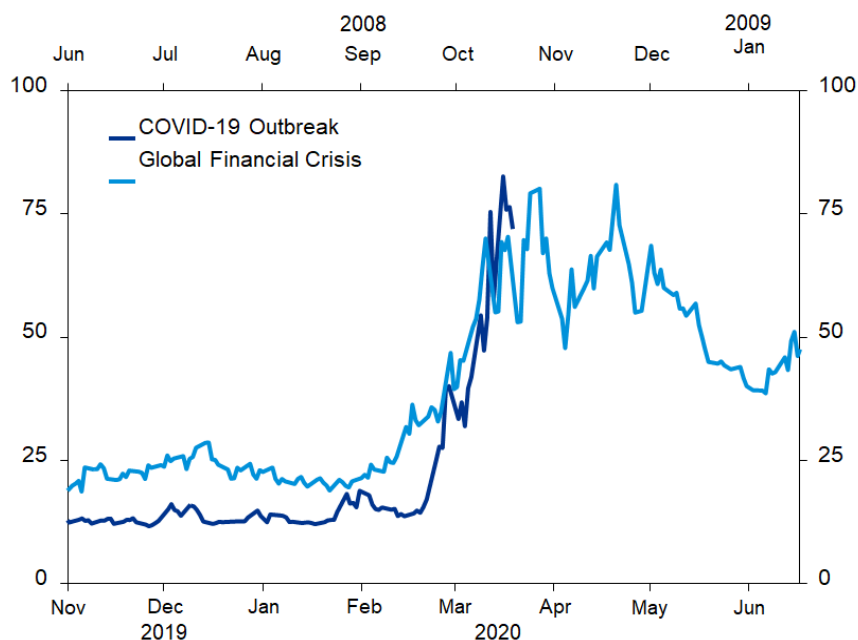


- China's connectivity to the world is reflected in its dominant place in trade, supply-chain and shipping/transport linkages
- As the contagion proceeds towards U.S. and Europe, one can anticipate further stress and supply chain disruptions across the world.

Source: United Nations Conference on Trade and Development (UNCTAD) database, accessed on 23 March 2020

The market volatile (VIX index) at Global Financial Crisis (GFC) levels

CBOE Volatility Index (VIX)



- The VIX is an important tool for economists to model the knock-on effects of market selloffs on capital spending.
- A higher VIX occurs in times of stock market sell-off.
- An elevated VIX is associated with wider corporate bond spreads; the higher borrowing costs reduce corporate investment which in turn reduces GDP.

Source: Wall Street Journal (19 March 2020), Haver Analytics, KPMG's analysis 2020 based on secondary research

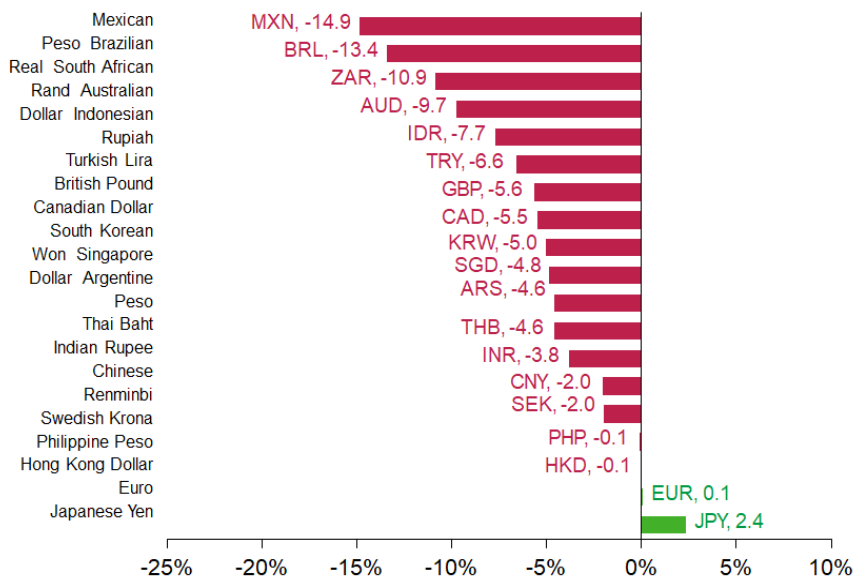
Impact on the global economy (5/6)

A strong dollar hurts borrowers the world over



Foreign currencies weaker against dollar

% change. 20 Jan to 17 Mar, 2020



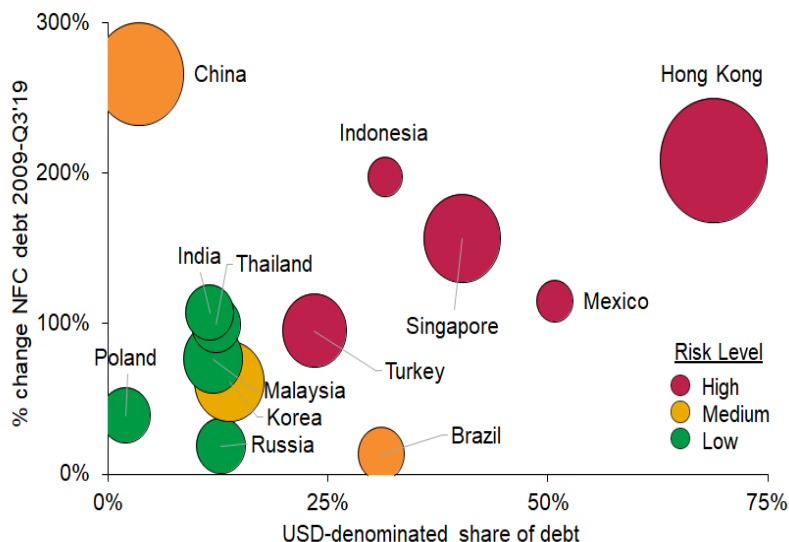
Source: BBG (March 17, 2020), KPMG's analysis 2020 based on secondary research

- A rush to safe haven assets such as the U.S. dollar, Yen and Euro has caused other currencies to weaken
- Around USD3 trillion of loans are outstanding in U.S. dollars that have been issued by non-U.S. domiciled corporations and businesses²
- Commodity exporters engaged in dollar denominations are going to be at risk of default as commodities decline
- The Federal Reserve (Fed) has opened swap lines with global central banks to ease dollar liquidity globally and to help stem the steep appreciation of the U.S. dollar.³

Weaker currencies raise concerns about EM debt burdens



China debt grows to USD21 trillion over 10 years



Source: IIF, Haver Analytics, KPMG's analysis 2020 based on secondary research

- Emerging market (EM) debt has more than doubled in many countries as the aftermath of the financial crisis ushered in an era of low and negative bond yields, seemingly indefinitely
- Hong Kong, Mexico, Singapore, Turkey, Indonesia, and Brazil all borrowed substantial amounts of dollar-denominated debt in relation to their GDP; depreciations in their currencies and in many commodities will make it more difficult to meet debt obligations.
- Given the magnitude of the socio-economic impact in India, further stimulus may be required, especially for the unorganised sector

2. COVID-19 Economic Impacts: Beware the Ides of March, KPMG US, 19 March 2020

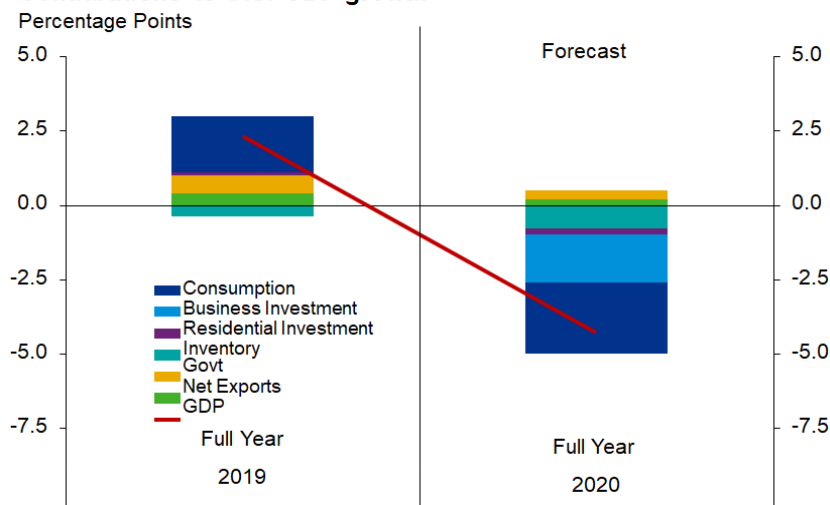
3. Federal Reserve announces the establishment of temporary U.S. dollar liquidity arrangements with other central banks, U.S. Federal Reserve, 19 March 2020

Impact on the global economy (6/6)

Preliminary analysis suggests -4.3 per cent y/y growth for the U.S. in 2020



Contributions to U.S. GDP growth



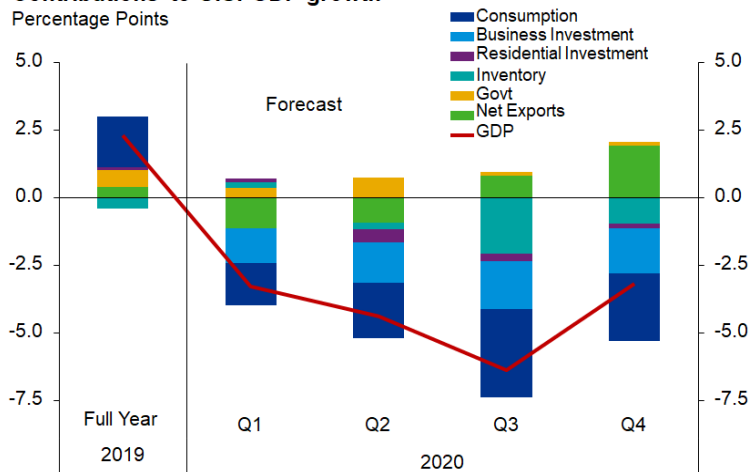
- The impact on the U.S. economy is likely to be high due to lower consumption, weaker business investment (as firms engage in prudential behaviour due to elevated uncertainty), and lower inventory accumulation arising from a combined supply shock and weakened demand
- We expect that Fed's stimulus package, in the best case, is likely to result in a 'U' shaped recession.

Note: Forecasts are inherently time sensitive and projections are dated as of March 19, 2020.
Source: BEA, Macroeconomic Advisors by IHS Markit, Haver Analytics, KPMG's analysis 2020 based on secondary research

U.S. forecast is morphing from 'V' to 'U' or 'L' shape



Contributions to U.S. GDP growth



Note: Forecasts are inherently time sensitive and projections are dated as of March 19, 2020.
Source: BEA, Macroeconomic Advisors by IHS Markit, Haver Analytics, KPMG's analysis 2020 based on secondary research

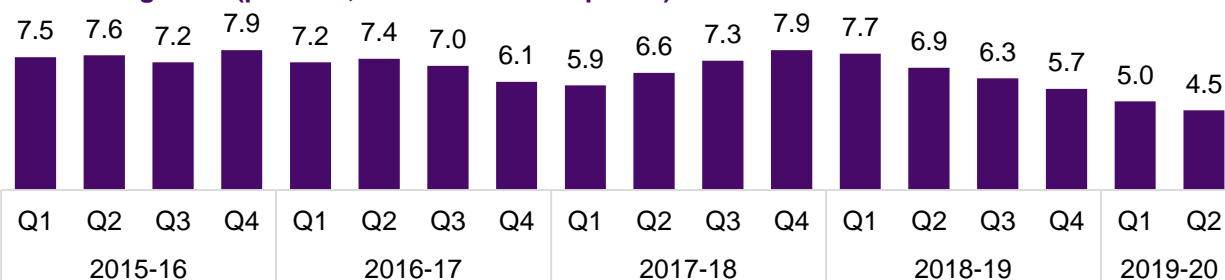
- In times of such outbreaks, experience reveals that consumers engage in 'prudential behaviour'
- Social distancing policies, including the cancellation of large gatherings and inter-mixing will sharply curtail consumption in the months ahead, reducing the odds of a quick recovery
- A wished-for 'V', or 'U' shaped recovery will depend on the timing and magnitude of government assistance as well as the level of corporate debt, and how companies and markets cope with lower demand
- Q1 GDP growth could show a significant impact from COVID-19 due to a near-complete shutdown of economic activity in March
- Q2 and Q3 would likely reveal significant adverse impacts from falling consumption, business investment and exports.

Impact on the Indian economy

Overview

India's real GDP growth decelerated to its lowest in over six years in 3Q 2019-20¹, and the outbreak of the COVID-19 posed fresh challenges. Steps taken to contain its spread, such as the nationwide lockdown have brought economic activity to a near-standstill, with impacts on both consumption and investment. While Indian businesses, barring a few sectors, can possibly insulate themselves from the global supply chain disruptions caused by the outbreak due to relatively lower reliance on intermediate imports, their exports to COVID-19 infected nations could take a hit. In sum, **the three major contributors to GDP -- private consumption, investment and external trade -- will all get affected.**

Real GDP growth (per cent, constant 2011-12 prices)



Source: Quarterly estimates of gross domestic product for the third quarter (Q3) of 2019-20, Ministry of Statistics and Programme Implementation (MoSPI), 28 February 2020, accessed on 24 March 2020

Three scenarios can be used to explain the economic effects of COVID-19

Scenario 1: Quick retraction across the globe including India; by end April to mid-May

China has significantly brought down the number of new cases and its manufacturing sector is all set to resume normalcy. Other nations also largely contain the spread of the COVID-19 pandemic and large fiscal and monetary stimulus unveiled will start to work sooner than expected, which will raise hopes of a solid recovery in the second half of 2020. In this case, **India's growth for 2020-21 may be in the range of 5.3 to 5.7 per cent, though this scenario looks distant at this moment.**

Scenario 2: While India is able to control COVID-19 spread, there is a significant global recession

Even under this scenario, the impact on India's growth in terms of global spillovers will be meaningful, owing to India's integration with the global economy. **So India's growth will be lower than scenario 1: the expected range is 4-4.5 per cent.**

Scenario 3: COVID-19 proliferates within India and lockdowns get extended; global recession

This would be double whammy for the economy, as it will have to bear the brunt of both domestic and global demand destruction. Prolonged lockdowns would exacerbate economic troubles. **India's growth may fall below 3 per cent under this scenario.**

1. Quarterly estimates of gross domestic product for the third quarter (Q3) of 2019-20, Ministry of Statistics and Programme Implementation (MoSPI), 28 February 2020, accessed on 25 March 2020

Demand-side impact

Private consumption

The lock-down is likely to have a sizeable impact on the economy, most significantly on consumption, which is the biggest component of GDP.

Private final consumption expenditure by purpose	Share, per cent
Food and non-alcoholic beverages	26.3
Alcoholic beverages, tobacco and narcotics	1.9
Clothing and footwear	5.8
Housing, water, electricity, gas and other fuels	13.7
Furnishings, household equipment and routine household maintenance	3.2
Health	4.5
Transport	17.6
Communication	2.7
Recreation and culture	0.8
Education	4.0
Restaurants and Hotels	2.2
Miscellaneous goods and services	17.2

Source: First revised estimates of national income, consumption expenditure, saving and capital formation, Ministry of Statistics and Programme Implementation (MoSPI), 31 January 2020, accessed on 24 March 2020.

Note: Share - as per cent of private consumption in domestic market

- **Significant reduction in urban transactions** could lead to a steep fall in consumption of non-essential goods
- The impact would be even more severe if domestic supply chain disruption caused by the 21-day lockdown were to affect the availability of essential commodities
- Weak domestic consumption and consumer sentiment will have firms delay their investment, which will in turn put additional pressure on growth
- Post COVID-19, some economies are expected to adopt de-risking strategy and shift their manufacturing bases from China, which could create opportunities for India. The extent to which this opportunity can be leveraged is largely dependent on how quickly the economy recovers and the pace at which supply chain issues are addressed

Informal sector

Top five states with highest urban informal workers (non-agriculture)

States	Percentage share of informal workers (non-agriculture)
Rajasthan	54.8
Punjab	51.8
Andhra Pradesh	51.0
Chhattisgarh	49.0
Gujarat	48.4

Source: Periodic Labour Force Survey, 2017-18

Note: per cent of wage/salaried workers who are not eligible for paid leave and do not have written job contract and enjoy social security benefits are considered as informal workers here.

- **Around 37 per cent¹ of regular wage/salaried employees in urban India are informal workers (non agriculture)**, who will face uncertain income following the stalling of urban activity
- **INR1.7 trillion² stimulus package**, focused majorly on cash transfer and food security, was unveiled.
- The income shock to migrant workers has resulted in a massive reverse migration, the effects of which will only unravel over time.

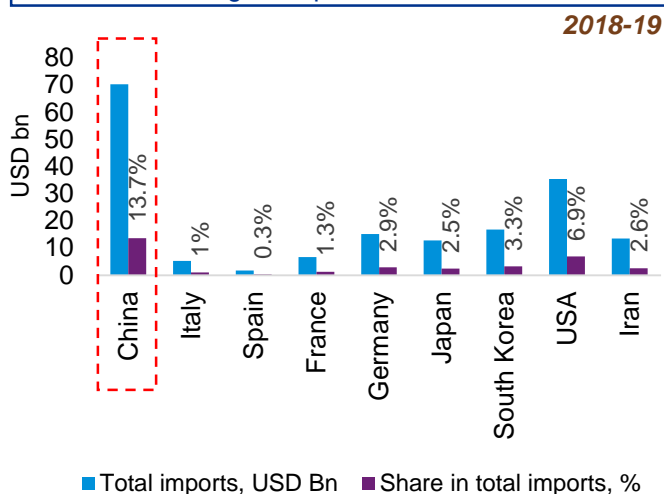
1. Periodic Labour Force Survey (July 2017-June 2018), Ministry of Statistics and Programme Implementation (MoSPI), May 2019, accessed on 24 March 2020

2. Finance Minister announces Rs 1.70 Lakh Crore relief package under Pradhan Mantri Garib Kalyan Yojana for the poor to help them fight the battle against Corona Virus, Press Information Bureau (PIB), 26 March 2020

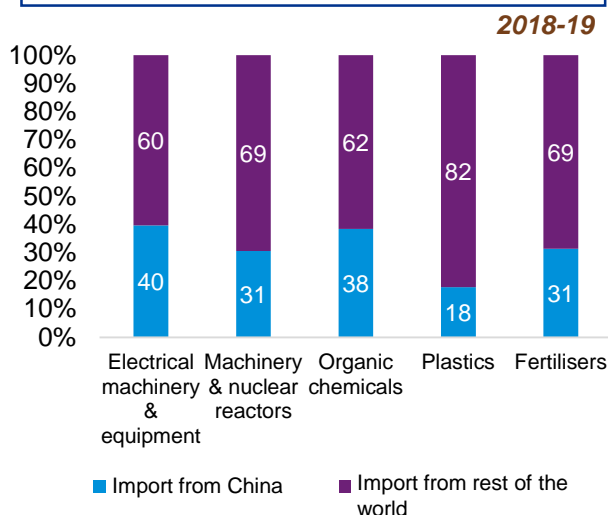
Supply-side impact

Shutdown of factories and the resultant delay in supply of goods in China, could result in a shortage of both raw materials and intermediate goods for Indian companies importing from there

Among COVID-19 infected nations, China is the largest import source for India

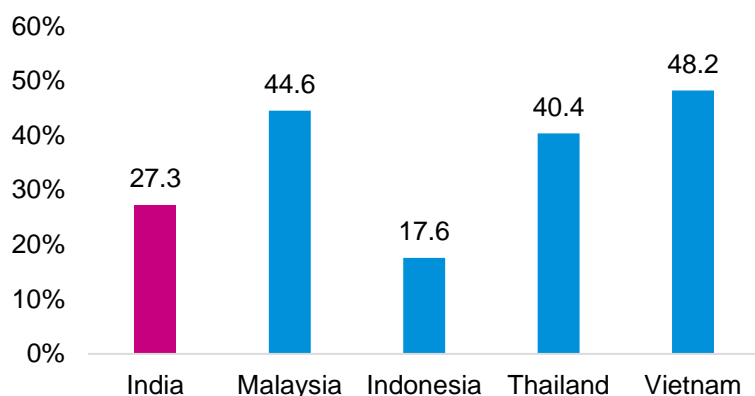


Top imported commodities from China



Source: Export Import Data Bank, Department of Commerce, accessed on 25 March 2020

Comparison of foreign value added component as per cent of gross manufacturing exports



Foreign value-added component in India's gross manufacturing exports is much lower than that of its Asian peers like Thailand and Vietnam.

