

A decorative graphic on the left side of the slide features a dark grey background with a grid of small, colorful squares in shades of green and blue. Overlaid on this are several concentric circles and lines in the same color palette, creating a complex, abstract pattern.

# COVID-19 BCG Perspectives

Facts, scenarios, and actions for business leaders

# Our presenters today



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São Paulo



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Managing Director and Partner  
São Paulo



1

## COVID-19 Context and Development

Disease progression and response

Government policies and economic stimulus

2

## Economic, Business, and Societal Impact and Scenarios

Economic scenarios

Consumer sentiment

Business engagement and response

3

## Leadership in Crisis

Principles for leadership in crisis



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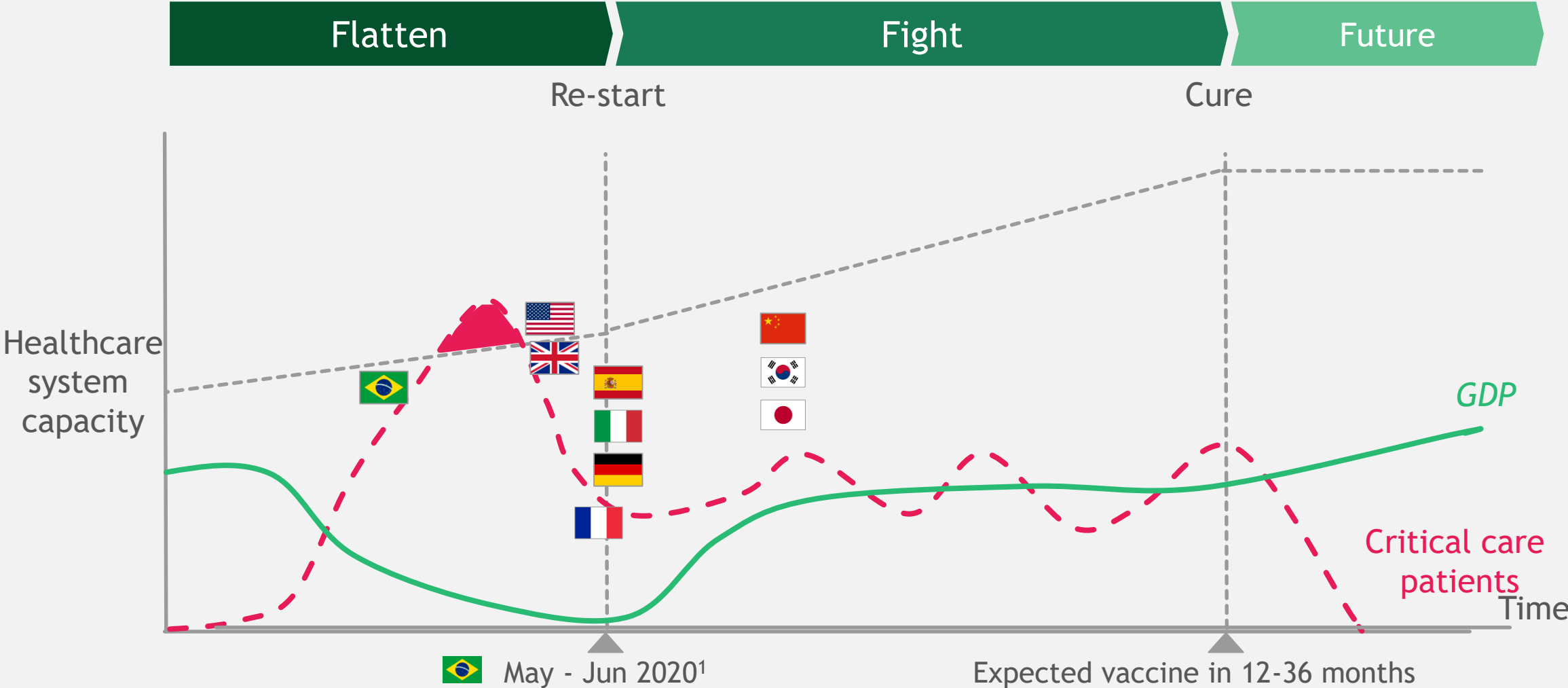
Business engagement and response

3

## Leadership in Crisis

Principles for leadership in crisis

# Three phases of the COVID-19 development

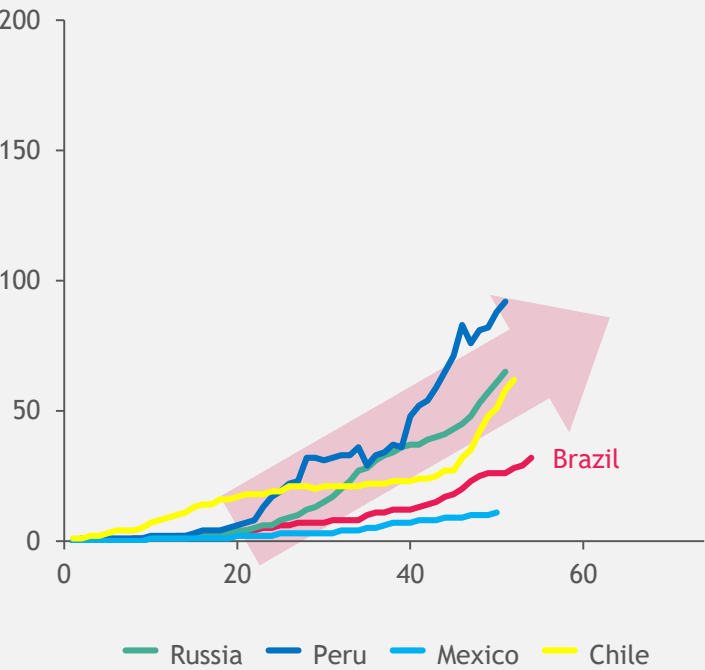


1. Expected date for controlled lifting of restrictions and gradual return of economic activities Note: Flags intended to illustrate each country phase and are not in scale.  
Source: Johns Hopkins CSSE; Press search; IBGE; Google Community Mobility; BCG analysis

