

A decorative graphic on the left side of the slide features a dark grey background with a grid of small, semi-transparent teal and green squares. A curved line of these squares arcs from the top left towards the center. Below this, there are several overlapping circles of various sizes and shades of teal and green, some with white outlines, and thin white lines connecting some of them.

COVID-19 India Perspective 4.0

Version: 24 April 2020

COVID-19 India Perspective 4.0

Objectives of this document

COVID-19 is a global societal crisis

We at BCG believe that the COVID-19 outbreak is first and foremost a societal crisis, threatening lives and the wellbeing of our global community. Society now, more than ever, needs to collaborate to protect people's lives and health, manage mid-term implications and search for lasting solutions.

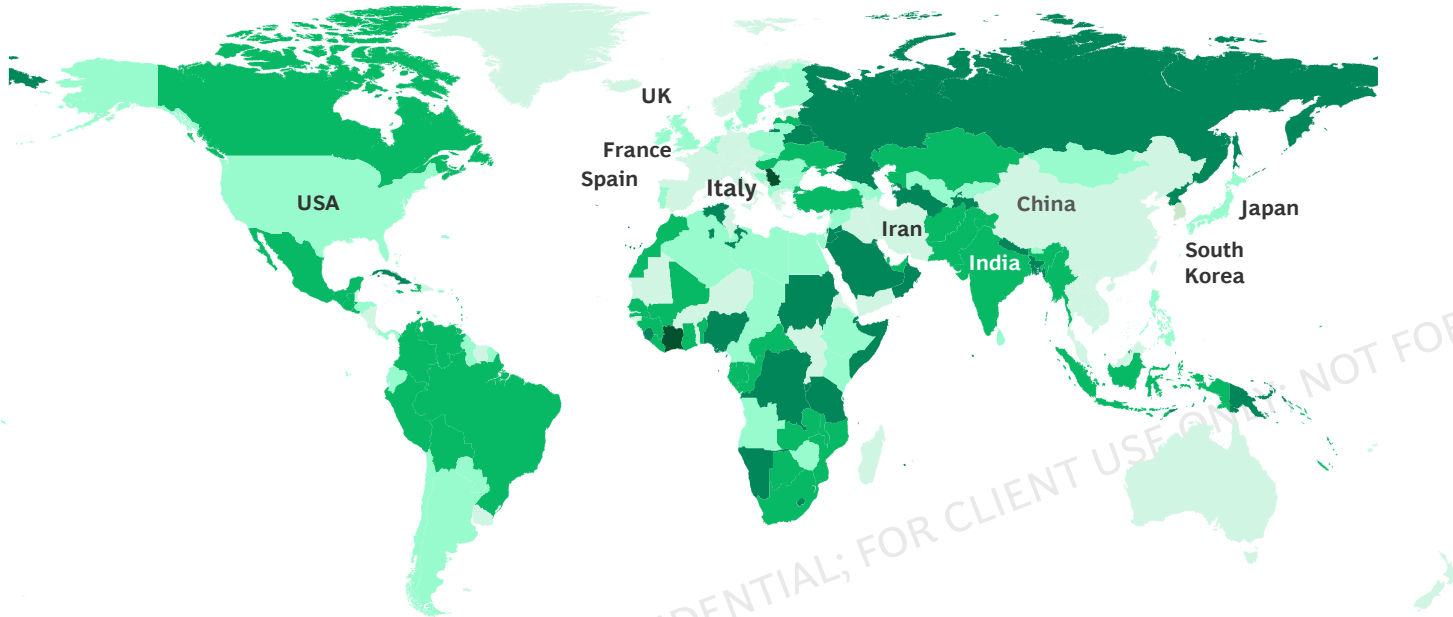
Imperative for business leaders to decode the continuously evolving COVID-19 scenario

The COVID-19 outbreak has led to unprecedented situations along all fronts. Five weeks through the lockdown period in India, businesses are starting to adapt to these uncertainties. In order to make decisions in this continuously evolving scenario, it is important to decode the COVID-19 impact across its chain of effect: ***Epidemiological > Public Policy > Social > Economical***. This document presents few early trends and indicators observed in the current COVID-19 situation in India.

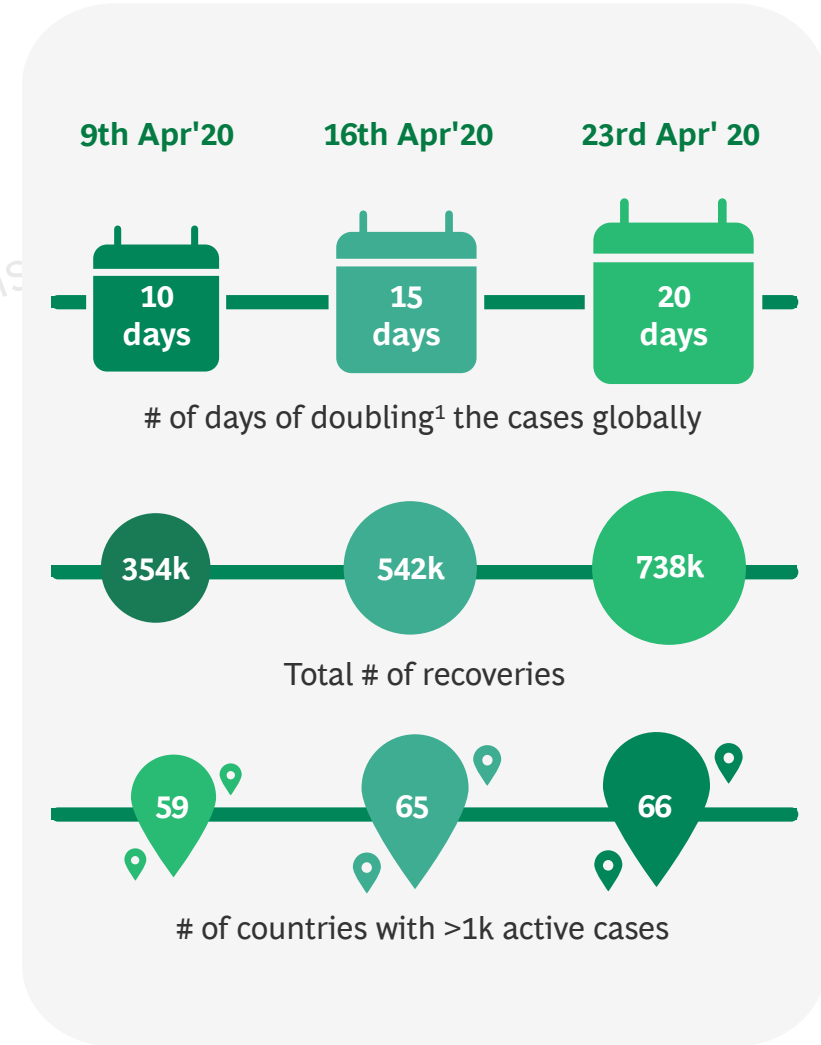
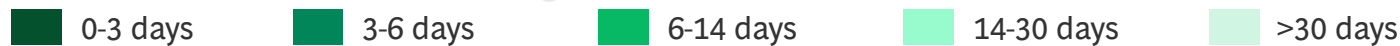
COVID-19 pandemic spread: Cases doubling every ~20 days¹ globally

DISEASE PROGRESSION & HEALTHCARE CAPACITY

As of 23 April 2020



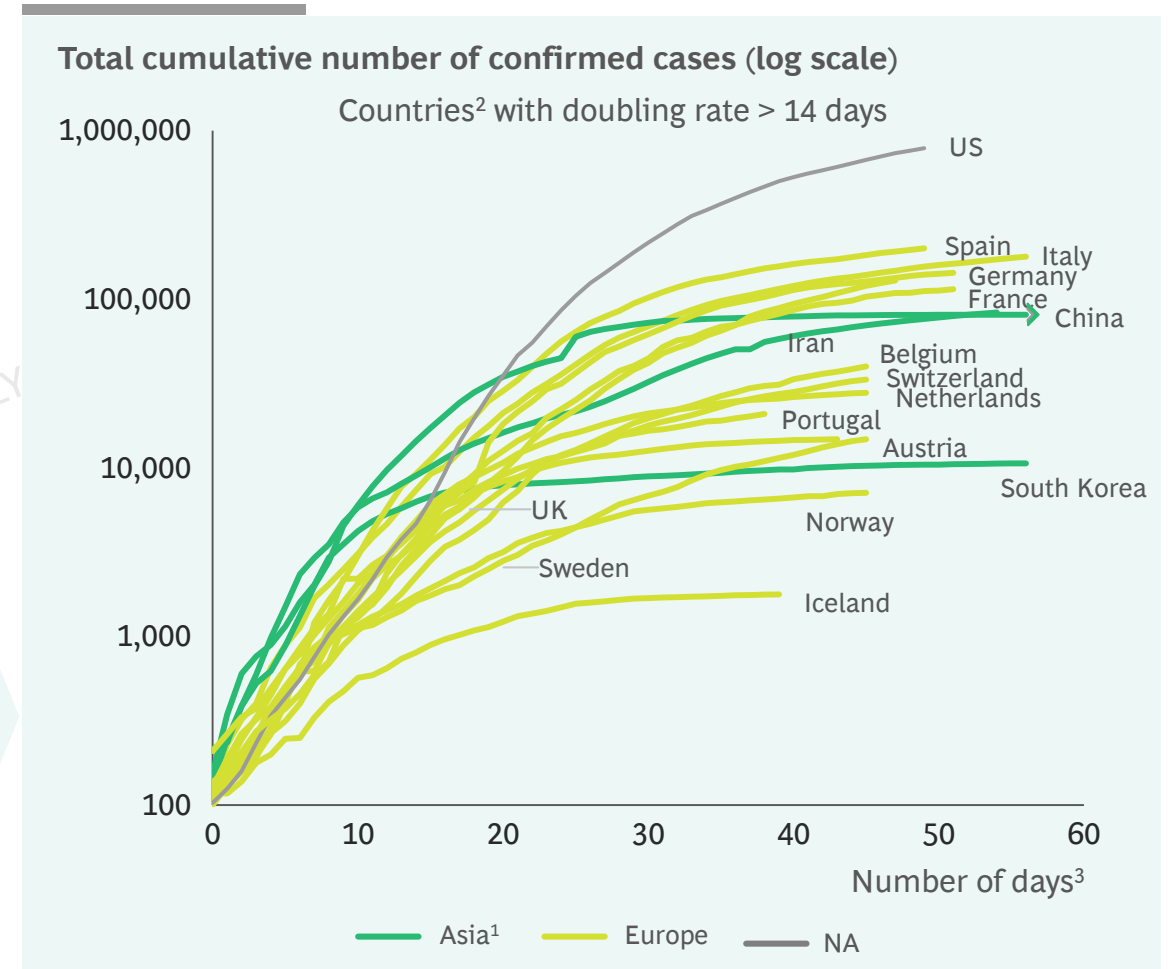
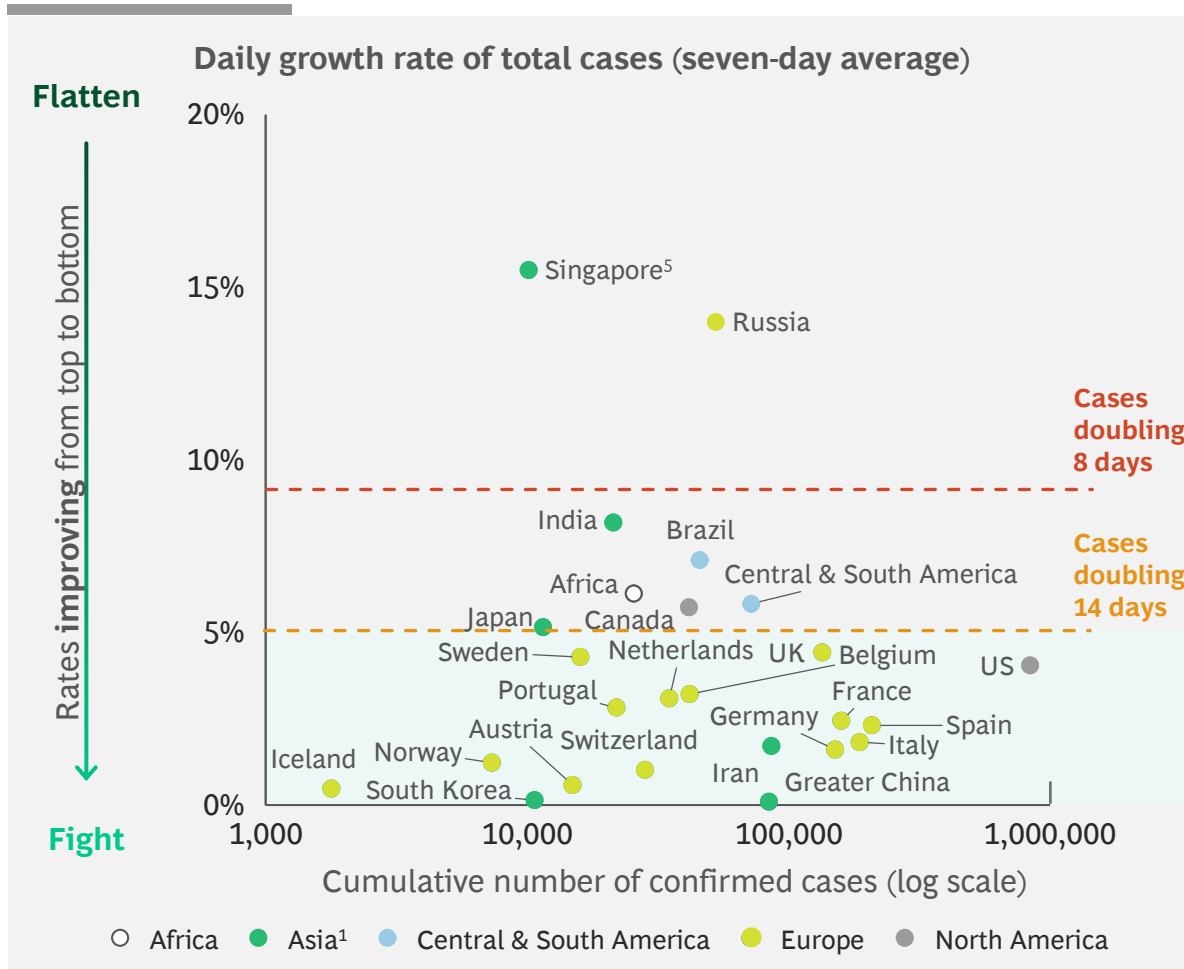
Days of doubling cases:



Note: Continued cases and fatalities are subject to different testing, propensity, reporting standards and hence imperfect measures
 1. No. of doubling days based on 7 day CAGR 2. Basis Johns Hopkins CSSE ; 3. Daily growth rate basis 7 day CAGR
 Sources: Johns Hopkins CSSE, Our world in data, WHO situation reports, BCG analysis

Disease progression | Many countries currently flattening the curve

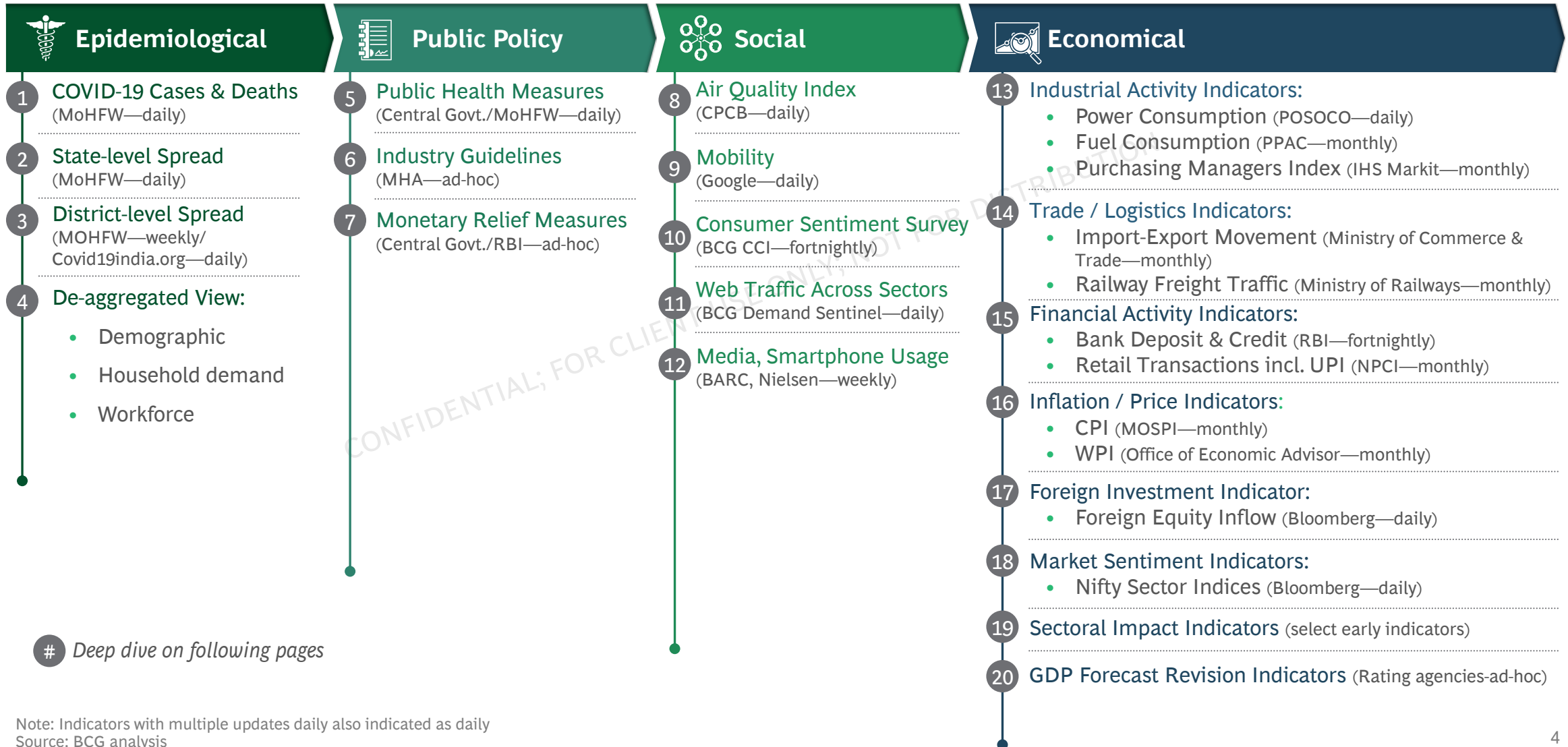
As of 22 April 2020



1. Includes Middle East 2. Countries selected from the chart on the left 3. # of days after exceeding 100 confirmed cases 4. Excludes Brazil 5. Singapore observed a steady decline in growth rate of cumulative cases from 22 Mar to 6 Apr post which the rate has mostly increased as of 22 Apr 2020. Source: Johns Hopkins CSSE, Our World in data, WHO situation reports

COVID-19 impact in India can be assessed and tracked along its chain of effect

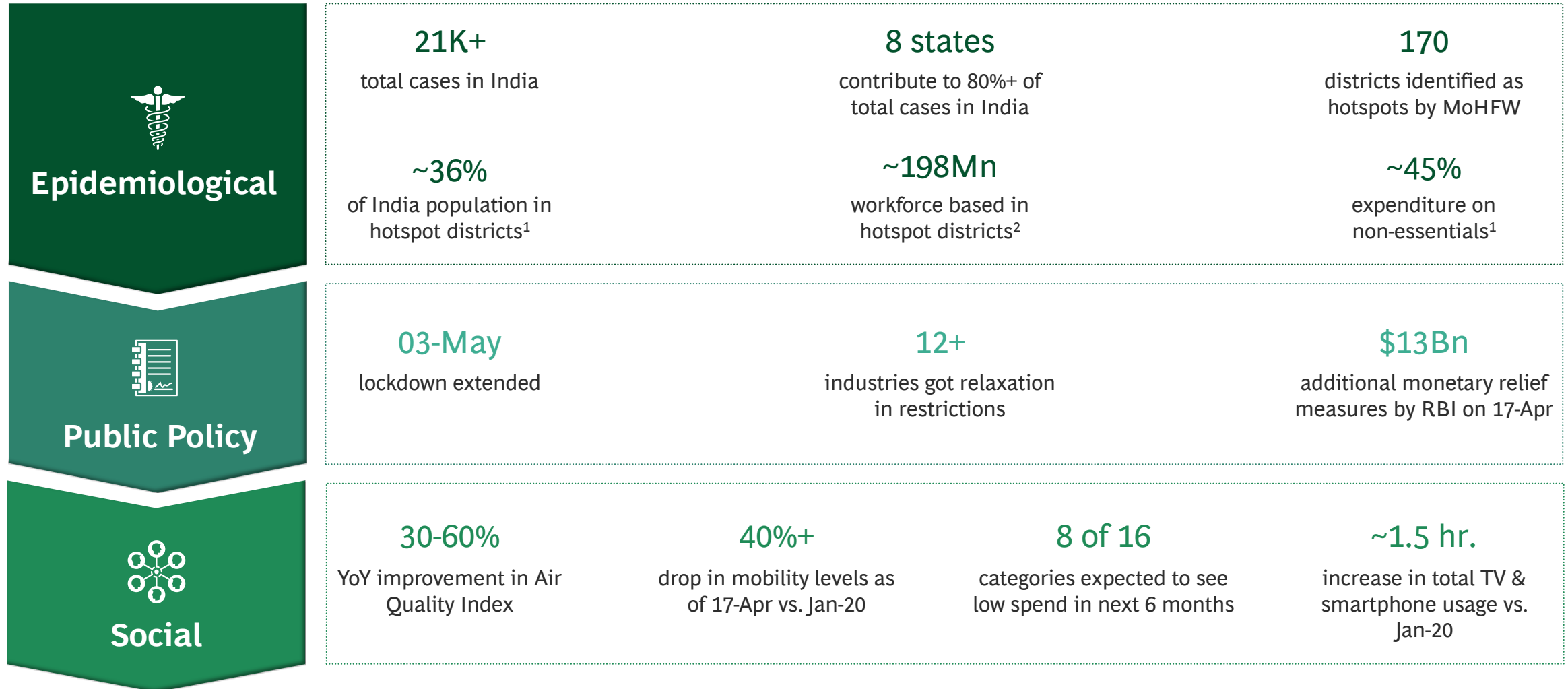
Not exhaustive



Note: Indicators with multiple updates daily also indicated as daily
Source: BCG analysis

Summary: Decoding the COVID-19 impact across its chain of effect (I/II)

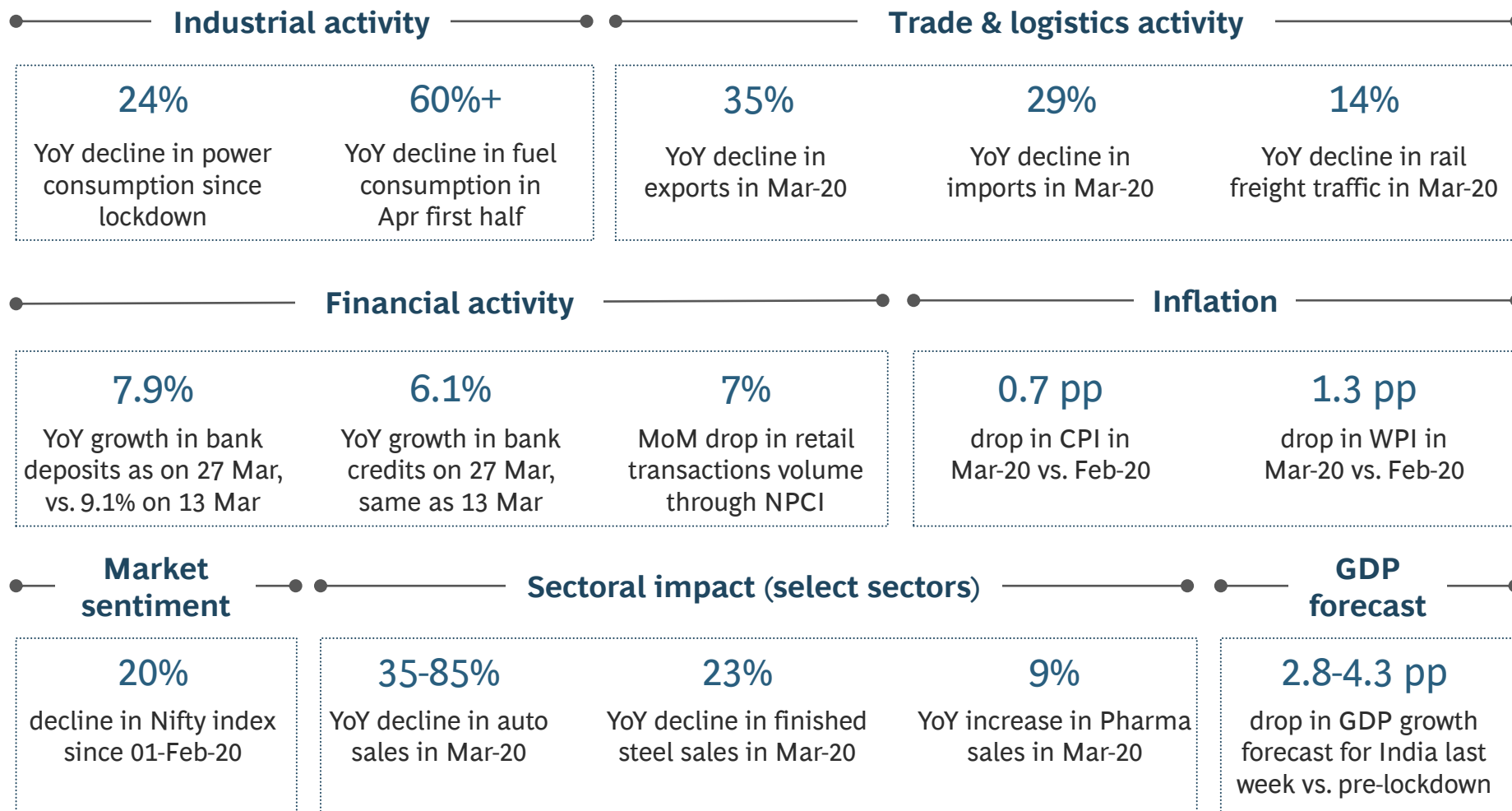
Data as on 23-Apr



1. Based on past data distribution from Nielsen-Indicus database 2017-18; 2. Based on past data workforce expenditure data from PLFS workforce survey 2017-18