Source: Trade in Value Added (TiVA) database, The Organisation for Economic Co-operation and Development (OECD), accessed on 25 March 2020

While a disruption in output in China could impact some Indian industries, **the economy at large may be relatively insulated** given its low reliance on intermediate goods from China as well as the common practice in Indian firms of stockpiling inventory. **Headwinds are more likely on account of demand - rather than supply - shocks from countries affected by COVID-19**

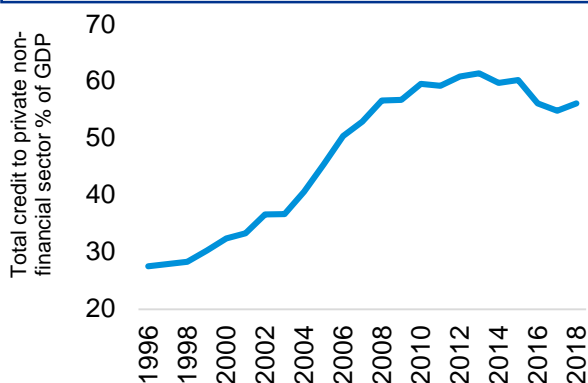
Another challenge is the disruption of domestic supply chains caused by the lockdowns, which may create a shortage of inputs for Indian firms when they restart their operations.

Lower oil prices not enough to mitigate impact on cash flow

The severe disruptive impact on demand caused by the pandemic has **created large cash flow gaps for corporates**. Tight financial conditions will make it difficult for them to fill this gap through market borrowing.

Cashflow problems created by the demand shock would impair Indian firms' debt servicing ability

Uncertain economic conditions pushed government bond yields higher



Source: Credit to the non-financial sector, Bank for International Settlements, 1 March 2020, accessed on 25 March 2020

Source: Investing.com, accessed on 25 March 2020

The severity of the impact is contingent on **the level of indebtedness of individual firms and their working capital requirements**.

- The price war between large global players, together with the pallid outlook for the global economy, has led to a steep decline in oil prices
- Falling oil prices will have a positive fallout on the Indian economy, as **80 per cent¹ of its oil requirement is met through imports**
- The Indian government has not passed on the fall in international crude prices to consumers but instead used this development to improve its fiscal position. But given a significant reduction in domestic demand, fiscal space coming from low oil prices, in terms of excise duties, may be inadequate
- **The Government earned over INR2 trillion² in terms of excise duty on oil products in 2018-19**. As soon as prices dropped, excise duty of INR3 per litre was imposed on petrol and diesel, which could create additional revenue to the tune of INR390 billion³

As the world and the Indian economy attempt to balance mitigating the health risks of COVID-19 with the economic risks, immediate measures need to be taken to:

- prevent collapse of liquidity
- protect the vulnerable, while enabling social distancing
- intensify health interventions on a war footing
- unclog production and supply chains for this

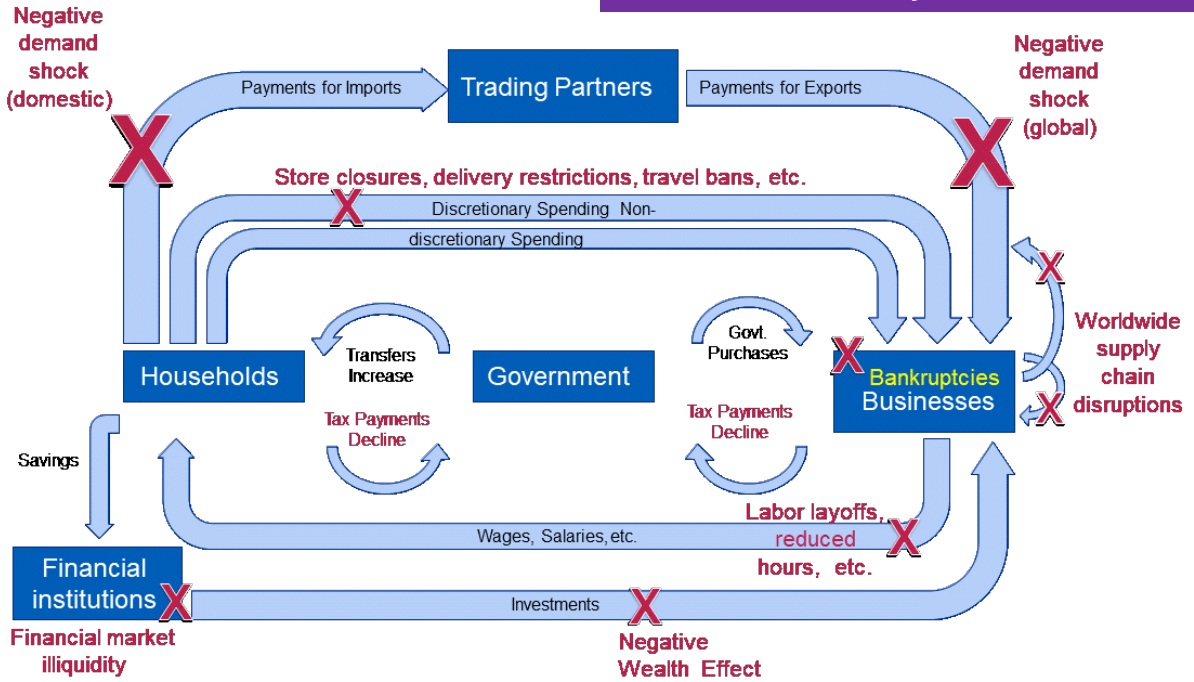
1. India to save USD45bn on crude oil imports next financial year, Energy Live News, 24 March 2020, accessed on 25 March 2020

2. Contribution of Petroleum Sector to Exchequer, Petroleum Planning and Analysis Cell, 11 March 2020, accessed on 25 March 2020

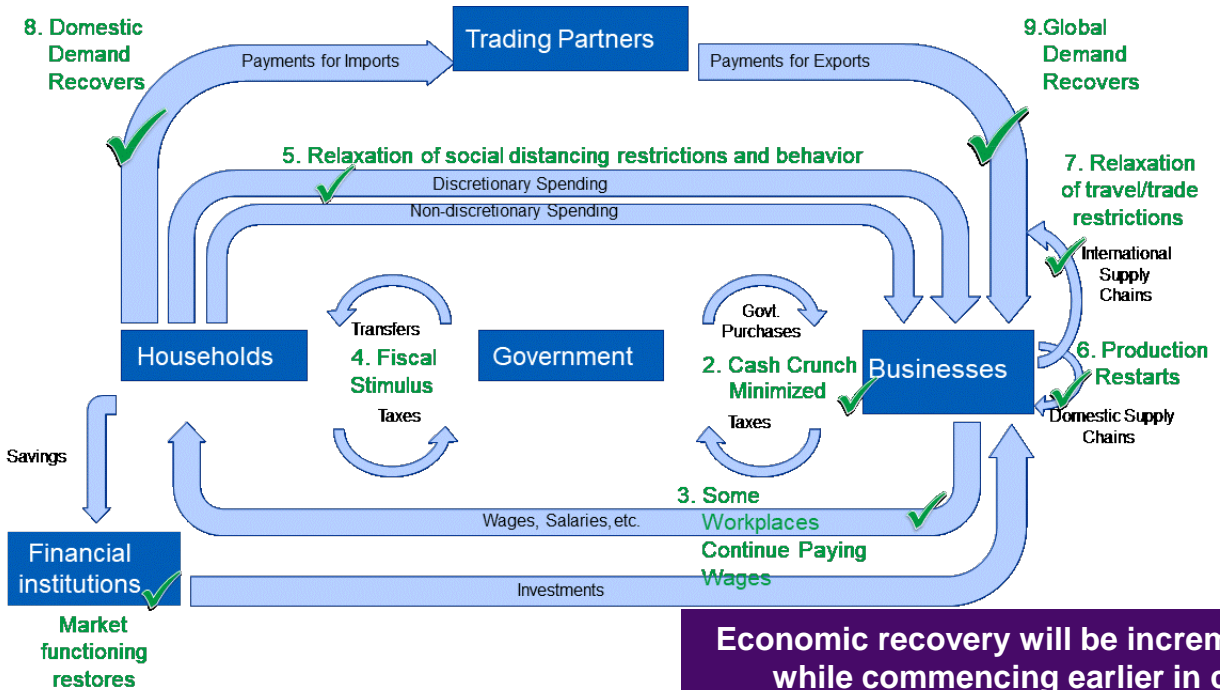
3. Excise duty on petrol, diesel hiked by INR3 a litre, no change in prices, Economic Times, 14 March 2020, accessed on 24 March 2020

A bridge is required to get past COVID-19's economic impact

The circular flow of different factors of the economy interact simultaneously.



Post COVID-19 recovery



Economic recovery will be incremental, while commencing earlier in certain sectors.

Source: A Bridge Past COVID-19, The path for the economy, KPMG, 1 April 2020



Sectoral impact

01



Apparel
and textiles

02



Auto and auto
components

03



Aviation and
tourism

04



Building and
construction

05



Chemicals and
Petrochemicals

06



Consumer,
retail and internet
business

07



Education
and skilling

08



Financial
services

09



Food and
agriculture

10



Healthcare

11



Metals
and mining

12



MSMEs

13



Oil and gas

14



Pharmaceuticals

15



Power

16



Telecommunications

17



Transport
and logistics

Apparel and textiles (1/2)



Sector overview

Sector contribution to GDP and employment¹	<ul style="list-style-type: none"> • 2 per cent of GDP • More than 45 million (direct jobs) in 2018 – 19
Key export markets¹	<ul style="list-style-type: none"> • Apparel – U.S., U.K., Canada, Japan, Russia, U.A.E, Italy • Cotton raw materials - Bangladesh, Cambodia and China
Key source countries for imports¹	Bangladesh, China, Vietnam
FDI equity inflows in sector (per cent of total)²	0.75 per cent (Apr 2000 – Dec 2019)

Current and potential impact on the sector

Parameter	Low	Med	High	Unknown	Comments
Supply-side					
Price variations of key raw materials		✓			Prices have remained stable, however demand has been impacted
Production shutdown			✓		The sector is one of the largest employers in the country, employing over 45 million (direct jobs) ¹ and a sizeable number of contract labourers as well. The nationwide lockdown has led to temporary closures of factories and lay-offs have already begun among low-wage workers.
Labour force			✓		
Cash flow constraints			✓		
Supply chain disruption		✓			Garment manufacturers can look at local sourcing opportunities
Imports (if applicable)			✓		China is the fourth largest trading partner with India for purified terephthalic acid (PTA) and the largest trading partner for polyester staple fiber (PSF) ³ .
Demand-side					
Lockdown/restrictions impact		✓			Supply chain has stagnated, thus resulting in significant impact on demand for the spring-summer season
Consumer sentiment		✓			If the situation persists, the impact would be higher
Exports (if applicable)			✓		With a drastic fall in global demand and an export ban on certain critical raw materials (those used to make masks for example), the impact on exports is considerable

1. Annual report, 2018-19, Ministry of Textiles, accessed on 24 March 2020

2. Quarterly factsheet on Foreign Direct Investment (FDI), April 2000-December 2019, Department for Promotion of Industry and Internal Trade

3. COVID-19 puts break on India's raw material import, Fibre2Fashion, 25 February 2020



Current and potential impact on the sector

- Demand shocks are expected to hurt India's textile exports over the next few quarters
- With lockdown in China, price of Man-Made Fibre (MMF) imports is expected to rise significantly, resulting in higher price for some goods in the domestic market
- If the current scenario persists over the next few months, the domestic retail market would also be impacted significantly
- From a manufacturing perspective, employment would be impacted owing to limited demand in both domestic and international market
- The textile and apparel sector production is **expected to decline by 10-12 per cent in the Apr-Jun quarter**
- **Cotton prices have been reduced by three per cent and are expected to be further impacted over the next few months.**

Below is the estimated impact across value chain components based on the situation as at 23 March

Sub-sector	Impact
Cotton fibre	Cotton prices are expected to take a hit
Man-made fibre	With Chinese production lockdown, the imports of MMF fibre would be impacted, prices of imported MMF used for high value products is expected to rise by 25-30 per cent over the next two quarters (Apr to Sep 2020)
Yarn	Yarn accounts for 29 per cent of India's textile trade ⁴ . With a decline in demand in both global and domestic market, the yarn production is expected to contract by 12-15 per cent over the next two quarters
Fabric	Fabric production is expected to decrease owing to decline in exports and stagnation in apparel/home textiles production
Apparel	Apparel production is expected to contract by 18-20 per cent ⁵ owing to decline in global demand. Effect of lockdown on domestic market is yet to be witnessed
Home textiles	Home textiles industry has had limited impact of the COVID-19 induced global downfall

Key policy recommendations

Recommendations	Short term	Medium to long term
Tax and compliances related	Tax compliances deadline needs to be extended considering the nationwide lockdown and taxes need to be reviewed to attenuate the impact of decline in demand	
Easing financial stress in the sector	The sector has been reeling under severe financial stress, so interest rate reduction should be considered	Credit ratings based loan facilitation for MSME players need to be reviewed in order to make the sector competitive/lucrative
Support for end customer	Tax reliefs need to be provided, thus boosting consumer spending	
Others	Given the fragility of the sector, and the very high labour dependence, a comprehensive financial support package along the lines announced in Germany and the U.S. can be considered.	Provide an adhoc reimbursement/ concession of 5-10 per cent against the recently approved Remission of Duties or Taxes on Export Product (RoDTEP) scheme to compensate for the hitherto unreimbursed levies and taxes to the exporters.

4. ITC Trademap database, accessed on 24 March 2020

5. Interactions with industry sources

Auto and auto components (1/2)



Sector overview

Sector contribution to GDP and employment¹	<ul style="list-style-type: none"> Automobiles - 7.1 per cent, Auto components - 2.3 per cent ~40 million
Key export markets²	U.S., Mexico, Bangladesh, African region, and Asia.
Key source countries for imports²	China, Germany, South Korea, Japan and Thailand
Major auto clusters in India³	Chakan, Maharashtra; Oragadam, Tamil Nadu; National Capital Region (NCR), Sanand, Gujarat.
FDI equity inflows (per cent of total)⁴	5.2 per cent (Apr 2000 – Dec 2019)

Current and potential impact on the sector

Parameter	Low	Med	High	Unknown	Comments
Supply-side					
Price variations of key raw materials		✓			Short-term fluctuations witnessed in prices of raw materials
Production shutdown			✓		Automotive sector was already facing weak demand; production shutdown across the country due to the pandemic will significantly impact the sector further
Cash flow constraints			✓		General liquidity shortfall in the sector due to Non-Banking Financial Companies (NBFCs) and banking sector situation leading to an impact on sales
Supply chain disruption			✓		China accounts for around 25 per cent of India's automotive part imports ² . Disruption in supply of raw material and other critical components have affected imports
Imports (if applicable)			✓		
Labour force			✓		Availability of contract labour for operations and support functions may be an issue even after the situation normalises
Demand-side					
Lockdown/restrictions impact			✓		
Consumer sentiment			✓		Consumers have been postponing their vehicle purchase decisions owing to uncertainty surrounding the pandemic.
Exports (if applicable)			✓		Global slowdown and production shutdown in key markets affecting exports

1. Automobile and auto components sector overview, InvestIndia website, accessed on 25 March 2020

2. Export-Import (EXIM) databank, Ministry of Commerce, accessed on 25 March 2020

3. India's automobile hubs, Make in India website, accessed on 25 March 2020

4. Quarterly factsheet on Foreign Direct Investment (FDI), April 2000-December 2019, Department for Promotion of Industry and Internal Trade

Auto and auto components (2/2)



Current and potential impact on the sector

- Continued cash flow tightening will impact the market further
- Passenger vehicles and two/four wheeler segment:
 - Demand likely to continue to be muted, as this segment is significantly impacted by economic/market sentiments, and consumer purchasing power
- Commercial vehicles segment:
 - With a shutdown of all non-essential services, the demand for commercial vehicles is expected to further plummet
 - Liquidity and cash crunch has already put a dent in sales of fleet operators, which is expected to further widen in the coming months.
- Auto original equipment manufacturers (OEMs) will need to delay any new launches by at least a few quarters, or till sentiments improve
- After market spending by consumers on discretionary items will be put-off due to increase in spending share of essential items including food and medicines, for the immediate period. Only essential repair related after market services may continue, but under low demand
- Auto components sourcing might get dearer due to disturbance in supply chain across the globe. However, Indian auto component industry can emerge in medium to long term as an alternative source of supply if duly supported by policy framework

Key policy recommendations

Recommendations	Short term	Medium to long term
Tax and compliances related	<ul style="list-style-type: none"> • Tax booster in the form of short term GST rate cuts to increase the demand, e.g. rate cut for ICE-powered vehicles <i>*ICE - Internal combustion engine</i> • Deferment of GST payments to boost liquidity • Building trust by suspending tax audits • Efficiency in processing exporter's claims such as duty drawback, GST refunds etc. • Consumer attractiveness by allowing income tax deduction on auto loan 	<ul style="list-style-type: none"> • Allow OEMs and other automotive firms to operate on previously granted approvals and licenses, given the expiry date is approaching near, for a period of 6 months. • GST rate cut for ICE-powered vehicles <i>*ICE - Internal combustion engine</i>
Easing financial stress in the sector	<ul style="list-style-type: none"> • Operational benefits in the form of wage subsidy to small industries or income support for contract workers for period of three months • Reduction in interest rates on delayed payment of tax for three months 	<ul style="list-style-type: none"> • Develop a repayment support scheme for automobile and related firms, especially the MSME dealers and auto component manufacturers and sellers.
Support for end customer	<ul style="list-style-type: none"> • Rate cut by RBI resulting in reduction in interest rates for retail customers 	<ul style="list-style-type: none"> • Fast-track the implementation of the vehicle-scraping scheme for passenger and commercial vehicles to incentivise purchase of new vehicles
Others		<ul style="list-style-type: none"> • Extend the BS-VI deadline at least by a quarter <i>*BS-VI: Bharat Stage 6 emission norms</i>

Aviation and tourism (1/4)



Sector overview

Sector contribution to GDP and employment	Aviation supports ~8 million jobs and contributes USD72 billion to GDP (FY19) ¹ Tourism supports 42.7 million people (2018 – 19) and contributes ~9.2 per cent to GDP (FY18) ²
Central government spending³	Tourism: INR25 billion (2020 – 21)
Key destination countries²	China, Middle East, South East Asia, Germany, U.S. and U.K.
Key states for tourism²	Maharashtra, Kerala, UP, Ladakh, Gujarat, Tamil Nadu, Rajasthan, Goa
FDI equity inflows (per cent of total)⁴	3.16 per cent (Apr 2000 – Dec 2019)

Current and potential impact on the sector

Parameter	Low	Med	High	Unknown	Comments
Supply-side					
Price variations		✓			With international and domestic travel closed, demand for turbine fuel will substantially decline.
Cash flow constraints			✓		Large scale cancellations. Indian Association of Tour Operators (IATO) estimates the hotel, aviation and travel sector together may incur loss of about INR85 billion ⁴ due to travel restrictions imposed on foreign tourists
Labour force			✓		Impact likely to be felt on both white and blue collar jobs
Demand-side					
Lockdown/restrictions impact			✓		Outbound travel and inbound travel to India will be at an all time low
Consumer sentiment			✓		

- The entire aviation industry value chain including airlines, airports, ground handlers, cargo operators, fuel suppliers, Maintenance, Repair and Overhaul (MRO) service providers, travel and hospitality industry will be severely impacted
- International Air Transport Association (IATA) estimates passenger revenue losses of upto USD252 billion in FY21. India as the fourth largest aviation market in the world is expected to see a big fallout in its international business but its strong domestic market is expected to help faster recovery if the pandemic is controlled.