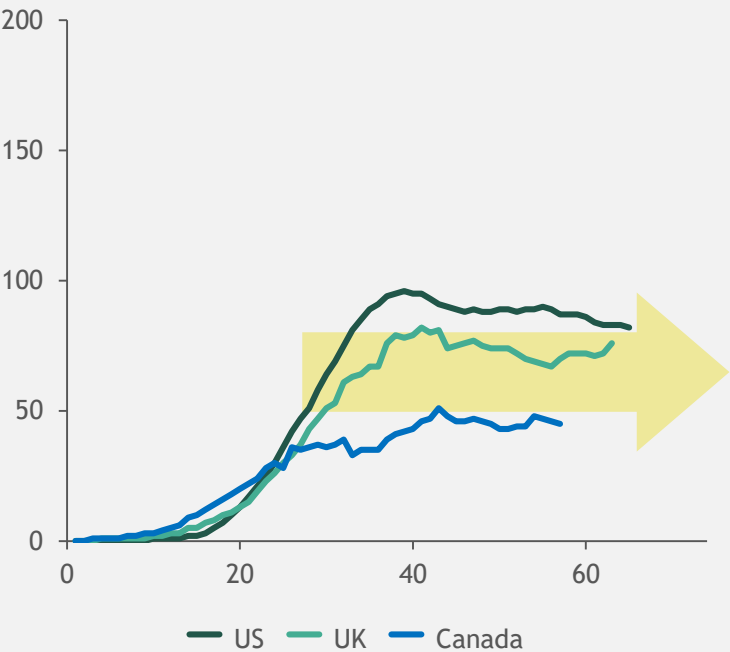
# Brazil not yet flattening the curve

## Increasing

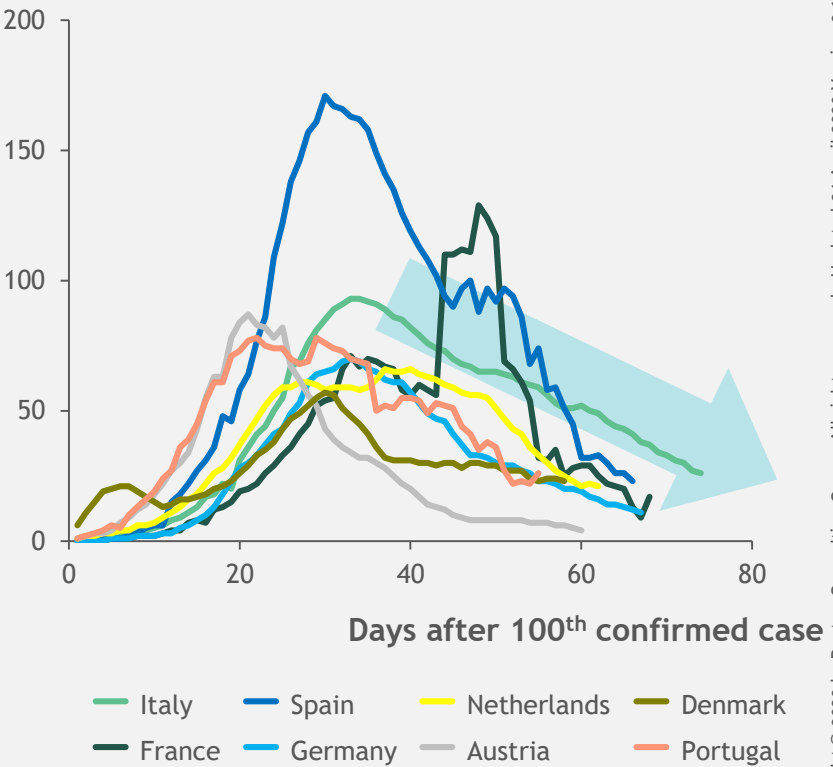
Daily new confirmed cases per 1M hab. (7-day moving average)



## Plateauing



## Decreasing



Note: Countries shown on the graph have more than 1.000 reported confirmed cases  
Source: Johns Hopkins CSSE, United Nations, BCG Analysis

Similarly to EU, SP will use three criteria to flex isolation



Applying these criteria to the different Brazilian States we notice very distinct realities, some already critical

Data as of 6 May



### Criteria recommended by EU

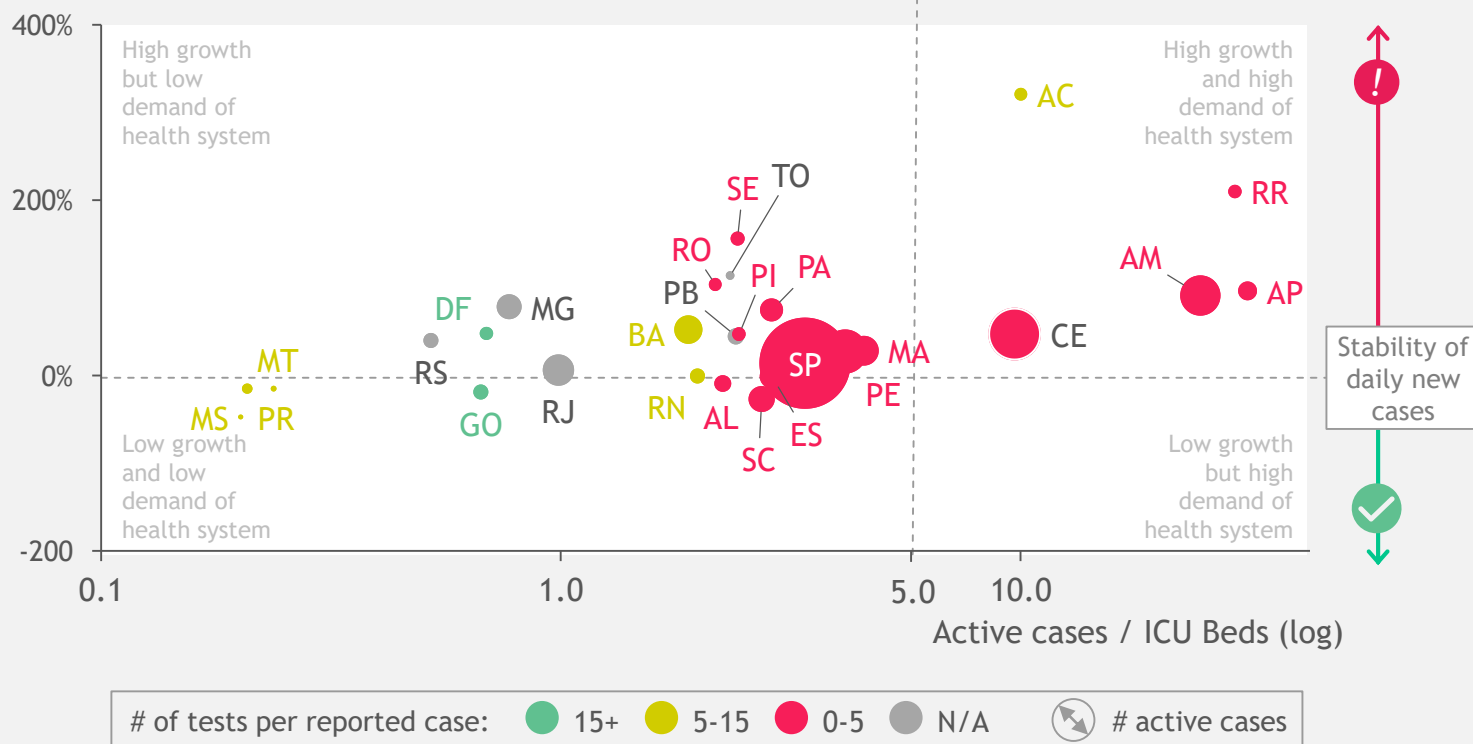
- Number of cases
- Healthcare capacity
- Monitoring capacity