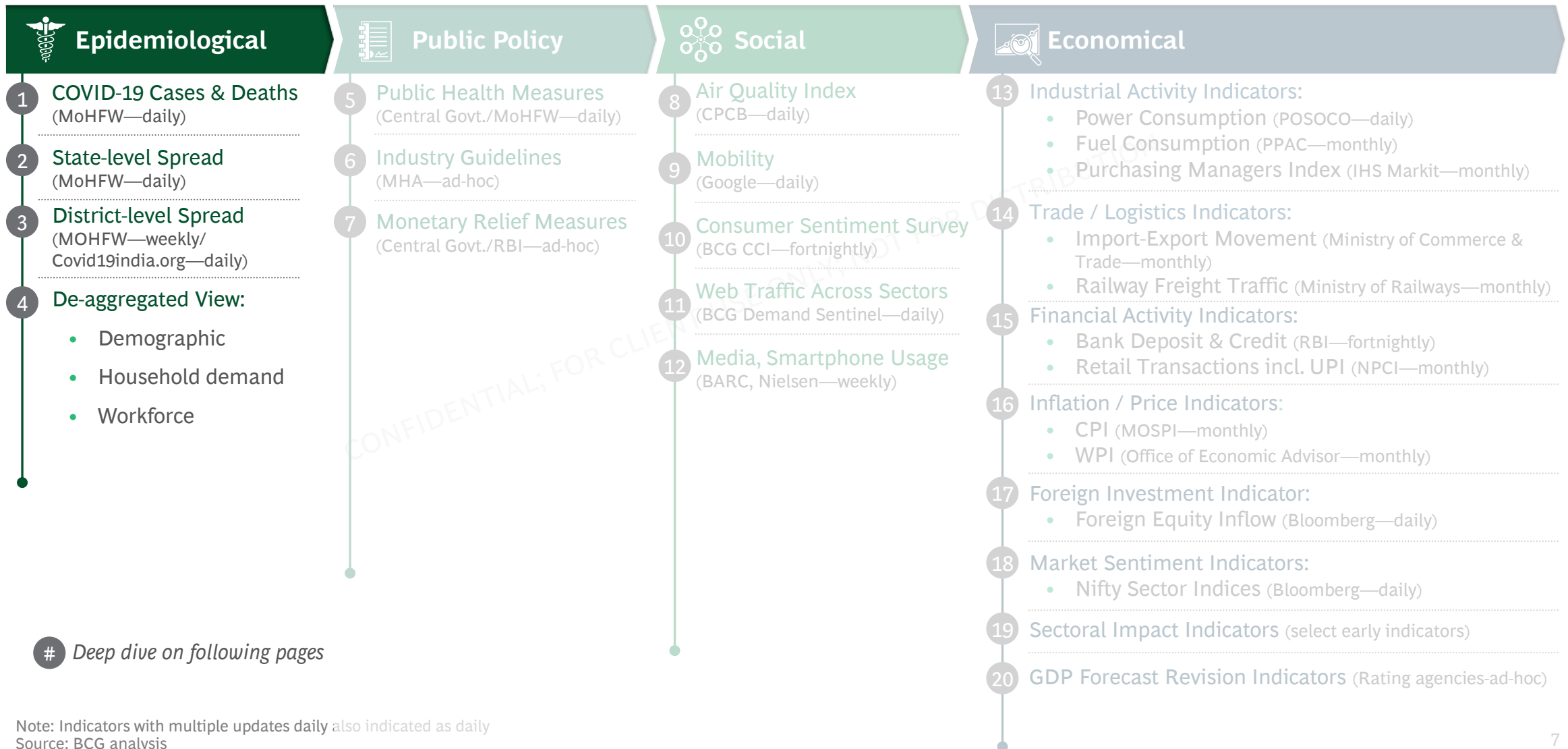
Summary: Decoding the COVID-19 impact across its chain of effect (II/II)

Data as on 23-Apr



COVID-19 impact in India can be assessed and tracked along its chain of effect

Not exhaustive



Note: Indicators with multiple updates daily also indicated as daily
Source: BCG analysis

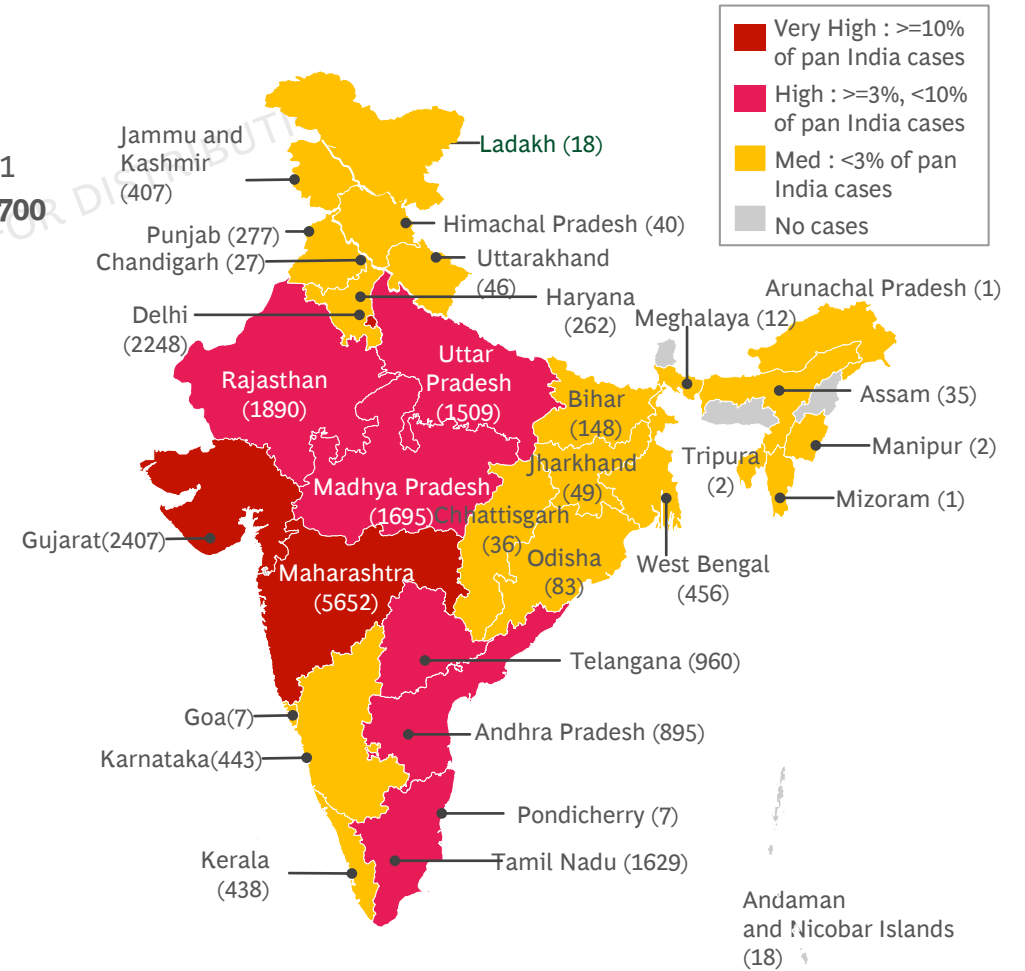
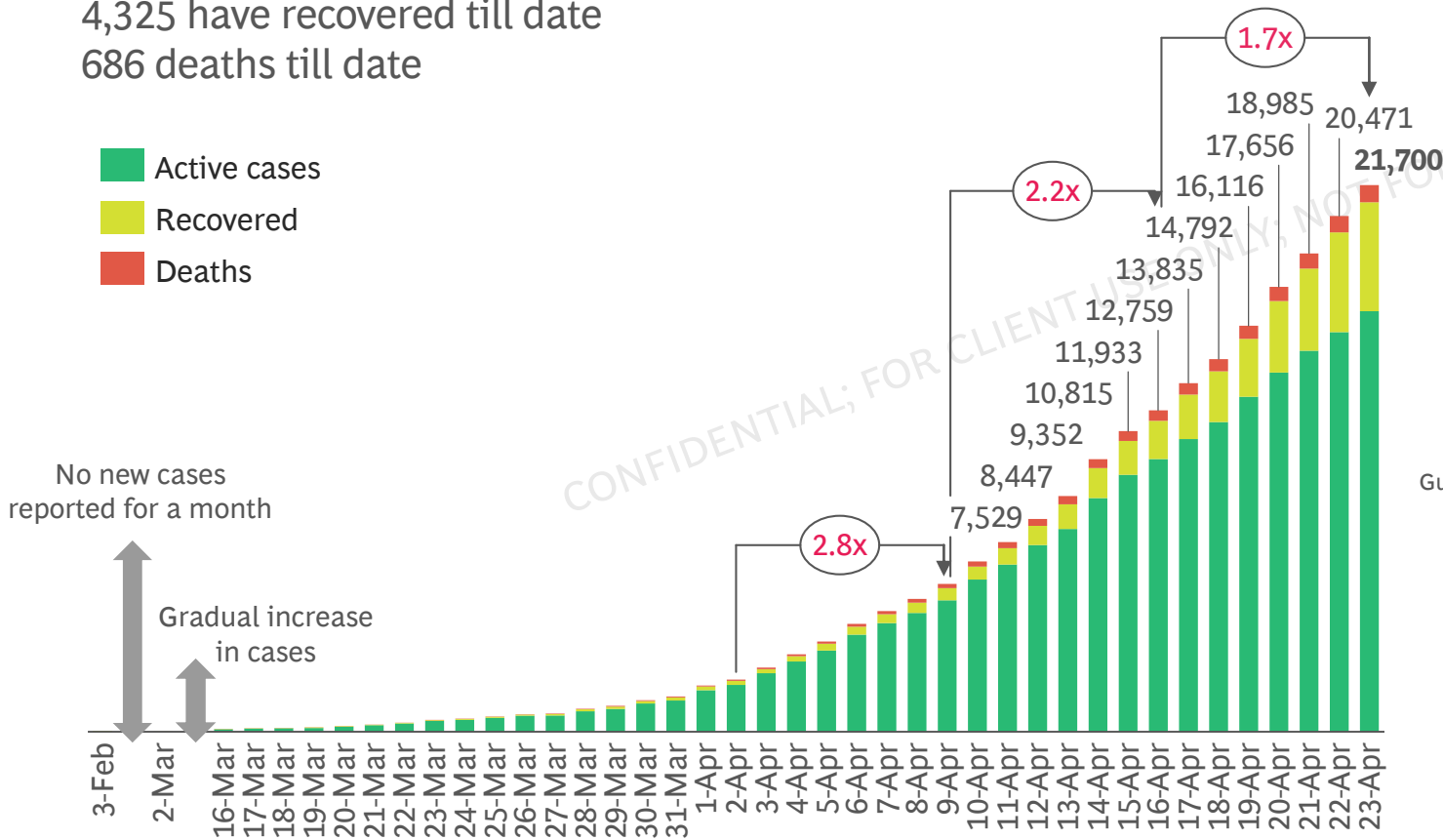
COVID-19 cases in India have increased by 1.7x in the last week, to hit 21k+ cases in total

Data as of 23 Apr

No. of COVID-19 cases in India are on the rise

8,941 new cases added in India over last week;
4,325 have recovered till date
686 deaths till date

Active cases
Recovered
Deaths



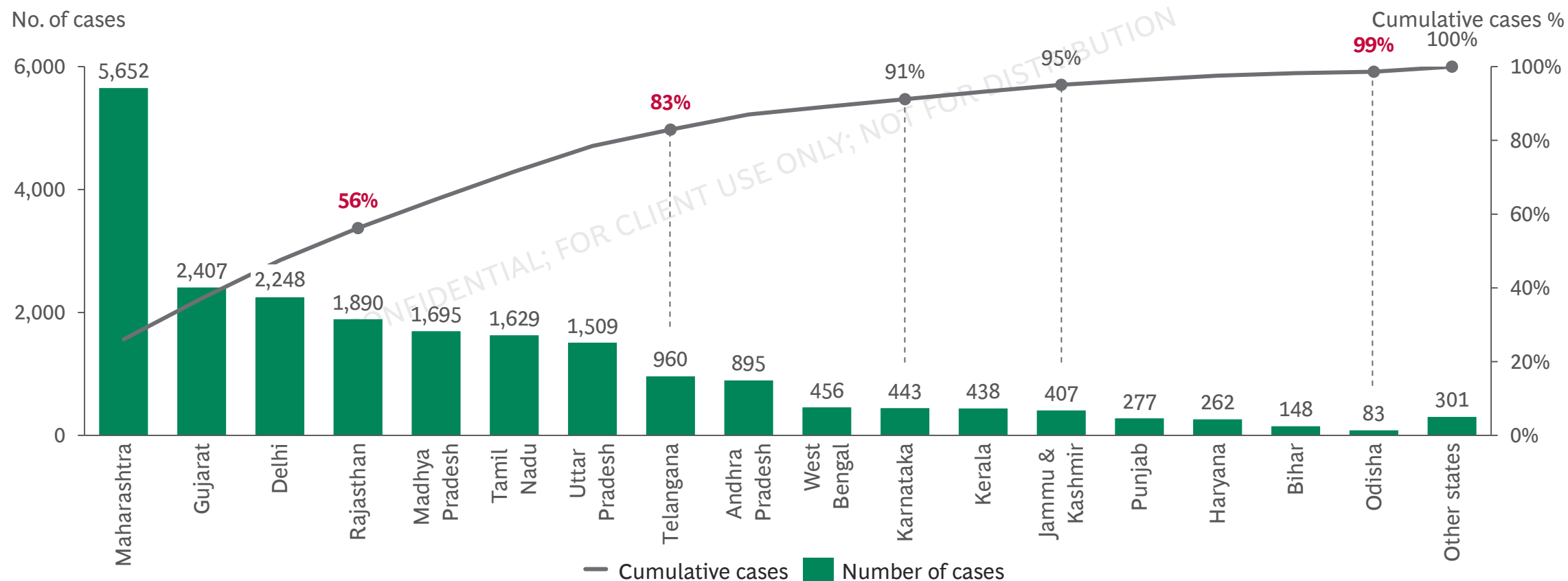
Source: Ministry of Health & Family Welfare (MoHFW) website; Press reports; BCG analysis

8 states contain ~80% of all COVID-19 cases in India

17 states contain ~99% of all cases

Data as of 23 Apr

Spread of cases by states



Source: Ministry of Health & Family Welfare (MoHFW) website; Press reports; BCG analysis

170 districts spread across 25 states & UTs identified as hotspots by Ministry of Health & Family Welfare (MoHFW)

Ministry of Health & Family Welfare (MoHFW) has issued district classification guidelines on 15th Apr 2020 for effective implementation of containment measures

As per guidelines, 3 district categories based on intensity & growth of disease spread:

Hotspot districts¹

Districts contributing to >80% cases in India or within a state, and doubling rate <4 days²

Non-hotspot districts¹

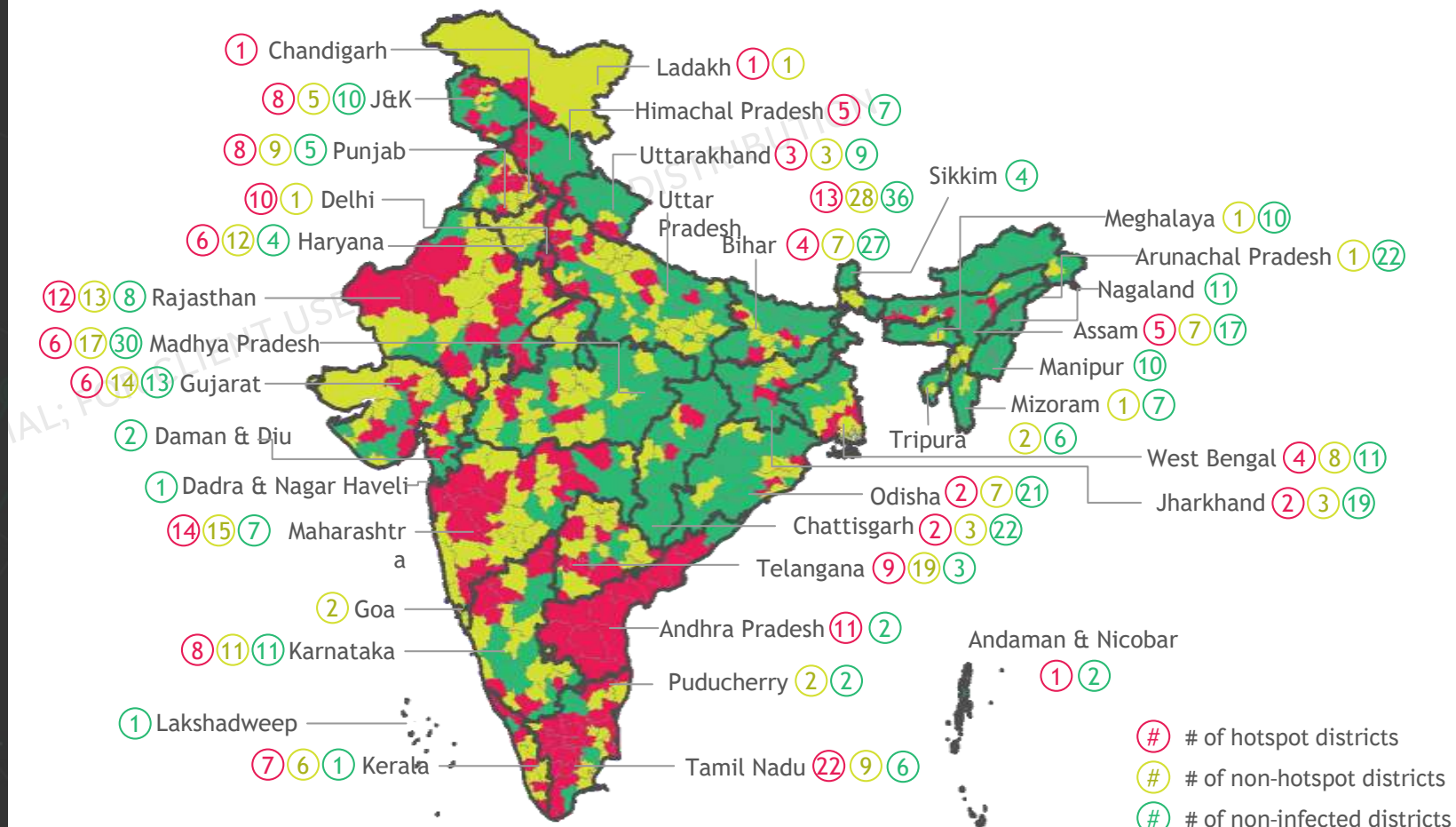
Districts which are not hotspots, but cases have been reported

Non-infected districts¹

Districts with no COVID-19 cases, or where no new cases have been reported in last 28 days

District classification as per MoHFW guidelines on 15 Apr

District level view as per MOHFW guidelines



1. Hotspot, non-hotspot & non-infected districts as defined by Ministry of Health & Family Welfare, Government of India on 15th Apr 2020 have been used; 2. Doubling rate to be calculated every Monday for the last 7 days
 Source: MoHFW guidelines 15th Apr; Press reports, BCG analysis

17 out of 170 hotspots had no new cases in the last 11 days¹; continuous monitoring required to identify potential re-classification

As per Ministry of Health & Family Welfare (MoHFW) guidelines, states need to implement strict disease containment measures in hotspot districts

Based on the effectiveness of containment measures, hotspot districts will be re-classified as follows:

Hotspot districts (designated red zones)²

Districts contributing to >80% cases in India or within a state, and doubling rate <4 days²



Hotspot districts (designated orange zones)²

Red zones where no new cases reported in last 14 days, i.e. containment operations deemed effective



Non-infected districts (designated green zones)²

Orange zones where no new cases reported in last 14 days, i.e. containment operations deemed successful

Districts with no cases from 10-21 Apr time period as per MOHFW data

No. of cases data as of 21 Apr

District classification as per MoHFW guidelines on 15 Apr

State	District
Andhra Pradesh	Visakhapatnam
Assam	Golaghat
Assam	Nalbari
Bihar	Gaya
Bihar	Siwan
Chattisgarh	Raipur
Himachal Pradesh	Sirmaur
Kerala	Ernakulam
Kerala	Thiruvananthapuram
Kerala	Wayanad
Punjab	Amritsar
Punjab	Mansa
Punjab	Moga
Punjab	Shahid Bhagat Singh Nagar
Rajasthan	Bhilwara
Rajasthan	Udaipur
Uttarakhand	Udham Singh Nagar

Note: Above list is an analysis based solely on publicly available information as of 21 Apr, actual classification by the government of India might differ. Also, the situation is constantly evolving, making this list subject to change
1. Analysis & data as of 21 Apr; 2. Hotspot, non-hotspot & non-infected districts as defined by Ministry of Health & Family Welfare, Government of India on 15th Apr 2020 have been used;
Methodology: MoHFW district data as of 21st Apr compared with data as of 10th Apr to identify districts with no new cases
Source: Ministry of Health & Family Welfare (MoHFW) district reporting data

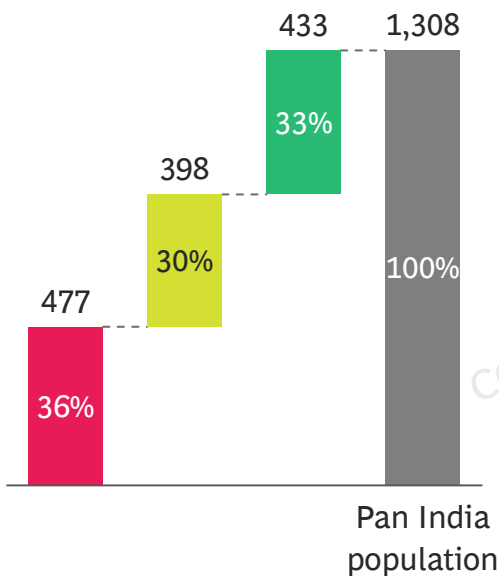
~36% (477M) of India's population lives in hotspot districts, of which ~27% (126M) lives in Metros & Tier 1 cities

District classification as per MoHFW guidelines on 15 Apr

~36% of India population in hotspot districts

50% (239M) of hotspot district population from rural sub-districts

Population (Millions)¹



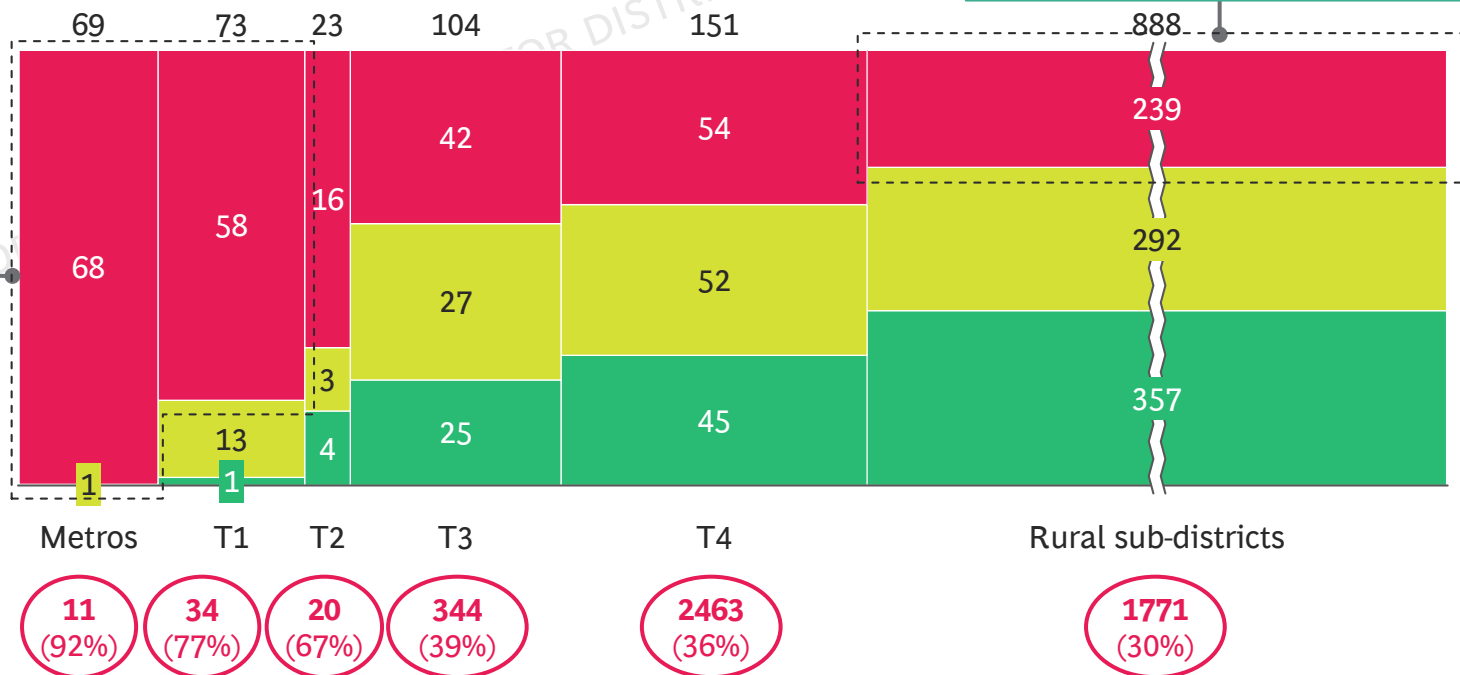
- Hotspot districts
- Non-hotspot districts
- Non-infected districts