1. Aviation sector overview, InvestIndia website and International Air Transport Association (IATA) website, accessed on 5 April 2020

2. Tourism and Hospitality sector overview, InvestIndia website, accessed on 25 March 2020

3. Union Budget Speech, Ministry of Finance, 1 February 2020

4. Quarterly factsheet on Foreign Direct Investment (FDI), April 2000-December 2019, Department for Promotion of Industry and Internal Trade

5. Tour operators, hotels brace for slump after visa suspension, The Economic Times, 13 March 2020



Current and potential impact on the sector

- India's tourism sector has been the first industry to be hit. Many believe, this **crisis looks set to be a greater threat than earlier ones such as 9/11 and the financial meltdown of 2008-09** and India's tourism sector faces questions around its very survival
- The World Travel and Tourism Council (WTTTC) estimates the **crisis to cost the tourism sector at least USD22 billion**, the travel sector shrinking by up to 25 per cent in 2020, resulting in a loss of 50 million jobs⁶
- On account of COVID-19, the Indian tourism and hospitality industry is staring at a potential job loss of around 38 million, which is around 70 per cent of the total workforce.

Key policy recommendations

Recommendations	Short term	Medium to long term
Tax and compliances related	<ul style="list-style-type: none"> • Waiver of 5 per cent GST on economy class tickets for a period of six months or till airlines achieve pre-COVID-19 load factors for the period ending 29 February 2020, whichever is earlier. Will help reduce cost of travel and prop up demand on domestic routes • Waiver of withholding tax (WHT) on lease payments made by airlines to lessors for a period of six months • Waiver of GST for third party checks that may needed for <ol style="list-style-type: none"> i. recertification and/or maintenance of aircraft for air worthiness before resumption of commercial services or ii. redelivery of aircraft back to the lessors. 	<ul style="list-style-type: none"> • GST holiday for all travel and tourism services • Waiver for the next 12 months from all state governments for entire tourism industry including <ul style="list-style-type: none"> ▪ property and excise taxes ▪ reduction in electricity and power tariffs ▪ deferment of payment of all previous due GST till the COVID-19 impact exists • Aviation Turbine Fuel (ATF) needs to be brought under the ambit of GST to provide immediate relief to the airlines with full input tax credit on all goods and services.

6. Coronavirus puts up to 50 million Travel and Tourism jobs at risk says WTTTC, Press Release, 13 March 2020



Key policy recommendations

Recommendations	Short term	Medium to long term
<p>Easing financial stress in the sector</p>	<ul style="list-style-type: none"> Financial support to the MRO industry to help retain staff for business-as-usual requirements. Retraining and recertifying engineering and maintenance staff is cost and time intensive, making retention very critical Extending additional support from Regional Connectivity Fund (RCF) for regional carriers to continue to operate essential services for a period of six months or till such time such carriers achieve pre-COVID-19 load factors, whichever is earlier Defer revenue share payable by airport operators for 12 months or till such time revenues match pre-COVID-19 levels, whichever is earlier. Government should also consider providing commensurate budgetary support to AAI during this period to bridge the shortfall in revenue Incentivise airport operators to defer revenue share/lease rentals from aero service providers by allowing recovery of revenue shortfall over future years as part of the tariff filing process Incentivise airport operators to reduce landing and parking charges for airlines for a period of six months through suitable financial and regulatory interventions, with a provision for deferred clawback of discounts or return on capital Restructuring of long-term loans with interest moratorium necessary to support businesses claw back losses attributable to closure of operations Provision of working capital loans at low interest rates to manage immediate cash requirements. 	<ul style="list-style-type: none"> All tourism entities - airlines and hospitality – must be treated as priority sector lending Increased credit allowance to airline companies Government funding for ventures in distress Relief funds, e.g. Kerala No loan may be classified as NPA and no collateral enforced or enhanced in this period of moratorium.

Aviation and tourism (4/4)



Key policy recommendations

Recommendations	Short term	Medium to long term
Support for end customer		<ul style="list-style-type: none"> Promote safety and hygiene through publications detailing hygiene levels of tourist destinations and safety assessment Healthcare and insurance incentives.
Others	<ul style="list-style-type: none"> Campaign – ‘Postpone travel, don’t cancel’. Allow travelers to postpone their travels up to 12 months. 	<ul style="list-style-type: none"> Campaign to promote domestic tourism #Indiawelcomesyouback - Develop an appropriate market messaging/advertising campaign for tourism during the crisis, and once the crisis mitigates to promote ‘Incredible India’ aggressively.



Sector overview

- The real estate sector is one of the largest employment generators in the country and has a multiplier effect on around 250 allied industries. The sector is expected to contribute to around 13 per cent to the country's GDP by 2025 and become the third-largest globally at USD1 trillion by 2030¹
- However, the year 2019 has been a mixed bag for the Indian real estate industry, having attracted investments worth ~USD5 billion. Around 66 per cent of these investments were in the commercial real estate market owing to healthy demand from private equity investors for stable rent yielding assets²
- On the other hand, the residential real estate sector has witnessed poor demand and lower absorption in the past few years owing to the economic slowdown, the NBFC crisis, cynical buyer sentiment and developer defaults. This has led to higher unsold inventory across the major cities in India
- The government introduced an Alternative Investment Fund (AIF) with a total corpus of ~USD3,570 million to bail out ~1,600 real estate projects stalled due to an acute liquidity crunch. This was expected to boost growth by steering consumption in real estate and associated sectors³.

Current and potential impact on the sector

Parameter	Low	Med	High	Unknown	Comments
Supply-side					
Price variations of key raw materials		✓			Overall halt in manufacturing sector activity including cement, steel and other building materials.
Production shutdown			✓		Profound impact on sourcing of building materials and labour
Cash flow constraints			✓		Weakening sale velocity and restricted travel would impact cash flows in the residential, hospitality and retail segments.
Supply chain disruption		✓			Delayed construction owing to disruption in the supply chain network
Labour force			✓		Both direct and indirect jobs likely to be affected in the real estate sector
Imports (if applicable)				✓	The construction segment is dependent on imports of interior finishes from countries in Europe and Asia; this may be impacted, however the estimation is difficult
Demand-side					
Lockdown/restrictions impact			✓		Weakened sales within residential segment and lower footfalls for retail and hospitality segment. FDI within commercial segment to be on hold on account of limited new leasing activity due to the existing industry shutdown and potential change in user habits.
Consumer sentiment			✓		
Exports (if applicable)				✓	NA

1. Indian real estate and construction: Consolidating for growth, KPMG, NAREDCO, APREA publication, September 2018

2. Indian real estate attracts \$5 billion PE in 2019, commercial projects lead: Report, The Economic Times, 8 January 2020

3. Govt to infuse Rs 25,000 crore to revive stalled housing projects, India Today, accessed on 27 November 2020



Current and potential impact on the sector

- The housing sector is expected to see muted demand with significant reduction in the new launches
- With possible slowdown in the U.S. and European economies, the **potential investments in commercial real estate may either get curtailed** or postponed till H2 of the current year
- With current lockdown situation in the country, retail sector is experiencing material impacts and may continue to see a slowdown in the demand along with **impact on the supply chain and logistics**
- **Hospitality sector is one of the early few to have faced the highest impact of the pandemic** outbreak, with the segment possibly staring at massive financial and employment losses
- There is a **high possibility of postponement of REIT launches** (earlier scheduled for listing in 2020), which would mean further liquidity pressure on real estate developers
- **Fresh equity investments into the country's real estate sector could slow down**, with almost all sub-sectors going through turmoil.
- **Industrial (logistics and warehousing) sector** is also expected to get impacted in the short run, but the bounce back for this segment is expected to be the strongest, as global corporations look to shift their manufacturing base to other Asian countries (such as India, Vietnam and Cambodia) from China.
- Demand for segments such as **data centers** is expected to increase in order to maintain safe and secure digital infrastructure as more customers move their daily operations online and employees transition to remote work environments.

Key policy recommendations

Recommendations	Short term	Medium to long term
Tax and compliances related	<ul style="list-style-type: none"> • GST tax holiday for six months for the tourism/hospitality sector and further extending it to 12 months. 	<ul style="list-style-type: none"> • Extend registration timelines granted to promoters by a year • Removing the cap on tax benefit against interest paid on housing loan for FY2020 and FY2021 (currently capped at INR0.15 million).
Easing financial stress in the sector	<ul style="list-style-type: none"> • No interest repayment for 3-6 months for developers, then extending it to 9-12 months. 	<ul style="list-style-type: none"> • Lending rate for realty projects to be fixed at a lower repo rate • NPA classification to be extended beyond 90 days for stressed projects.
Support for end customer	<ul style="list-style-type: none"> • No EMI repayments for six months for the end user/buyer. 	
Labour	<ul style="list-style-type: none"> • When the labour workforce is back at work, nutrition support to be provided as well as shelter and healthcare 	
Others	<ul style="list-style-type: none"> • In line with the practices adopted in other countries, government could subsidise the tourism/hospitality sector for payment of sustenance compensation to staff in establishments. 	



Sector* overview¹

Global presence	India is sixth largest chemical and petrochemicals producer in the world, contributing to ~3.5 per cent of global chemical Industry (2018-19)
Domestic production	27.8 MMT (2018 - 19)
Domestic consumption	37.1 MMT (2018 – 19)
Domestic demand growth (past 3 years)	4.7 per cent (petrochemicals however, is growing much faster - expected CAGR ~9-10 per cent)
Net imports	~26 per cent of total consumption
FDI equity inflows (per cent of total FDI)*	9 per cent (Apr 2000 – Mar 2019)
Global demand growth (past 3 years)	4.1 per cent

*Sectors include chemicals and petrochemicals

Current and potential impact on the sector

Parameter	Impact	Comments
Supply-side		
Price variations in raw material feedstock	High	<ul style="list-style-type: none"> Raw material prices for petrochemicals are falling primarily driven by crude prices. Additional supply resulting from a price war between Russia and Saudi price and weakened global demand due to COVID-19 are expected to drive prices down. Supply tightness of raw material for other chemicals (especially specialty) due to production cuts in China (the major import source) could drive raw material prices higher in short-medium term
Production shutdowns	High	<ul style="list-style-type: none"> Slowdown in key downstream industries – textile and packaging (PET) due to lockdown have a ripple effect on petrochemicals demand, and also for liquid products driven by storage capacity constraints Lower production operating rates are expected for rest of chemicals as well, apart from ones in essential categories (fertilisers, pharma etc.)
Cash flow constraints	High	<ul style="list-style-type: none"> Majority of chemical producing units are SMEs and do not have a buffer to meet a sudden increase in working capital requirements. Extension of credit to customers and suppliers alongside falling revenues in the short to medium term is expected to adversely affect cash flows
Supply chain disruption	Medium	<ul style="list-style-type: none"> Restrictions on road movement to impact domestic supply chain in short term. Also, with closing down of major ports in China, global disruption in supply chain is expected.
Labour force	Medium	<ul style="list-style-type: none"> High instance of labour migration expected in chemicals sector due to uncertainty, as most of the operating units are SMEs. Issue may not be witnessed by large plants integrated with refinery units
Imports (if applicable)	High	<ul style="list-style-type: none"> Imports are expected to fall as major import sources - Middle East and China - are highly impacted by COVID-19. Additionally, uncertain short term demand outlook in India is expected to restrain traders/importers.
Price-end product	High	<ul style="list-style-type: none"> For petrochemicals, prices are expected to be under pressure due to drop in weak demand and market uncertainty. For other chemicals, supply tightness, due to impact of COVID-19 in China might keep prices moderate to high in short-medium term even with muted demand

1. Chemicals & Petrochemical Statistics publication, IHS Markit, accessed on 29 March 2020



Current and potential impact on the sector

Parameter	Impact	Comments
Demand-side		
Lockdown / restrictions impact	High	<ul style="list-style-type: none"> Overall slowdown in end-consumer demand in chemicals and petrochemicals sector in short-medium term (except essential components e.g. fertiliser). Medium-long term demand outlook uncertain.
Exports (if applicable)	Low	<ul style="list-style-type: none"> Global slowdown in demand and supply chain restrictions expected to reduce exports. However, exports account for less than ~15 per cent of India production - so no major impact on the domestic industry²

- Petrochemical prices were already under pressure, given concerns of global overcapacity and slowdown in demand. The COVID-19 impact is further expected to exacerbate impact on the sector:
 - With the weakening in crude oil prices and the cascading impact on petrochemicals coupled with uncertain domestic and global demand, **petrochemicals prices are likely to remain low**
 - Given that China accounts for a third of global petrochemicals capacity, many producers are expected to have **large accumulated inventories owing to dormant global markets**. Post COVID-19, these producers may adopt aggressive pricing to liquidate inventory and reduce working capital stress
 - This coupled with restrictions at important ports across globe is bound to disrupt the global supply chain and further aggravate inventory accumulation and drive prices down
- Planned **capacities in H2 2020, expected to be delayed** by at least few quarters leading to financial stress on investors. Construction labour migration issue, if not addressed by government, might further aggravate the delays.
- Uncertain demand outlook and weak prices are expected to lead to weak market sentiments and delay investments in the sector. **In the medium-long term however, most of the fundamental factors for growth and investments still hold in India** - high population with increasing per capita chemicals demand, shift to Asia as a manufacturing hub, increasing purchasing power and availability of labour; the question remains on the timing of the recovery in economic activity.
- Supply chain restrictions and expected labour migration would be the major impediments to pace and timelines of recovery. Once lockdowns are lifted, plants will gradually resume normal production and outflow. We expect that these restrictions will be lifted in late Q2 2020– paving the way for the market to start recovering in H2 2020.

2. Export-Import (EXIM) databank, Ministry of Commerce, accessed on 30 March 2020



Key policy recommendations

Recommendations	Short term	Medium to long term
Additional benefits across production units and PCPIR zones	<ul style="list-style-type: none"> In order to help increase operating rates of petrochemical units, additional fiscal/non-fiscal benefits need be considered. 	<ul style="list-style-type: none"> Petroleum, Chemical and Petrochemical Investment Regions (PCPIRs) were already facing challenges in attracting investments. Strengthening of incentives around tax, energy inputs, logistics in these zones would be key to promote new CAPEX
Ease financial stress for SME and MSMEs within the sector	<ul style="list-style-type: none"> Most chemical companies and downstream petrochemical units are small/medium scale units and have minimal working capital buffer. Banking assistance would be needed to provide working capital loans on flexible and favorable terms to help them keep afloat 	<ul style="list-style-type: none"> With uncertain demand outlook, attractive loan/capital assistance might be required targeted at SME/MSME segment to revive market sentiments and lead to production ramp-up in future
Review of import tariffs	<ul style="list-style-type: none"> Review of import tariffs on essential feedstock for chemical companies to ensure adequate and competitive supply 	
Trade policy measures	<ul style="list-style-type: none"> Review of FTAs and anti-dumping duties to protect downstream manufacturers from dumping and inferior quality imports 	



Sector overview

Sector contribution to GDP and employment¹	<ul style="list-style-type: none"> • Retail - 10 per cent of GDP • Retail - 8 per cent of employment (2018 – 19)
Market size¹	USD950 billion (2018 – 19)
Global presence¹	Fifth largest in retail space
FDI equity inflows (per cent of total FDI)²	0.44 per cent (Apr 2000 – Dec 2019)
Major segments¹	Household and personal care (50 per cent), healthcare segment (31 per cent), and food and beverages (19 per cent).
E-commerce market size³	USD64 billion*

Current and potential impact on the sector

Parameter	Low	Med	High	Unknown	Comments
Supply-side					
Price variations of key raw materials		✓	✓		Raw material supplies could be a challenge due to disrupted supply chains. A fall in imports could severely impact select categories in retail and durables.
Imports (if applicable)			✓✓		
Production shutdown	✓		✓		Production for specific categories especially non-essentials would be a major challenge, with demand unlikely to pick up immediately.
Cash flow constraints		✓	✓		Cash rotation would slow down for all categories, though food and grocery retail would be less impacted. Large retail and real estate companies can be expected to renegotiate rental contracts by invoking the force majeure clause. It is still unclear whether and how banks will step in to support companies in such a situation
Supply chain disruption	✓		✓		Supply chain seems to be the big challenge and needs realignment given recent announcements on essentials.
Labour force		✓	✓		Labour needs to be aligned to service essentials-based services

✓: Indicates impact for essential product categories such as food, grocery, health/hygiene, e-commerce delivery companies

✓: Indicates impact on Non-essential product categories such as durables, apparel, other discretionary spends

1. Retail Sector Overview, FICCI, accessed on 25 March 2020

2. Quarterly factsheet on Foreign Direct Investment (FDI), April 2000-December 2019, Department for Promotion of Industry and Internal Trade

3. Market size of e-commerce industry across India from 2014 to 2017, with forecasts until 2027, Statista, accessed on 25 March 2020



Current and potential impact on the sector

Parameter	Low	Med	High	Unknown	Comments
Demand-side					
Lockdown/restrictions impact	✓		✓		Stronger demand for delivery through e-commerce; consumers to buy essentials and postpone purchase of non-essentials.
Consumer sentiment			✓	✓	Sentiment will be to conserve cash due to uncertainty of duration of COVID-19 exigency,
Exports (if applicable)				✓ ✓	Export opportunity available basis capacity and global need in non-China countries.