### Criteria used by SP

- New daily cases
- ICU occupancy
- Testing availability

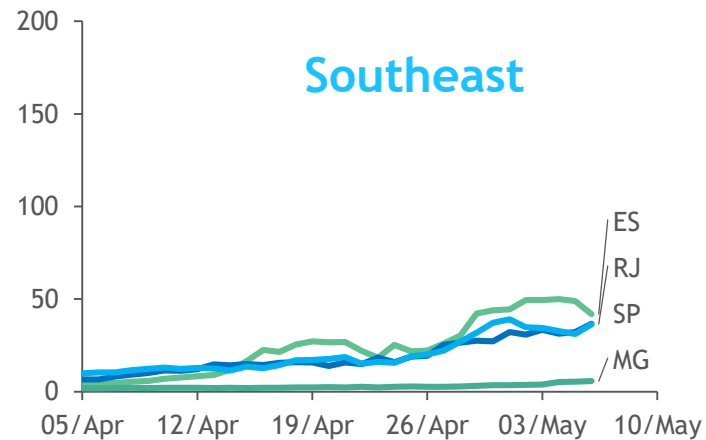
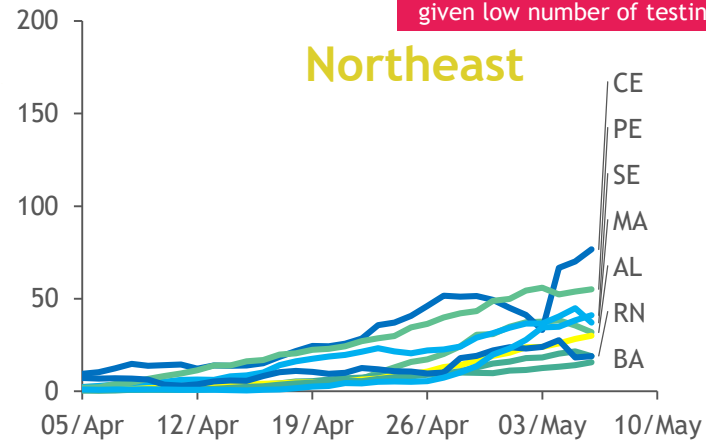
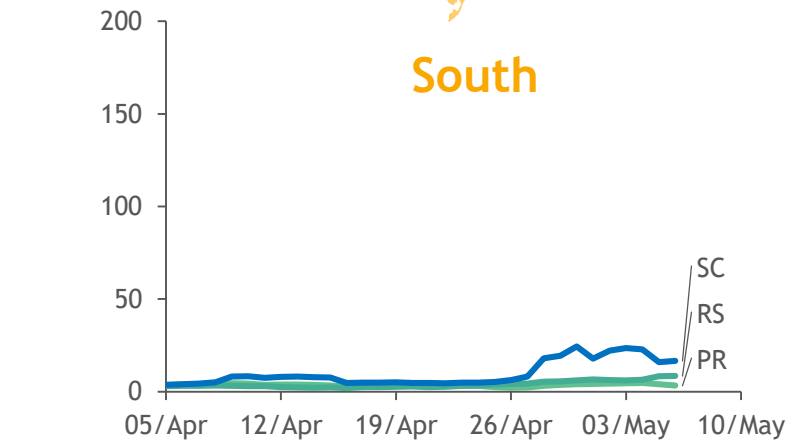
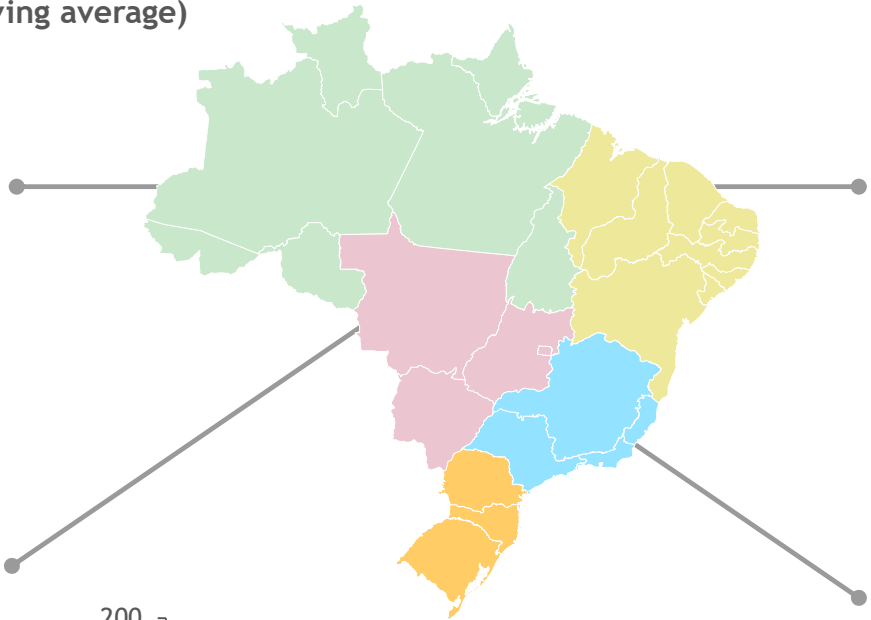
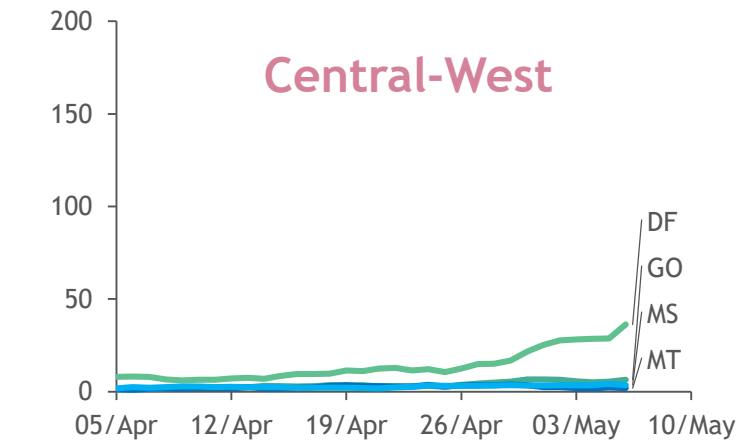
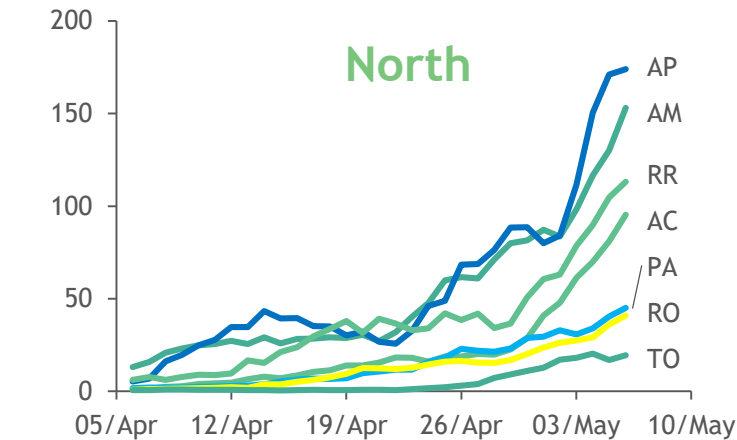
Variation of daily new cases  
(06.05 vs 29.04, 7-day moving average)