Population (Millions)¹ across sub-districts / tier classification

80%+ population in metros & Tier 1 cities (126M) live in hotspot districts; This constitutes 27% of total hotspot district population

27% population in rural sub-districts (239M) live in hotspot districts; This constitutes ~50% of total hotspot district population

No. of sub-districts / towns which are part of hotspot districts



1. Data compiled in 2017-18

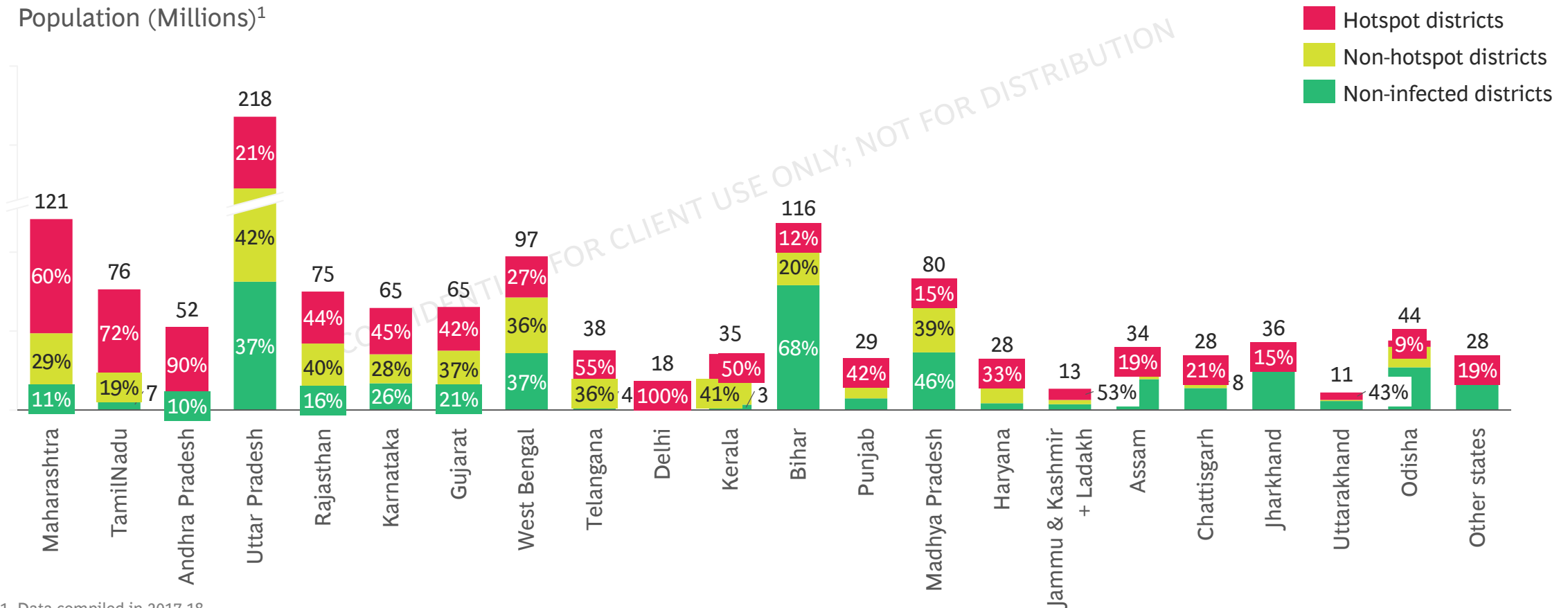
Hotspot, non-hotspot & non-infected districts as defined by Government of India (Ministry of Health & Family Welfare) on 15th Apr 2020 have been used
Source: Nielsen-Indicus database 2017-18, BCG Center for Consumer Insight, Press reports, BCG Analysis

Maharashtra, Tamil Nadu, Andhra Pradesh, Uttar Pradesh have high population in hotspot districts

District classification as per MoHFW guidelines on 15 Apr

Population in hotspot, non-hotspot & non-infected districts by state

Population (Millions)¹



1. Data compiled in 2017-18

Hotspot, non-hotspot & non-infected districts as defined by Government of India (Ministry of Health & Family Welfare) on 15th Apr 2020 have been used

Source: Nielsen-Indicus database 2017-18, BCG Center for Consumer Insight, Press reports, BCG Analysis

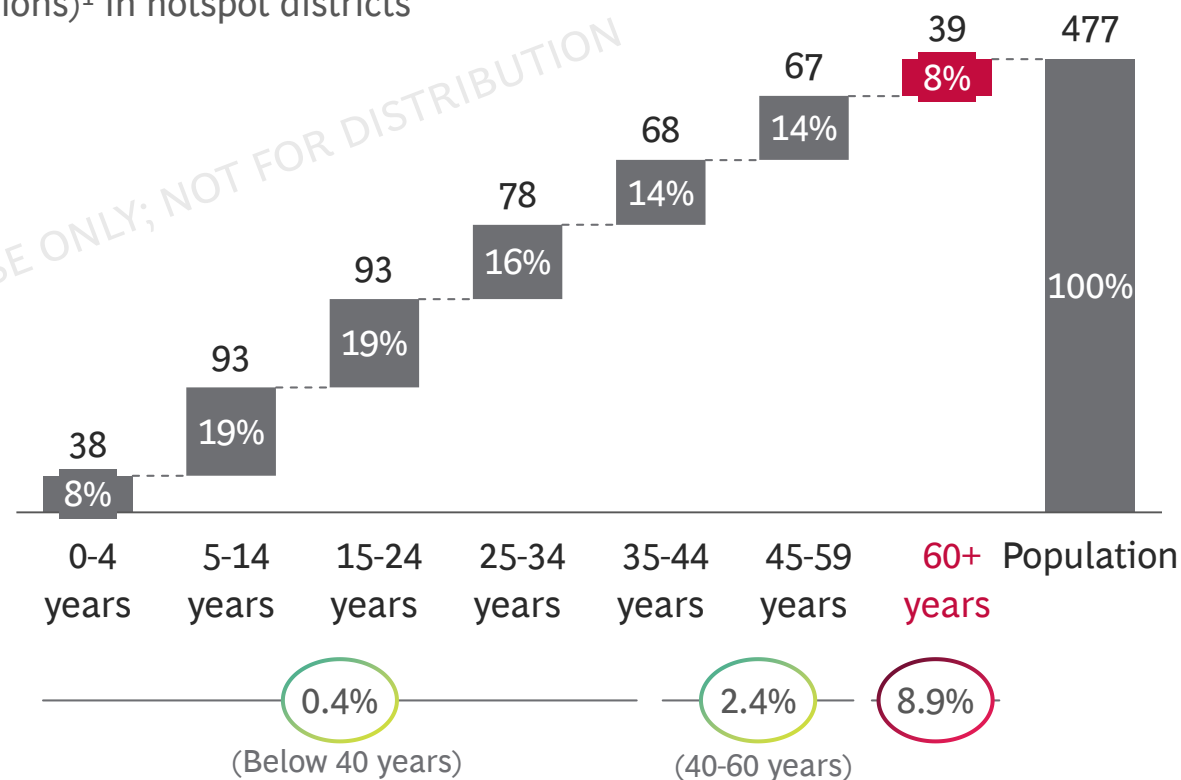
Demographics:
8% of population
in hotspot
districts are
above 60 years of
age

District classification as per
MoHFW guidelines on 15 Apr

EPIDEMIOLOGICAL
DE-AGGREGATED VIEW
DEMOGRAPHICS

Age-wise population distribution in hotspot districts

Population (millions)¹ in hotspot districts



Fatality rates
(as per Ministry
of Health data)²

1. Data compiled in 2017-18

2. As per age related data released by the Ministry of Health & Family Welfare on 6th April 2020

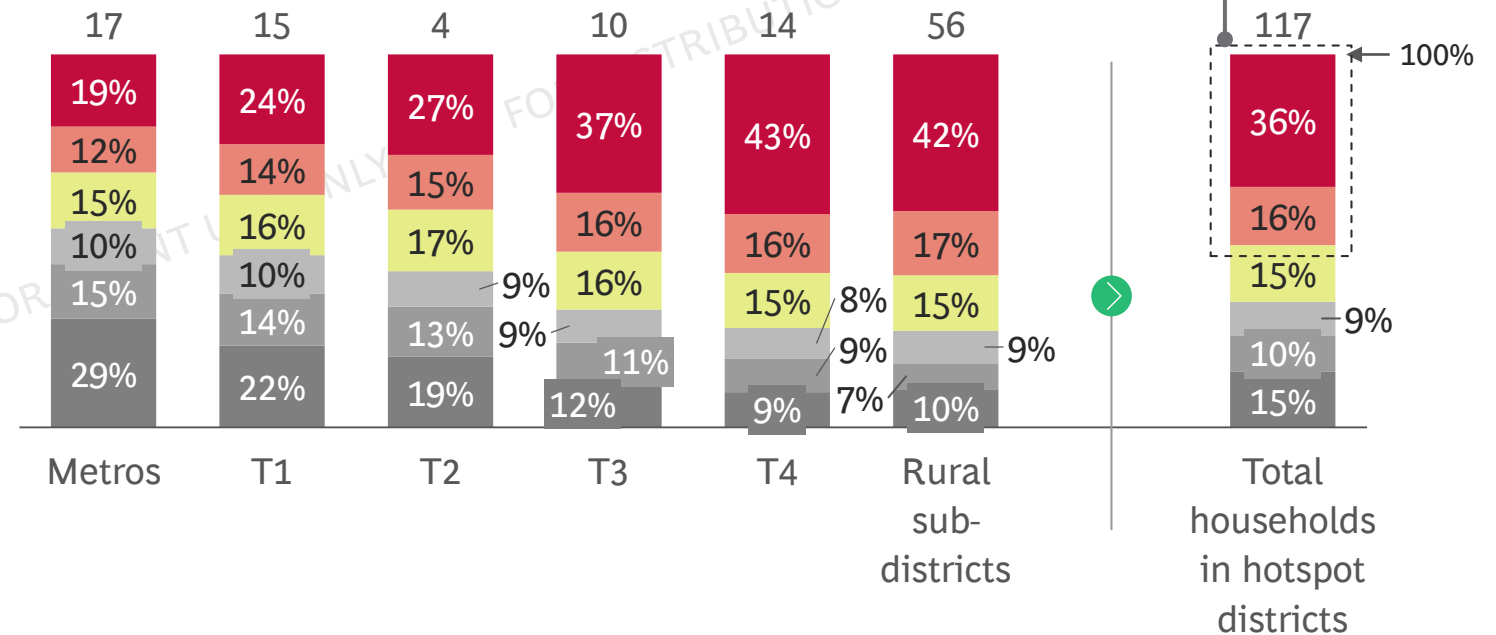
Hotspot, non-hotspot & non-infected districts as defined by Government of India (Ministry of Health & Family Welfare) on 15th Apr 2020 have been used

Source: Nielsen-Indicus database 2017-18, BCG Center for Consumer Insight, Press reports, BCG Analysis

Demographics:
~52% of
households in
hotspot districts
have annual
incomes below
1.5 L

Income distribution of households in hotspot districts, across tiers / sub-districts

Number of households (in millions)¹ in hotspot districts



Annual income per household (in INR)

■	< 0.75 L	■	1.5 L to 3 L	■	5 L to 10 L
■	0.75 L to 1.5 L	■	3 L to 5 L	■	> 10 L

1. Data compiled in 2017-18

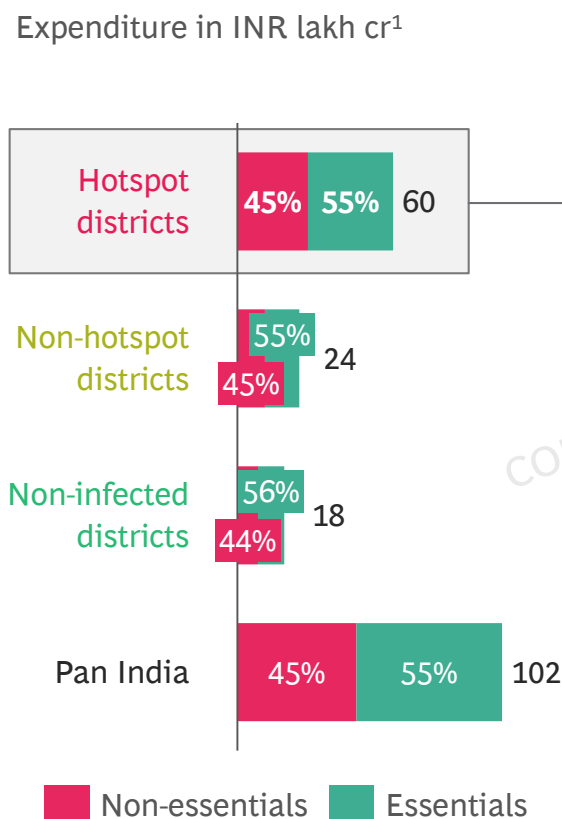
Hotspot, non-hotspot & non-infected districts as defined by Government of India (Ministry of Health & Family Welfare) on 15th Apr 2020 have been used

Source: Nielsen-Indicus database 2017-18, BCG Center for Consumer Insight, Press reports, BCG Analysis

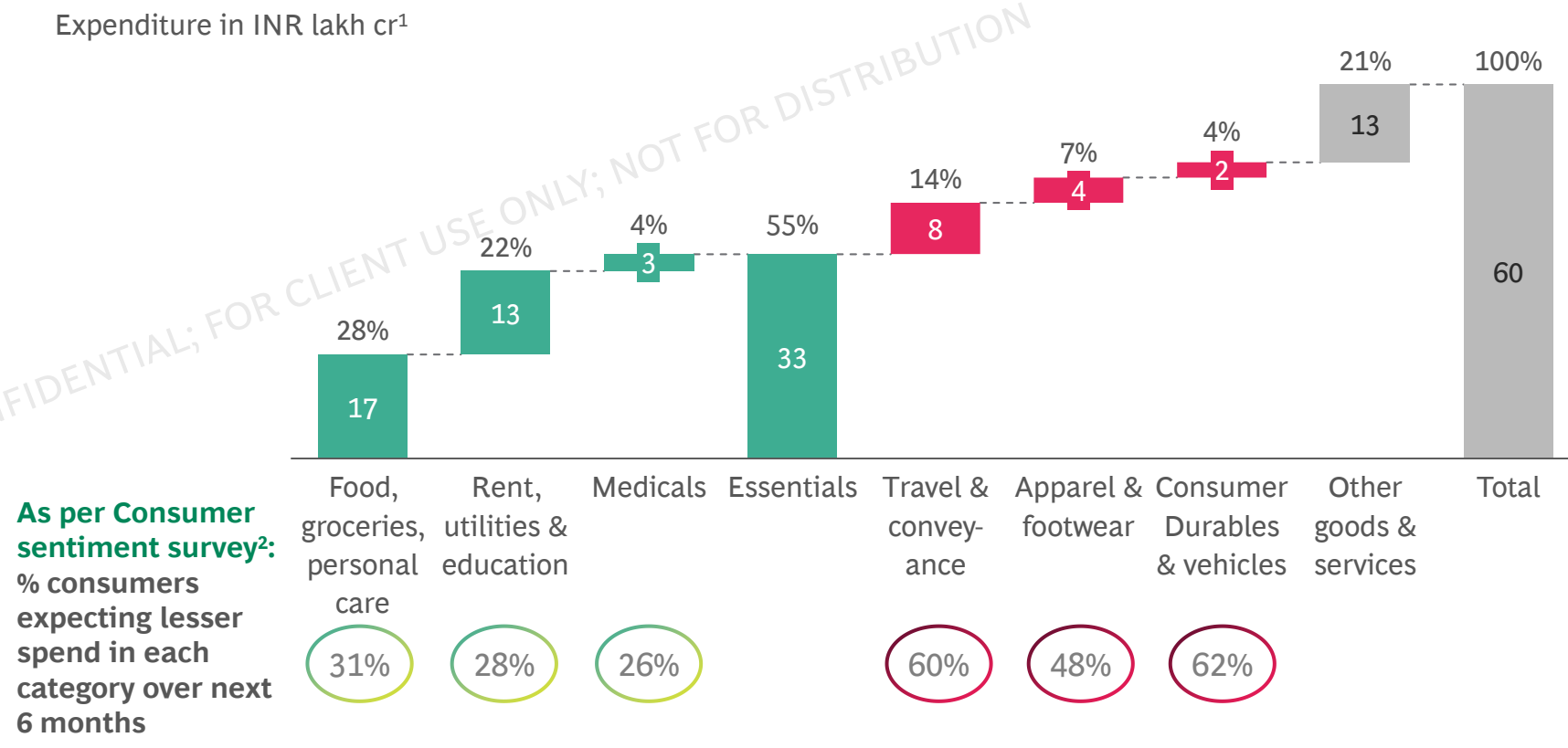
~45% of pan India household expenditure is on non-essential goods, prone to impact from lockdown

District classification as per MoHFW guidelines on 15 Apr

Hotspots contribute to ~60% of total household expenditure



~45% of household expenditure in hotspots is on non-essentials; mainly split between travel & conveyance, durables & apparel



As per Consumer sentiment survey²: % consumers expecting lesser spend in each category over next 6 months

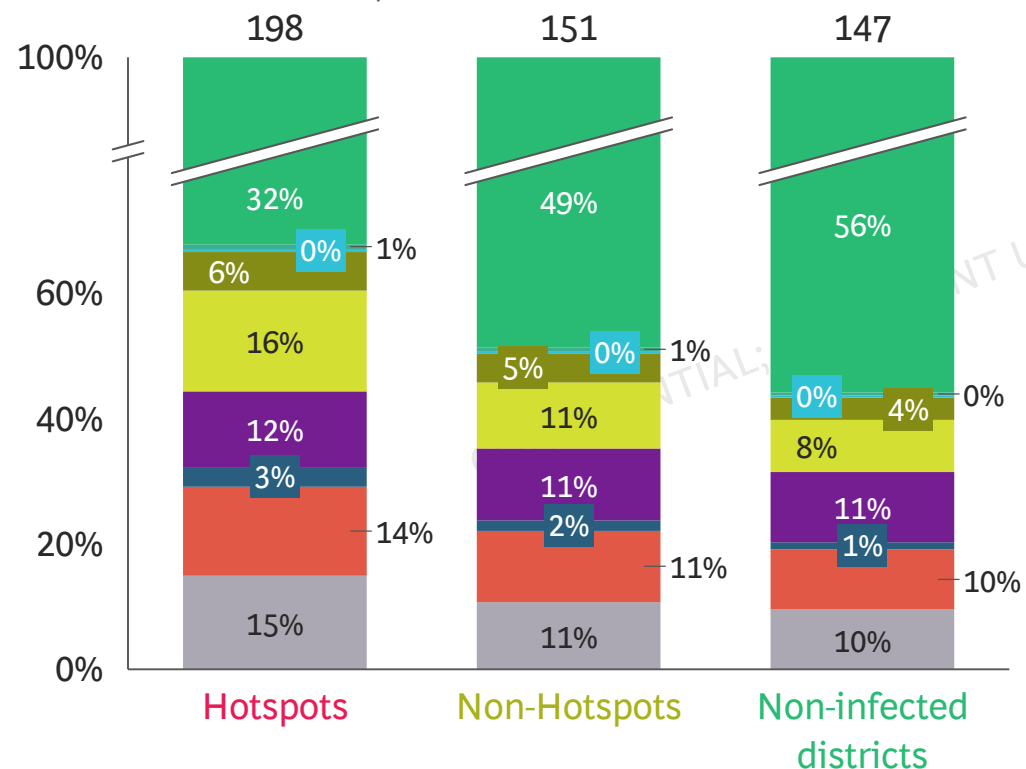
1. Data compiled in 2017-18; 2. Results as per BCG COVID-19 consumer sentiment survey (India), March 23-26 2020
Hotspot, non-hotspot & non-infected districts as defined by Government of India (Ministry of Health & Family Welfare) on 15th Apr 2020 have been used
Source: Nielsen-Indicus database 2017-18, BCG Center for Consumer Insight, Press reports, BCG Analysis

~198M workforce employed in hotspot districts; ~14% employed in fully restricted sectors, while ~51% in partially restricted sectors

District classification as per MoHFW guidelines on 15 Apr

Estimates of sector-wise split of workforce across districts

Workforce in millions, with % share of each sector



Sector

Sector	Restrictions as per Ministry of Home Affairs guidelines; subject to guidelines by states
Agriculture	Fully allowed to operate ¹
Utility services	Fully allowed to operate
Mining	Not restricted
Transportation & storage	Goods transportation & storage not restricted; Passenger transportation fully restricted
Manufacturing	Partially restricted - allowed in rural, SEZ areas; Essentials not restricted
Construction	Partially restricted - allowed in rural, SEZ areas; Infrastructure projects not restricted
Financial & professional services	Financial services not restricted ¹ ; Other professional services partially restricted
Trade & hospitality	Fully restricted; Essentials not restricted
Other services	Partially to fully restricted

Legend: Not restricted Partially restricted Restricted

Methodology: Overlaid district wise and sector wise workforce split on 2017-18 state workforce data to estimate (1) Workforce in hotspots, non-hotspots, non-infected districts, (ii) Sector-wise split of workforce; Workforce split by district & by sector assumed unchanged since 2011-12

1. Activities not restricted in all areas except state identified containment zones (within hotspot districts)

Hotspot, non-hotspot & non-infected districts as defined by Government of India (Ministry of Health & Family Welfare) on 15th Apr 2020 have been used

Source: Census 2011-12 district workforce report, PLFS workforce survey 2017-18, BCG Analysis

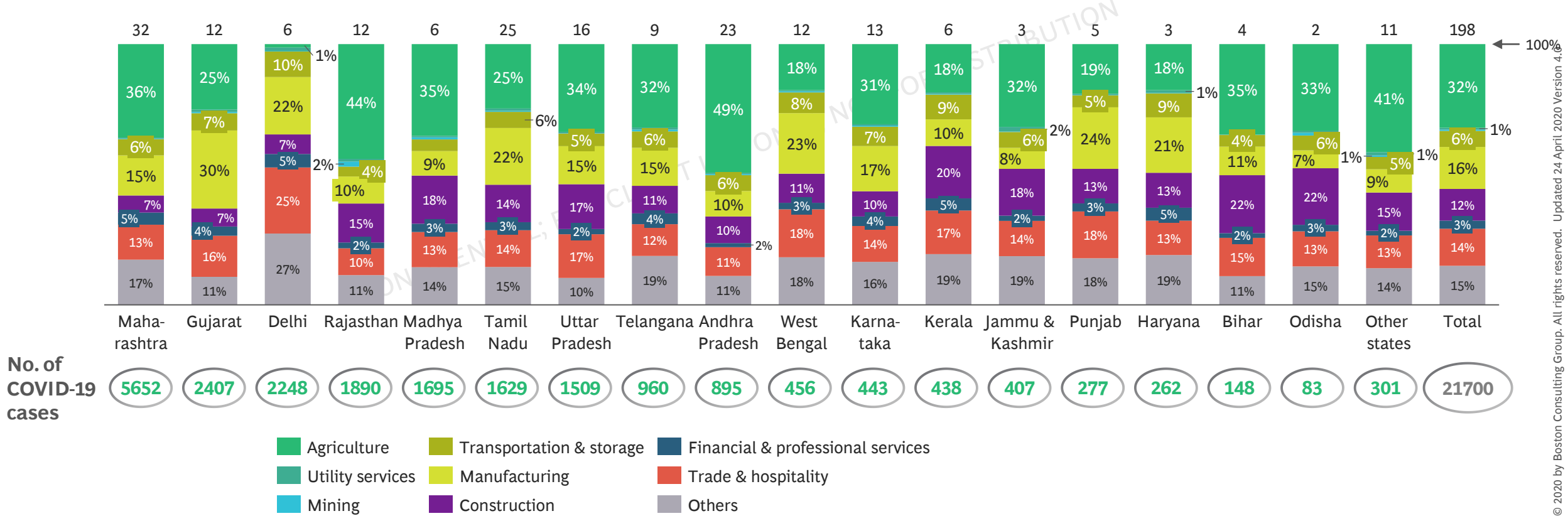
As per MoHFW guidelines, consolidated revised relaxation guidelines **do not apply on containment zones⁸**

Hotspot district workforce have varied sector split across top 17 exposed states

No. of cases data as of 23 Apr
 District classification as per MoHFW guidelines on 15 Apr