✓: Indicates impact for essential product categories such as food, grocery, health/hygiene, e-commerce delivery companies

✓: Indicates impact on Non-essential product categories such as durables, apparel, other discretionary spends

- We are in the midst of a global pandemic and with the guidance around social distancing to counter the COVID-19 threat, it is logical to expect **consumers to over-stock on essentials products and commodities**. The existing uncertainty around how the pandemic shapes up may result in a **uptick in spend by consumers in categories like rice, flour and lentils**. This may give a slight fillip to sales for FMCG companies, but at the same time this may be neutralised by a drop in levels in 'stock-in-trade' due to potential supply chain disruptions. The coming two to three weeks would be a testing ground on how supply chains are able to keep pace with this temporary rise in consumption
- The **e-commerce sector will also face the challenges** due to COVID-19 and may see a dip in growth. There will be **increased pressure on supply chain for deliveries of products** and another challenge for e-commerce companies is that they will need to equip their employees with the appropriate resources to manage operations remotely with little or no disruption
- Going forward, we could expect companies to explore newer distribution channels focused on a 'direct to consumer' route. Further, the ability to predict and manage demand will be a game changer. In this environment, shoring up the customer relationship while focusing on the bottom line will be key.

Essential Commodities	Non – Essential Commodities
<ul style="list-style-type: none"> • Growth seen for players with essential commodities. Margin profiles should improve unless there is a price-cap fixed by government • Alternate distribution models should be put in place, as soon as possible, as consumers would not be visiting stores/markets frequently • Manufacturing activity to be solved for smooth progress. This is needed to ensure ample essential goods. 	<ul style="list-style-type: none"> • Markets likely to crash due to low discretionary demand • Risk on product shelf life and expiry • Over-dependence on imports could pose a threat • Industries facing severe challenges: Apparel, durables, restaurants and other on-premise services like gym/salons etc.



Key policy recommendations

Recommendations	Short term	Medium to long term
Tax and compliances related for Industry	<ul style="list-style-type: none"> • Rebate on interest and principle payments • Provide relief on cash flow for retail players by way of GST waivers or tax incentives. 	<ul style="list-style-type: none"> • Easing manufacturing rules for essential commodities – faster clearance • Cut duties/allow imports of critical to retail markets • Create incentives for retail products manufacturing.
Easing financial stress in the sector	<ul style="list-style-type: none"> • Payment deferment or interest waivers or special rebates to ensure that micro/small retailers have cash flows to pay workers and suppliers • Banks/NBFCs could extend credit limits for small retailers. 	<ul style="list-style-type: none"> • Moratorium on rentals (force majeure) • Increase in allowances/capacities for direct to home logistics • Adequate insurance coverage against extreme business disruptions.
Support for end customer	<ul style="list-style-type: none"> • Digital payment should be prioritised in order to enable easy and 'COVID-19 risk-free transactions' 	<ul style="list-style-type: none"> • Personal income tax slab-reduction, re-evaluation of dividend distribution tax, capital gains tax • For e-commerce players, support to be provided to ensure smooth supply chain operations during a crisis-like situation.
Others	<ul style="list-style-type: none"> • Guidelines and preventive measures coupled with disinfection initiatives across all Tier-1 and 2 cities in India • Given all infrastructure would be operating at lower capacity, provide incentives/waivers to incentivise transport and logistics operators. 	<ul style="list-style-type: none"> • Gradual opening of markets/malls within social distancing norms

Education and skilling (1/3)



Sector overview

Market size¹	USD101.1 billion (2018 – 19)
Government spending²	<ul style="list-style-type: none"> • INR993 billion for education sector; • INR30 billion for skill development (2020 – 21)
FDI equity inflows (per cent of total FDI)³	0.66 per cent (Apr 2000 – Dec 2019)
No. of colleges and universities⁴	39,931 and 993, respectively (2018 – 19)
Gross Enrollment Ratio (GER)⁴	92.3 per cent (elementary schools); 26.3 per cent (higher education), (2018-19)
Workforce in 15–59 year age group⁵	13.53 per cent (2017 – 18)
Enrollment under Skill India Mission⁵	More than 3.4 million trained (as on 26 March 2020) under Pradhan Mantri Kaushal Vikas Yojana 2016-20 (STT component)
Jobs created in rural and urban among salaried and wage employees⁵	26.2 million (2011 – 18)

Current and potential impact on the skilling sector

- Skill institutes in India are training more than 10 million trainees annually⁵ – lockdown would decrease the available skilled manpower by ~10-15 per cent⁶. This coupled with sluggish human resource demand is likely to increase unemployment rate in the country.
- Post-COVID-19, many job roles are likely to change; skill institutions will need to be prepared for this impact
- Once operations resume, there will be issues with sustainability of MSMEs leading to a large number of lay-offs
- Simulation-based, platform-only and ed-tech players might see an increased adoption by students and Technical and Vocational Education and Training (TVET) institutes to ring fence against similar issues/natural calamities in the future
- Examinations (both formative and summative) have been put on hold. Various certificate awarding bodies like Directorate General of Training (DGT), Sector Skill Councils (SSCs) etc. would prefer to fast track their adoption of computer based testing of candidates in order to maintain continuous learning environment
- TVET trainers and assessors are generally contractual in nature. Closure of skilling institutes across India is likely to create temporary unemployment and adversely affect the long term quality of education been imparted
- Owing to low margins, private training partners might become insolvent and unable to service their loans. This would also lead to working capital issues in the near term

We have analysed the impact on key thematic areas in the skilling development space

Low to Marginal Impact	Noticeable Impact
<ul style="list-style-type: none"> • <u>Academic year</u> – would become tougher to cover up the contact hours during shutdown • <u>Courseware revision</u> – might miss current academic cycle FY21 • <u>OJT opportunities</u> – companies would refrain from hiring apprentices in near future 	<ul style="list-style-type: none"> • <u>Enrollment of marginal groups</u> – would decrease substantially • <u>Online learning</u> – exponential take up by both students and service providers (for delivery) • Need to change both <u>content and pedagogy for changed job roles</u> • <u>Policy/Fiscal measures</u> – budgets to be redeployed (more in form of grants or subsidies)

It is important to introduce and promote **basic healthcare e-learning course** for training healthcare professionals and support staff in order to meet the shortfall of healthcare professionals

1. Education Sector Overview, Indian Chamber of Commerce (ICC), accessed on 25 March 2020

2. Union Budget Speech, Ministry of Finance, 1 February 2020

3. Quarterly factsheet on Foreign Direct Investment (FDI), April 2000-December 2019, Department for Promotion of Industry and Internal Trade

4. All India Survey on Higher Education (AISHE), accessed on 25 March 2020

5. Annual Report (2017-18) of MSDE accessed on 26 March 2020; KPMG in India analysis 2020

6. KPMG in India analysis 2020, assuming 60-75 days of training abeyance



Current and potential impact on the education sector

- Schools around the country have been impacted by COVID-19, facing closures that could last several weeks that too during the crucial period of academic year ending
- Public schools and low-fee private schools especially are likely face a larger impact on teaching and learning, owing to heavy reliance on brick and mortar means of delivering lessons
- The challenge in a country like India is the additional economic burden facing the parents in the absence of school provided mid-day meals
- Private schools that have the means and resources on the other hand, could try to minimise impact on teaching-learning, but could face cash flow issues if fee payments are delayed
- In higher education, most Higher Education Institutions (HEI) are not fully geared to implement online learning, with constraints around availability of digital content, technology and delivery capabilities
- The impact of the COVID-19 outbreak is also expected to impact admissions to HEIs in the coming academic year
- Placements, internships for students could also be affected with companies delaying the onboarding of students
- The outbreak is also expected to have far reaching consequences such as decreased global mobility of students (both inbound and outbound), difficulty in recruiting faculty, etc.

Key policy recommendations

Recommendations	Short term	Medium to long term
Skilling		
Tax and compliances related	<ul style="list-style-type: none"> • Social protection measures such as free medical care and paid leaves • Tax relief for MSME sector and low-income earners 	<ul style="list-style-type: none"> • Increase in time period for NPA classification to be revised for education service providers
Easing financial stress in the sector	<ul style="list-style-type: none"> • Deferred repayment for the service providers who have availed financial assistance from Banks or NBFCs 	<ul style="list-style-type: none"> • Incentivise health related courses – offer free to qualified youth
Support for service providers and end beneficiary	<ul style="list-style-type: none"> • Online entrepreneurial courses/modules at minimal cost • Creating awareness about COVID-19, by mobilising healthcare personnel, anganwadi workers, people trained in community programmes 	<ul style="list-style-type: none"> • Trainers' time to be utilised for e-content development and e-training delivery • Payouts under the government schemes to be linked with number of online contact hours established
Others	<ul style="list-style-type: none"> • Framework for effective collaboration with Industry associations, Skill Councils, National Skill Development Corporation (NSDC) and Edtech companies to devise effective ways of online skills training across sectors 	<ul style="list-style-type: none"> • For apprenticeship trainings, theoretical learning component to be taken up – online modules to be delivered by the training providers



Key policy recommendations

Recommendations	Short term	Medium to long term
Education		
Ramping up digital resources	<ul style="list-style-type: none"> For rural schools with limited internet connectivity – leverage radio, TV as medium to continue classes Leveraging platforms such as DIKSHA, to achieve teaching-learning objectives as well as for awareness creation and sensitisation In Higher Education (HE), the percentage of courses that can be offered online can be increased from the current 20 per cent to ensure continuity of learning. 	<ul style="list-style-type: none"> HEIs and schools should be encouraged to digitise content, invest in technology to promote remote delivery of courses In HE, credit scores of courses taken on online platforms such as Courser, Swayam, can be made acceptable in lieu of regular courses.
Teacher and faculty training	<ul style="list-style-type: none"> In K12 and HE, there is a huge number of contract teachers who will be affected, should there be longer time of closure. It's important to ensure there is no panic in this teaching/academic community Ramp up free online resources work for self-study and as aids for teachers. 	<ul style="list-style-type: none"> Continuous professional development of teachers and faculty on creation of online content, effective delivery of courses online, conducting assessments online
Ensuring continuity in operations - admissions, assessments	<ul style="list-style-type: none"> CBSE and other boards to consider alternate ways of assessing instead of indefinitely postponing the examinations Given the uncertainties over the next academic calendar, delays in conducting admissions exams, HEIs can consider staggered admissions cycles for some of their programmes. 	<ul style="list-style-type: none"> Create a detailed contingency plan, undertake rigorous academic planning and syllabus prioritisation for AY 2020-21 factoring current backlogs In the long term, HEIs should have robust operating procedures and policies to ensure continuity of operations in the wake of such emergencies.
Fiscal support	<ul style="list-style-type: none"> Provide subsidies to education technology players, encouraging them to make remediation both accessible and sustained to a wide audience Provide loans to low-fee private schools for ICT and broadband upgradation Revenue losses for new universities, due to lower fee collection, could be partly compensated by allowing staggered loan repayment. 	<ul style="list-style-type: none"> Provision for schools with technology and resources should expand their offering to students of less privileged schools as CSR Undertake cost optimisation exercise - reduced cost heads through a re-look at the pedagogy and delivery process to include digital resources.
Others	<ul style="list-style-type: none"> Continuing the mid-day meal system through distribution to homes of students, provision of vouchers for meals Universities should be encouraged to create content in the form of videos, documents to spread awareness about the virus. 	<ul style="list-style-type: none"> Create a public service awareness campaign targeting schools once they reopen to address the spread of any new infections and enhance their preparedness



Sector overview

Gross non-food credit¹	INR 101 trillion as on 31 January 2020 <i>Break-up:</i> Agriculture – 13 per cent Industry - 31.7 per cent Services - 27.3 per cent
Total deposits (SCBs)²	INR132.1 trillion, as of Jan 2020
Credit deposit ratio (SCBs)³	75.7 per cent, Dec 2019
Capital adequacy (industry avg.)*⁴	15.2 per cent as of Sep 2019
Cost to Income ratio (NBFCs)⁵	80.0 per cent (H1: 2019-20#)
Gross NPAs⁶	9.3 per cent as of Sep 2019
Net NPAs⁷	3.7 per cent as of Sep 2019

* Industry avg is for all SCB – Scheduled Commercial banks.

Provisional data

Current and potential impact on the sector

Overall expected impact

- Banks profitability will be under pressure due to
 - reduced offtake of loans under recessionary market conditions and cautious customer outlook
 - increased delinquencies post the moratorium period, due to the lockdown
 - depressed NIMs in a low interest rate regime
 - fall in transaction banking income due to lower cross border trade
 - drop in fee income on distribution of wealth products, due to volatility in the capital market.
- These could be partially offset by lowering the cost of funds, harvesting profits from the SLR portfolio and medium-term measures around cost optimisation, digitisation and focusing on non-interest based revenue streams.
- In the short term,
 - Savings may increase in the near-term, which can help cushion the liquidity demand for banks
 - Retail investors may also defer their renewal premia and/or opt for endowment products, that will adversely impact the flow to capital markets, but may prove positive for insurance companies and banks having scale and strong balance sheet.
- Retail financing industry, which was one of the key drivers of credit growth will be impacted for at least two quarters, as the demand for housing assets, consumer goods and working capital financing will get hit due to general slowdown in economic activity
- There is a potential risk of defaults and insolvencies unless the regulatory framework is tweaked urgently to address the unprecedented challenge that corporate sector, and retail sector is witnessing at present.
- From a reporting perspective, banks follow Indian GAAP whilst NBFCs follow Ind-AS. The difference in quantification and reporting of credit costs (Ind-AS is more stringent) is likely to have a greater impact on the reported results of NBFCs.

1. Monthly Bulletin, RBI, 11 March 2020, accessed on 01 April 2020

2. Bank credit growth at 7.6% as on 03 January 2020, Business Standard, 16 January 2020, accessed on 01 April 2020

3. Commercial banks at a glance: Reserve Bank of India, accessed on 01 April 2020

4. Financial Stability Report, Reserve Bank of India, December 2019, accessed on 01 April 2020

5. Report on Trend and Progress of Banking in India 2018-19, Reserve Bank of India, accessed on 01 April 2020

6. Financial Stability Report, Reserve Bank of India, December 2019, accessed on 01 April 2020

7. Financial Stability Report, Reserve Bank of India, December 2019, accessed on 01 April 2020



Current and potential impact on the sector

Liquidity

- Liquidity in financial institutions (FIs) maybe cushioned by RBIs recent policy announcements relating to CRR and Marginal Standing Facility. However, weaker private banks, co-operative banks and Small Finance Banks may be impacted due to their customer's 'flight to safety', as they begin to place deposits with stronger banks. Short to mid-term liquidity risk will need to be stress tested due to:
 - The impact of heightened delinquencies, which are like to surface by Q2 and Q3 of FY21, post the EMI moratorium
 - Uncertainty on the potential credit loss in portfolios will result in lower securitisation deals thus impacting the fund-raising ability of NBFCs
 - Repayment events on term loans or facilities availed from other FIs, which have not offered a moratorium
 - Repayment events on capital market borrowings such as bonds or NCDs which are outside the ambit of the RBIs announcements
- Banks and NBFCs will need to strike the right balance between continuity of repayment cash flows vs. extending the three-month moratorium to the required borrowers
- While avoiding panic selling of bonds, scenario analysis on bond prices may be needed for banks to assess the capital impact under different interest rate scenarios
- Buyers of existing securitised pools may choose to enforce the Credit Enhancements during the moratorium period, thus impacting the liquidity of the seller and the credit rating of the pool.

Credit quality

- Auto and auto-ancillary, aviation, travel and hospitality, retail and consumer durables, real estate and construction are likely to general stressed assets in absence of significant Government stimuli to these sectors
- Infrastructure sector which was already facing stress points is likely to come under immense pressure with stoppage of toll collections, payment to gencos and challenges that airport operators are witnessing at present. Sharp decline in demand will further compound the impact
- SMEs involved in discretionary goods and services are likely to be adversely impacted. The segment needs liquidity and credit support from the Banking sector at concessional interest rates
- On consumer credit, we expect affordable housing, two-wheeler financing, micro-finance, and gold loans exposures to be adversely impacted. The recent RBI guidelines on moratorium would be helpful in supporting the segment. However, the true impact of delinquencies especially on unsecured lending and MFIs will be known by Q2'20
- Borrowers would require their credit facilities to be restructured based on revised business cash flows, thus necessitating a regulation for one-time restructuring of loans impacted by COVID-19.



Current and potential impact on the sector

Operations and controls

- Proportion of banking services availed through digital channels, particularly payments, is likely to increase during lock-down. We expect banks to significantly increase their focus on engaging customers through the digital channels including recovery processes. Cash-collection intensive businesses are likely to transform their operating models to reflect the new business reality
- The current crisis has exposed the banking and financial services industry to new ways of working. The industry has made a reasonably smooth transition to working remotely, which is likely to shape the cost structure in the days ahead. Also, the industry shall accelerate self-service and automation initiatives around request for service like payment, facilities, reporting and also query resolution
- Banks will have to adopt innovative approaches to digitisation of processes, optimisation of its work force and in some scenarios remote working and optimisation of work places to reduce costs
- Globally, the COVID 19 situation has resulted in social engineering scams that are being perpetrated using social media and telecommunication channels. The implemented internal control system due to 'work-from-home' (Bank, Third Parties) and other crisis driven measures especially around cyber security will be tested in this ongoing crisis
- Banks will be required to revisit their internal borrower rating based on the revised norms to factor the COVID-19 impact on borrowers in the short term.