1. Approximately 19% of cases progress to severe (hospitalization) and critical (intensive care), from a Study of 44,672 confirmed cases in Mainland China; Note: Active cases considers the confirmed cases excluding the people who have died or recovered. Number of people who recovered was not available in the states of MG, SC and GO  
Source: Ministry of Health; States Health Secretaries; Press search; IBGE, China Center for Disease Control (CCDC); Worldometer; BCG Analysis

# Variation of daily new cases: South plateauing; other regions growing

Daily new confirmed cases per 1M hab. (7-day moving average)



Data as of 6 May

Disclaimer: Reported cases may be underestimated given low number of testing

Source: Ministry of Health; States Health Secretaries; IBGE; BCG analysis

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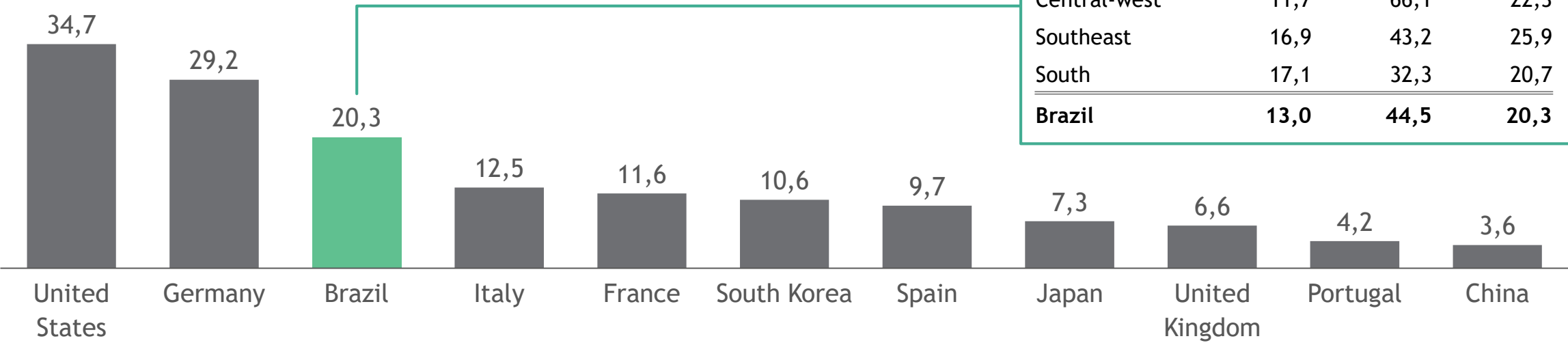


# ICU beds: Brazil apparently has a decent number of ICU beds

Still, huge discrepancy in distribution amongst regions and amongst public / private systems

Data as of 19 Mar

ICU beds / 100.000 hab.



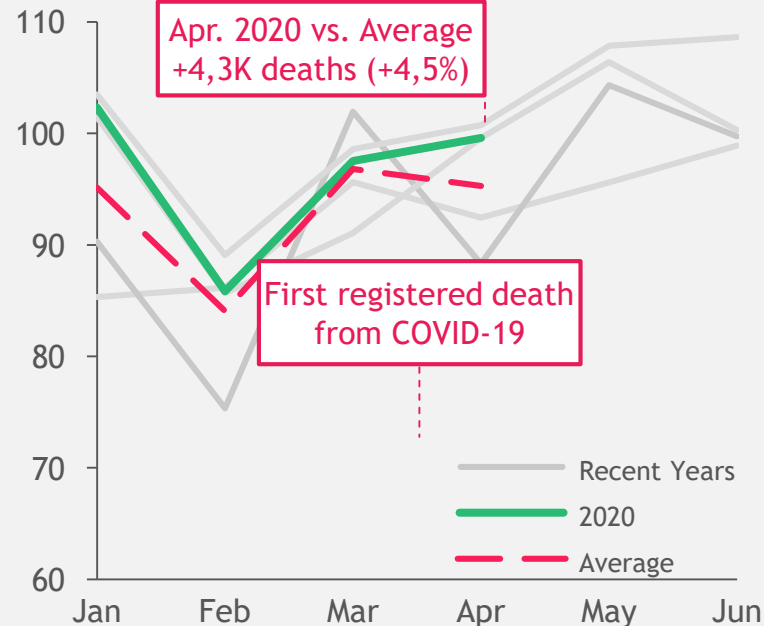
Disclaimer: ICU saturation due to other illnesses and non ICU beds availability may impact COVID-19 treatment

Note: SUS: number of ICU beds in public hospitals over the total population not covered by private health provider  
Source: Critical Care Bed Capacity in Asian Countries and Regions (2020); Society of Critical Care Medics (SCCM); Associação de Medicina Intensiva Brasileira (AMIB); OECD

# Total deaths in Brazil have not changed much - Yet! - that said, we see substantial changes in some places, especially in large cities

## Total deaths in Brazil increased less than 5%...

Number per deaths from all causes vs. average from recent years<sup>1</sup> in Brazil (K)