Estimates of sector-wise split of hotspot district workforce, across states

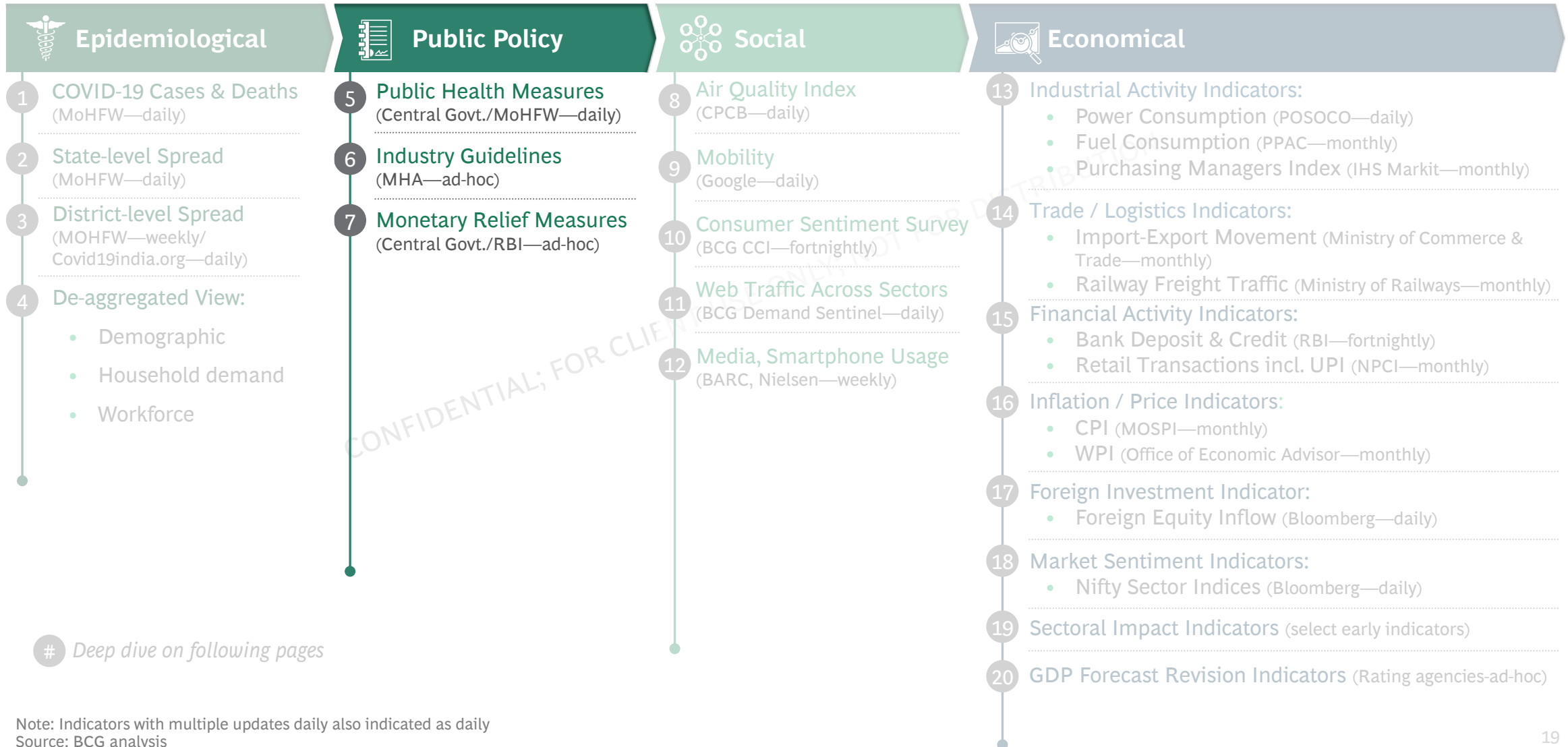
Workforce in millions, with % share of each sector



Methodology: Overlaid district wise and sector wise workforce split on 2017-18 state workforce data to estimate (1) Workforce in hotspots, non-hotspots, non-infected districts, (ii) Sector-wise split of workforce; Workforce split by district & by sector assumed unchanged since 2011-12
 Hotspot, non-hotspot & non-infected districts as defined by Government of India (Ministry of Health & Family Welfare) on 15th Apr 2020 have been used
 Source: Census 2011-12 district workforce report, PLFS workforce survey 2017-18, BCG Analysis

COVID-19 impact in India can be assessed and tracked along its chain of effect

Not exhaustive

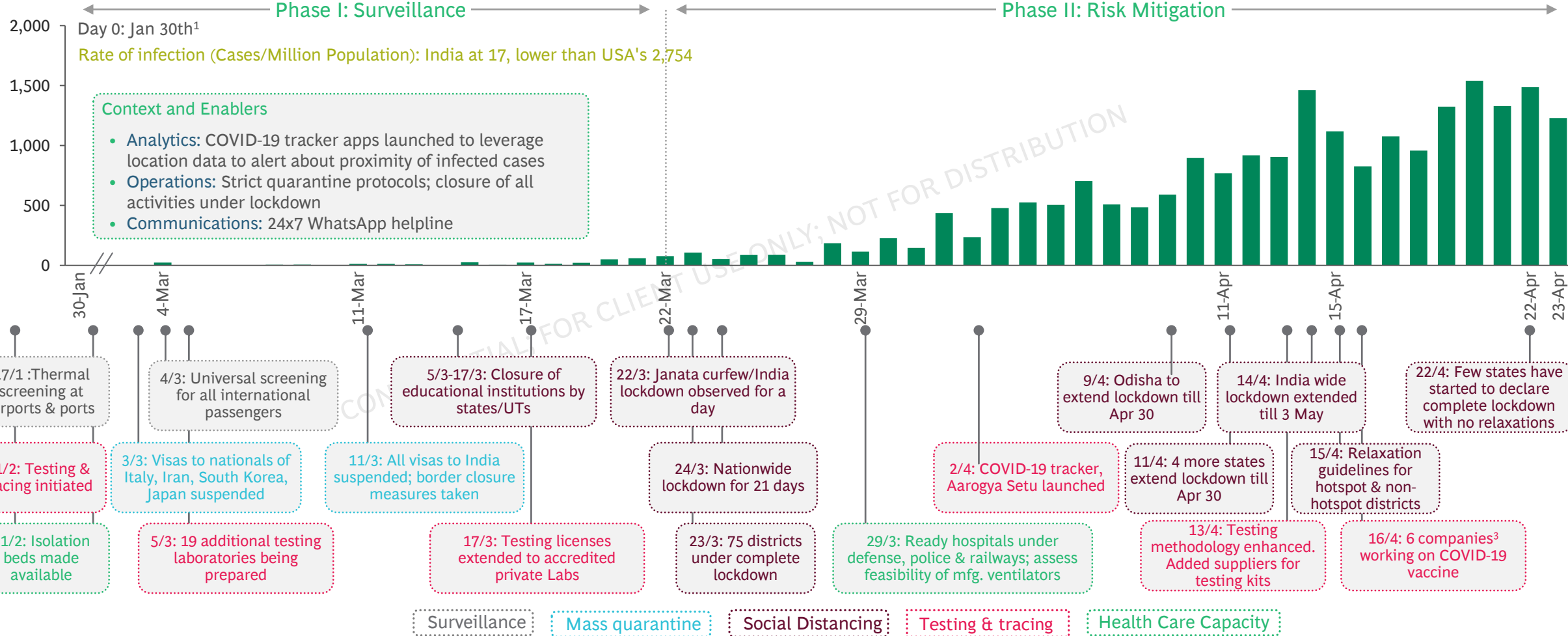


Note: Indicators with multiple updates daily also indicated as daily
Source: BCG analysis

India continues risk mitigation measures, extended the lockdown and is ramping up testing & tracing measures in parallel

Data as of 23 Apr

Confirmed cases per day



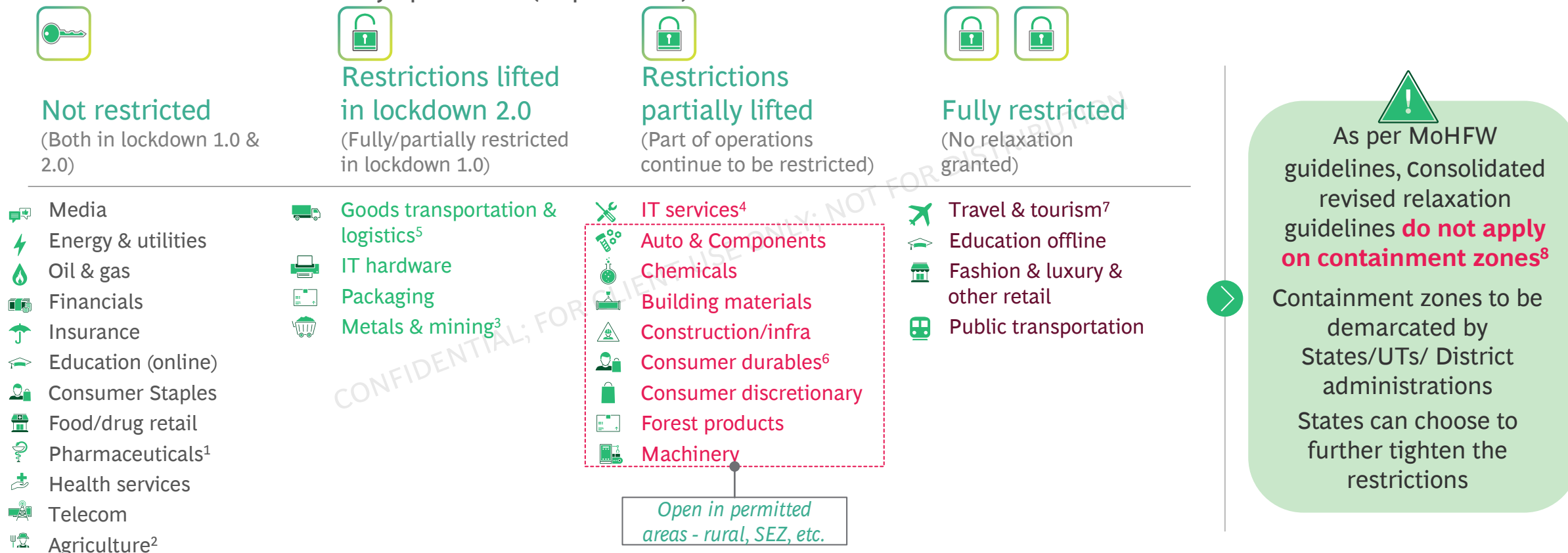
1. Day 0 based on confirmation of first case 2. Data updated as on 23 Apr 3. Zydus Cadila is working on two vaccines, Serum Institute, Biological E, Bharat Biotech, Indian Immunologicals, and Mynvax are developing one vaccine each
Source: Ministry of Health & Family welfare; Media reports; BCG analysis

Govt. has issued guidelines for phased relaxation of restrictions across industry sectors; But no activity allowed in containment zones

4 key archetypes emerge

Based on guidelines released on 15 Apr

Level of restrictions on industry operations (as per MHA)



1. Pharmaceuticals include intermediates and raw materials 2. Agricultural activities in lockdown 1.0- APMCs closed, agricultural businesses closed & disruption in supply chain 3. Coal & mineral prod., O&G refinery & brick kilns in rural areas permitted 4. IT technology & services permitted activities: IT and IT enabled Services, with upto 50% strength; Data and call centers for Government activities only; Government approved Common Service centers (CSCs) at Gram Panchayat level 5. Movement of labor employed in transport allowed with legal passes; excludes passenger transportation 6. Consumer durables exclude IT hardware 7. Lock down 1.0 & 2.0 permit: Hotels, home stays, lodges and motels, which are accommodating tourists and persons stranded due to lockdown, medical and emergency staff, air and sea crew 8. The containment zone will be decided by the RRT based on the extent of cases. However if contact listing/ mapping is taking time (>12-24 hours), then on arbitrary basis demarcate an area of 3 Kms radius around the epicenter (the residence of the positive case). This area of 3 km radius will be the containment zone. If required, based on the mapping of contacts and cases, the containment zone will be refined. A buffer zone of an additional 5 Kms radius (7 Kms in rural areas)/administrative boundary of including neighboring districts/per-urban zone shall also be identified

Source: Ministry of Home Affairs (MHA), Govt. of India, BCG Analysis



Monetary relief measures by RBI on **17 Apr** to infuse additional **~\$13Bn** in the system

Financial institutions to get support to boost liquidity and sectoral lending

For detailed list of measures by Government & RBI (From 26 Mar to 1 Apr) refer Appendix

Data as of 22 Apr

**POLICY DECISIONS
MONETARY RELIEF
MEASURES**

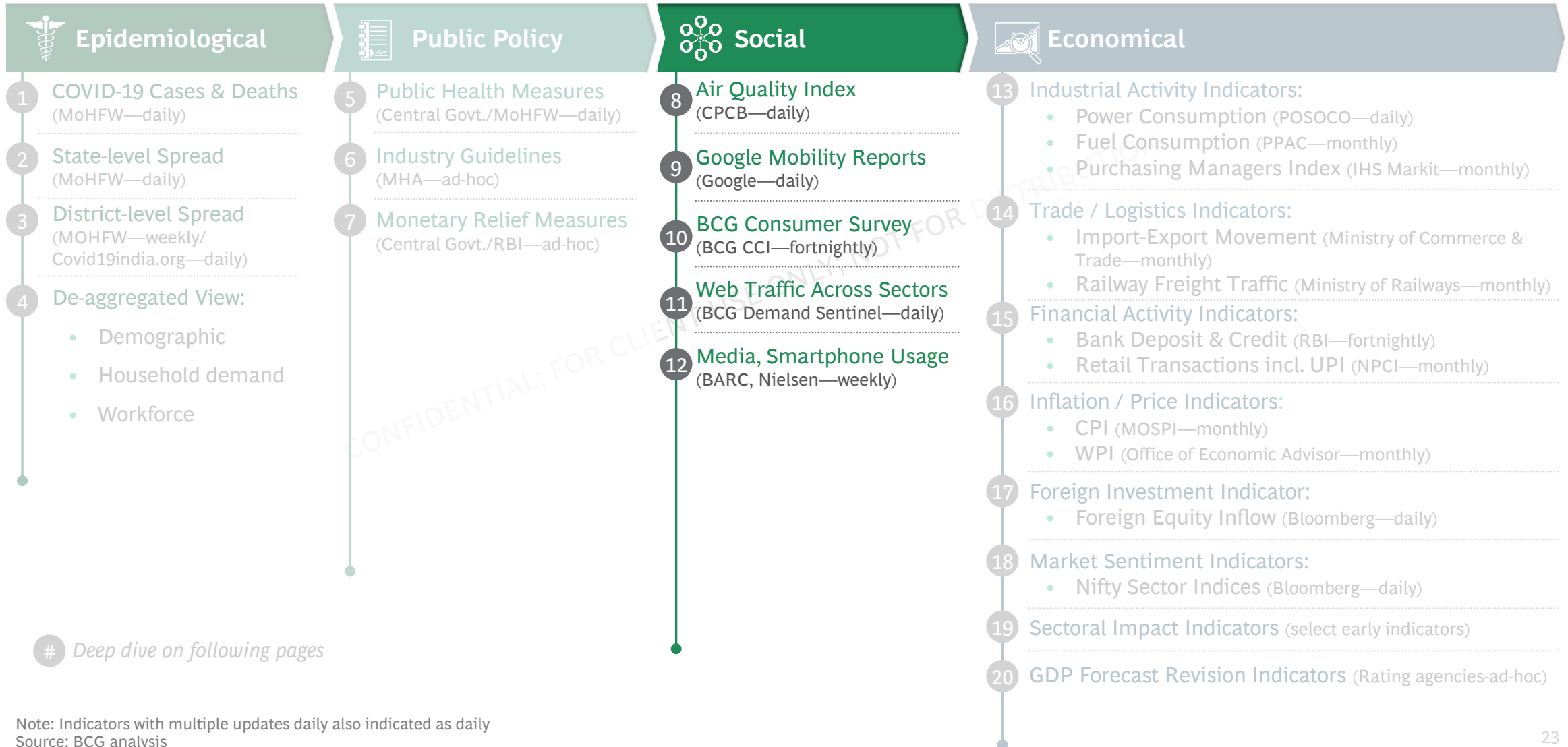
Beneficiary Measure Description

Beneficiary	Measure	Description
Government	Liquidity	<ul style="list-style-type: none"> 'Ways & Means Advances'¹ limit increased by 60% over and above the 30% level as on Mar 31 for all States/UTs until Sept 30
Banks	Liquidity	<ul style="list-style-type: none"> Reverse repo rate under Liquidity Adjustment Facility² (LAF) cut by 25 bps from 4% to 3.75% Liquidity coverage ratio eased to 80% from 100%; to be restored in 2 phases- 90% by Oct 1, 2020 & 100% by Apr 1, 2021
	Regulatory	<ul style="list-style-type: none"> 210 days limit for resolving loans in default extended by 90 days, additional 20% provision to be made thereafter Banks to maintain higher provision of 10% on moratorium loans over 2 quarters 90-day NPA norm to exclude the moratorium period for non-NPA loans with delayed payments on Mar 1 Commercial and cooperative banks barred from paying dividend for FY 20
NBFCs, MFIs, Businesses	Liquidity	<ul style="list-style-type: none"> Another round of targeted long-term repo operations³ (TLTRO 2.0) for an aggregate amount of INR 50k crore <ul style="list-style-type: none"> 50% to go to small and mid-sized NBFCs and MFIs Refinance facilities for INR 50k crore to NABARD, SIDBI & NHB to enable them to meet sectoral credit needs <ul style="list-style-type: none"> INR 25k cr to NABARD for refinancing RRBs, cooperative banks & MFIs INR 15k cr to SIDBI for on-lending/refinancing INR 10k cr to NHB for supporting HFCs
NBFCs	Regulatory	<ul style="list-style-type: none"> Date for commencement of operations for commercial real estate projects⁴ can be extended by an additional 1 year; not to be treated as restructuring

1. Ways and Means Advances is the temporary loan facility provided by the RBI to the center and state governments to meet mismatch in receipts & payments 2. Liquidity adjustment facility is a monetary policy which allows banks borrow money through repurchase agreements 3. LTRO: RBI provides longer term (1-3 year) loans to banks at repo rate. As banks get long-term funds at lower rates, their cost of funds falls. In turn, they reduce interest rates for borrowers 4. Commercial real estate projects delayed for reasons beyond the control of promoters; Note: NABARD: National Bank For Agriculture & Rural Development, SIDBI: Small Industries Development Bank of India, NHB: National Housing Bank, RRB: regional Rural banks, MFI: Micro Finance Institutions, HFC: Housing Finance Companies
Source: RBI notification 17 April; BCG analysis, Exchange rate \$1= INR 75

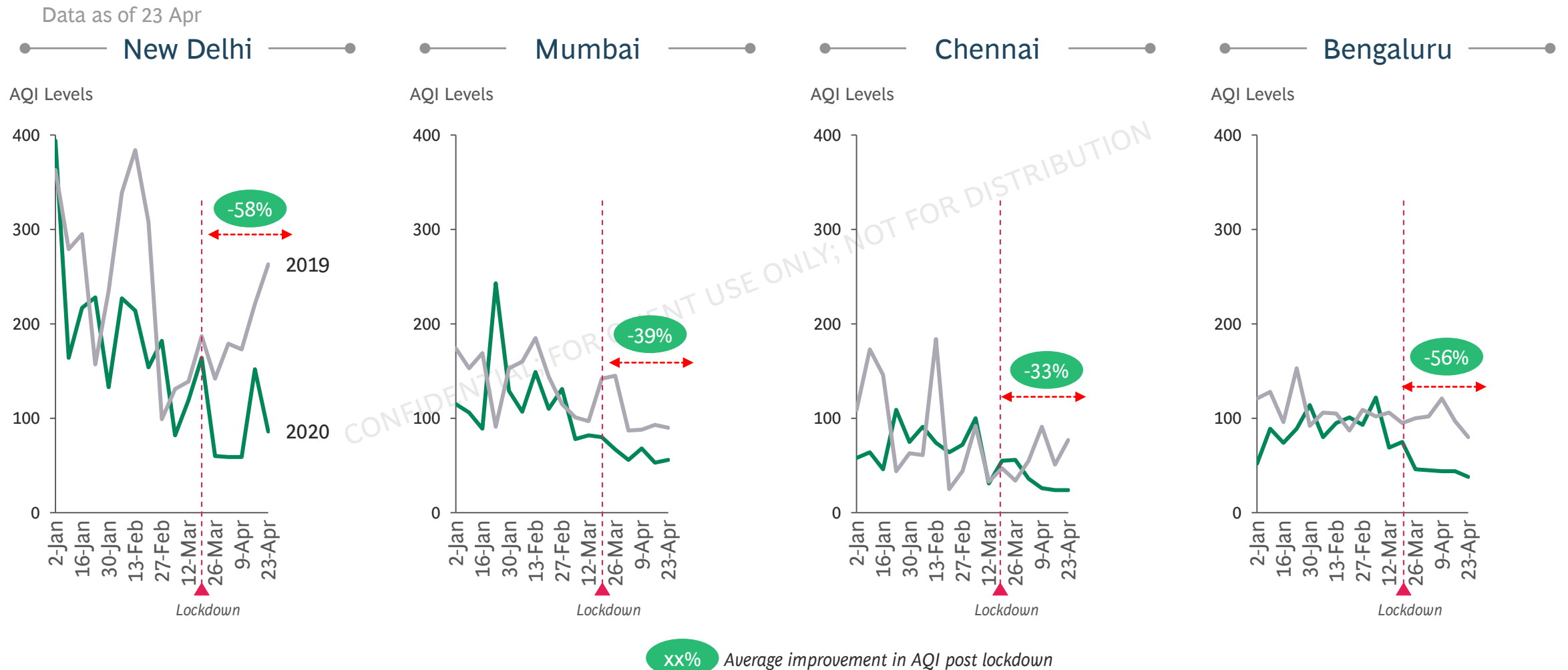
COVID-19 impact in India can be assessed and tracked along its chain of effect

Not exhaustive



Note: Indicators with multiple updates daily also indicated as daily
Source: BCG analysis

30%-60% reduction in AQI compared to last year post lockdown across metro cities



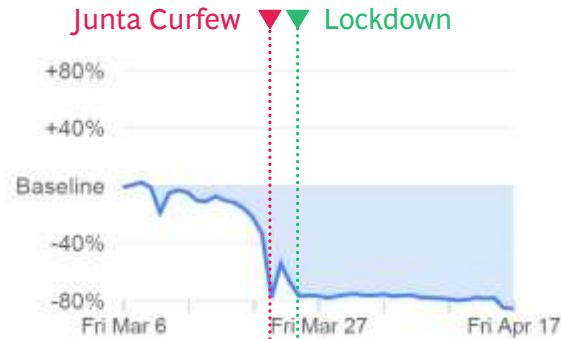
Notes: Weekly AQI Information captured for 10:00 AM IST for the locations: 1. IGI Airport, New Delhi; 2. Bandra, Mumbai (in case of data unavailability - Vile Parle, Mumbai); 3. Alandur Bus Depot, Chennai; 4. Jayanagar 5th Block, Bengaluru; In case of data unavailability on a particular date, average AQI level for preceding and succeeding date has been used for the YoY comparison
Air Quality Index is calculated by measuring 8 criteria of air pollutants (Particulate Matter or PM 2.5 & 10, Sulfur Dioxide, Carbon Monoxide, Nitrogen Dioxide, Ozone, Ammonia & Lead)
Source: Central Pollution Control Board (CPCB)

More than ~40% reduction in number of visits to public places; Grocery and pharmacy seeing an increase in visits in last few weeks

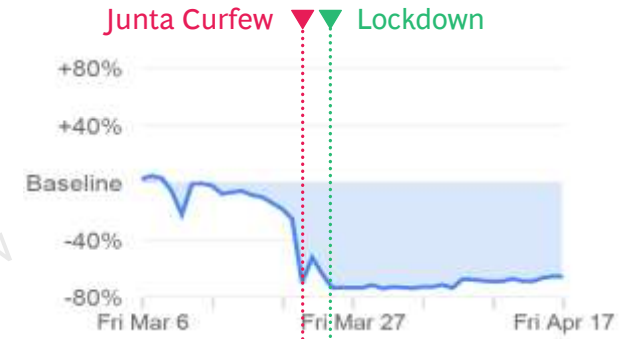
Data as of 17 Apr



Retail & recreation
— 85% compared to baseline¹



Transit stations
— 65% compared to baseline¹



Grocery & pharmacy
— 43% compared to baseline¹



Workplaces
— 65% compared to baseline¹



Parks
— 60% compared to baseline¹



Residential
+ 31% compared to baseline¹



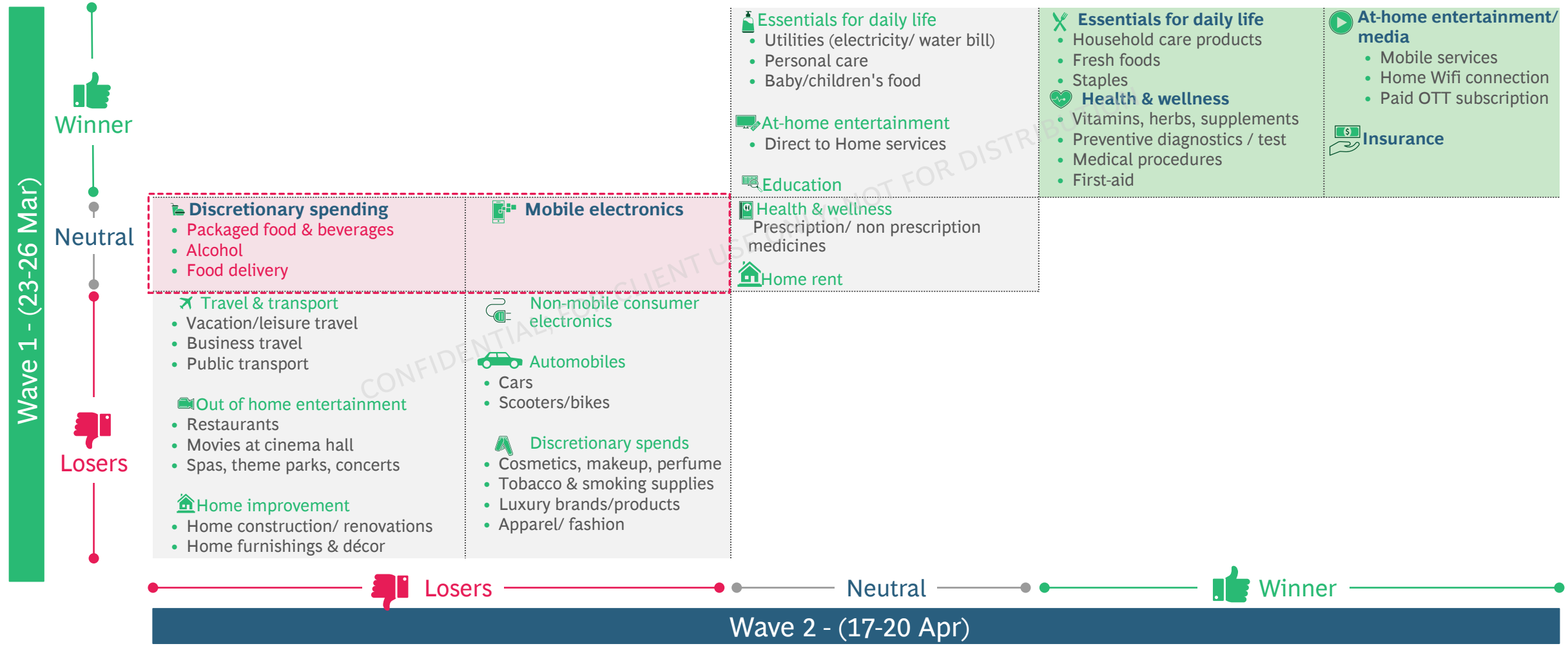
1. The baseline is the median value, for the corresponding day of the week, during the 5-week period Jan 3-Feb 6, 2020
Source: Google COVID-19 Community Mobility Report - India - Apr 17, 2020