Key policy recommendations

Aspect	Recommendations
Asset classification norms	<ul style="list-style-type: none"> • Regulatory support on asset classification and provisioning norms with forbearance period of upto nine months, for stressed sectors and end-user segments, post end of the moratorium, to defaulting borrowers.
Restructuring	<ul style="list-style-type: none"> • 'One Time Restructuring' window to be permitted across all businesses without reclassification of the accounts from the provisioning perspective • Existing Resolution framework will need to be made more practical and facilitative to ensure businesses are not pushed towards defaults and insolvencies.
Securitisation/ loan assignment	<ul style="list-style-type: none"> • COVID-19 related credit guarantee schemes to be extended to banks supporting securitisation deals with NBFCs.
PCA norms	<ul style="list-style-type: none"> • Relaxation on implementation of PCA norms for a one-year period may be assessed for Banks, depending on how the portfolio stress unravels across the industry.
Digital payments	<ul style="list-style-type: none"> • Incentivising merchants, retailers and consumers through lower taxation, special incentive schemes to shift to digital payment transactions.
Liquidity support	<ul style="list-style-type: none"> • NBFCs to be provided three months forbearance to service bonds and debentures given the EMI deferral option given to customers • Moratorium for tax payments of at least six months (upto 30 September 2020) to enable enterprises overcome liquidity crunch.



Key policy recommendations

Aspect	Recommendations
Support package for stressed sectors	<ul style="list-style-type: none"> • Taking a cue from policy interventions in other countries like Korea, Singapore and the U.S., India may also consider the following, should the impact on the economy extend over the medium to long term: <ul style="list-style-type: none"> ○ Wage support and tax holidays/deferments for impacted sectors ○ Extended moratorium of six months post return to normalcy, to provide sufficient headroom for the borrowers to honour their loan obligations ○ Creating long tenure sub-loans for retail loan instalments that were accumulated and unpaid during the moratorium period, to cushion the impact of delinquencies impacting the sector ○ Guaranteeing MSME borrower’s credit obligations ○ Purchasing corporate bonds in the primary and secondary markets to infuse liquidity into the system and ○ Subscribing to commercial papers and term-asset back securities of financial institutions to ensure that retail and MSME lending is insulated from any liquidity shortfall.



Sector overview¹

The insurance sector in India had witnessed robust growth in FY20 with ~13 per cent growth for the non-life and ~18 per cent growth for the life insurance sector for the period till February on a year on year basis.

Line of business	Unit	YTD Feb FY19	YTD Feb FY20	Growth (per cent)
Life Insurance (Retail APE)	INR bn	571.90	675.11	18
Non-Life Insurance	INR bn	1,440.92	1,634.09	13
Retail Lines (Motor, health and PA)	INR bn	1,029.46	1,150.45	12
Motor	INR bn	583.16	634.81	9
Health and PA	INR bn	446.31	515.64	16
Stand-alone health insurers	INR bn	96.33	126.02	31
Other non-life insurers	INR bn	349.97	389.61	11
Commercial Lines	INR bn	411.46	483.64	18

Current and potential impact on the sector

Overall business

- Awareness of health products has increased given the current pandemic scenario and offtake of digital health products has been on a rise
- Renewals may get delayed due to paucity of monies in the hands of policyholders. With the policyholders focusing on pure risk cover policies in these trying times, there is more focus on customer retention
- Fresh savings business and P&C business issuance is expected to be muted. Endowment products may stand to gain from change in mix by retail investors of allocations between long-dated endowment products and investment in capital markets
- Growth in the SME group health segment is likely to be muted in the short term given the overall economic scenario.

Target operating model

- Digitisation will play a bigger role as people become more accustomed to the remote and digital way of working. Insurers would need to develop paperless and app/web based seamless journeys
- Processes need to be digitised and made more efficient to ensure increased manpower productivity which can be capitalised post economic recovery
- Digitisation would also lead to greater degree of centralisation of claims and policy administration related functions

Cost efficiency

- Focus on cost efficiency will become critical with topline pressures in the near term
- Usage of Artificial Intelligence (AI)/Machine Learning (ML) can assist in reduction of operating costs while increasing customer satisfaction during on-boarding, claims, servicing and renewals processes.

1. Calculations based on data available on websites of Life Insurance Council and General Insurance Council, accessed on 1 April 2020



Current and potential impact on the sector

Actuarial	<ul style="list-style-type: none"> • All key assumptions, e.g. mortality, claim incidence, recovery rate, lapsation, etc. may need short term adjustments. However, actuaries would generally wait for some experience to develop before factoring these in the central estimates • High transmission rates for diseases, the intensity of an outbreak and length of the incubation period will increase the in-patient treatment, pre-hospitalisation, post-hospitalisation claims. As the incidence rate increases, the morbidity assumptions will eventually need revision • There will be demand, and hence a need for development of products focusing on 'Loss of Business' or 'Loss of Revenue' given the recent experiences. Estimating similar business loss event, would be critical and would require a focused effort and estimation • Elective surgeries are getting pushed out and there will be lesser claims in the shorter run, but near term should see an increase in the claims and hence loss ratios.
Investments	<ul style="list-style-type: none"> • The length of magnitude of this economic financial market downturns will make insurers seek increasing shelter in government bonds amid uncertain future economic activity arising from the impact of COVID-19 • With the material drop in interest rates to lower levels, there is an increase in credit spread and increased volatility in equity. The valuation discount rate used by the actuaries to calculate Mathematical Reserves will reduce. This may put pressure on the premiums if the interest rates were to hover around this 'new normal' for the next couple of years • The opportunity to reinvest maturing assets becomes even more difficult for financial institutions and a prolonged low-interest-rate environment outlook may essentially challenge every insurer's ALM philosophy and question the coherence of the same.
Capital and solvency	<ul style="list-style-type: none"> • Given the growth levels are expected to be muted leading to lower absorption of overhead expenses, there may be pressure on capital • Prudent changes to operating assumptions and lower discount rate used for statutory valuation due the economic environment will increase the reserves • Asset value will get depressed as: <ul style="list-style-type: none"> ○ Credit quality deteriorates and spread widens ○ Prospective loss faced by reinsurers increases the credit risk on the recoverable and ○ There is a dramatic fall in equities prices. • Increased reserving requirement and dwindling asset value is expected to negatively impact solvency of all the insurance companies. The quantum could vary depending on the ALM strategy deployed, type of business written and other operational aspects



Current and potential impact on the sector

Risk Management

- If a company follows Solvency II/RBC approach to calculate its capital, then it needs to calibrate the 1-in-200 stress scenarios which shocks all the risks together:
 - demographic (mortality and morbidity shock),
 - market (interest rate and equity shock) and
 - operational risk shocks (distribution, remote working, and other supply chain impact)
- COVID-19 seems fitting exhibition of the above stresses and hence provides a testing ground for the CROs to check the sufficiency of their current capital framework.
- Given the uncertainty, the extent of reinsurance ceded protection and health insurer business is likely to increase and there could be a need to have Catastrophe insurance
 - Increase in use of derivative as risk management tool to lock-in higher yields to reduce market risk amidst economic outlook expecting large downturns in GDP
 - Increase in digitation and automation will expose insurers to a larger risk of cyber threats. Also, insurance has a large ecosystem of third-party service providers, thereby expanding exposure to cyber risk.

Key policy recommendations

Aspect	Recommendations
Automatic rollover with delayed payments	<ul style="list-style-type: none"> • In the lockdown phase, the regulator can provide a provision for automatic renewal with a grace of certain duration for premium payment to ensure policies stay in force.
Accelerated product approvals	<ul style="list-style-type: none"> • The post lockdown situation would be challenging economically, and the industry would look at introducing products calibrated to the same. An accelerated approval process, specifically for retail products shall be beneficial.
Accelerated payments for government policies	<ul style="list-style-type: none"> • Accelerated payment of premiums for government policies would be extremely beneficial for the cash flows of insurance companies.
Increase FDI Limit	<ul style="list-style-type: none"> • It will be worthwhile to consider increasing the proposed FDI limit sooner to ensure adequate capital for insurers given the stress
Solvency guidelines	<ul style="list-style-type: none"> • India currently follows a factor-based regime for solvency capital calculation. The impacts of COVID-19 fortify discussions in favor of a risk-based capital framework to fully calibrate and mitigate the risk posed by such events.

Food and agriculture (1/4)



Sector overview

Sector contribution to GDP and employment¹	16.5 per cent of GVA and 43 per cent of employment (2019-20)
Market size¹	Food and Retail Market: USD828.92 billion (2020) Food Processing: USD543 billion (2020)
Global presence¹	1 st in dairy, spices, and cashew, 2 nd in food grains, fruits and vegetables
FDI equity inflows in food processing sector (per cent of total FDI)²	2.14 per cent (Apr 2000 – Dec 2019)
Major processed food segments (value)³	Dairy (29 per cent), Edible Oil (32 per cent), Cereals (10 per cent)
Agriculture inputs market size (value)³	Seeds - USD4 billion, Agro chemicals - USD5 billion and Fertilisers - USD19.3 billion
Food and grocery distribution in e-commerce domestic trade³ (per cent)	Dry food groceries, beverages, fresh produce, dairy, perishables, and spices

Current and potential impact on the sector

Parameter	Low	Med	High	Un-known	Comments
Supply-side					
Price variations of key raw materials	Cereals Vegetables Milk Fruits Agri Inputs	Seafood Meat	Poultry eggs chicken	Industrial Commodities like maize, soy, cakes etc.	Supplies of essential commodities like cereals, pulses, fruits, vegetables, dairy need to be closely monitored, being dependent on interstate food movement. Government policies on transport, logistics and e-commerce will have significant impacts on price. Edible oil prices are expected to go down in the short term due to global down turn in demand. Import dependent agro chemicals, and fertiliser sector may see some volatility in the long term. Supply of agri-commodities are expected to be normal in short term but long term impact will be known only after three to four months, once first Kharif sowing reports are out.
Production shutdown	All essential food processing units		Bakery, Confectionery, QSR, Ice cream		Majority of food processing units expected to be back on stream as well as Quick Service Restaurants (QSR) based food supplies. Rabi season harvest for wheat, rice and pulses may get impacted due limited availability of labour force. Recent announcements from State and Central governments on 'labour and transport issues' should ease the situation in the coming weeks

1. Food Processing Industry In India, InvestIndia website, accessed on 26 March 2020

2. Quarterly factsheet on Foreign Direct Investment (FDI), April 2000-December 2019, Department for Promotion of Industry and Internal Trade

3. Euromonitor International, accessed on 26 March 2020

Food and agriculture (2/4)



Current and potential impact on the sector

Parameter	Low	Med	High	Un-known	Comments
Supply-side (cont.)					
Cash flow constraints	All essential foods		Food delivery, online grocery		Largely not impacted except for e-commerce based food delivery platforms that have constraints. Procurement and marketing of Rabi season commodities will decide future prices for consumers and industries. RBI stimulus will help the industry in the short term.
Supply chain disruption	Vegetables, Milk, Fruits etc.		Poultry eggs, chicken		Supply chain seems to be the major challenge as several states are evolving their strategies for food supply chain. Government is prioritising the smooth flow of highly perishable items like vegetables and dairy. Low demand for poultry products due to fake social media propaganda. Non- essential foods are restricted as of now.
Labour force			Seasonal food processing like seafood, mango etc.		Movement restrictions on interstate labour to be lifted in a calibrated fashion for both primary agriculture and food processing sectors. Seasonal industries like mango, seafood etc. need support on labour availability. The government of India has issued clear guidelines which needs to percolate down to the last mile.
Imports (if applicable)	Consumer edible oils	Agro chemicals	Industrial oils, fats		Edible oils are major imports and this may not have any impact in the short term. Agro chemical companies depending on import of raw ingredients will face issues.
Demand-side					
Lockdown / restrictions impact	Agri inputs, food processing		Online food delivery, grocery etc.		Agri inputs - No significant impact since classified as essential. Food processing - No significant impact except domestic poultry industry and export items like tea, rice, meat, spices, seafood etc. due to demand contraction. E-commerce - Heavy impact due to evolving policies regarding delivery. This should ease once state government policies reach the last mile.
Consumer sentiment			Poultry, meat		At the moment, no discernible impact. Demand for meat products may see jump once restrictions ease as alternative channels (QSR) are closed.
Exports (if applicable)			Seafood, meat, rice, tea, spices		Food categories like tea, meat, spices, seafood that are exported to U.S., Europe, China are impacted heavily due to both decrease in demand and domestic supply chain issues.



Current and potential impact on the sector

- **Primary agriculture:** Since this is vital both in terms of meeting national demand as well as sustenance of farmers, this sector has to be high priority in terms of usage of agri-inputs like seeds, pesticides and fertilisers. The curbs on migratory labour movement for harvesting wheat, paddy, pulses etc. need to be attenuated. Special attention to the rural food production areas in the coming weeks will mitigate the macro impact of COVID-19 on the Indian food sector as well as larger economy. Post the Ministry of Agriculture's press release⁴ of agriculture-farming and allied activities being exempted from lockdown, crop procurement and mandi operations are yet to be streamlined and this may result in low sowing in the upcoming crop season and also impact sale of agri inputs in the Kharif season.
- **Agricultural inputs: Overall sector impact should be very low.**
 - **Seeds:** States have cleared this as an essential category and impact is likely to be low.
 - **Agro-chemicals:** Companies that depend on exports for finished goods sale and imports of raw ingredients will be impacted.
 - **Fertilisers:** Owing to existing inventories impact may be less except for logistics and port clearances in India.
- **Food retail:** Several state governments have already allowed free movement of fruits, vegetables, milk etc. Due to fake propaganda, the poultry sector has been impacted. The supply chains of fresh meat and seafood have been erratic. Brick and mortar grocery retail chains and shops are largely operating normally, while shortage of staff is impacting operations. It is expected that prolonged lockdown will result in increased demand for food supplies. Online food grocery platforms are heavily impacted due to last mile issues⁵. States are working out policies for food movement which are likely to ease the situation.
- **Food processing:** Food based industries would need support in terms of access to labour and supply chains.
- **Food exports:** Indian food export-based companies will be impacted due to low global consumer demand and port hurdles. Partial diversion of export inventories to domestic market will help the players in the interim. Farm gate prices for export oriented commodities like seafood, mango, grapes are crashing and this will impact future crop availability.

4. Agriculture-Farming and allied activities exempted from Lockdown, Press Information Bureau (PIB), 28 March 2020

5. BigBasket, Grofers and other delivery services disrupted amid lockdown, TheNewsMinute, 25 March 2020



Key policy recommendations

Recommendations	Short term	Medium to long term
National Policy on food supply chain during COVID-19/pandemics	<ul style="list-style-type: none"> States and Centre should classify essential food items with zero hurdle supply chain mechanism for food retail and food industries to help consumers, food industry and farmers. Fake propaganda regarding food items like poultry to be countered Food packaging industry should be allowed as essential category. 	<ul style="list-style-type: none"> Existing infrastructure of GST, FASTAG should be used for smooth movement of essential food items. This will help in long term stability of food sector. Dedicated food transport corridors to be announced pan India with no stoppage at borders Aadhaar based approvals, passes to be issued for smooth supply chain of food
Easing financial stress in the sector	<ul style="list-style-type: none"> RBI and Finance Minister announced measures will help the industry and the employees in the short term. States may supply agri inputs free of cost for the upcoming Kharif season to ensure stable food production. 	<ul style="list-style-type: none"> Food Processors: Domestic and export market incentives to be introduced for FY21 to process and liquidate inventories. Agri inputs - priority handling of goods at the ports
Support for food and agri inputs delivery personnel	<ul style="list-style-type: none"> Health and life insurance for the last mile delivery personnel. Registering unemployed youth as temporary staff for food and input delivery in urban and rural areas. Drone based crop spraying to be tried if labour shortages arise 	<ul style="list-style-type: none"> Systems to be put in place to enable direct benefit transfers for migrant agricultural labour.
Others	<ul style="list-style-type: none"> E-commerce based apps should be encouraged to help rapid deployment of delivery personnel to avoid panic buying and restrict movement in the streets Ensuring optimal farm gate prices for domestic and export commodities and easy availability of agri labour will ensure farmer's interest in Kharif season and therefore the food production will not be impacted. 	<ul style="list-style-type: none"> National e-commerce policy during pandemic situation and safety net policy for healthcare personnel will need to be implemented Agriculture and allied export policy during this period needs to be re-calibrated.



Sector overview

Sector contribution to GDP	<ul style="list-style-type: none"> 1.28 per cent of GDP on public health, which is expected to increase to 2.5 per cent by 2025.¹
Government spending	<ul style="list-style-type: none"> Government of India outlay (2019) for health is INR623.9 billion of which INR317.5 billion for National Health Mission (2019-20) and INR64 billion for Ayushman Bharat Allocation of INR150 billion for healthcare to control COVID-19 outbreak.³
Workforce	<ul style="list-style-type: none"> More than two million health workers in India⁴. However, patient to doctor ratio of 1445:1 (modern medicine) is less than WHO's recommendation of 1000:1 ratio.⁵
Infrastructure	<ul style="list-style-type: none"> 529 Medical colleges (MBBS), 702 Ayush, 313 Dental (BDS), 253 PG Dental ~158 thousand sub-centers, more than 25,000 Primary Health Centres (PHC), ~5,624 Community Health Centres (CHC).¹

Current and potential impact on the sector

Parameter	Med	High	Comments
Supply-side			
Price variations of key drugs and consumables		✓	Prices of various drugs and self hygiene products such as sanitisers, masks, gloves, disinfectants will see a surge until production increases to compensate for the rise in demand
Health insurance	✓		More inclination among people for health insurance which may now include viral disease coverages and/or quarantine costs
Hospitals and financial constraints		✓	Closure of all services except emergency has impacted the revenue flow for private healthcare providers when cash outflow like salaries, maintenance, interest continue Private hospital workforce to experience layoffs and salary-cuts Multispecialty large hospitals to tide the crisis better than smaller nursing homes
Supply chain disruption		✓	Due to market uncertainty and supply tightness in China, raw materials, APIs and intermediates for pharma, medical equipment and health sector will be negatively affected.
Skilled manpower		✓	Deficit recognised in required number of healthcare workers including doctors, nurses, paramedical staff, sanitary workers. Burnout expected among doctors and nurses working round-the-clock presently.
Healthcare protocols and R&D		✓	Standard treatment protocols, virology, sanitisation and disposal protocols will be affected and revised. R&D in microbiology, vaccination and testing methodology to experience significant shift.