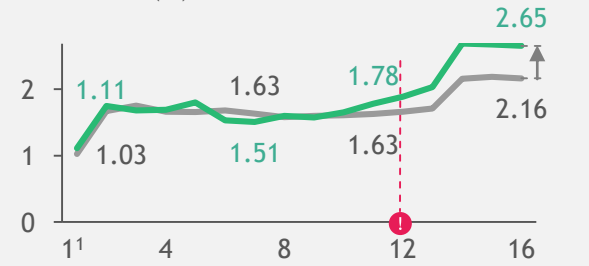


## ... but major affected cities saw increase in all deaths, with COVID and RD<sup>2</sup> as main drivers

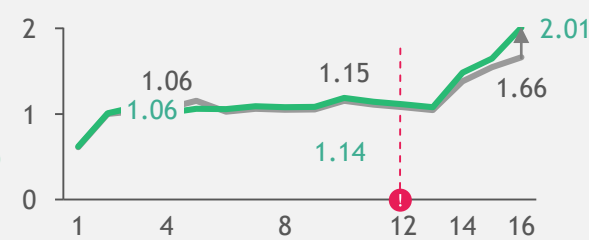
Total deaths per Epidemiological Week (K)



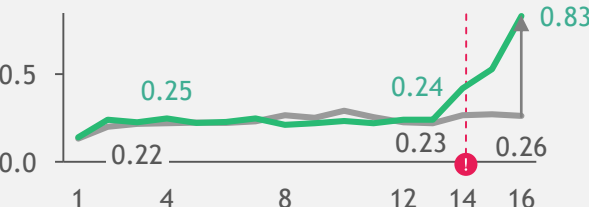
São Paulo



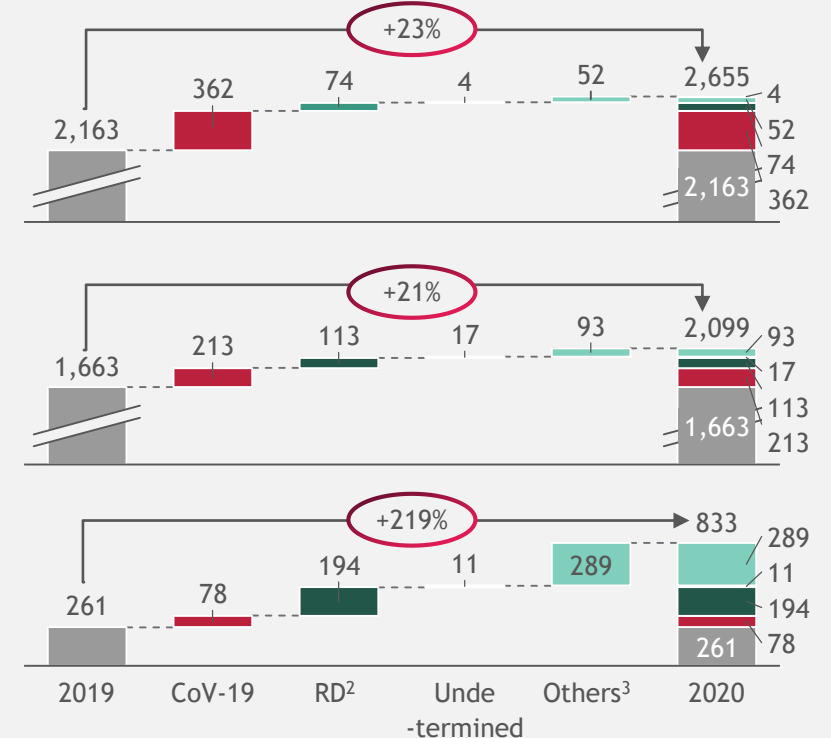
Rio de Janeiro



Manaus



Contribution of causes for raise in number of deaths from first COVID-19 death EW to EW 16

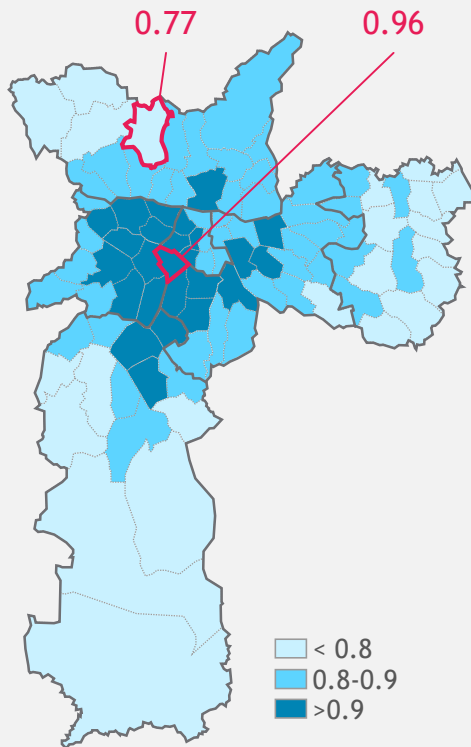


1. Data from 01/01 to 04/01 2. Respiratory Diseases: SARS, Respiratory Insufficiency and Pneumonia 3. Includes Septicemia, undetermined and external/non-natural causes of death Source: Portal de Transparência de Registro Civil, BCG analysis

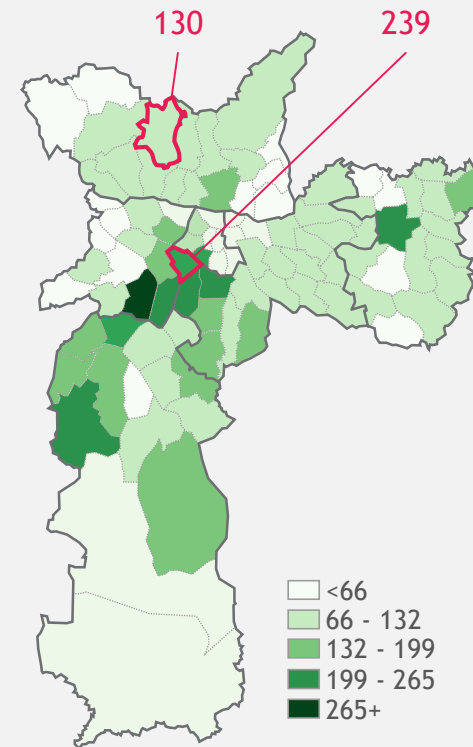
# Zooming in a large city like Sao Paulo, we understand the different micro-regional realities, with poor districts severely damaged

Data as of 21 April

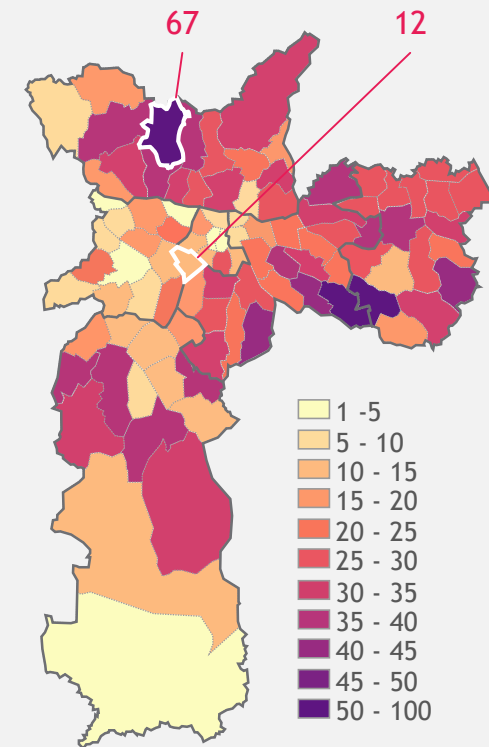
Higher HDI<sup>1</sup> in  
central districts of SP  
HDI per district