Spending sentiment has worsened across categories

Travel, outdoor leisure activities, discretionary spending continue to be hardest hit; Essentials, health & wellness, at-home entertainment mostly likely to witness an increase

BCG India Consumer Sentiment Survey—Wave 2 (17-20 Apr) vs. Wave 1 (23-26 Mar)

Classification of Categories as Winners, Neutral & Losers basis change in spends in next 6 months



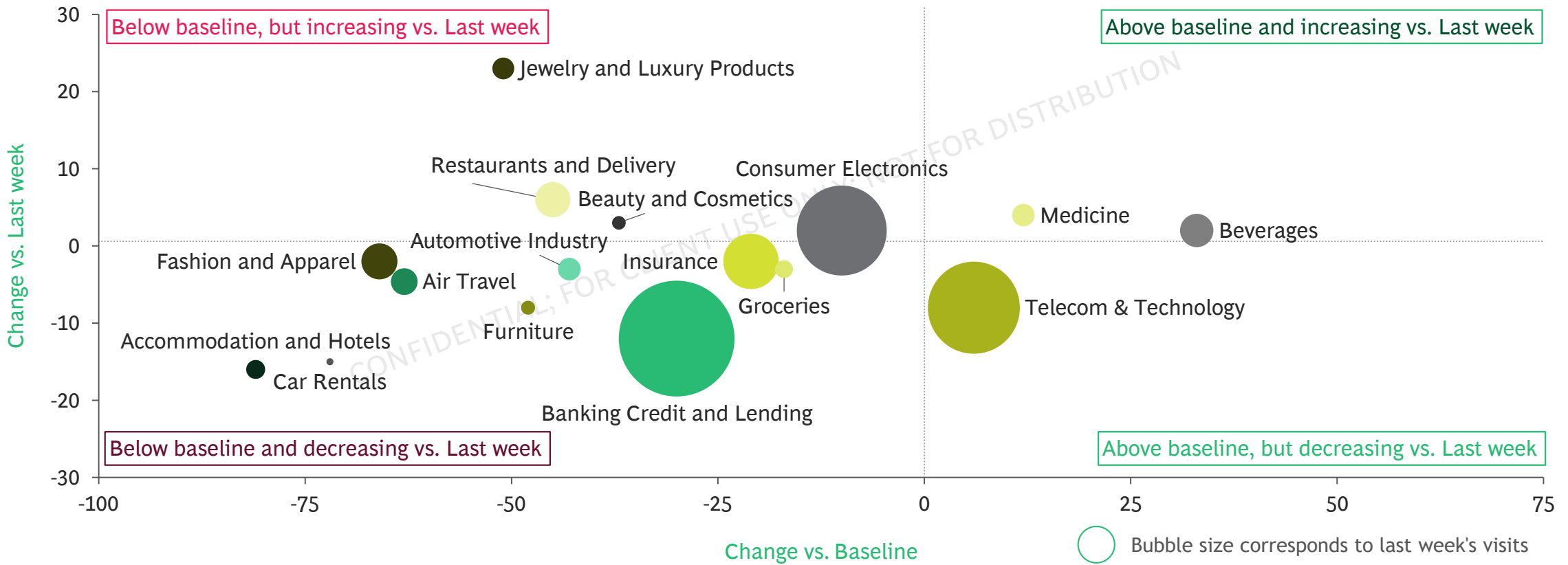
1. Categories with Top 2 Box > xx (5% more than average) classified as winning categories. Categories with Bottom 2 Box > xx% (5% more than average) classified as losing categories; Note: Question text: "How do you expect your spend to change in the next 6 months across the following areas?" Source: BCG COVID-19 Consumer Sentiment Survey March 23-26, April 17-20 2020 (N = 2,106 and N = 2,324 respectively)

Select categories like restaurants & deliveries witness higher web traffic while banking has decreasing traffic over last week

Data as of 17 Apr

Web traffic trends across various categories¹ for India

Change in normalized visits for Current week: 11 Apr – 17 Apr; Base line: 27 Jan - 2 Feb; Last week: 4 Apr – 10 Apr



1. Websites (non-exhaustive) included in select categories: i. Telecom & technology- jio.com, airtel.in, Vodafone.in, bsnl.co.in, paytm ii. Consumer electronics: Samsung.com, mi.com, apple.com iii. Banking credit & lending: onlinesbi.com, icicibank.com, bankbazaar.com iv. Furniture: Pepperfry.com, wakefit.co v. Jewelry & luxury products: tanishq.co.in, keralagold.com, mirraw.com vi. Beverages: winesearcher.com, parleproducts.com vii. Medicine: Medscape.com, hopkinsmedicine.org

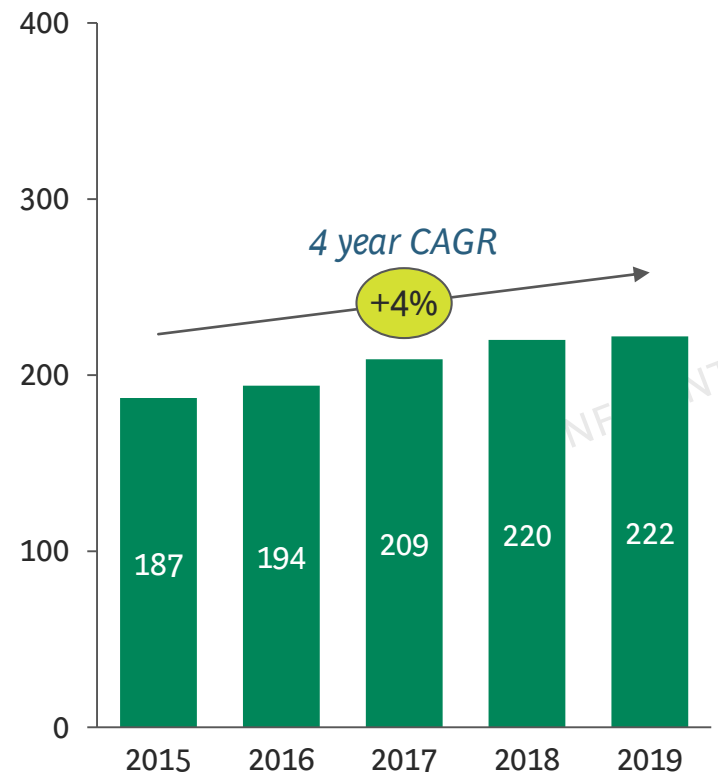
Note: 7 day moving average considered for all categories

Source: SimilarWeb data *www.similarweb.com; BCG Analysis

The slowly growing TV consumption observed a steep increase in Apr-20 as the avg. daily TV viewing went up by 25% or 1 hr. vs. Jan-20

TV viewing duration had been growing at 4% CAGR in last 4 years

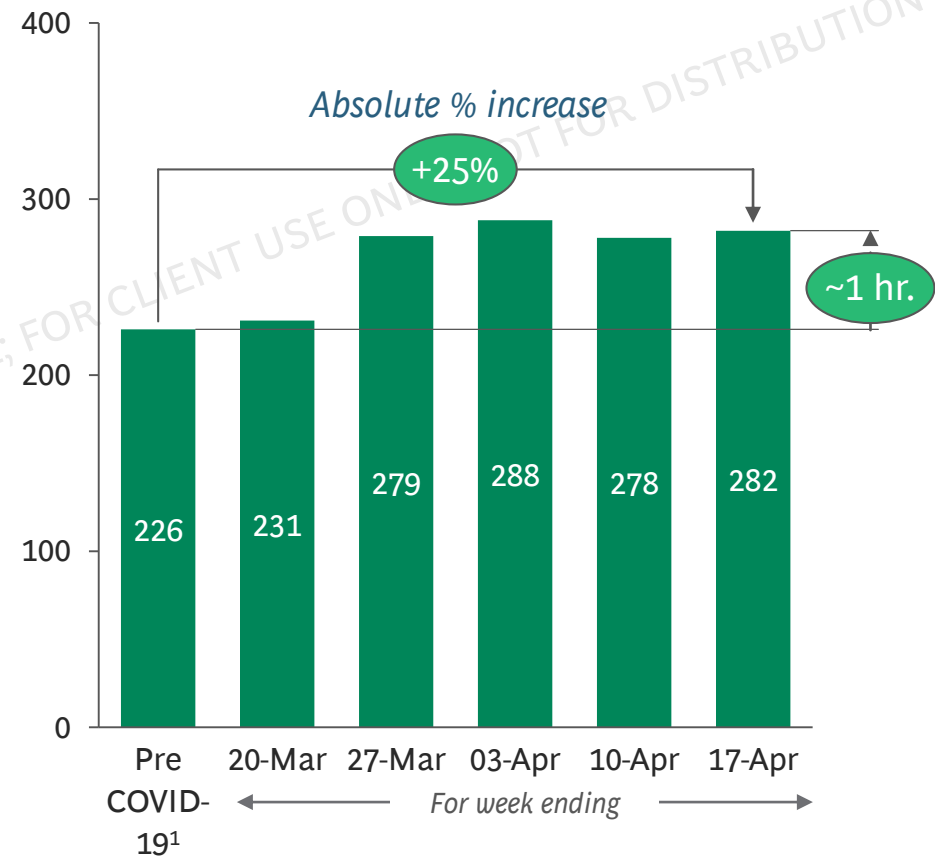
Avg. daily TV viewing (in min)



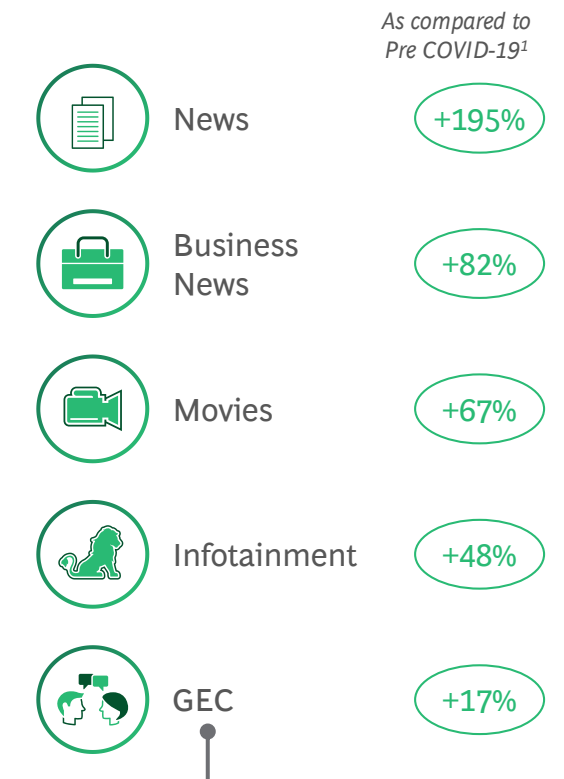
1. Pre-COVID-19: 11- 31 Jan
Source: BARC India, Nielsen

Steep increase of 25% in avg. daily TV viewing duration in last few weeks vs. Jan-20

Avg. daily TV viewing (in min)



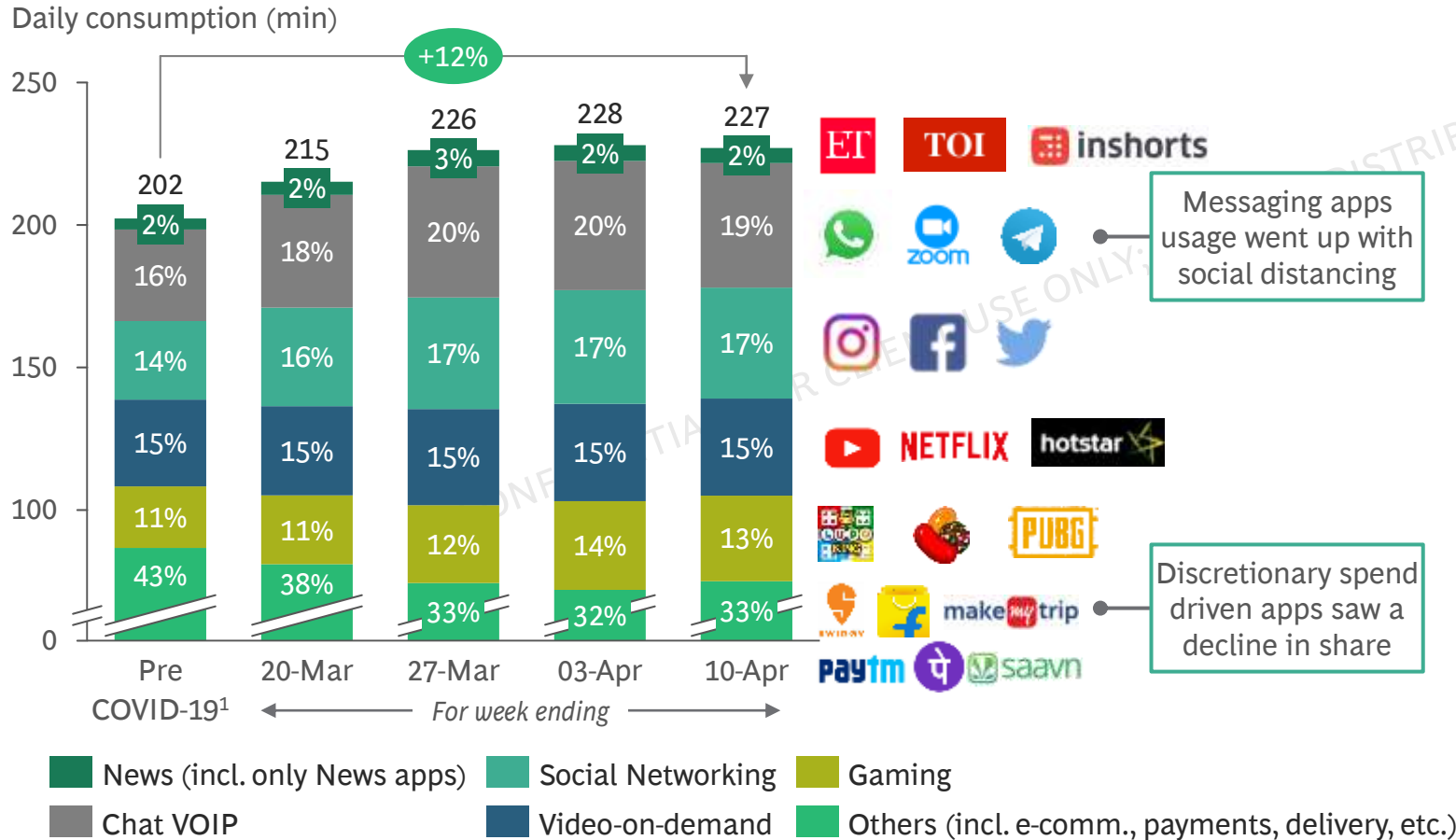
Primarily driven by news, movies & mythology



Hindi GEC incl. Mythology shows grew by 43% in Hindi speaking markets

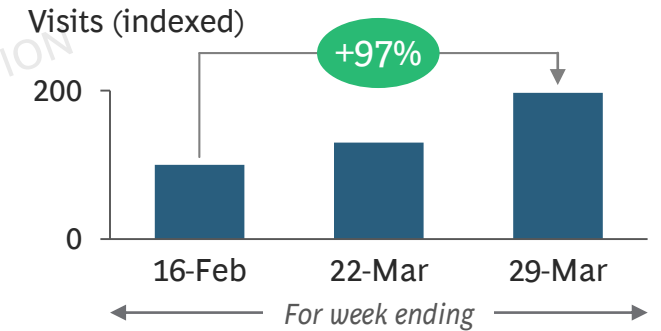
Smartphone usage increased by 12% in Apr-20 as compared to Jan-20 as observed in a market survey; shifts observed in usage

Smartphone usage saw an increase of 12% or 25 min, vs. pre COVID-19 period; also observed shifts in usage across key categories



Select categories saw significant changes across internet platforms

General News



Visits to **General News** websites and apps increased by **97%** in Mar end as compared to Feb mid (as per Comscore)³

Gaming & Sports

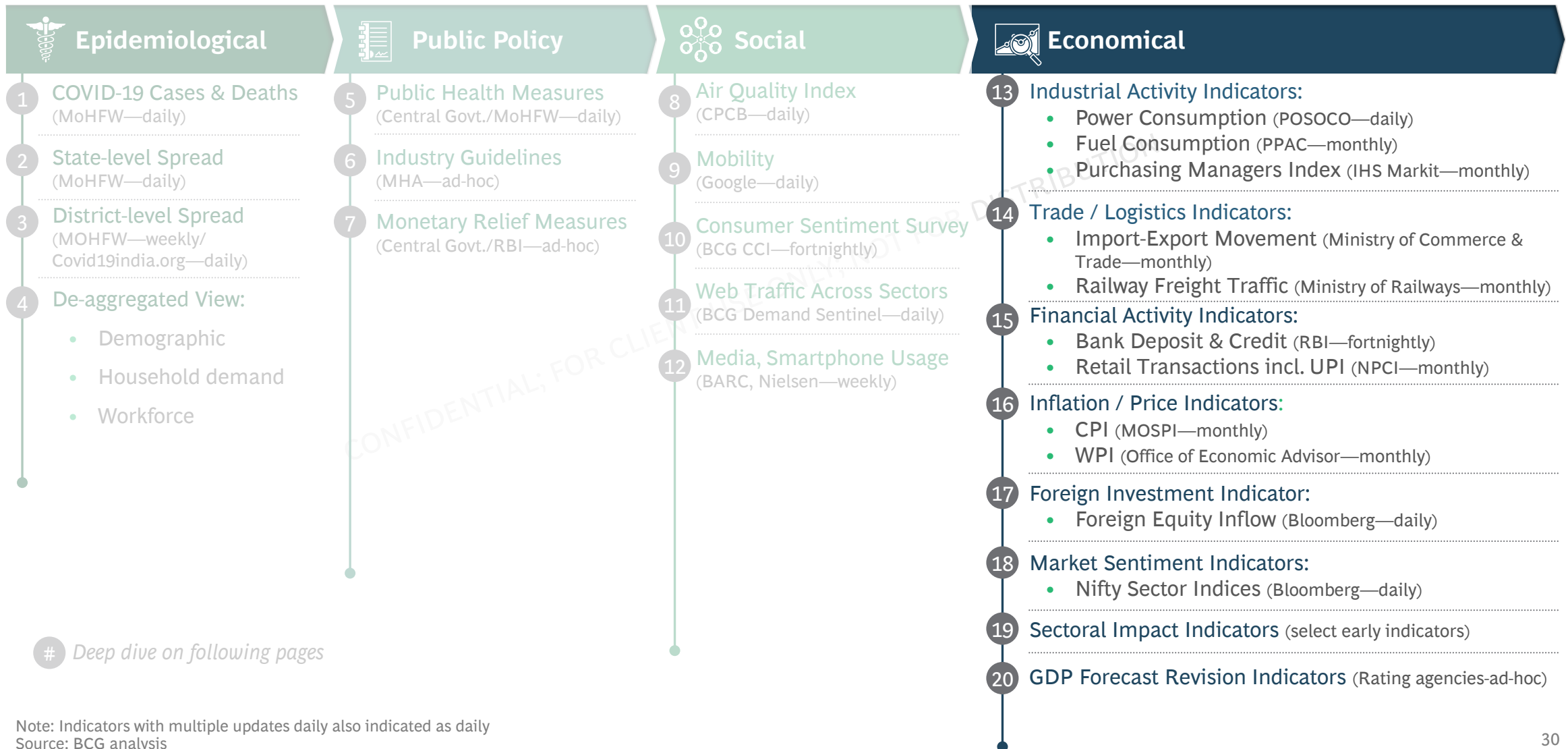
Visits to **Gaming** websites and apps increased by **53%** in Mar end as compared to Feb mid

Whereas, visits to **Sports** traffic **dropped by 79%** in Mar end amidst sports event cancellations as compared to Feb mid (as per Comscore)³

1. Pre-COVID-19: 11- 31 Jan
 2. Daily averages calculated from weekly data and growth over pre-COVID period as per Nielsen Android Smartphone Panel Survey representing 1L+, NCCS ABC, 15-44
 3. Feb mid refers to week of 10-16 Feb-20; Mar end refers to 23-29 Mar-20
 Source: BARC India, Nielsen, Comscore, BCG analysis

COVID-19 impact in India can be assessed and tracked along its chain of effect

Not exhaustive

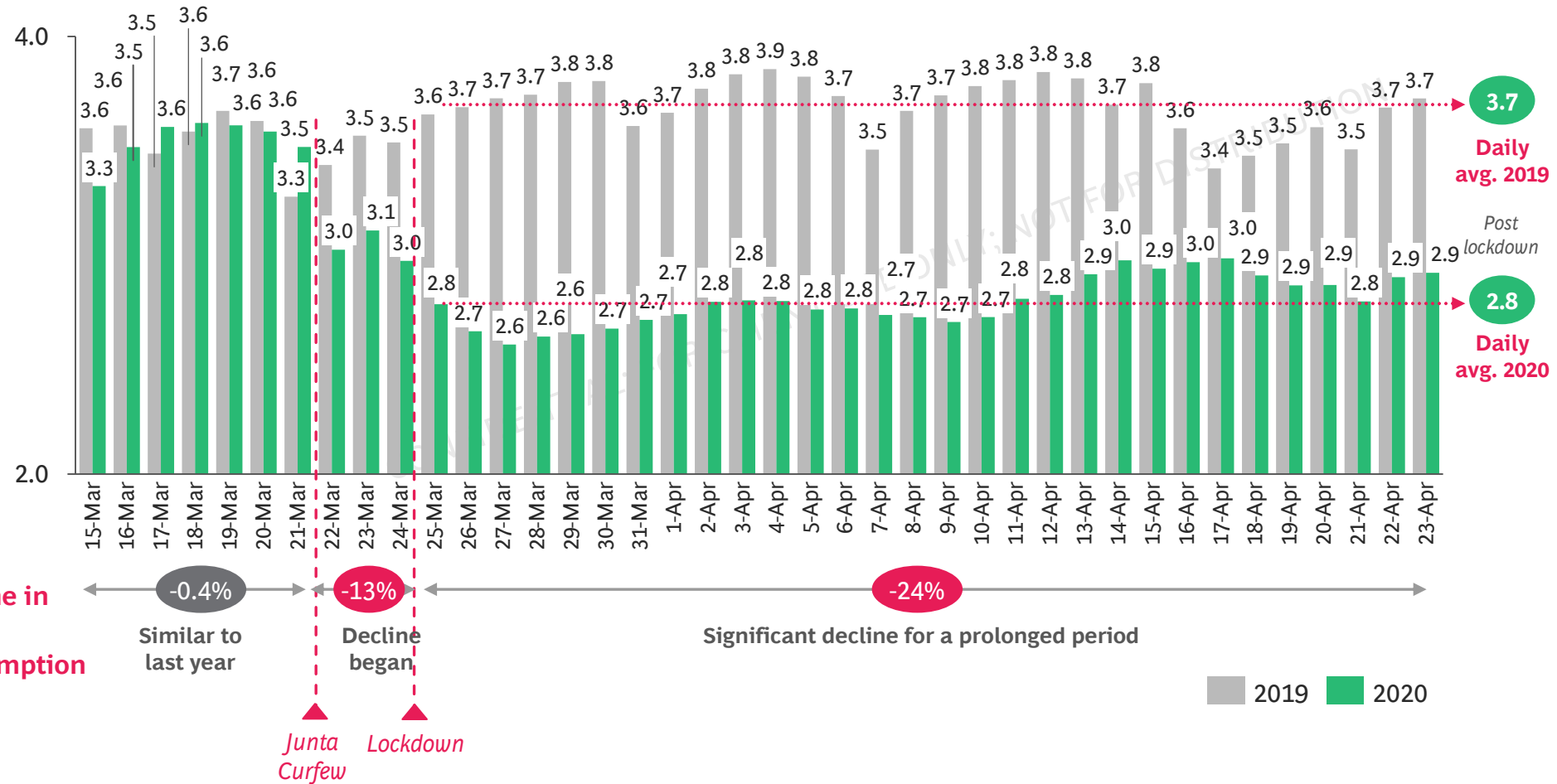


Note: Indicators with multiple updates daily also indicated as daily
Source: BCG analysis

24% decline in power consumption post lockdown driven by reduced demand; consumption marginally higher than last week

Data as of 23 Apr

Power consumption volume ('000 MU)



Typical power consumption by sectors in India²

Sector	%
Industrial	42%
Domestic	24%
Agriculture	18%
Commercial	9%
Others	7%
Total	100%