1. National Health Profile Report, 2019, accessed on 5 April 2020

2. Healthcare Industry in India, India Brand Equity Foundation, accessed on 5 April 2020

3. PM Modi Allocates Rs 15,000 Cr For Healthcare Infra To Combat Covid-19 Outbreak, ABP News, 24 March 2020, accessed on 5 April 2020

4. Healthcare Workforce in India, WHO 2019, accessed on 5 April 2020

5. Doctor patient ratio in India less than who prescribed norm of 1:1000, Business Standard, accessed on 5 April 2020



Current and potential impact on the sector

Parameter	Med	High	Comments
Demand-side			
Lockdown/ restrictions impact		Unknown	Elective surgeries put on hold. But, patients needing non-COVID-19 critical care suffering in absence of means to affordable healthcare or due to closing down of hospitals or due to restrictions in travel. While medicines are classified essentials, due to disruption in movement, many patients unable to procure required drugs.
Healthcare sentiment		✓	Awareness towards health, sanitisation, communicable diseases, social distancing increased, will give rise to health seeking behaviour. More concentration on preventive care will be seen.
Exports (if applicable)		✓	India is primary exporter of generic drugs across the world and this may face short-term scarcities with supply chain issue from China and Europe

COVID-19's impact on the health sector has been phenomenally disruptive.

- Directly, it questions the health-burden carrying ability of systems across the globe, forcing governments to rethink and **increase funding, manpower and infrastructure** allocated to health
- Public and private sector in all countries will be compelled to **increase production of medical equipment and ancillary consumables** such as masks, PPEs, ventilators, surgical catheters etc.
- Healthcare **sanitation, self-hygiene products and bio-waste disposal** are areas that will indirectly gain fillip due to a paradigm shift in people's awareness regarding contamination, infection spread, quarantine
- An increase in government's **focus on strengthening paramedical staff** may be expected
- 14 per cent of rural and 19 per cent of urban population has access to health insurance coverage, which will increase as increased awareness of infections and communicable diseases will **improve health-seeking behaviour**.



Key policy recommendations

Recommendations	Short term	Medium to long term
Tax related	<ul style="list-style-type: none"> • Reduce import/export duties on pharma and biomedical items • Moratorium on all working capital, principal, interest payments 	<ul style="list-style-type: none"> • Introduction of 0.5 per cent healthcare cess and enhancement of 'sin tax' on items like cigarettes.
Healthcare guidelines, STPs and R&D	<ul style="list-style-type: none"> • Release of guidelines related to testing, biomedical waste management, discharge protocols, social gathering protocols, quarantine and infection prevention 	<ul style="list-style-type: none"> • Increase funding towards research in communicable diseases, virology, vaccines and technology related to health equipment • Private pharma companies to invest in developing of rapid testing methodologies • Increase awareness about infection and sanitation in rural areas by mobilising Accredited Social Health Activists (ASHAs)
Augmenting capacity and easing financial Stress	<ul style="list-style-type: none"> • Launch of emergency viral and infectious disease packages in the public health insurance schemes such as Ayushman Bharat • Interest free deferred payment option for private healthcare providers for three months • Short-term interest-free loans for augmenting capacity • Waiver of GST on input costs and services of the sector for one year • Reduction in corporate tax for medical device industry 	<ul style="list-style-type: none"> • Collaboration with private insurance agencies to cover viral treatment under their schemes • Incentivise construction of hospitals in tier-2 and tier-3 cities in PPP mode • Support domestic manufacturing companies producing essential drugs and testing kits by providing subsidies (land/equipment) • Duty structure to be reformed in favour of domestic production of medical devices (which is currently dependent on imports) • Invite multinational medical equipment manufacturing companies to set up production base in India, start-ups under Startup India • Fast-track approval of domestically produced medical devices • Augment training of AYUSH and paramedical staff on basics of quarantine, infection, to be ground-ready for deployment in far-flung places • Speedy quality clearance of domestic manufacturers for manufacturing medical equipment
Support for end customer	<ul style="list-style-type: none"> • Continuous identification of dedicated central and state facilities that can be used for isolation and treatment of COVID-19 patients 	<ul style="list-style-type: none"> • General-awareness programmes by government on basics of cleanliness, infection, self-hygiene • Campaigns for better health behaviour in public places

Metals and mining (1/3)



Sector overview

Sector contribution to GDP¹	2.4 per cent of GVA in 2018 - 19
Export share of metals and minerals²	Iron and steel (3 per cent), gold and other precious metal jewellery (4.5 per cent)
Growth in production of major minerals¹	25 per cent (2018 – 19)
Mining growth¹	2.9 per cent (2018-19); 4.4 per cent (Jan 2020)
Index of eight core growth (per cent)³	Coal (-2.4 per cent), steel (5.3 per cent) during Apr 2019 – Jan 2020
FDI equity inflows (per cent of total FDI)⁴	2.51 per cent (Apr 2000 – Dec 2019)
Credit growth⁵	Mining and quarrying (-3 per cent), basic metal and metal product (-7.9 per cent)

Current and potential impact on the sector (assuming lockdown till end-April only)

Parameter	Low	Med	High	Un-known	Comments
Supply-side					
Price variations of key raw materials		✓			Indian raw material market generally de-linked from international prices – however they will decline sharply too if turnaround gets delayed beyond a month
Production shutdown		✓	✓		Metals are considered process industry and exempted from complete shutdown but has only skeletal staff operating – downstream mills are being shut down across states. If turnaround takes time, furnaces and smelters too will be shut down.
Cash flow constraints			✓		Sector highly leveraged; high labour intensity; dependent on raw materials which are mainly cash-and-carry – cash flow constraints will happen sooner than later; sales will be impacted due to distress in auto and construction sector.
Supply chain disruption	✓	✓			Other than coking coal, India is insulated from global supply chain disruption. Domestic freight disruption unlikely to extend beyond the mandatory lockdown period by Central/State governments. Initial reports indicate trucks being held back at district and state boundaries. Industry fears pilferage.
Labour force		✓	✓		Highly labour intensive sector and supply disruption here will hit operations; also logistics sector employment is driven by this sector (will affect railway revenues and employment big time); increasingly outsourced labour used – one can expect suspension of pay, if not retrenchment.

1. Annual Report 2018-19, Ministry of Mines, accessed on 26 March 2020

2. Export-Import (EXIM) databank, Ministry of Commerce, accessed on 25 March 2020

3. Index of Eight Core Industries (Base: 2011-12=100) for January, 2020, Press Information Bureau (PIB), 28 February 2020

4. Quarterly factsheet on Foreign Direct Investment (FDI), April 2000-December 2019, Department for Promotion of Industry and Internal Trade

5. The Reserve Bank of India (RBI), accessed on 26 March 2020



Current and potential impact on the sector (assuming lockdown till end-April only)

Parameter	Low	Med	High	Un-known	Comments
Supply-side					
Imports (if applicable)		✓			Copper concentrate is imported – players may benefit from low price; demand will slow down before inventory comes down heavily and supply hits happen Coking coal – steel sector has high import reliance; port restrictions and vessel constraints may hinder availability. Worsening exchange rate could make imports costlier
Demand-side					
Lockdown/restrictions impact			✓		Consumers of steel – construction, auto, durables etc. – highly impacted sectors; Consumers of base metals – conductors, construction etc. – medium - highly impacted sectors
Consumer sentiment			✓		Consumer industries slowly coming to a halt; globally, industry and financial markets reconciled to a deep recession.
Exports (if applicable)			✓		Global demand in consuming industries is down; China is reviving – so it might re-capture other markets if at all there is any

- **Steel** – Infrastructure, construction and automotive sectors account for ~75 per cent⁶ of steel consumption in India. The steep slowdown in these sectors is likely to affect steel demand. Further, demand-side issues are likely to keep steel prices under pressure. Disruptions in seaborne freight may impact availability and prices of coking coal (which is primarily imported). Indian steel players with exposure to global markets will be impacted more. Small leveraged sponge iron players will also be badly impacted.
- **Aluminum and copper** – About 80 per cent⁷ of the aluminum is consumed by construction, transport and electrical sector. The sector is likely to see demand contract due to COVID-19 situation. Further, since aluminum prices are linked to global indices, global slowdown is likely to hit companies' realisation and profitability. Impact will be more acute on companies with higher exposure to the transport sector. Copper prices have fallen sharply since January. India imports copper concentrate and the price for that too has reduced. However, exchange rate deterioration will partly undo the raw material price advantage. More than 50 per cent⁸ of copper is consumed by electrical sector, which may also see slowdown.
- **Iron Ore** – Iron ore sector in India was already reeling under mining lease expiry in March 2020. Demand slowdown due to COVID-19 situation will further affect prices and therefore, profitability of companies. Suddenly, the bid-price quoted for the mines in the auctions will appear to be too high.
- **Coal** – Coal is an essential input to the power sector and hence supply disruptions are likely to be minimal. Supply of coal at notified prices by CIL will limit any price impact of COVID-19. However, demand slowdown by end-use sectors, coupled with adequate inventories, will impact e-auction realisation of CIL (~13 per cent⁹ of volumes). The demand for coal in Q1 of FY21 may be lesser by 20 – 60 MT, depending on the duration of the lock-down. If the fall in price of coal lingers due to demand-correction, it is likely to impact energy transition globally. Plus the risk of increased energy prices and job-loss from closure of coal on top of a COVID-19-led downturn, may be too high a risk for the political leadership around the world, including in India.

6. National Steel Policy 2017, Ministry of Steel, published on 8 May 2017

7. Need for Aluminum Policy in India, NITI Aayog, accessed on 28 March 2020

8. Metals – Markets & Opportunities, KPMG report for IBEF, accessed on 28 March 2020

9. Annual Report 2018-19, Coal India Ltd, accessed on 28 March 2020



Key policy recommendations

Recommendations	Short term	Medium to long term
Tax and compliances related	<ul style="list-style-type: none"> Subsume District Mineral Foundation (DMF), National Mineral Exploration Trust (NMET) kind of duties into GST for raw materials Waive GST on bidding amount Temporarily waive bidding amount payable on own mines until sector recovers Provide relaxation in statutory and employee related payments 	<ul style="list-style-type: none"> Rationalise taxation of freight Increase quantum of accelerated depreciation for revival of capex-cycle Provide legal support/develop insurance products for companies (esp. PSUs) to help them suspend statutory payment during such black-swan incidents
Easing financial stress in the sector	<ul style="list-style-type: none"> Provide a moratorium for loan repayment (in the event of temporary closures) Reduce cost of trade-finance Provide wage subsidies for labour intensive mining projects 	<ul style="list-style-type: none"> Provide special package to finance working capital loan for re-starting plants Offer loan guarantee for investment in strategic sectors/projects
Support for end customer	<ul style="list-style-type: none"> Immediate release of funds for projects worth INR102 trillion under National Infrastructure Pipeline 	<ul style="list-style-type: none"> Any support to reviving demand in auto and construction sector would benefit metal and mining companies
Others	<ul style="list-style-type: none"> Allocate iron ore and coal mines to PSUs Stimulus/revival packages for strategic sectors, such as automobile and airlines 	<ul style="list-style-type: none"> Avoid allocation of mines through auctions (explore other methods like single-stage bids) Lease allotment with pre-embedded clearances. Develop insurance products for dealing with such situations



Sector overview

Sector contribution to GDP and Employment¹	<ul style="list-style-type: none"> • 30 – 35 per cent of GDP • 114 million people
Sector composition²	Micro (~99 per cent), Small (0.52 per cent) and Medium (0.01 per cent) enterprises
Government spending³	INR75,722 million (2020 – 21)
Exports²	USD125 billion (2017 – 18)
Number of registered units¹	0.161 million registered units (as on 30 May 2019)
Sectoral distribution of MSMEs²	Trade (36 per cent), Manufacturing (31 per cent), and Other services (33 per cent)
Distribution of MSMEs²	Rural (49 per cent) and Urban (51 per cent)
States with highest number of registered MSMEs²	Maharashtra, Uttar Pradesh, Bihar, Tamil Nadu, and Madhya Pradesh

Current and potential impact on the sector

Parameter	Low	Med	High	Unknown	Comments
Price variations of key raw materials		✓			The domestic supplies and those from imports both will suffer leading to a significant impact on availability and cost.
Production shutdown			✓		Will lead to a cascading impact even after the lockdown restrictions have been eased owing to global slowdown in demand
Cash flow constraints			✓		Will have impact on working capital needs during lock down, will also have an impact on supply chain, future investments and expansions
Supply chain disruption			✓		Impact on markets, relationships with downstream and upstream enterprises, pressure to look for newer markets etc.
Labour force			✓		Contractual, wage labour will get impacted more leading to layoffs, unrest, lowering of purchasing power
Consumer sentiment			✓		Negative sentiment and diminishing liquidity will impact most of the consumer goods industries, retail, service enterprises.
Exports (if applicable)			✓		With Europe and U.S. being affected the most, there will be huge impact on exports as global demand is expected to come down significantly

1. Central Statistics Office (CSO), Ministry of Statistics & Programme Implementation, accessed on 25 March 2020

2. Ministry of Micro, Small and Medium Enterprises, accessed on 25 March 2020

3. Union Budget Speech, Ministry of Finance, 1 February 2020



Current and potential impact on the sector

- A study by the All India Manufacturer's Organisation (AIMO) estimates that about a **quarter of over 75 million MSMEs in India will face closure** if the lockdown due to COVID- 19 goes beyond four weeks and this figure is estimated to touch a whopping 43 per cent if the situation extends beyond eight weeks⁴.
- The impact will be high considering the fact that these MSMEs provide employment to more than **114 million people and contribute around 30-35 per cent to the GDP**⁵.
- The **MSMEs are affected at several levels** - with the national lockdown, the production facilities and retail has been hit big time. Micro enterprises specifically in the services sector are considerably impacted
- MSMEs engaged in hotel industry, tourism sector and logistics have been witnessing a sharp drop in business for some time now. MSMEs engaged in essential services are still operational; however, it is unlikely to remain isolated from the slowdown owing to liquidity constraints, plunging general sentiments and purchasing capacity. Moreover, the impact on businesses is likely to have a cascading effect across the value chain.
- Consumer goods, garments, footwear, utensils, automotive segments will see a major direct impact. Sectors which are dependent on high imports (of raw material) such as electronics, consumer durables, pharma etc. are facing bottlenecks and so are the export oriented sectors due to a major drop in demand globally.
- RBI's announcement of a three month moratorium on repayment of term loans and a reduction in the repo rate will provide some relief, however the lending institutions have to follow the spirit of the measures and pass on benefits to the end customer.

Key policy recommendations

Recommendations	Short term	Medium to long term
Tax and compliances related	<ul style="list-style-type: none"> • The date to deposit advance tax should be extended by six months • All GST and other tax refunds should be credited to the businesses immediately to tide over the lack of fund availability with the enterprises. 	<ul style="list-style-type: none"> • While RBI has announced moratorium period for all loans till 30 June which is a welcome move, there is a need to reassess the impact of crisis on some sectors which may go beyond three months especially the sectors dependent on exports • No fines/penalties should be levied owing to delays in filing of statutory returns or those arising out of statutory physical audits for an extended three months period.
Easing financial stress in the sector	<ul style="list-style-type: none"> • The banks have been directed to reassess and restructure working capital loans to help enterprises meet up monthly expenses related to utilities, paying of wages etc. Salaries/wages could be paid through ESIC or there should be assistance from the government towards the payouts • A fixed waiver on electricity charges till such time the production output reached pre-COVID-19 levels will substantially help ease the burden • Trade Receivable Discounting System (TReDS) should be made mandatory for all MSME-related transactions. All pending payments should be mandatorily cleared in the next 15 days. 	<ul style="list-style-type: none"> • Increasing the Open Cash Credit (OCC) account limits for MSMEs would have a positive impact on the liquidity available with the MSMEs. This limit could be reviewed on a monthly basis and revised as per the prevailing situation • Banks are reviewing the margin requirements for loans, they could also look at making 'stocks' and 'receivables' totally interchangeable for security purposes • Boost to AI/ML/data analytics-based digital lending platforms especially for start-ups and micro/small enterprises who are relatively weak on traditional financial data will open new avenues to infuse funds into the sector.

4. MSMEs will be the biggest casualty of COVID- 19 in India: a study, The Hindu, 16 March 2020

5. As per 73rd round of National Sample Survey conducted by NSSO



Key policy recommendations

Recommendations	Short term	Medium to long term
Other development measures	<ul style="list-style-type: none"> • There is a surge in demand for pandemic related items such as personal protective equipment (PPE), ventilators, medicines etc. A lot of MSMEs have the capacity to manufacture these items in part or full. Support to these enterprises in terms of logistics, linkages with downstream/upstream entities, specialised financial products would help them remain relevant and helpful to the government • Industry associations, technology centres/other facilities of government could be looked at as aggregation points/entities for large scale public procurement of such items • Public procurement norms, Government e-Marketplace (GeM) registration should be made simpler to induct more MSMEs into the supply chain faster. 	<ul style="list-style-type: none"> • This time could be looked at as an opportunity to initiate measures for import substitution and localisation. A phased and targeted approach could be undertaken • Framework for adoption of Industry 4.0 by MSMEs aimed at decentralised and lean manufacturing could help deal with crisis situations in the future • There could be instances where the COVID-19 crisis may spillover for longer periods. Possibilities of India exporting essential items to the affected nations should be explored and necessary support measures should be provided • The crisis has brought the issue of migrant labour to the fore. There is a need to look at reforms in the labour sector for more inclusion and security aided by measures to boost productivity and specialisation. • Constitute a task force to assess the actual impact on sectors that have been most affected by the lockdown and suggest long-term financial and policy measures.



Sector overview

Global presence¹	India is the third largest energy consumer after U.S. and China; accounted for 5.8 per cent of world's primary energy consumption in 2018 – 19
Crude oil reserves¹	619 MMT (2019)
Domestic crude oil production¹	34.2 MMT (2018 - 19)
Domestic natural gas production¹	32.9 BCM (2018 – 19)
Oil imports²	USD108.66 billion (INR7,659.50 billion) (Apr 2019 – Jan 2020)
FDI equity inflows (per cent of total FDI)	3.5 per cent* (Apr 2000 – Dec 2019) ³
Global oil demand growth (per cent)⁴	To fall from 13.7 per cent in Q1 – 2021 to 1.2 per cent in Q2 - 2021

*Sectors include Non-Conventional Energy, Petroleum and Natural Gas.