Cases concentrated  
on central districts...  
Cases per district of residence



...while deaths  
relevant in periphery  
Deaths per district of residence



1. HDI: Human Development Index (2007), the higher, the more developed

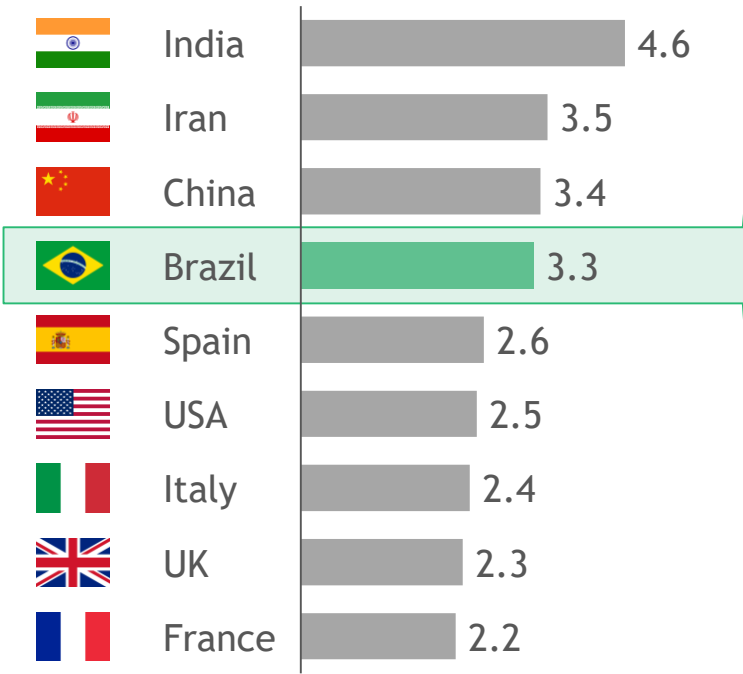
Note: Representation includes 5.824 (87,1%) of E-SUS VE cases, 4.318 (97,4%) of Sivep Gripe cases and 2.341 (99,2%) of MSP deaths (919 confirmed and 1.442 suspected deaths)

Source: São Paulo City Health Secretary COVID-19 Weekly report - 30/apr, IBGE, BCG analysis

As presented on April 9<sup>th</sup> BCG Brazil COVID-19 Live Session, household size and structure was mentioned as a challenging context for virus contention

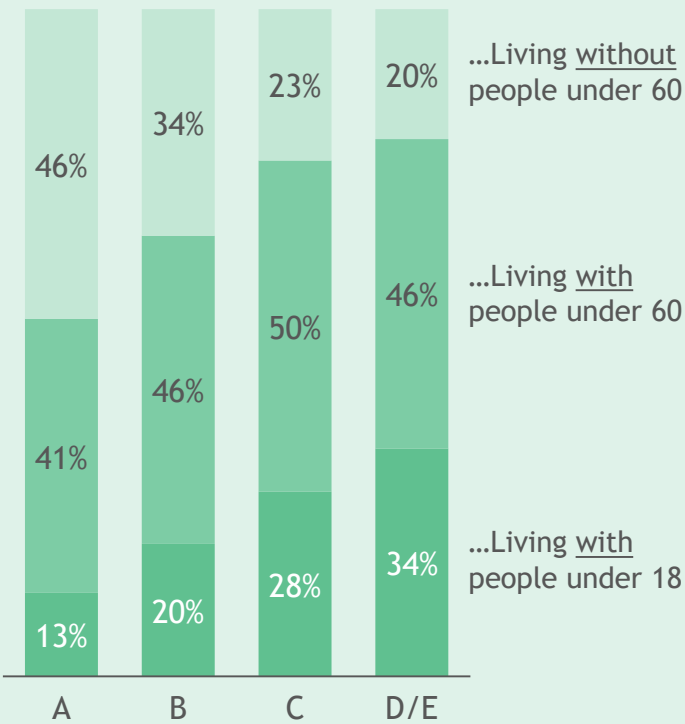
Household size

Average Household Size (# of Members)



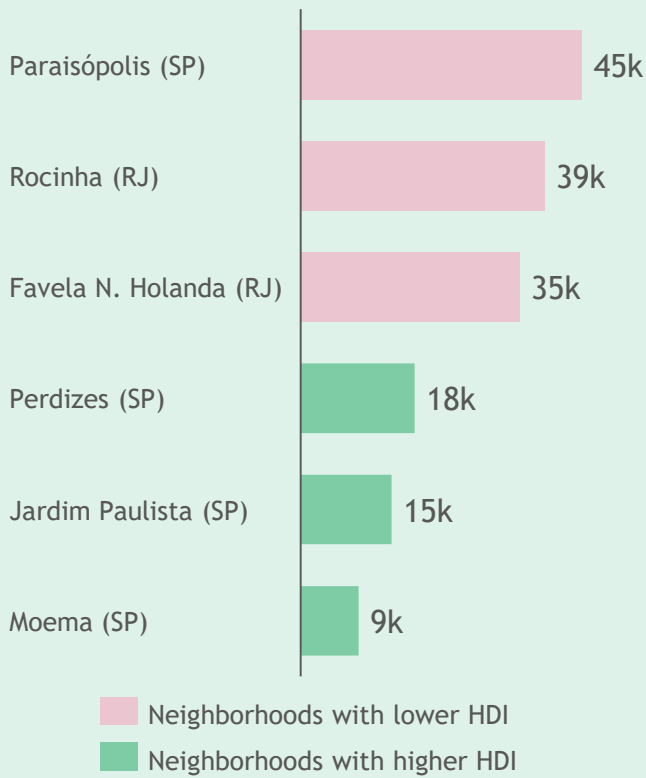
Multigenerational households

Percentage of people over 60 years old...