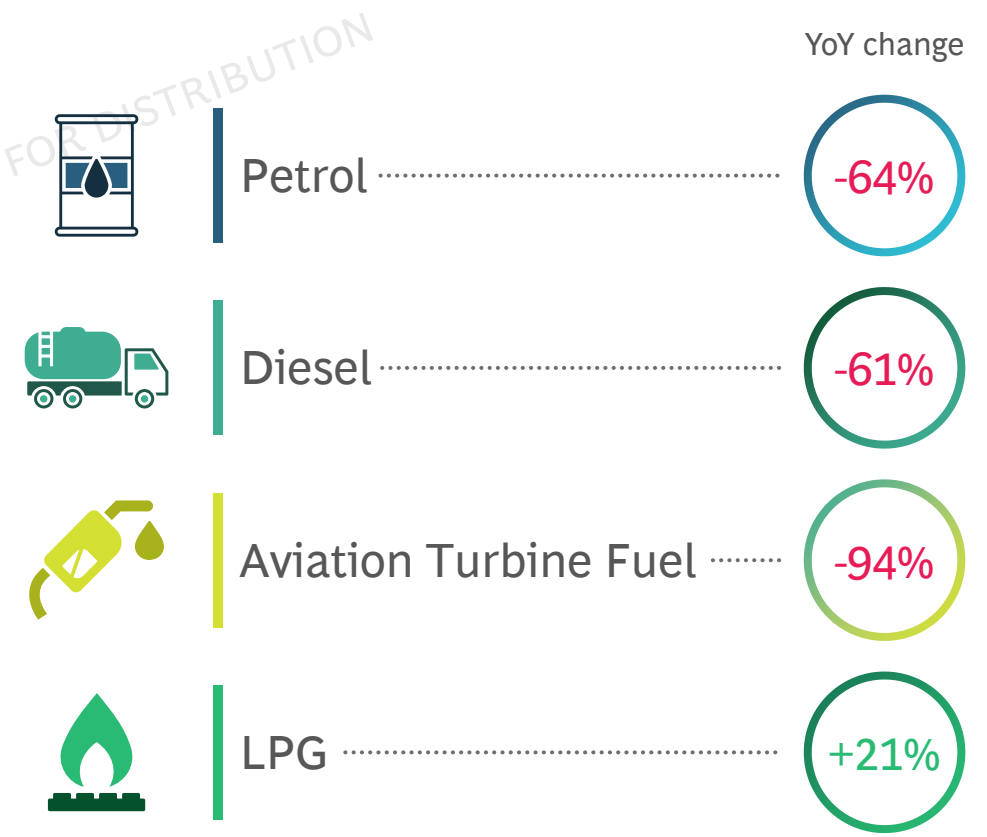
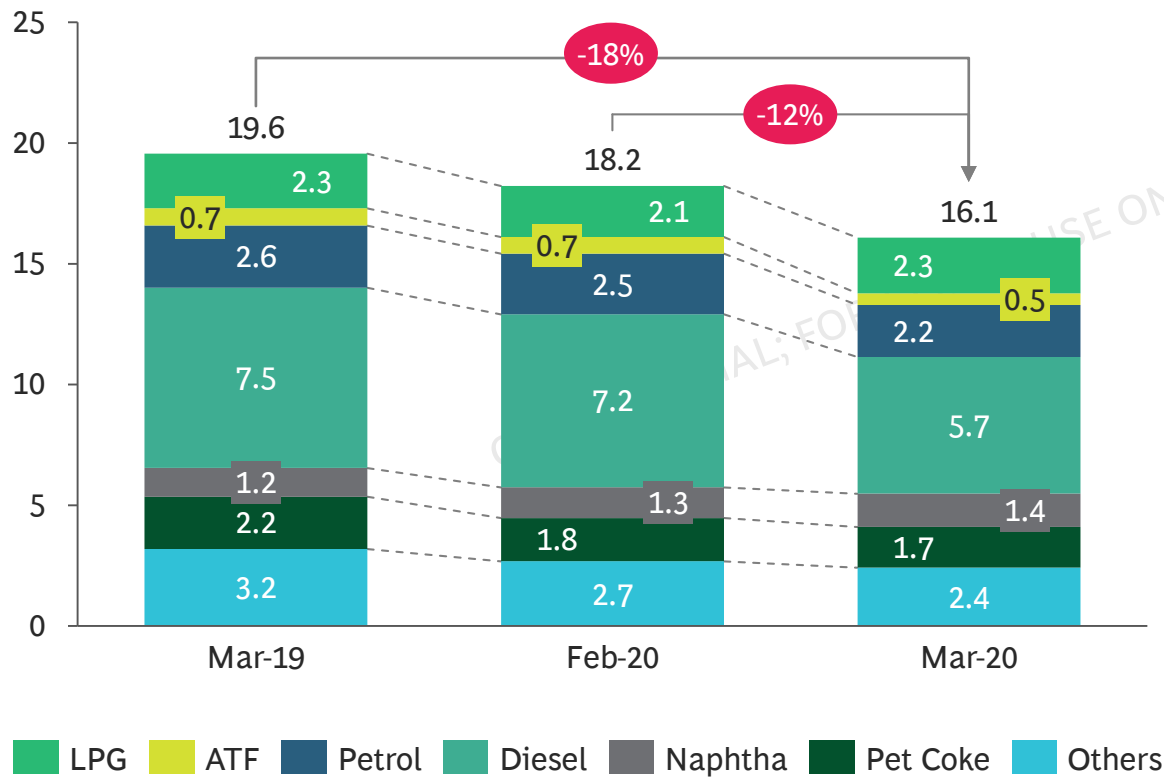
Source: 1. Daily Reports on Power Consumption published by Power System Operation Corporation (POSOCO);
2. MOSPI Report on Energy Statistics 2019 - Consumption of Electricity by Sectors in India during 2017-18; BCG analysis

Fuel sales observed a massive decline in April first half - drop in sales for petrol 64%, diesel 61%, ATF 94% vs. last year

Fuel demand in Mar-2020 declined by 18% YoY and 12% MoM (based on PPAC data)

Fuel demand in Apr-20 first half saw steep decline (based on provisional industry data)

Consumption of petroleum products (in MMT)



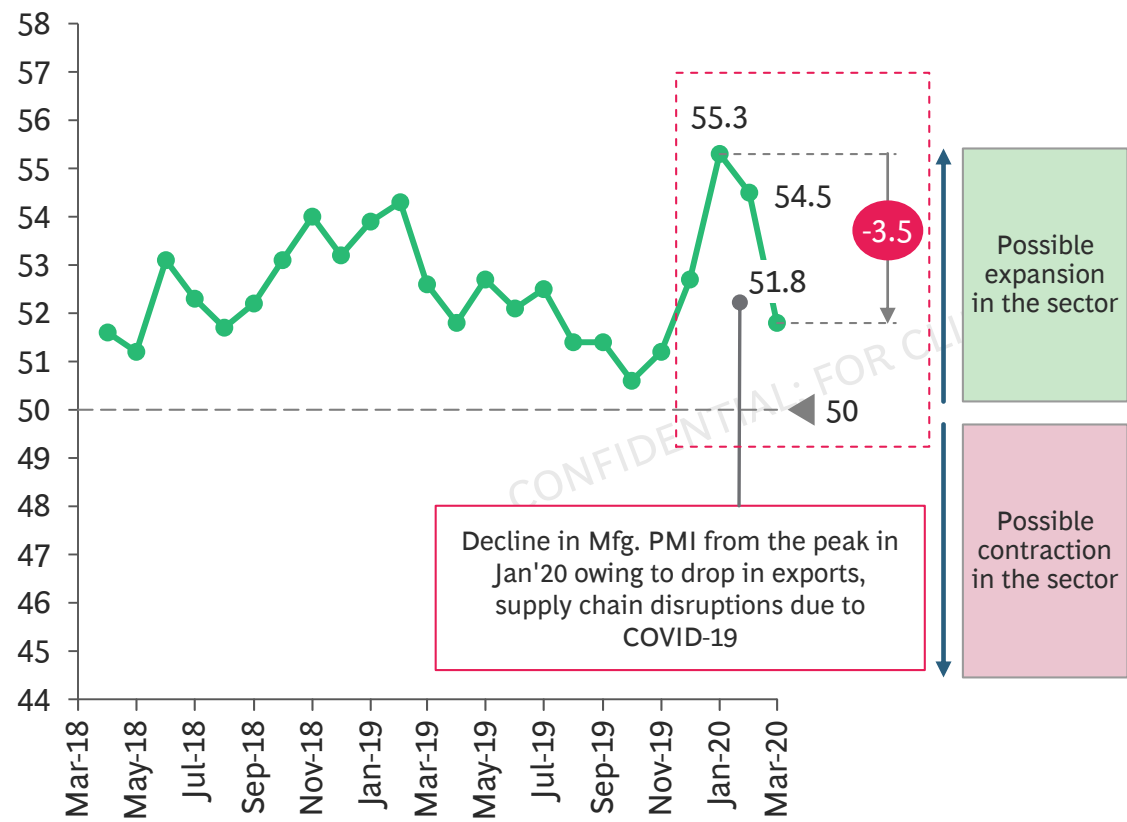
Source: PPAC, The Economic Times, provisional industry data

Manufacturing & Services PMI scores saw a decline in Mar-20

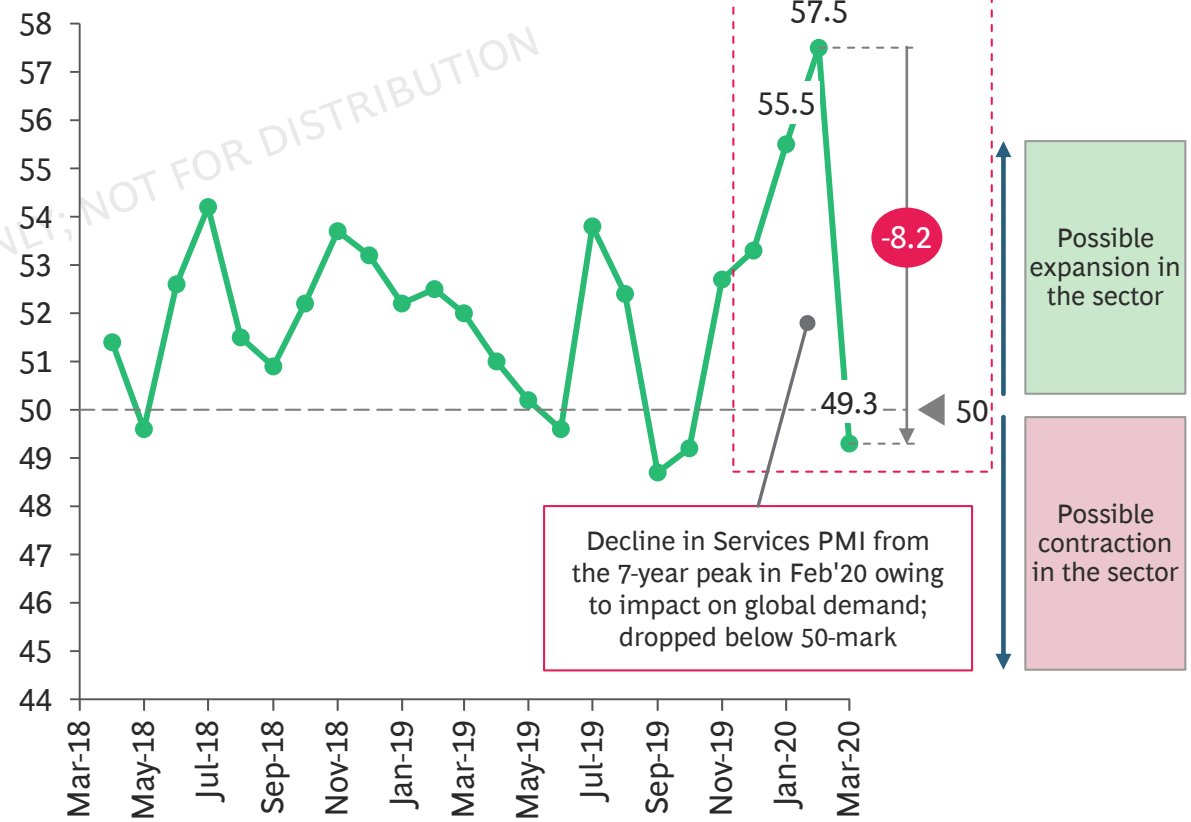
Manufacturing PMI on the decline post COVID-19 impact across the manufacturing value chain

Services PMI dropped below the 50-mark in Mar'20 after reaching its peak in the last 7 years in Feb'20

Manufacturing PMI



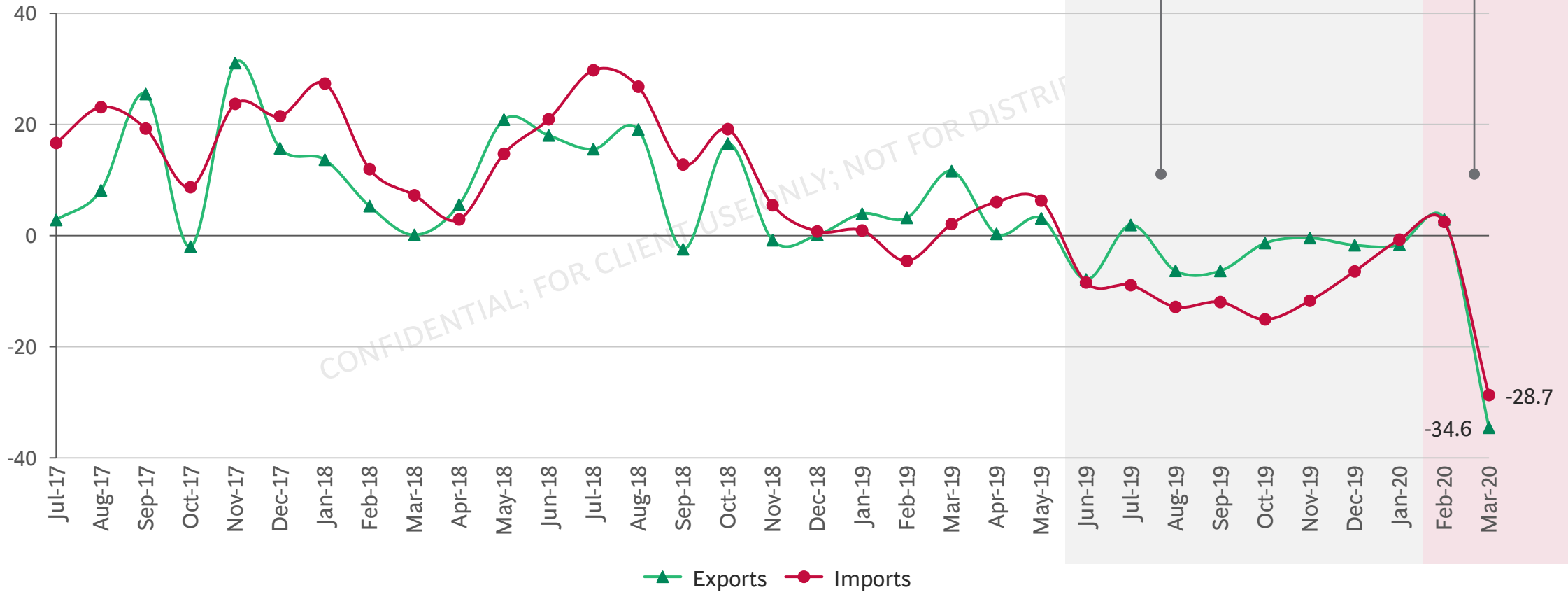
Services PMI



Note: The Purchasing Managers Index (PMI) is a measure of the prevailing direction of economic trends in manufacturing and services sectors. The PMI is based on a monthly survey of supply chain managers across 19 industries, covering both upstream and downstream activity. Value >50 indicates possible expansion in the sector, and value <50 indicates recession.
 Source: IHS Markit, CMIE, Analyst Reports

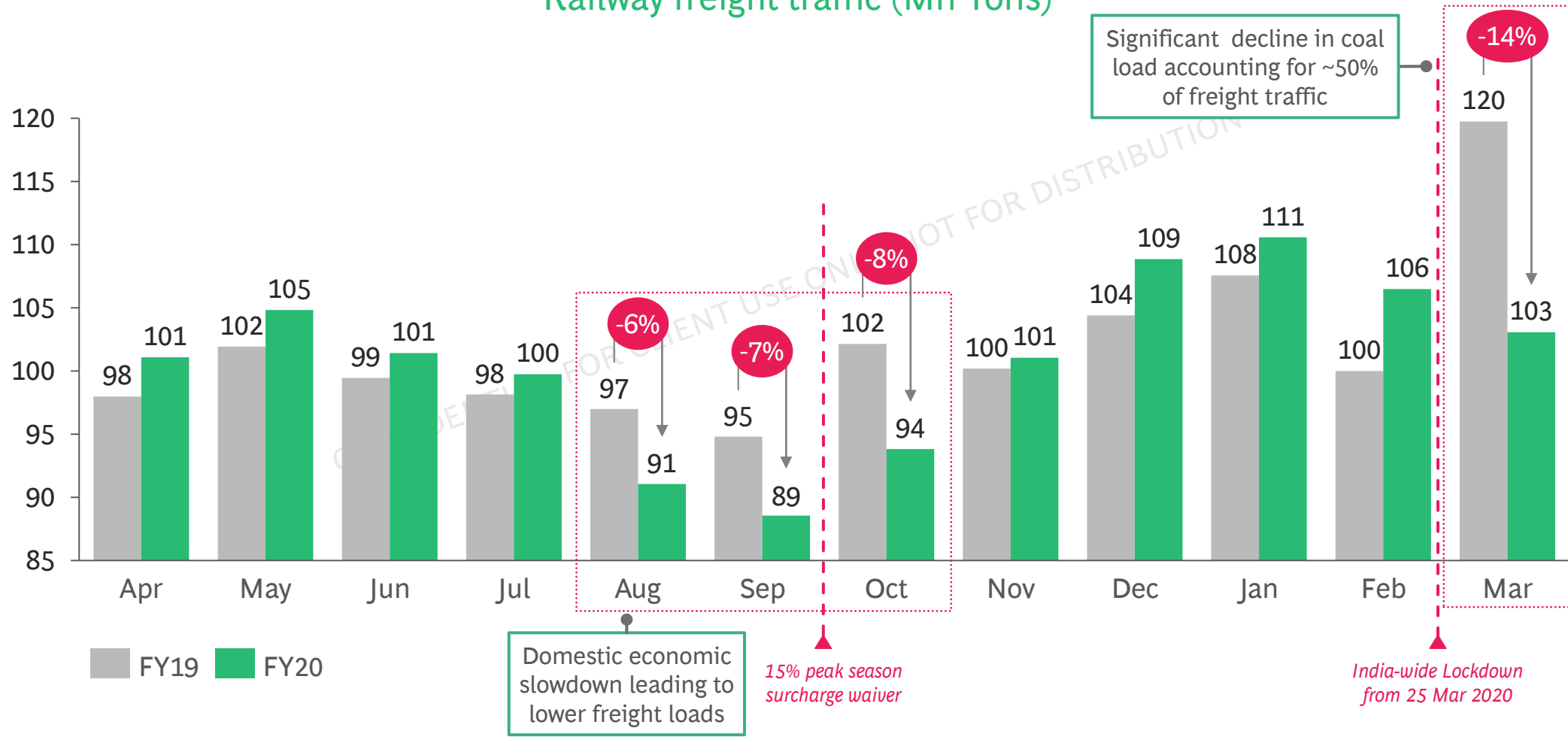
Exports and imports saw a sharp decrease in Mar-20; Imports declined by 28.7%, exports by 34.6% YoY

Monthly growth of Imports and Exports, % change YoY



Railway freight traffic saw sharpest decline in Mar-20; Cumulative FY20 traffic lower than FY19

Railway freight traffic (Mn Tons)

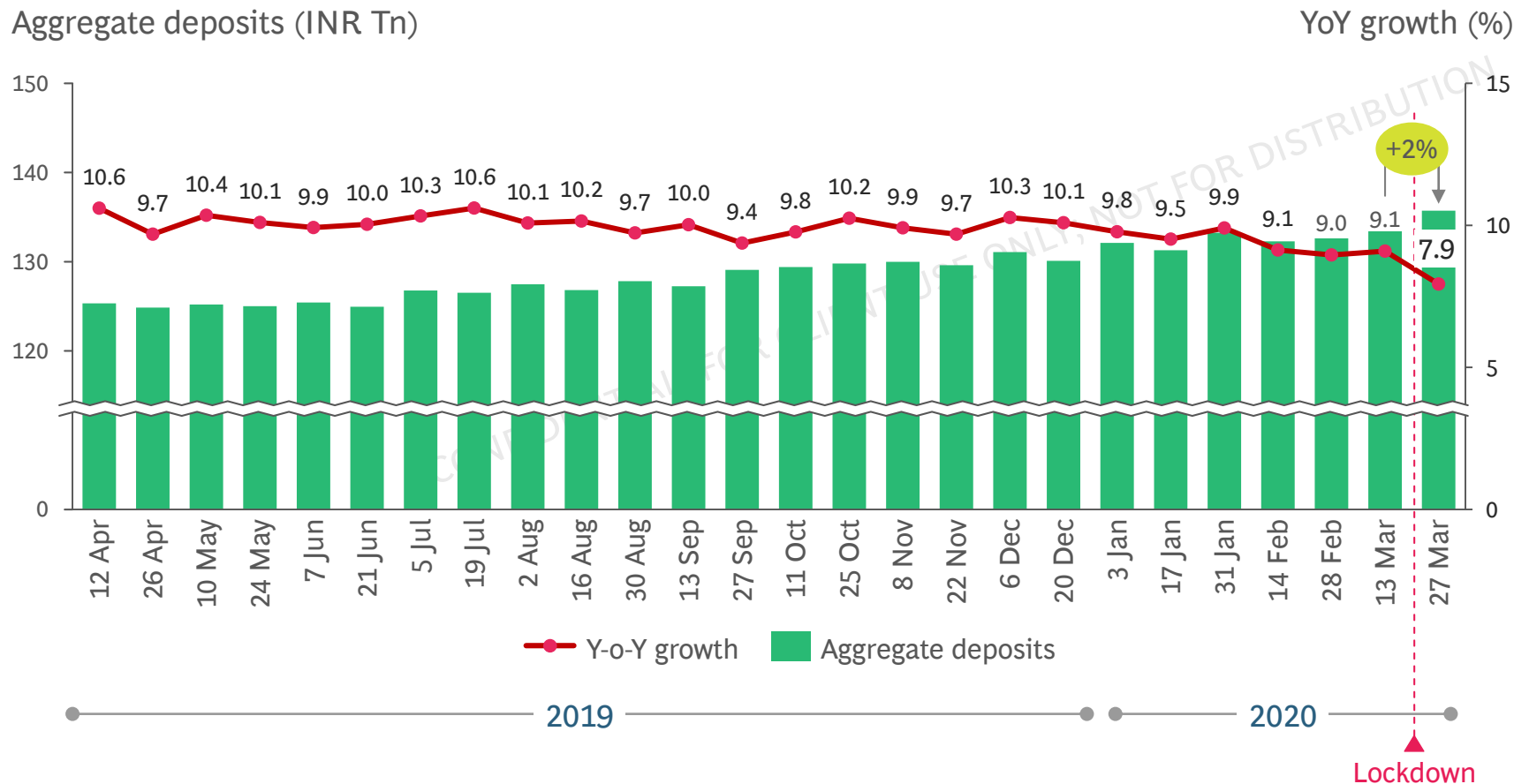


Source: Ministry of Railways, CEIC data, BCG Analysis

Aggregate deposits continue to grow at a steady pace this year; however YoY growth declined to 7.9% due to lower current deposits

Data as of 27 Mar

Total deposits volume & growth aggregated for all banks



Share of categories in total deposits¹

Sector	%
Current deposits	9%
Savings deposits	33%
Term deposits	59%
Total	100%

Key changes in Mar-20

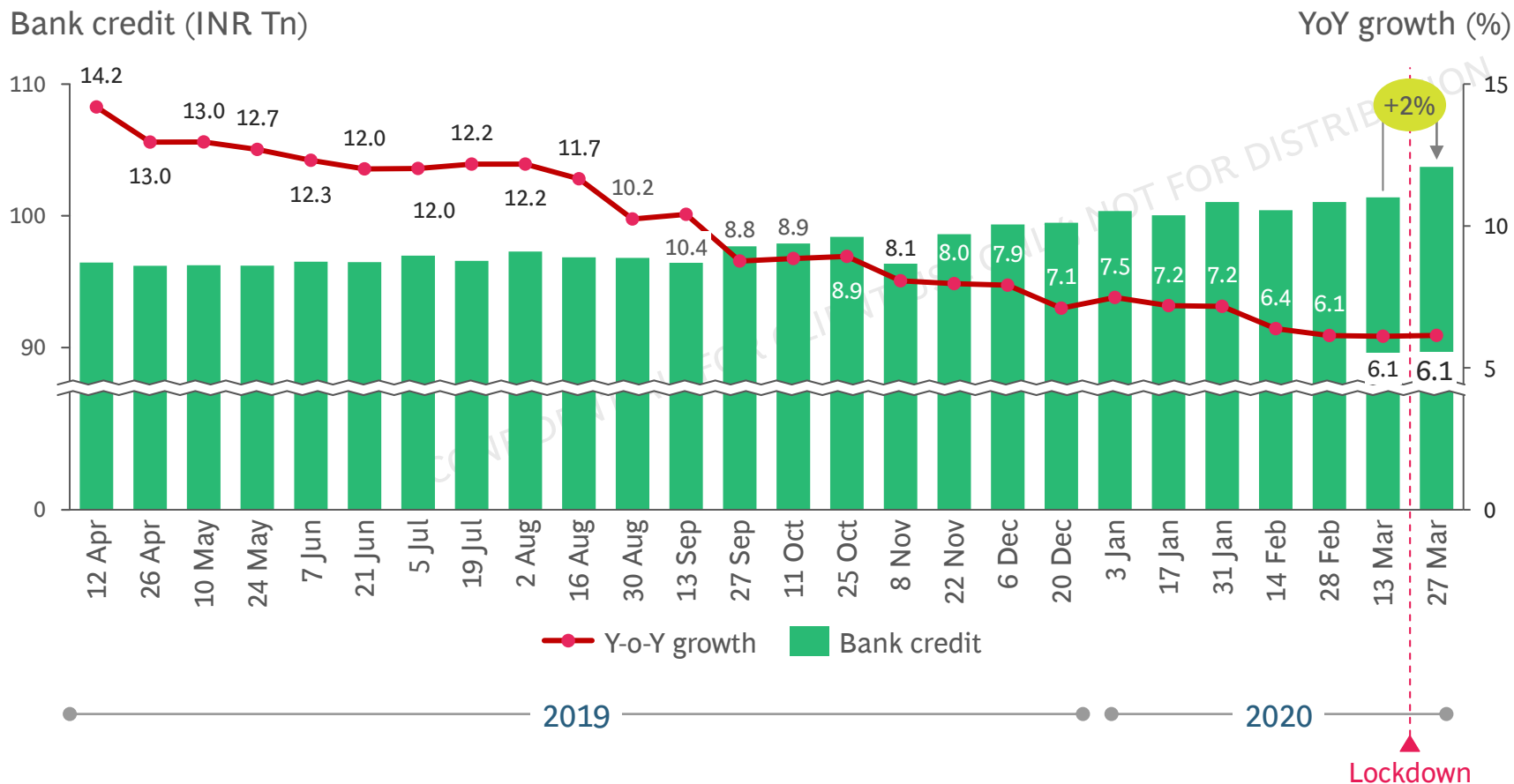
- Current deposits saw a decline in growth rate in last 2 weeks of Mar-20 as compared to last year
 - 11% in 2020 vs. 17% in 2019
- Savings & term deposits reduced marginally