Current and potential impact on the sector

Parameter	Low	Med	High	Unknown	Comments
Supply-side					
Price variations of key raw materials			✓		Crude prices have seen a significant drop due to price war and supply issues. COVID-19's impact has been less direct
Production shutdown		✓			Lesser impact as oil and gas is essential. No manpower shift or opex impact but future capex impact is expected
Labour force		✓			
Cash flow constraints			✓		Lesser revenues and extended credit to customers//suppliers likely to lead to potential cashflow impact
Supply chain disruption		✓			Some impact on crude due to Very Large Crude Carriers (VLCC) shipping but may not be as much on oil and gas, as these are supplied in pipeline, and only the last mile on road. Goods transport is open as it is an essential service
Imports (if applicable)			✓		Crude prices have fallen so India import bill will reduce
Demand-side					
Lockdown/restrictions impact			✓		Demand slowdown from customer side owing to limited travel and reduced consumption leading to lower refinery throughout gross refining margin (GRM) spreads and higher inventory buildup
Consumer sentiment		✓			Sentiment is muted and uncertain as consumers are not sure when the pandemic will pass and what shall be its potential impact on economy, their income and goods pricing
Exports (if applicable)			✓		Exports of diesel, petrol to neighboring countries reduced due to lockdown and reduced demand

1. BP Statistical Review of World Energy, 2019, accessed on 26 March 2020

2. Export-Import (EXIM) databank, Ministry of Commerce, accessed on 25 March 2020

3. Quarterly factsheet on Foreign Direct Investment (FDI), April 2000-December 2019, Department for Promotion of Industry and Internal Trade

4. Oil Market Edge, IHS Markit, 23 March 2020



Current and potential impact on the sector

The Oil and Gas sector impact will be palpable mostly at the direct customer and retail end, which is driven primarily by diesel and petrol demand (accounting for 2/3rd demand), followed by Aviation fuel, LPG and NG.

- For transport fuels, there is **perceptible slow-down** driven by a) moderation in Goods movement (↔), as auto and industrial manufacturing has declined, however food and consumer goods being essential would remain and b) fall in Passenger movement (↓), both bulk and personal transport
- **Aviation has been sorely impacted** with international and domestic travel closed. Demand for turbine fuel will substantially decline
- LPG being a household and commercial fuel, its demand is coming from both sides as people are at home/ordering in (some bit of industrial demand would drop) but the other broader issue here is that LPG is also imported (40-50 per cent) so that would be impacted from supply chain perspective
- Natural Gas mostly used in cities, in the form of PNG and CNG, and fertiliser which is mostly imported (>50 per cent) so there is **impact from supply chain side** however globally prices have fallen
- The fallout of COVID-19 on oil markets will further unravel amid a deepening global financial and economic crisis in the short to mid-term. The scale of the oil challenge is such that broader and higher-level coordination and cooperation among OPEC, governments, IOC and NOC becomes imperative in the long run
- With supply on its current trajectory, the second quarter is expected to build oil supply of around 12.0 MMB/day. **Markets prices of crude oil** including Brent and WTI, have translated into **dismal outlook** as prices hovered around USD25/bbl and USD22/bbl, respectively in March⁵
- The **crude oil production landscape is further troublesome** as despite the significant plummet in prices, a collaborative response to immediate supply cut is not expected in the short run even with prevalent COVID-19 crisis. Thus, prices are expected to further fall in the next few quarters.

Key policy recommendations

Recommendations	Short term	Medium to long term
Tax and compliances related	<ul style="list-style-type: none"> • From an end-customer standpoint, government may want to reduce excise and state VAT as crude prices have dropped to ensure end-use price lowers as well at retail outlet 	<ul style="list-style-type: none"> • Roll-out of GST for fuels and gas. Other than lubricants, this category is still not under GST
Easing financial stress in the sector	<ul style="list-style-type: none"> • Most oil and gas companies are cash rich but there will be some cash-flow and working capital issues in short-term. They may potentially need short-term borrowings which banks should provide as oil and gas are tagged as essential services 	<ul style="list-style-type: none"> • There will be a downturn on capex investment with lower demand for short-medium term (and longer term transition away from fossil fuel). Accordingly, there will be a need for sectoral incentives (moratoriums, debt rates, tax avoidance etc.) for new projects
Support for end customer	<ul style="list-style-type: none"> • Given potential income impact for labourers and daily wagers there would be need for some price support and DBT especially for LPG, kerosene 	
Others	<ul style="list-style-type: none"> • Key requirement is maintaining the reliable supply of fuels and gas, while ensuring there is not significant inventory buildup. Government may look at setting up a taskforce to ensure this 	

5. Oil Market Edge, IHS Markit, 23 March 2020

Pharmaceuticals (1/3)



Sector overview

Market size¹	USD55 billion (2019 – 20)
Job creation¹	2.7 million (direct and indirect)
Pharmaceutical trade²	Exports: USD13.7 billion (Apr 2019 – Jan 2020); Imports: USD1.99 billion (Apr 2019 – Jan 2020)
Key export destinations²	U.S., U.K., Canada, Middle East
Global presence¹	Manages 50 per cent of global demand for generic drugs Supplies 80 per cent of drugs to fight AIDS
FDI equity inflows (per cent of total)³	3.59 per cent (Apr 2000 – Dec 2019)
Market trends¹	Branded generics hold 70 – 80 per cent share of retail market; 3 rd largest market for APIs in the world; 4 th largest medical device market in Asia; 3000 pharma companies; 10,500 manufacturing facilities

Current and potential impact on the sector

Parameter	Low	Med	High	Unknown	Comments
Supply-side					
Price variations of key raw materials		✓			Imported raw materials - API imports from China have seen a 40-50 per cent rise in prices for specific cases
Production shutdown			✓		Regional lockdown have resulted in production shutdowns due to non-availability of labour
Cash flow constraints		✓			Large organisations are able to manage while others are impacted
Supply chain disruption			✓		Supply disruptions due to raw material shortages, price increases, factory and freight shutdowns – have impacted access to medicines in certain cases
Labour force		✓			While pharma manufacturing has been exempted from lockdown, non-availability of labour has resulted in production shutdowns. Shipments from factories affected.
Imports (if applicable)			✓		Factory closures (esp. China) and limited (~30-60 day) RM inventory result in high impact

1. Pharmaceuticals sector overview, InvestIndia website accessed on 26 March 2020

2. Export-Import (EXIM) databank, Ministry of Commerce, accessed on 25 March 2020

3. Quarterly factsheet on Foreign Direct Investment (FDI), April 2000-December 2019, Department for Promotion of Industry and Internal Trade



Current and potential impact on the sector

Parameter	Low	Med	High	Unknown	Comments
Demand-side					
Lockdown/restrictions impact		✓			Spike in sales over the short term as consumers stock up on essential medicines. Field force impacted. Inventory in the supply chain should cater to sales during lockdown
Consumer sentiment			✓		Sentiment not impacted. Anxious about potential cures from combination of available drugs
Exports (if applicable)		✓			Increase in exports as developed countries stock-up on essential medicines, testing kits etc.

- Generics drugs are most impacted – reliance is high on imports (~70 per cent) from China⁴. Supply disruptions over the past 2 months were managed through available inventory. As China limps back to almost full production, raw material supply disruptions should ease out
- While pharmaceutical manufacturing is exempted from the lockdown - non-availability of labour, lack of clarity over transport over ingredients (e.g. packing material) and physical distancing has bottlenecked production volumes
- Supply and distribution of essential medicines, sanitisers and PPEs (masks, gloves etc.) are impacted, also there is a production slowdown due to raw materials and ancillaries not reaching factories
- High exports demand for certain products over the short term – as developed countries (U.S., EU etc.) look to stockpile medicines
- India has banned the export of critical APIs, essential medicines, specific medical devices, sanitisers, surgical masks and ventilators – to ensure sufficient quantities are available for the domestic market
- Most large global pharmaceutical manufacturing are monitoring their supply chains, and have reiterated their commitment to continued supply with minimum disruptions
- Pharmaceutical companies are working along with agencies to test combinations of medicines for potential cures against the virus
- The USFDA has made certain exceptions from import alert for companies who manufacture critical drugs⁵
- For Online pharmacies - delivery of medicines has been affected due to staff not turning up and non-availability of passes.

4. Coronavirus Spotlights India Drug Industry's Reliance on China, VOAnews, 27 February 2020

5. Import Alerts, U.S. Food & Drug Administration, accessed on 26 March 2020



Key policy recommendations

Recommendations	Short term	Medium to long term
Tax and compliances related	<ul style="list-style-type: none"> Clarity on rules and special permissions for manufacturing and transport of raw material and ancillaries required Relax rules on restriction of export of APIs which have sufficient inventory. 	<ul style="list-style-type: none"> Single window clearance mechanism for faster approvals and clearances
Easing financial stress in the sector	<ul style="list-style-type: none"> Faster reimbursement of GST and other levies, as applicable 	<ul style="list-style-type: none"> Faster reimbursement of GST and other levies, as applicable
Support for end customer	<ul style="list-style-type: none"> Ensure availability of essential medicines at the customer Promote digital payment mechanisms – in the view of social distancing. 	<ul style="list-style-type: none"> Strengthen local FDA – to prevent counterfeit medicines
Others	<ul style="list-style-type: none"> Address the labour shortage issue by issuing electronic passes and government approved transport to the labour force so that they are able to commute and not inconvenienced during the lockdown period 	<ul style="list-style-type: none"> Create a 'pharmaceutical critical reserve inventory' for both API and formulations with supply of critical drugs for at least three months period – to be maintained at DCGI/ state FDA approved warehouses around the country to meet any emergency situation Create a global multilateral partnership with EU countries and U.S. to address their pharmaceutical supply chain disruptions and how India can be their alternate source of pharmaceutical products over longer term. Reduce dependence on China for import of raw materials Incentivise R&D investment – through enhanced collaboration between industry and academia.



Sector overview

Total installed capacity¹	3,68,689 MW (as on 31 Jan 2020)
Budgetary allocation for power and renewable energy²	INR220 billion (2020 – 21)
EoDB ranking: getting electricity³	22 nd among 190 countries (2020)
WEF ranking⁴	76 th among 115 countries in Energy Transition Index
FDI equity inflows (per cent of total FDI)⁵	3.21 per cent (Apr 2000 – Dec 2019), equity inflows
Index of Industrial Production (IIP): electricity growth⁶	0.9 per cent (Apr 2019 – January 2020)
Peak deficit (per cent)¹	0.8 per cent (2018 – 19)
Power generation capacity (fuel-wise) share¹	Thermal (62 per cent), renewable energy sources (23 per cent), hydro (13 per cent), and nuclear (2 per cent)
Power generation capacity (sector-wise) share	Private (47 per cent), state (28 per cent), and central (25 per cent) ¹

Current and potential impact on the sector

Parameter	Low	Med	High	Unknown	Comments
Supply-side (electricity generation only, not considering manufacturing/construction value chain)					
Price variations of key raw materials		✓			Limited impact on coal prices. Changes in coal costs may pass through. However, solar module prices due to short supply may increase. This may affect bid based projects under construction.
Production shutdown	✓				Essential service, hence limited impact. Cost increase may be witnessed if sustained over a longer period.
Cash flow constraints			✓		Revenue collection may be impacted across categories.
Supply chain disruption	✓				Coal logistics may have limited impact, however, supply chain for raw materials and equipment likely to be affected.
Labour force	✓				NA
Imports (if applicable)				✓	NA
Demand-side (electricity demand)					
Lockdown/restrictions impact			✓		Domestic demand has increased as people stay indoors. Closure of industrial and commercial activities has led to significant loss of demand.
Consumer sentiment		✓			Overall, demand has been suppressed by 20-30 per cent during lock down period.
Exports (if applicable)				✓	NA

1. Ministry of Power, Government of India, accessed on 26 March 2020

2. Union Budget Speech, Ministry of Finance, 1 February 2020

3. 'Doing Business 2020', The World Bank, accessed on 26 March 2020

4. The Global Competitiveness Report 2019, World Economic Forum, accessed on 26 March 2020

5. Quarterly factsheet on Foreign Direct Investment (FDI), April 2000-December 2019, Department for Promotion of Industry and Internal Trade

6. Ministry of Statistics and Programme Implementation (MoSPI), accessed on 26 March 2020



Current and potential impact on the sector

• Electricity demand

- Already subdued demand (5 year CAGR of 4.9 per cent) will reduce further on account of shutdown (if sustained over longer period) of industrial and commercial activity (which contribute to ~50 per cent demand)
- Peak power and total energy demand has dropped by 28-29 per cent in first week of lockdown (between 18 and 27 March)⁷. The timing of all India peak has also been unpredictable. Power system need to prepare for volatility that may impact grid security, leading to potential outages.

• Electricity supply

- Being essential service, power generation is less likely to be impacted. Supply glut will increase further and capacity utilisation will go down with muted demand. Coal mining disruption due to COVID-19 may lead to coal shortage in some plants, affecting regional power availability. Albeit, lower demand may offset any supply constraints
- Merchant power from IPPs likely to be impacted due to absence of long-term power procurement tie-ups with Discoms and anticipated fall in spot prices which could drive them out of market.

• Capital Expenditure (Capex)

- About 62 GW thermal⁸, 11 GW RE⁹ and transmission projects under construction likely to get delayed with prolonged lockdown, thereby impacting debt servicing and project viability
- Solar projects, largely dependent on imported modules from China and Malaysia likely to be impacted due to raw material shortfall, production delay and supply chain disruption
- Subdued demand, supply chain disruptions, investment gaps and constrained utility finances may impede clean energy transition.

• Revenue/cash flow

- Collection delays and defaults likely by consumers (due to disruption of wages, business discontinuity and disruption of cash collection mechanisms) which will put more pressure on financially ailing Discoms. This will have a cascading effect on payment to generators and debt service to financial institutions
- Tariff revision for utilities (due in March) likely to be deferred, leading to revenue shortfall (delay in public hearings etc.)
- Government budgets for tariff subsidies and power sector schemes may be challenged as funds gets diverted towards efforts to combat COVID-19. There may also be delay in payment of dues against government consumption
- Fall in industrial and commercial demand will impact cross-subsidies available to other consumers.

• Exports/imports

- Limited electricity trade with neighboring countries, not likely to be impacted.

• Labour/employment

- Significant impact unlikely as electricity is an essential service, and sustained operation is critical
- Manufacturing and construction part of value chain may face temporary job losses in case of delay in under construction projects esp. the contract based labour.

• Reforms

- Reform measures likely to be delayed if COVID-19 is sustained over a period of time. For instance, Real Time Market (RTM) slated for launch by 1 April 2020 has been deferred due to curtailment of preparatory time
- Govt funding for reforms may get partially diverted towards financial stimulus to other sectors.

7. Daily reports, Power System Operation Corporation (POSOCO), accessed on 29 March 2020

8. Broad status report (monthly) under construction power plants, CEA, December 2019

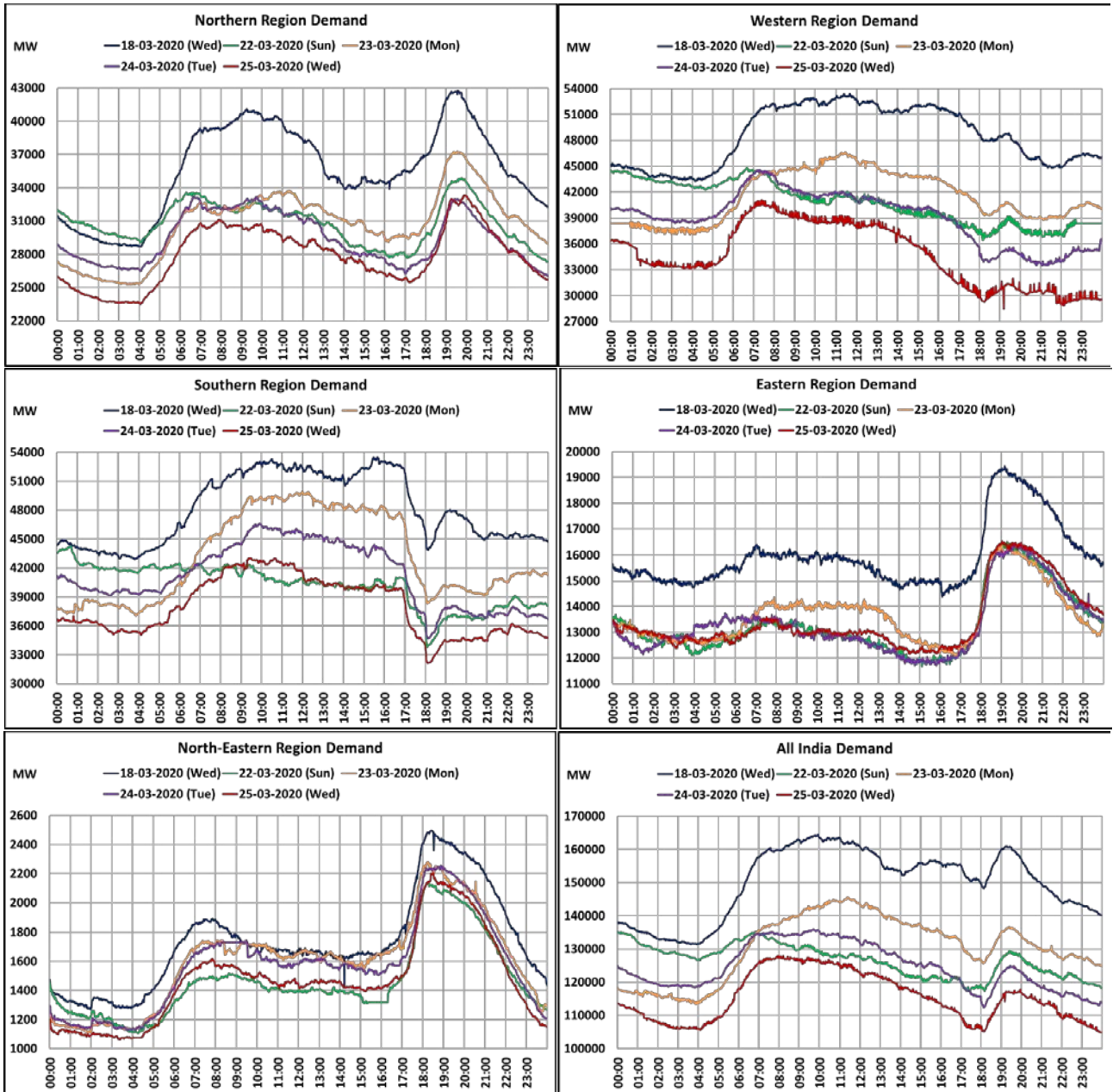
9. Summary of Solar and Wind Power projects (Commissioned and under construction) of Solar Energy Corporation of India (SECI), CEA, 30 Sep 2019



Key policy recommendations

Aspect	Measures
Business continuity and customer services	<ul style="list-style-type: none"> • More awareness on scheduled/preventive outages to avoid panic • Suspension of non-essential processes- disconnections, maintenance shutdowns, etc. • Deferring billing cycle, temporarily connecting disconnected users • Priority support to hospitals, isolation centres and other sensitive services.
Safeguards and resilience	<ul style="list-style-type: none"> • Insulating critical operations (e.g. control room) and emergency response staff to ensure continuity of supply • Contingency measures and advance training to manpower, management of demand volatility and large scale power outages among other occurrences.
Easing financial stress in the sector	<ul style="list-style-type: none"> • Stimulus packages/financial support for utility to continue services to customers (similar to those introduced in U.K., France, Canada and U.S. etc.) • Campaigns for revenue collection through digital means (where collection is possible) • Special schemes for management of arrears of marginal consumers in cases of non-payment increase • In case of prolonged lockdown - reducing delays in notification of revised tariffs by conducting public consultation and submission of comments online or announcing provisional tariff subject to further review at a later date.
Global best practices	<ul style="list-style-type: none"> • Creation of a well-equipped emergency response team to include advanced trainings; and proactive maintenance of near failure equipment (incl. preparation of contingency plan in case of prolonged disruption) • Isolated control room operation and critical operations team • Postponing non-essential maintenance • Late fee waiver, support to consumers unable to pay bills • Increased awareness targeting utility employees and customers.