High demographic concentration




























Population concentration (people per km<sup>2</sup>)



Note: HDI: Human Development Index (2007), the higher, the more developed; Source: IBGE, United Nations

In Brazil, different approaches adopted by each state

Data as of 04 May

	End date <sup>1</sup>	Schools	Churches	Shopping	Retail	Cinemas	Gyms	Parks/clubs	Beaches
 AC	May 15	✓		✓	✓	✓	✓	✓	N/A
 AL	May 15	✓	✓	✓		✓	✓	✓	✓
 AP	May 18	✓	✓	✓	✓	✓	✓	✓	
 AM	May 13	✓	✓	✓	✓	✓	✓	✓	N/A
 BA²	May 18	✓	✓	✓	✓	✓	✓	✓	✓
 CE	May 5	✓	✓	✓	✓	✓	✓	✓	✓
 DF	May 10	✓		✓	✓	✓	✓	✓	N/A
 ES	May 15	✓	✓	✓	✓	✓	✓	✓	✓
 GO	Not specified	✓	✓	✓	✓	✓	✓		N/A
 MA	May 15	✓		✓	✓	✓	✓	✓	✓
 MT	Cities definition	✓	✓	✓	✓	✓	✓	✓	N/A
 MS	Cities definition	✓	✓	✓	✓	✓	✓	✓	N/A
 MG	Not specified	✓	✓	✓	✓	✓	✓	✓	N/A
 PA	May 15	✓	✓	✓	✓	✓	✓		
 PB³	May 18	✓	✓	✓	✓	✓	✓	✓	✓
 PR	Cities definition	✓		✓	✓	✓	✓	✓	
 PE	May 15	✓	✓	✓	✓	✓	✓	✓	✓
 PI	May 21	✓	✓	✓	✓	✓	✓	✓	
 RJ³	May 11	✓	✓	✓	✓	✓	✓	✓	✓
 RN	May 5	✓	✓	✓	✓	✓	✓	✓	✓
 RS	Not specified	✓	✓	✓	✓	✓	✓	✓	✓
 RO	Cities definition	✓	✓	✓	✓	✓	✓	✓	N/A
 RR	Cities definition	✓	✓	✓	✓	✓	✓	✓	N/A
 SC	Not specified	✓	✓	✓		✓	✓	✓	✓
 SP	May 10	✓	✓	✓	✓	✓	✓	✓	✓
 SE	May 7	✓	✓	✓	✓	✓	✓	✓	✓
 TO	Not specified	✓	✓	✓	✓	✓	✓	✓	N/A

✓ Closed for all state

✓ Closed in some cities, including capital

✓ Closure recommendation

1. Date announced by State governments, 2. Only gyms with less than 50 people can open, 3. in cities with confirmed COVID-19 cases; Source: Poder 360, official states government website  
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# Government Response | Widespread use of digital technologies in crisis response; choices depend on privacy and security

Data as of 29 April

Non-exhaustive

	Detect	Alert	Track & Trace	Community Support	Collaboration
	<p>Use of technologies (IoT, Analytics, Robotics, Imaging) to aid detection of cases based on physical symptoms, history</p> <p><b>China</b> Smart robot patrols</p> <p><b>UK</b> C-19 symptom tracker</p> <p><b>Vietnam</b> NCOVI health monitoring</p>	<p>Use of communication tech (Chat-bots, Webpages) to share information including disease alerts, treatment, and testing centers</p> <p><b>Australia</b> Coronavirus Australia app</p> <p><b>Singapore</b> FluGoWhere website</p> <p><b>UK</b> GOV.UK Notify portal</p>	<p>Use of modern computing (GPS, Bluetooth) to trace contact with patients/ high-risk individuals</p> <p><b>South Korea</b> Corona 100m app</p> <p><b>India</b> Aarogya Setu app</p> <p><b>Australia</b> COVIDSafe app</p> <p><i>Deep dive on next page</i></p>	<p>Coming together of the community (individuals, local groups, organizations and scientific community) on crisis response</p> <p><b>Ireland</b> MyWelfare portal</p> <p><b>Singapore</b> MaskGoWhere portal</p> <p><b>USA</b> COVID-19 high performance computing consortium</p>	<p>Use of technologies (AI, Big Data, Performance Computing) to enable collaboration across boundaries</p> <p><b>USA</b> AI enabled research dataset</p> <p><b>EU</b> Big data hub for R&amp;D</p> <p><b>South Korea</b> AI-enabled testing kit development</p>