1. As on 31 Dec 2019
Source: RBI, BCG analysis

Bank credit continued to grow at 6.1% YoY, expected to show a lagged impact of COVID-19

Data as of 27 Mar

Total credit volume & growth aggregated for all banks



Share of categories in total bank credit¹

Sector	%
Agriculture	11%
Retail	34%
MSME ²	13%
Corporate	39%
Others	3%
Total	100%

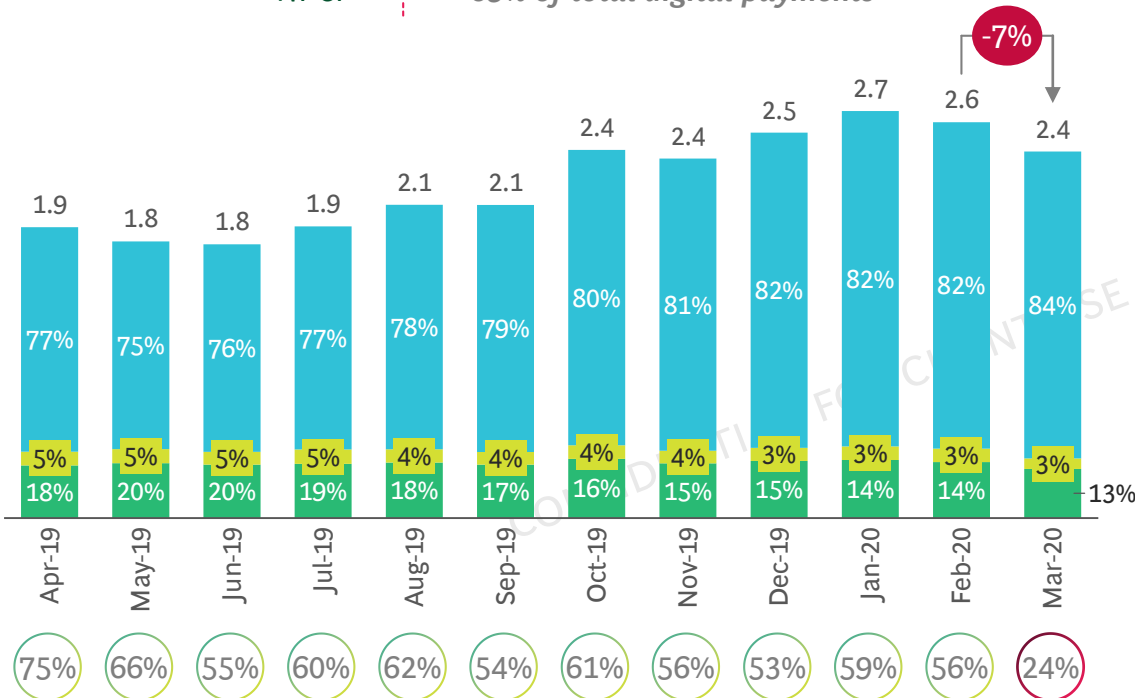
- YoY credit growth declined throughout FY 20
- Lagged credit impact across impacted industries expected due to restrictions & lockdown

1. As on 31 Dec 2019 2. MSME: Micro small and medium enterprises
Source: RBI, BCG analysis

Retail payments (recorded via NPCI) dropped by 7% MoM in volume and 16% MoM in value owing to lower consumer spend

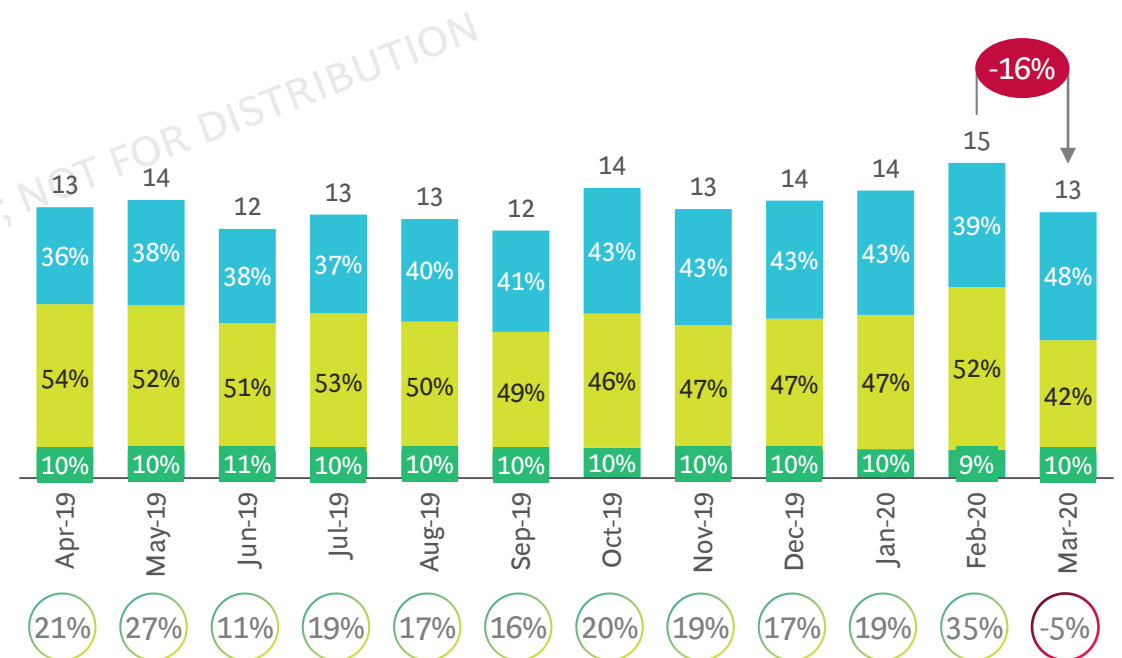
Volume of retail transactions⁵ (in Bn)

Share of NPCI¹ ~ 77% of total retail payments
~65% of total digital payments



Value of retail transactions⁵ (in INR Tn)

Share of NPCI¹ ~ 45% of total retail payments
~5% of total digital payments



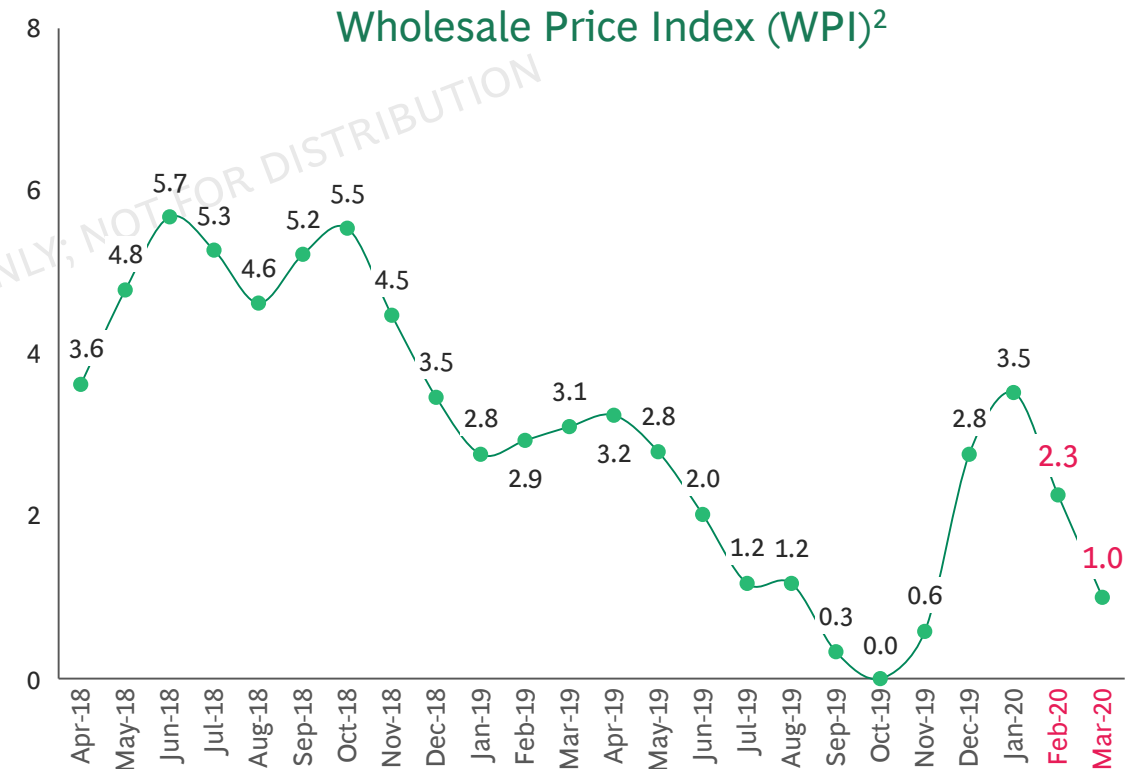
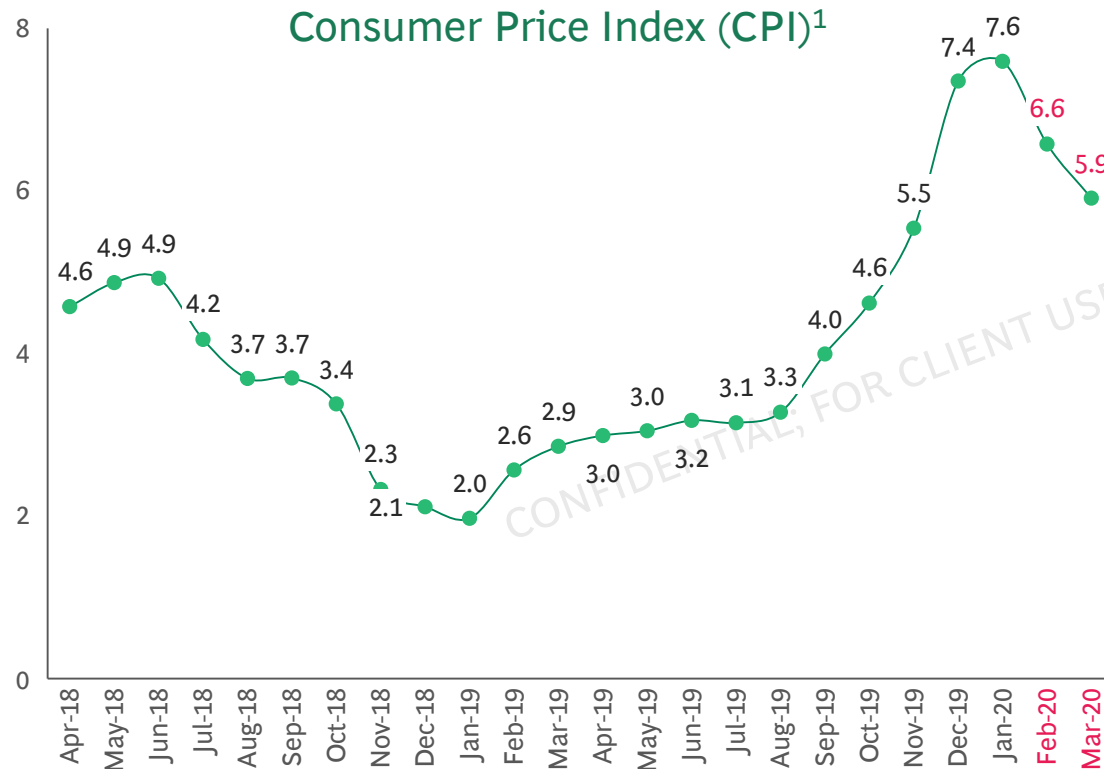
Cash² Physical³ Digital⁴ (incl. UPI) YoY growth

1. Share NPCI is based on data for Jan 2020 and Feb 2020 2. Cash refers to NFS Inter Bank ATM Cash Withdrawal; 3. Physical refer to CTS Cheque Clearing (Processed Volume); 4. Digital refer to NACH- National Automated Clearing House, IMPS, RuPay Card usage at (POS), RuPay Card usage at (eCom) AEPS (Inter Bank) Txn over Micro ATM (e.g., Cash withdrawal/Cash Deposit), BBPS (Bill Payment passing through BBPCU), UPI–Unified Payments Interface, USSD 1.0, NETC 5. NPCI retail transactions does not include NEFT, RTGS through RBI, Credit and debit card transactions other than RuPay, mobile banking & internet banking transaction, cash withdrawal from bank's ATM

Source: National Payment Corporation of India (NPCI), BCG analysis

Consumer & Wholesale Price Indices fell further in Mar-20, leading to a decline in inflation caused by falling food prices & low demand

Monthly inflation rate (in %)



1. The Consumer Price Index (CPI) is a measure that examines the weighted average of prices of a basket of consumer goods and services, such as transportation, food, and medical care. It is calculated as year on year increase in prices of the commodities 2. The wholesale price index (WPI) measures and tracks the changes in the price of goods in the stages before the retail level – that is, goods that are sold in bulk and traded between entities or businesses instead of consumers. It is calculated as year on year increase in prices of the commodities

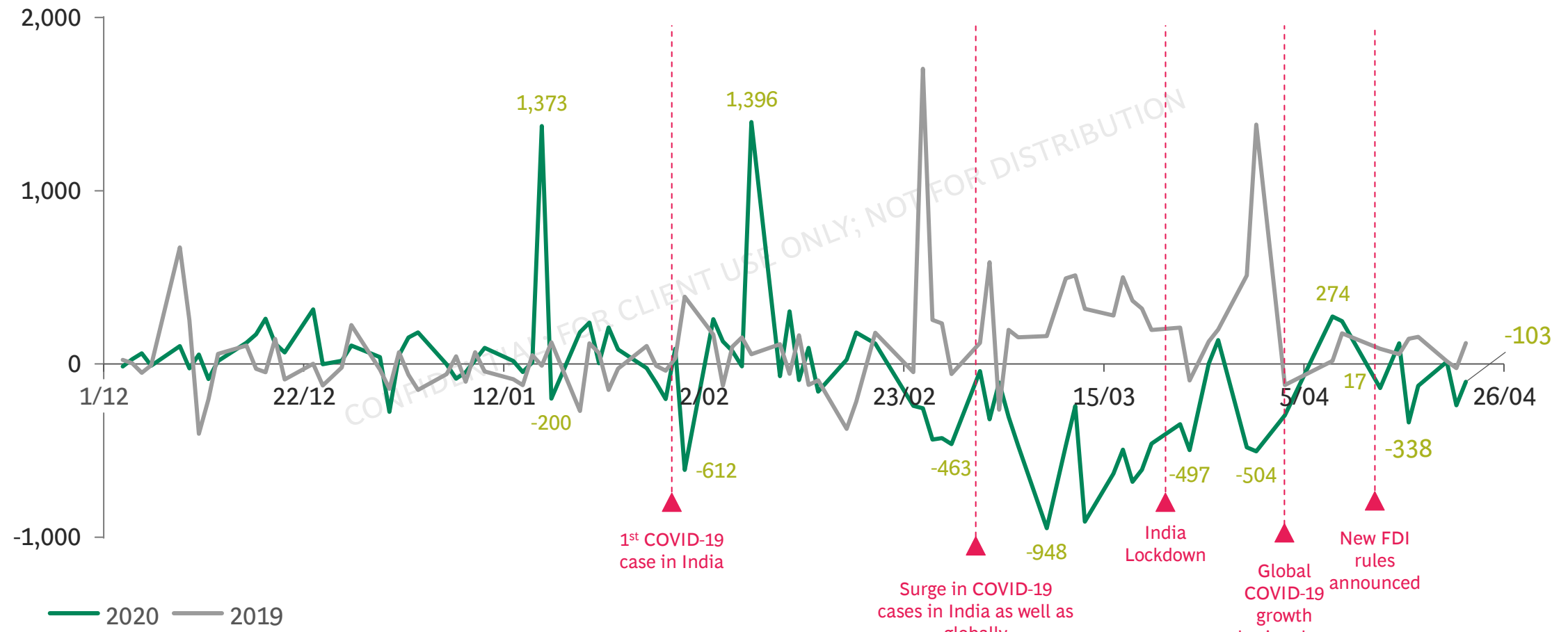
Note: In May 2016, the Reserve Bank of India (RBI) Act, 1934 was amended to provide a statutory basis for the implementation of the flexible inflation targeting framework.

Source: MOSPI, Office of the Economic Advisor - Department for Promotion of Industry and Internal Trade, CMIE

Foreign equity inflows observed fluctuations amidst current uncertain situations

Data as of 22 Apr

Net Foreign Equity Inflows \$Mn



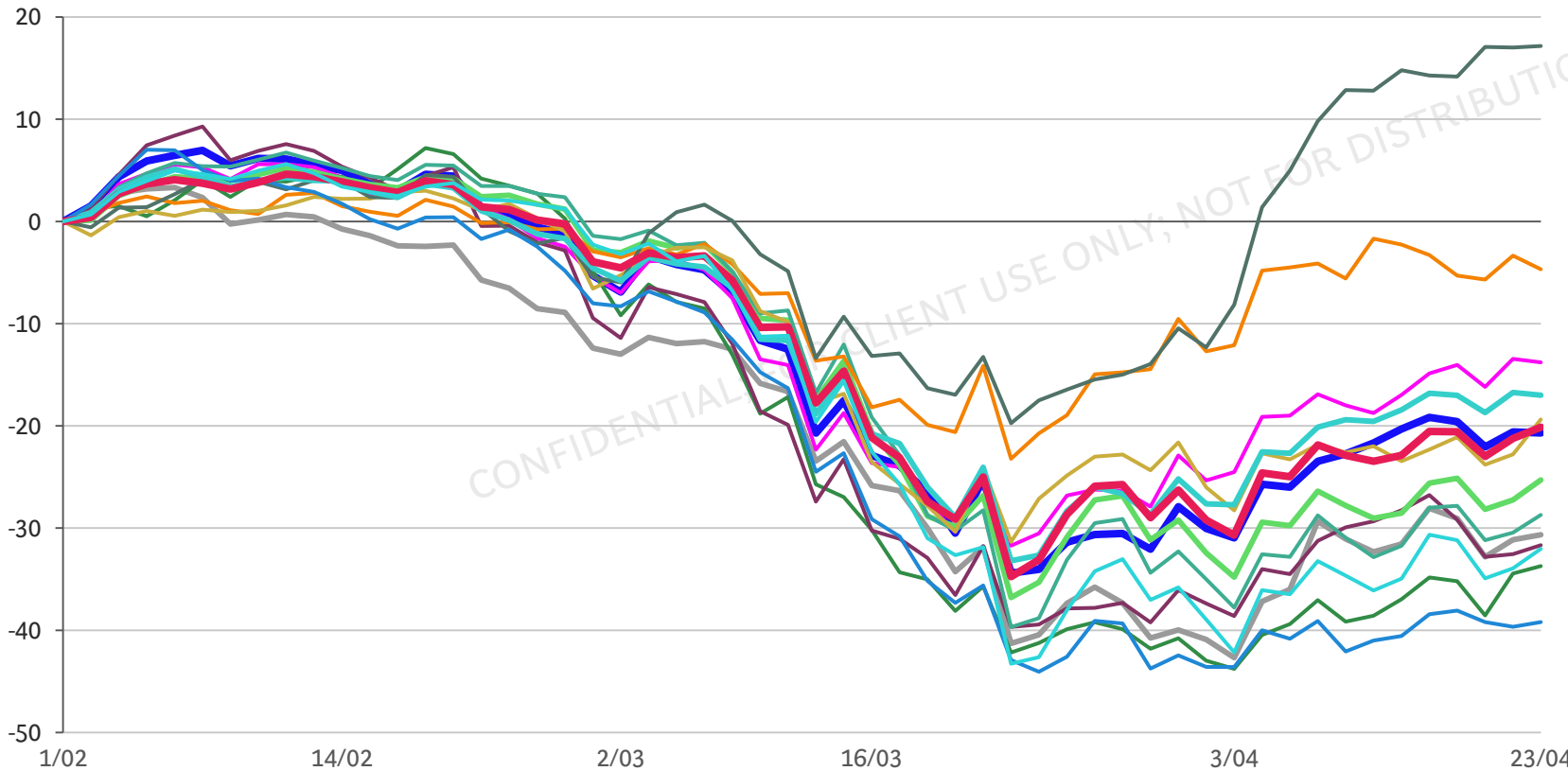
Source: Bloomberg, Press search, BCG analysis

All sectors experienced a decline; Pharma continues its positive trajectory while realty & media see the maximum decline

Data as of 23 Apr

Nifty Sectoral Indices

Change (%)



Descending order of performance¹

Sectoral Index	Change (%)
Pharma	17%
FMCG	-5%
Energy	-14%
Infra	-17%
IT	-19%
Nifty	-20%
Commodities	-21%
Services	-25%
Financial Services	-29%
Auto	-31%
Metal	-32%
Bank Nifty	-32%
Media	-34%
Realty	-39%

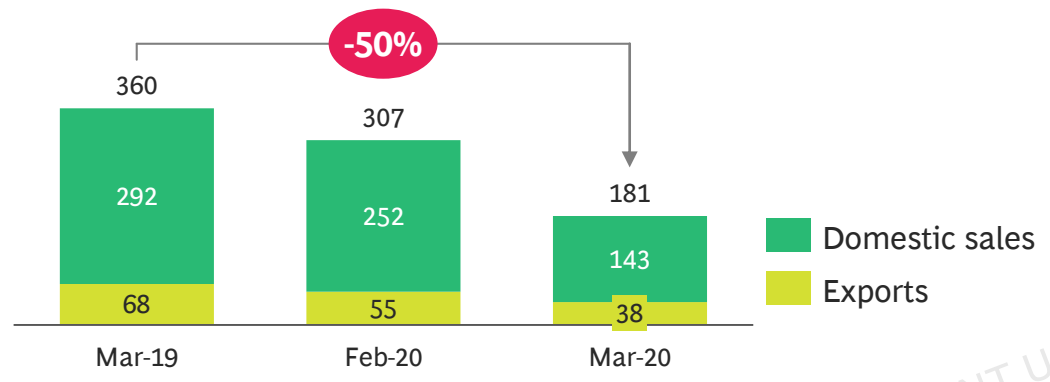
1. Growth rate over the past 3M from 01st Feb

Note: The graph shows change in Nifty and other sectoral indices over 3M. Considered 01st Feb since first coronavirus case was reported on 30th Jan.