A look at all India and region-wise load curve



Source: POSOCO

Energy Consumption (GWh)						
Date	Northern Region	Western Region	Southern Region	Eastern Region	North-Eastern Region	All India
18-Mar-20	827	1187	1148	383	42	3586
25-Mar-20	665 (-20%)	844 (-29%)	911 (-21%)	320 (-16%)	36 (-13%)	2777 (-23%)

Figures in parentheses indicate percentage change from 18th March 2020

Demand breakdown	
Industrial	~ 25%
Commercial	~ 8-10%
Agriculture	~ 21%
Domestic	~ 22%

Source: Daily reports, Power System Operation Corporation (POSOCO), accessed on 29 March 2020

Prolonged dip in electricity demand will impact the sustainability of generation plants. Demand volatility necessitates contingency measures for reliable grid operations and avoiding large scale outages and potential blackouts



Sector overview

Sector contribution to GDP¹	<ul style="list-style-type: none"> 6.5 per cent of GDP
Total subscriptions²	1.17 billion connections (0.509 billion: rural and 0.662 billion: urban) as on 31 December 2019
Tele – density (per cent)²	88.56 per cent (56.67 per cent: rural and 156.26 per cent: urban) (as of December 19)
FDI equity inflows (per cent of total FDI)³	8.13 per cent (Apr 2000 – Dec 2019)
Key drivers¹	Affordable tariffs, extensive availability, implementation of Mobile Number Portability (MNP), increasing 3G and 4G coverage, network availability, evolving consumption patterns of subscribers and a favorable regulatory environment.

Current and potential impact on the sector

Parameter	Low	Med	High	Unknown	Comments
Supply-side					
Price of materials/equipments			✓		From handset and network equipment manufacturing perspective, the global disruption in supply chains and suspension of manufacturing facilities will significantly impact the telecom sector in India.
Bandwidth availability			✓		
Cash flow constraints			✓		
Network availability			✓		
Labour force		✓			The telecom service providers are expected to provide uninterrupted services. COVID-19 is also likely to impact the much awaited 5G auctions as operators are focusing on servicing current demand surge and quality of service.
Demand-side					
Lockdown/restrictions impact		✓			Demand for handsets and new subscriptions is likely to be impacted in the short term.
Consumer sentiment		✓			
Interconnection Usage Charge (IUC)			✓		
Roaming			✓		
Over the top (OTT)/streaming services			✓		
Voice/SMS			✓		

1. Telecom sector overview, InvestIndia website, accessed on 26 March 2020

2. Highlights of Telecom Subscription Data as on 31st December, 2019, Telecom Regulatory Authority of India (TRAI), Gol, accessed on 26 March 2020

3. Quarterly factsheet on Foreign Direct Investment (FDI), April 2000-December 2019, Department for Promotion of Industry and Internal Trade



Current and potential impact on the sector

Services perspective

- Telecom is one of the most essential services and sectors at the time of the global pandemic. It has been a key enabler in helping governments and businesses in timely communication, tracking and also helping implement work from home
- With relaxation of the guidelines on work from home, telecom companies will have to revisit the enterprise product suite, provide packages and offers that address the needs of the companies enabling work from home. This opportunity is expected to create a new set of operating model, content consumption and assisted commerce where telecom companies can play a pivotal role
- Telcos need to strengthen and roll out business continuity plan and contingency plan for services being offered through important call centers and Network Operating Centers (NOCs) etc. Telcos will also have to revisit the risks associated with cyber frauds by improving security protocols and VPN connectivity and closely work with enterprises to address any challenges they may encounter
- Telecom and the associated digital infrastructure is key to any nation's progress. With 1.5 million kilometres of fibre laid, and less than a fourth of the cell towers connected on fibre, there is a long way to go to 'fiberise' the backhaul infrastructure. Currently, most of the network connectivity in India is microwave-based, which accounts for about 75-80 per cent of cell sites. For the network to be robust and available with low latency, the need for 100 per cent fiberisation has been felt the most at this critical stage⁵
- The increased broadband usage at home has resulted in pressure on the network and demand in excess of 10 per cent⁶
- The telcos are also requesting OTT platforms to ease network stress by reducing video quality. Internet and broadband connectivity to face tremendous pressure due to reliance on work from home
- However, the telcos are bracing for sharp drop in subscriber additions. Demand for bandwidth is expected to go up from existing customers
- Collaboration technologies along with telecom technologies will have an opportunity to create new products and service offerings. A larger focus is the need of the hour for SMB and MSME clients who will explore these options to grow business.

Handset and OEM perspective:

- The disrupted global supply chains is going to impact handset manufacturers.
- Leading smart phones manufacturers are closing down their handset factories in various countries.

5. Digital Infrastructure: Backbone of a digital economy, CII, released in February 2020

6. 'How Telecom sector is coping with a 10% data demand spike amid Covid-19', Business standard, dated 24 March 2020



Key policy recommendations

Recommendations	Short term	Medium to long term
Tax and compliances related	<ul style="list-style-type: none"> Relaxation of regulatory compliances and Quality of Service (QoS) norms similar to those relating to work from home guidelines to be initiated Provision for additional spectrum both access and backhaul microwave on a temporary basis Telecom and digital infrastructure should be given the status of essential services so that staff and engineers have access to network operations center and data centers. 	<ul style="list-style-type: none"> Easing of taxes and levies to remove the financial burden of the sector Deadline to discuss the AGR issues should be postponed for at least a quarter.
Easing financial stress in the sector	<ul style="list-style-type: none"> Provide financial aid for companies to expand network roll outs. 	<ul style="list-style-type: none"> Provide moratorium for spectrum dues, so that money can be utilised for network roll outs and expansions
Support for end customer	<ul style="list-style-type: none"> Leverage advanced technologies including IoT, OMNI channels, AI to make services available and enhance customer experience 	<ul style="list-style-type: none"> Expand use of collaborative tools for ease in work from home Develop infrastructure for comprehensive and robust cyber security and data storage capacities Establish cloud system as a new normal.
Others	<ul style="list-style-type: none"> Use telecom as an enabler to implement transformational technologies like, tele-medicine, teleconferencing 	<ul style="list-style-type: none"> Develop solutions if required, in collaboration with start-ups/ technology providers to offer intelligent risk scanning of the virus, e-medicine, emergency response services, and other innovative solutions that will take health and safety solutions to the masses Explore use of blockchain.



Sector overview

Sector contribution to GDP and employment¹	<ul style="list-style-type: none"> • 14 per cent of GDP (2018 – 19) • 8.27 million (H1: 2018 – 19)
Government spending²	INR1,700 billion
Market size³	USD215 billion (2020)
Global performance⁴	Ranked 44 th in Logistics Performance Index 2018 among 160 countries
Logistics cost (per cent of GDP)⁵	13-14 per cent
Major projects	Bharatmala, Sagarmala and the Dedicated Freight Corridors
FDI equity inflows (per cent of total FDI)⁶	1.37 per cent* (Apr 2000 – Dec 2019)
Freight traffic⁷	Approx. 3.5 bn ton p.a.

*Sea transport and air transport

Impact on transport infrastructure

Parameter	Low	Med	High	Unknown	Comments
Supply-side					
Price variations of key raw materials		✓			Impact due to short term fluctuation in material cost
Production shutdown		✓			Low asset utilisation
Cash flow constraints		✓			Cash flow for construction
Supply chain disruption		✓			Impact low due to raw material supply challenges
Labour force	✓				Labour availability issue for limited duration
Imports (if applicable)					NA
Demand-side					
Lockdown/restrictions impact		✓			Project delay
Consumer sentiment					NA
Exports (if applicable)					NA

1. Sector overview, InvestIndia website, accessed on 26 March 2020

2. Union Budget Speech, Ministry of Finance, 1 February 2020

3. Economic Survey 2019-20, Ministry of Finance, Government of India, January 2020

4. Logistics Performance Index 2018, The World Bank, accessed on 26 March 2020

5. Debunking India's logistics myths, Mint, 23 March 2018

6. Quarterly factsheet on Foreign Direct Investment (FDI), April 2000-December 2019, Department for Promotion of Industry and Internal Trade

7. India Freight Traffic: Freight Originating, CEIC data, accessed on 25 March 2020



Impact on public transport services

Parameter	Low	Med	High	Unknown	Comments
Supply-side					
Price variations of key raw materials	✓				Fuel price reduction to have low impact
Production shutdown			✓		Low asset utilisation
Cash flow constraints			✓		Debt servicing
Supply chain disruption					
Labour force	✓				Availability not an issue
Imports (if applicable)					NA
Demand-side					
Lockdown/restrictions impact			✓		Artificial demand reduction
Consumer sentiment			✓		Impact from consumer sentiment
Exports (if applicable)					NA

Impact on logistics and freight services

Parameter	Low	Med	High	Unknown	Comments
Supply-side					
Price variations of key raw materials	✓				Positive impact due to reduce fuel prices
Production shutdown			✓		Low cargo volume impacts
Cash flow constraints			✓		Working cap and debt service challenges
Supply chain disruption			✓		Impact on cargo volume
Labour force	✓				Impact on daily services
Imports (if applicable)			✓		Impact on cargo volume
Demand-side					
Lockdown/restrictions impact			✓		Impact on cargo volume and revenue
Consumer sentiment					Not applicable
Exports (if applicable)			✓		Impact on cargo volume and revenue



Current and potential impact on the sector

- Transport and Logistics is an essential sector where supply is predominantly lower than the demand
- Crude price reduction is likely to **impact the transportation costs positively** in the short term
- **Pace of infrastructure project development is expected to slowdown in the medium term** possibly leading to time and cost overruns over the course of project development
- Reduced demand for logistics due to reduced production across sectors will put **downward pressure on prices across various transportation and logistics sub-sectors** like warehousing, freight transportation, among others
- **Freight traffic volume** spike typically witnessed in the months of February and March is expected to be **delayed and the slowdown is anticipated to persist until monsoon**. Post-monsoon, the demand is anticipated to spike on account of accrued consumer savings as well as onset of festive season
- **Asset utilisation across the transport and logistics sector anticipated to reduce in the short term**.
- Low impact on regularised labour force expected, Transport and Logistics being an essential sector. However, **daily wage earners to be adversely impacted in the short to medium-term** and expected to stabilise only once the demand picks up
- Transport and Logistics services sector is highly working capital intensive. **Reduced demand for these services is expected to impede the services in the short to medium term** due to cashflow constraints. This might further result into reduced discretionary spending by the sector
- Decreased passenger movement on urban transportation systems will **reduce utilisation of assets such as MRTS, SRTCs, cab aggregators** etc. which will adversely impact their revenue and operations
- A surge in private transport is anticipated as people have become wary of public transport due to perceived/potential health risks
- **Trucking sector is expected to witness immediate adverse impact** in the short-term on account of reduced demand due to decrease in production as well as domestic and EXIM trade
- **Ports are also expected to experience reduced traffic volumes** decreasing the overall utilisation level and revenues in short to medium term
- **Reduced freight volume** is expected to result into low utilisation of road and rail infrastructure
- Storage facilities such as warehouses, ICDs, MMLPs etc. which are majorly dependent on EXIM and domestic trade are expected to experience reduced cargo volume impacting revenues.

Key policy recommendations

Recommendations	Short term	Medium to long term
Tax and compliances related	<ul style="list-style-type: none"> • Relaxation in timelines and documentation for compliance • Tax benefits in the short term 	<ul style="list-style-type: none"> • Digitisation of compliance related processes
Easing financial stress in the sector	<ul style="list-style-type: none"> • Working capital/loan repayment support in the short-term from the banking sector 	<ul style="list-style-type: none"> • Relaxing terms on existing loans through measures like interest deferment, increased moratorium period etc.
Support for end customer	<ul style="list-style-type: none"> • Direct Benefit Transfer to daily wage earners impacted by the sector slowdown 	<ul style="list-style-type: none"> • Fair and transparent pricing of all relevant transport and logistic services through price caps etc.
Guidelines for transport	<ul style="list-style-type: none"> • Immediate guidelines for uniform measures of safe and hygienic travel • Address customer issues with cancelled tickets and rebooking after lockdown ends. 	<ul style="list-style-type: none"> • Policy support and standardisation for hygienic travel

Beyond COVID-19: Embracing the 'New Normal'

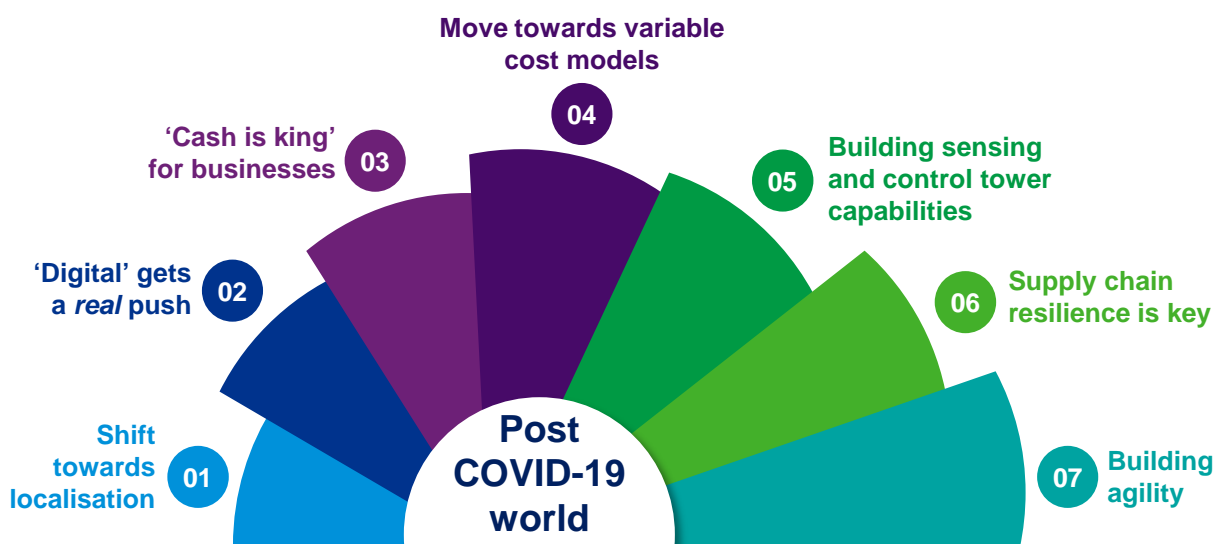
The increasing spread of COVID-19 has radically disrupted traditional patterns and networks of economic interaction and behaviour, and post this crisis, a new normal has to emerge. By now, it is fairly certain that the current downturn is fundamentally different from the recessions that we have seen in the past. This is not just another turn of the business cycle, but a shakeup of the world economic order. While countries and companies attempt to come to terms with the scale of this pandemic, it is evident that we are staring at more permanent, structural changes in the way we live, work and play.

The collective experience of going through this common crisis will lead to a fundamental re-evaluation of assumptions and priorities, which will be both a challenge and an opportunity.

We have summarised **seven** ways in which the business landscape could shift, not only in India, but the world around. Leveraging these will certainly help navigate the economically and socially viable path to the next normal:

1. The shift towards *localisation*

The supply chain disruption has brought to light the immediate and tangible impact of black swan events. That, along with the ongoing geopolitical environment and a globally recessionary climate is likely to lead to greater protectionism and risk aversion. This is expected to lead to greater localisation of supply chains, especially of essential commodities as well as for sectors that are perceived to be strategically important.



2. 'Digital' gets a *real* push

Most companies have opted to work remotely and their employees are now 'online' and working from home. While these trends were already 'in-motion', they have now hit the fast-forward button. Even the most traditional brick and mortar organisations have been forced to experiment with digital channels. This presents a real and immediate opportunity to drive efficiencies through digital media. At the same time, this crisis has highlighted the importance of investment in enabling technologies like cloud, data and cyber security.

This will change the way we work with far reaching implications on B2B, B2C, B2G services, commercial real estate, e-commerce, e-governance, cyber security, process automation, data analytics, self-service capabilities, etc.

3. 'Cash is king' for businesses

This situation has proven, once again, that cash is king - companies that are over leveraged and 'living on the edge' are the most vulnerable. The crisis has reiterated that it is important to be financially prudent and conserve cash.

4. Move towards variable cost models

One of the biggest lessons, amongst others, is the importance of reducing overall business costs. One significant way to accomplish this is to convert fixed costs to variable costs wherever feasible. For instance, businesses will now determine what they must keep in-house, and explore outsourcing the rest so that fixed costs can be lowered. As with other trends, this will further impact the labour force and 'how they work', contract manufacturing, supply chain considerations, etc.

5. Building sensing and control tower capabilities

Alternate data can offer quick insights that traditional approaches and tools may not offer. This is especially pertinent for areas where information is scarce or erratic. The downside to this are also challenges such as short histories, collection systems that are prone to change etc. Nevertheless, governments and companies have realised the importance of sensing capabilities, building transparency through 'digital control towers', 'digital twins' and the ability to process both structured and unstructured data.

For instance, analytics companies are now mining alternative data such as traffic jams, food orders etc. to track COVID-19 shock. This trend is only expected to pick-up.

6. Supply chain resilience is key

While localisation is a trend we covered earlier, individual companies will want to ensure their supply chains are resilient to remain competitive. Risks to supply chains are numerous and continuously evolving. Hence, it is imperative that resilience capabilities are developed in order to respond to repercussions of unexpected events and either quickly return to original state of business or move to a new and better state after being affected by the risk and continue business operations as efficiently as possible. Achieving this will require initiatives from both internal business as well as from the wider network.

7. Building agility

The ongoing pandemic is forcing countries and companies to take quick actions in the absence of perfect data, while remaining customer-centric, addressing employee needs and reinforcing stable team dynamics. It has also made them ponder upon the enabling mechanisms that need to be put in place to respond to any unexpected events in the future. Going forward, policies will need to evolve faster than the market and policymakers will need to be more responsive, inclusive and agile.

In sum, this crisis is a story with an uncertain ending. However, what is clear is COVID-19 has introduced new challenges to the business environment which call for a measured, practical and informed approach from political and business leaders. We also need to realise that COVID-19 is likely to lead to a new normal – being aware of and preparing for these shifts will help businesses and economies navigate in the post COVID-19 world

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