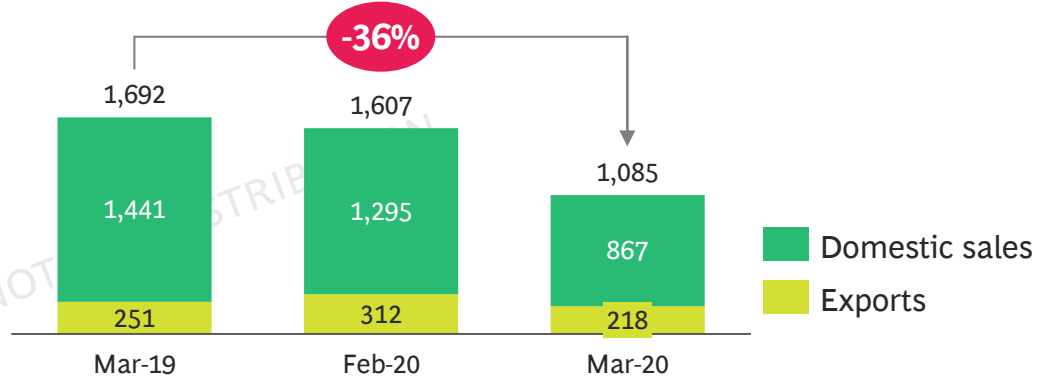
Source : NSE, Bloomberg, BCG analysis

Automotive sales saw a steep decline across categories in Mar-20; commercial vehicles worst hit among the categories

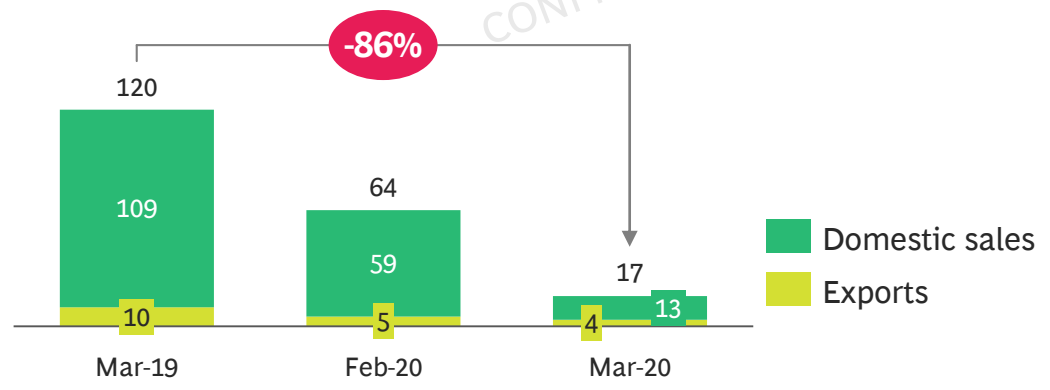
Passenger vehicles sales ('000 units)



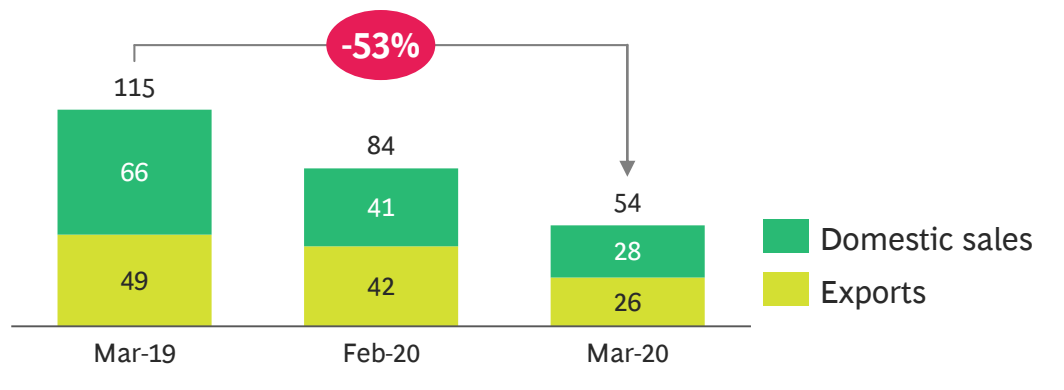
Two wheeler sales ('000 units)



Commercial vehicles sales ('000 units)



Three wheeler sales ('000 units)



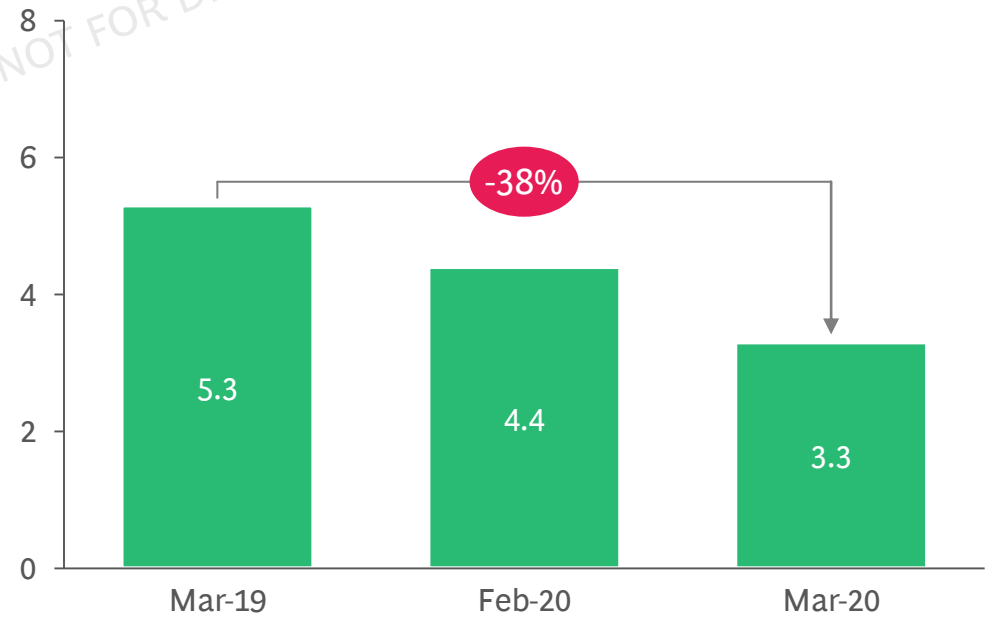
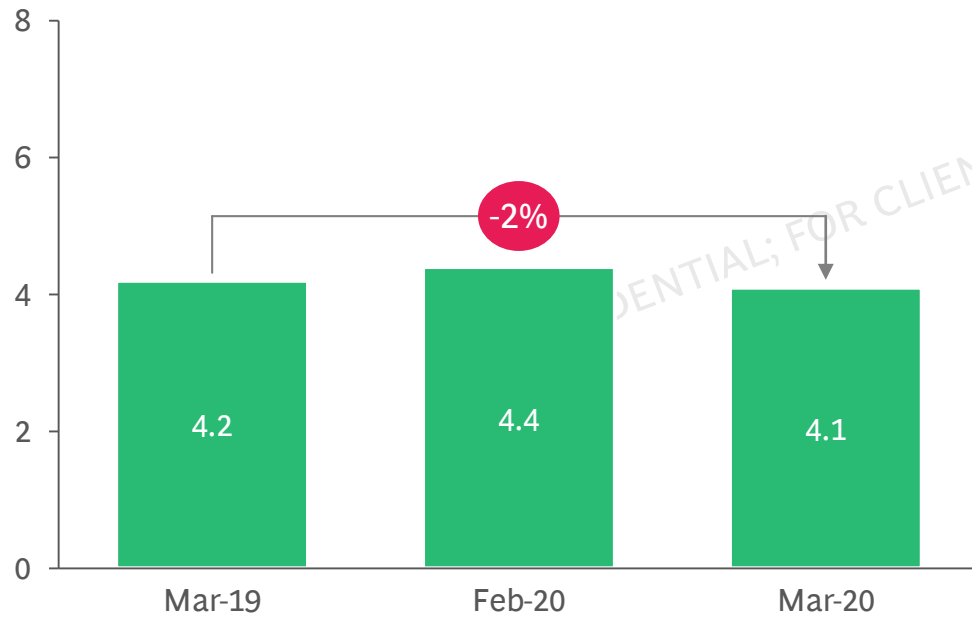
Total finished steel consumption declined by 23% YoY, owing to drop in demand in consumer industries

Finished steel consumption for long steel declined by 2% YoY - primarily used by construction & infrastructure industries

Finished steel consumption for flat steel declined by 38% YoY - primarily used by manufacturing industries

Consumption of finished steel (in MMT)

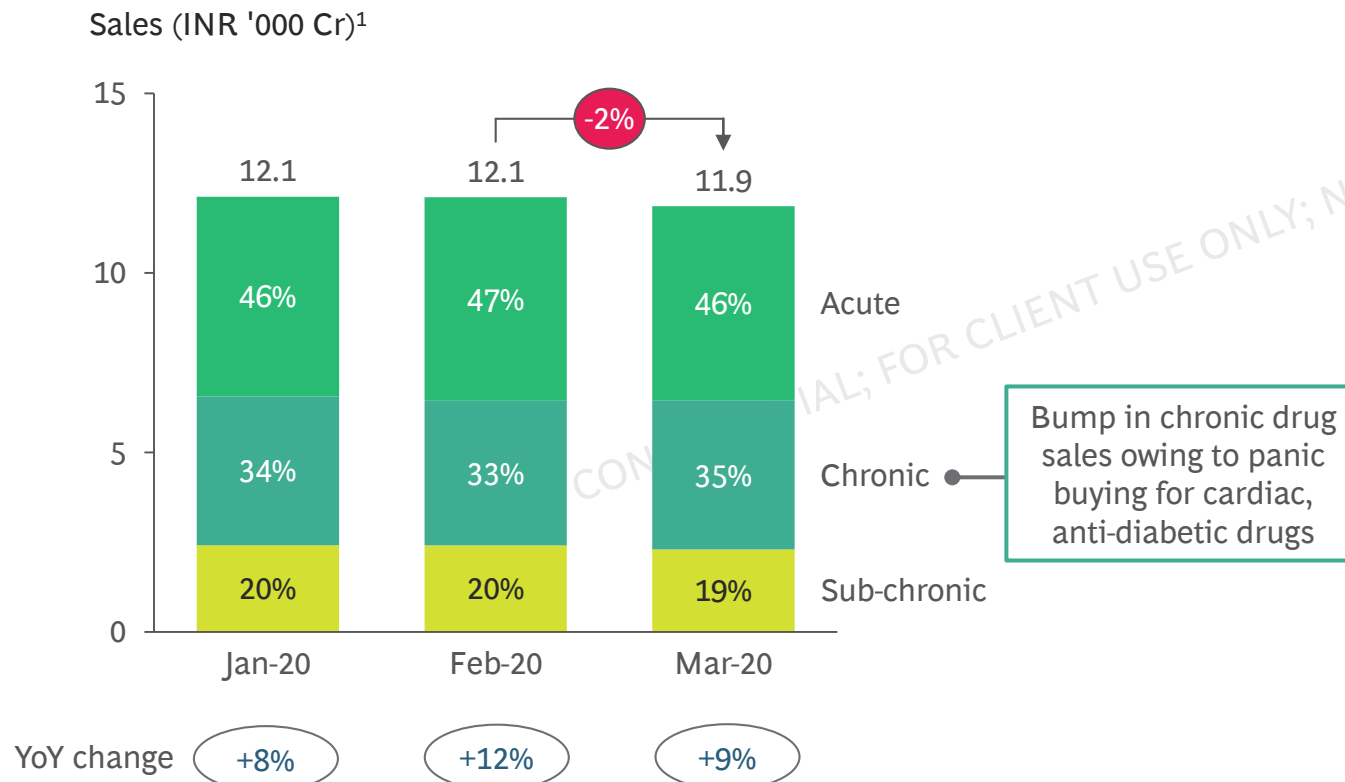
Consumption of finished steel (in MMT)



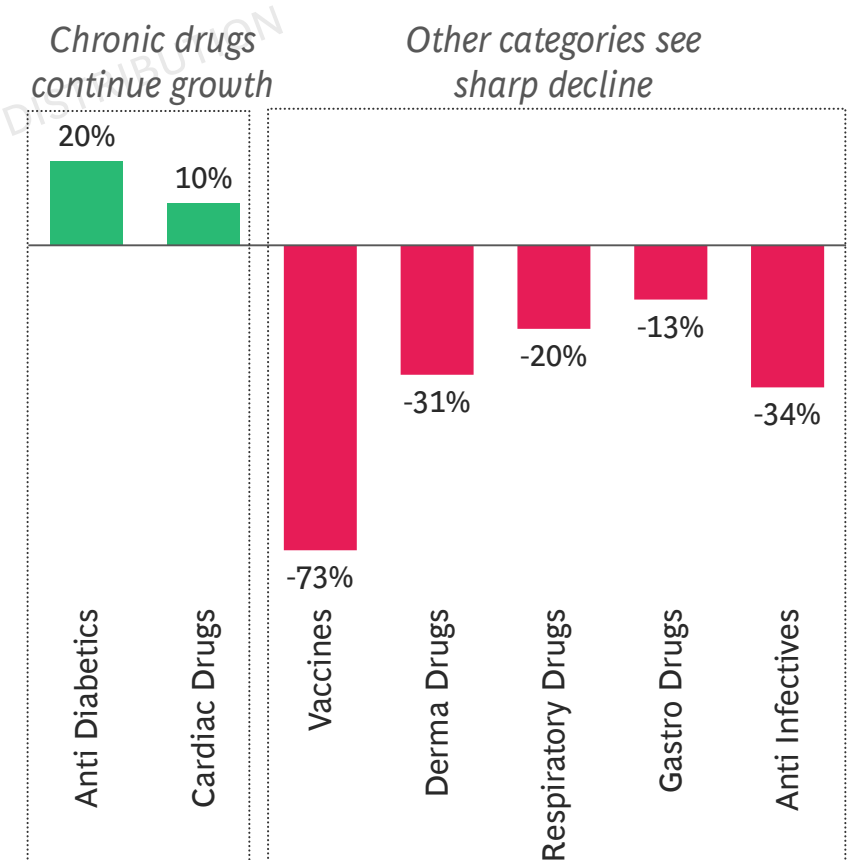
Based on early industry data; may not be 100% representative of the entire industry
Source: Joint Plant Committee,

Pharma. sales growth declined to 9% YoY in Mar-20 vs. 12% in Feb-20; Drop in sales steepened in Apr-20 vs. Mar-20

Pharma. sales grew by 9% in Mar-20 YoY vs. 12% in Feb-20

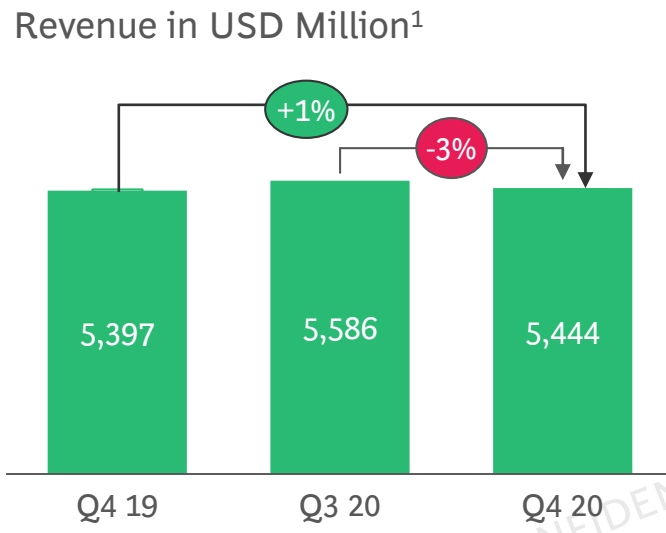


Steep decline in sales observed in April first half vs. same period in Mar-20 (based on provisional industry data)



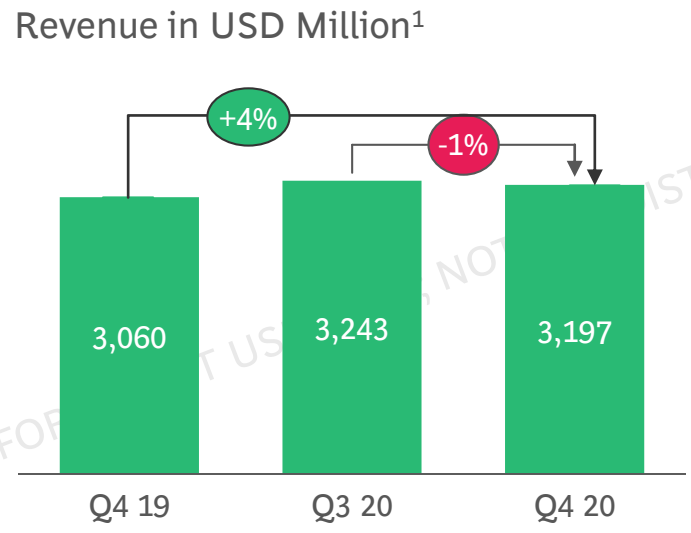
Includes sales from categories other than acute, chronic, sub-chronic
Source: AIOCD, The Economic Times, BCG analysis

Recent Q4 results released by top IT cos. in India show slight decline in revenue for Q4 FY20; companies expecting headwinds in Q1 FY21



“ 2/3rd of revenue impact in March related to supply side issues, primarily in Banking (down 5% QQ)

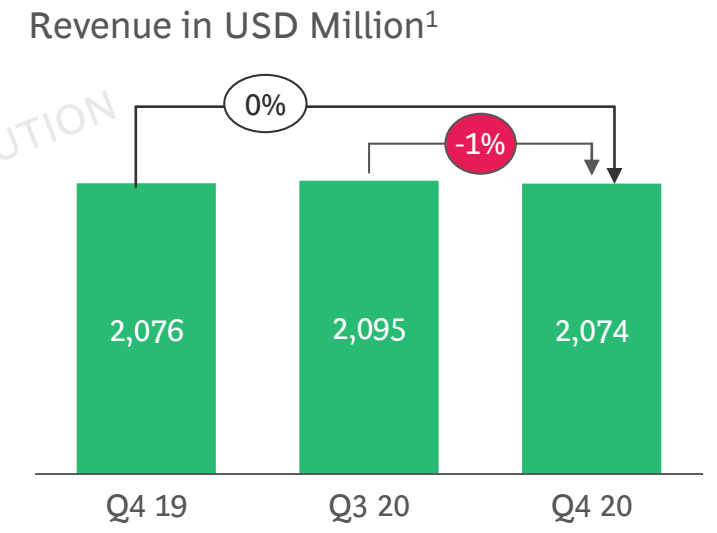
Peak impact on demand expected in Q1'21, with ~80% of revenue impact led by demand compression across geographies



“ Infosys lost 1% (QoQ) to supply slippages & demand destruction in Mar-20 2nd half

North America BFSI, European Healthcare particular areas of weakness

COVID-19 impact expected to worsen in Q1'21, led by supply and demand weakening driving sharp hits to utilization



“ COVID-19 impacted Q4'20 revenues by 0.7%-0.8%; expects further decline in Q1'21 putting huge pressure on margins

Pricing pressures in terms of discounts or payment term extensions and restructuring requests for existing spends

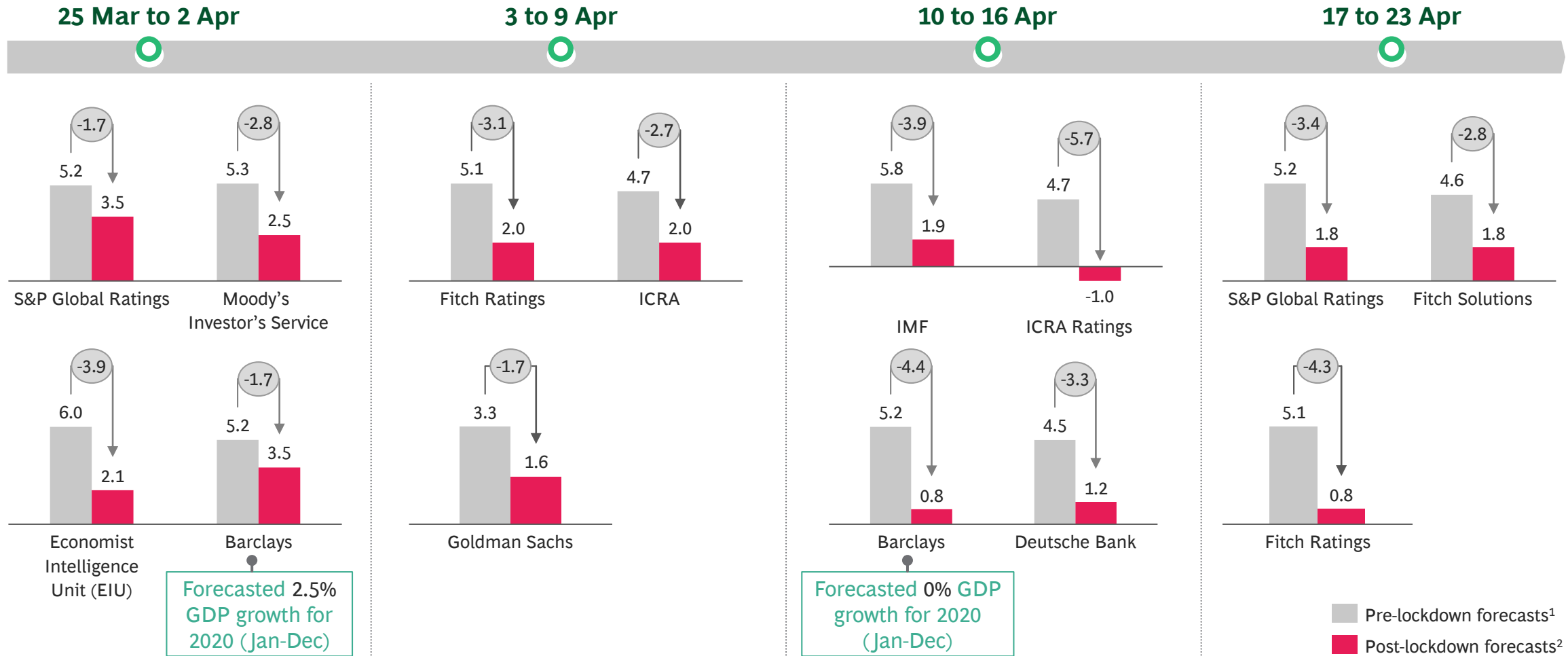


1. Revenue from IT services
Source: Company results & announcements, analyst reports

Indian GDP growth forecasts revised downwards over the last few weeks

Data as of 23 Apr; Estimates likely to be revised further

India GDP growth forecast for FY21 (YoY, %)



1. Pre-lockdown forecasts were made during Feb 2020 / early March 2020 2. Post-COVID forecasts were made across past weeks divided in 4 periods; from 25 Mar to 2 Apr, 3 to 9 Apr, 10 to 16 Apr and 17 to 23 Apr
Source: Analysts reports, BCG analysis

9 action areas for business leaders

Establish crisis management

Navigate through Flatten, Fight, and Future

Flatten

Fight

Future

- 1 Develop **Scenario-Based Planning Approach** to manage uncertainty
- 2 Create a **Rapid Response and Transformation (RR&T)** team
- 3 **Revamp Organization and People** for the new normal
- 4 Drive **Topline Security and Customer trust**
- 5 Stabilize and restart **Supply Chain, Manufacturing**
- 6 Manage **Cost, Cash, and Liquidity**
- 7 **Emerge Stronger**; drive advantage in adversity
- 8 **Accelerate Digital and Technology** transformation
- 9 **Help Society** during COVID-19

Note: RR&T = Rapid Response and Transformation Team
Source: BCG

How can BCG help you?



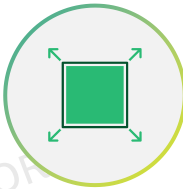
Engage as a partner

We will partner with you in getting the rapid response team kick-started with an agile working model



Plan for the unknown

We will drive a scenario wise assessment of company's exposure & outline mitigation roadmap



Support on immediate priorities

We will work with you to deep-dive on critical priorities to layout a detailed action plan



Capitalize on emerging opportunities

We will work with you to scan for emerging new opportunities (M&A, diversification) to enable acting early



Bringing best-practices to you

We will bring in the latest learnings and best-practices from around the world

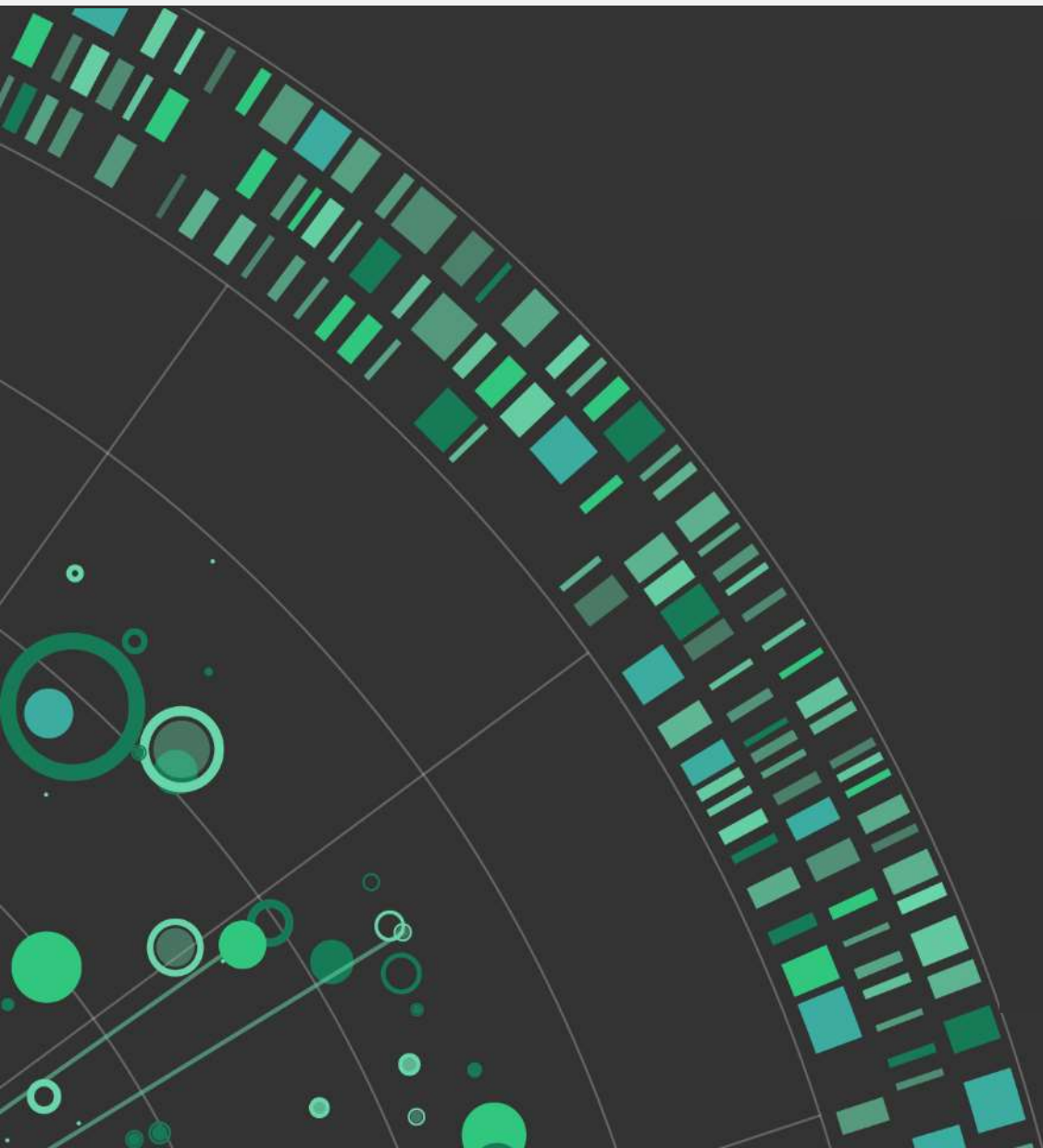
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