Source: BCG

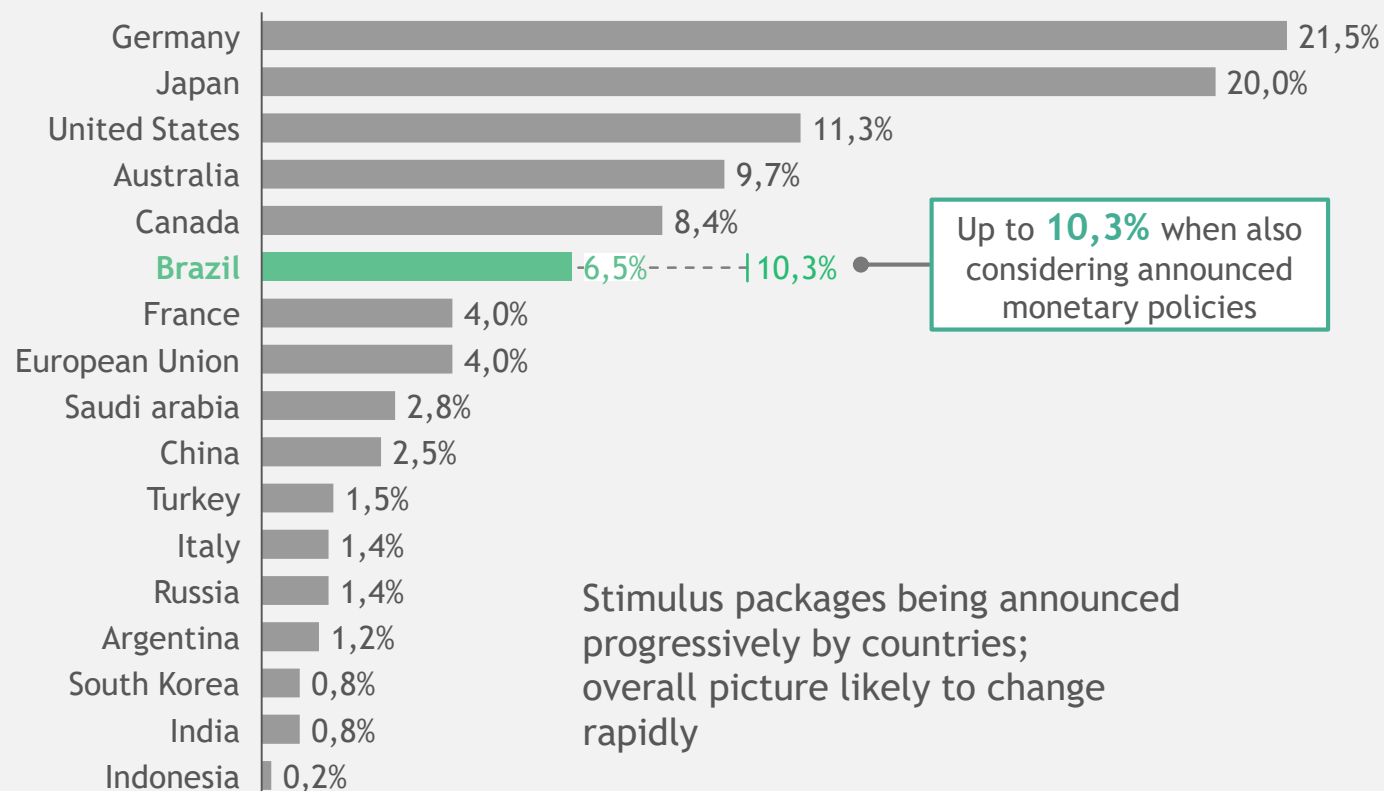
Virus monitoring solutions

# Many governments passed fiscal stimulus packages with unseen scale and some are suggesting more will be needed

Data as of 07 April

## Value of COVID-19 fiscal stimulus packages in G20 countries as a share of GDP

Support especially for small businesses, hard hit sectors, and lower wage earners



## Extra measures from Brazilian Central Bank to improve liquidity<sup>2</sup>

- 1 Compulsory Short-term liquidity indicator (LCR) + R\$ 135B
- 2 Additional Release of Compulsory Deposits + R\$ 68B
- 3 Flexibility of Agri letter of credit (LCA) rules + R\$ 2.2B
- 4 Guaranteed Financial letters (LF) backed loan + R\$ 670B
- 5 Commitments with Brazilian sovereign bonds + R\$ 50B
- 6 New Time Deposit with Special Guarantees + R\$ 200B
- 7 Debenture-backed loans + R\$ 91B

Total impact ~R\$ 1,2T  
As % of GDP 16,7%

1 As announced on April 09 2020, based on IMF (14 April 2020); Brazil: G1 (26 March 2020)  
Source: IMF; G1; Measures to fight Covid-19's crisis effects - Central Bank Brazil 04.04.2020





1

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# V-U-L empirics: same shock, three shapes

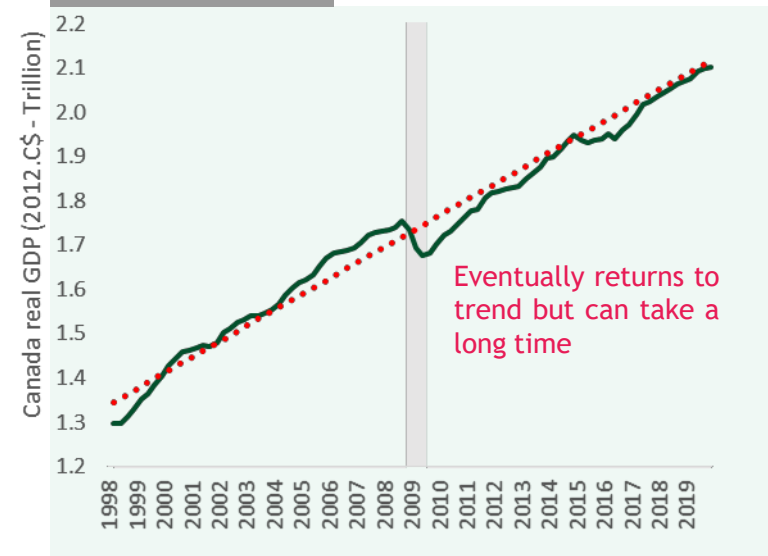
- 1

Sharp-rapid recovery (V)
- 2

Slow comeback (U)
- 3

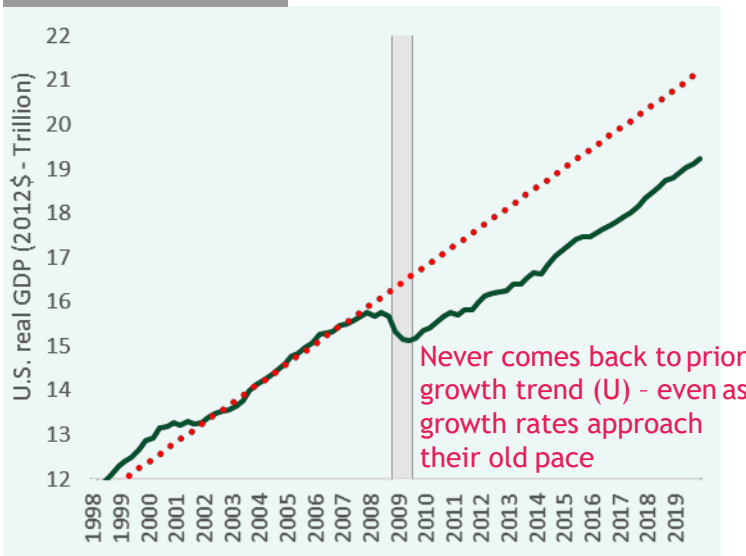
Protracted challenge (L)

## 2008 Canada



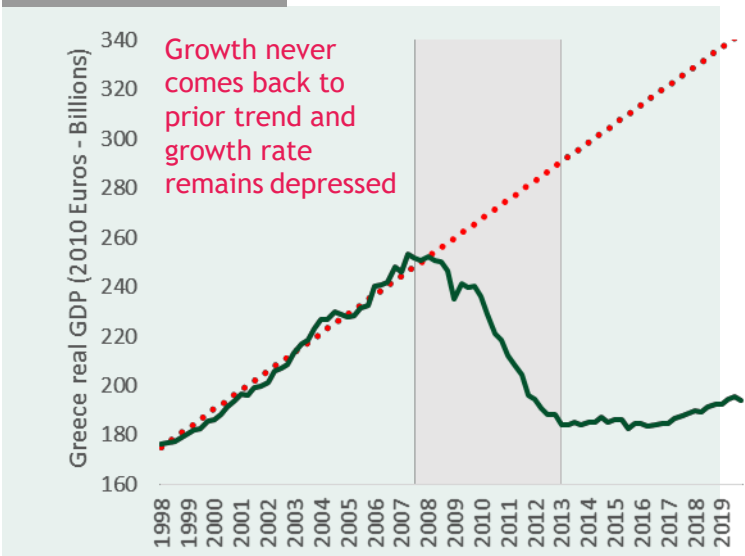
- Canada closest to V-shape (returns to prior trend)
- No systematic banking crisis - no damage to economy's supply side

## 2008 United States



- U.S. clear U-shape (returning to growth rate, but at a lower trend)
- Driven by severe banking crisis - a one time hit to the supply side

## 2008 Greece

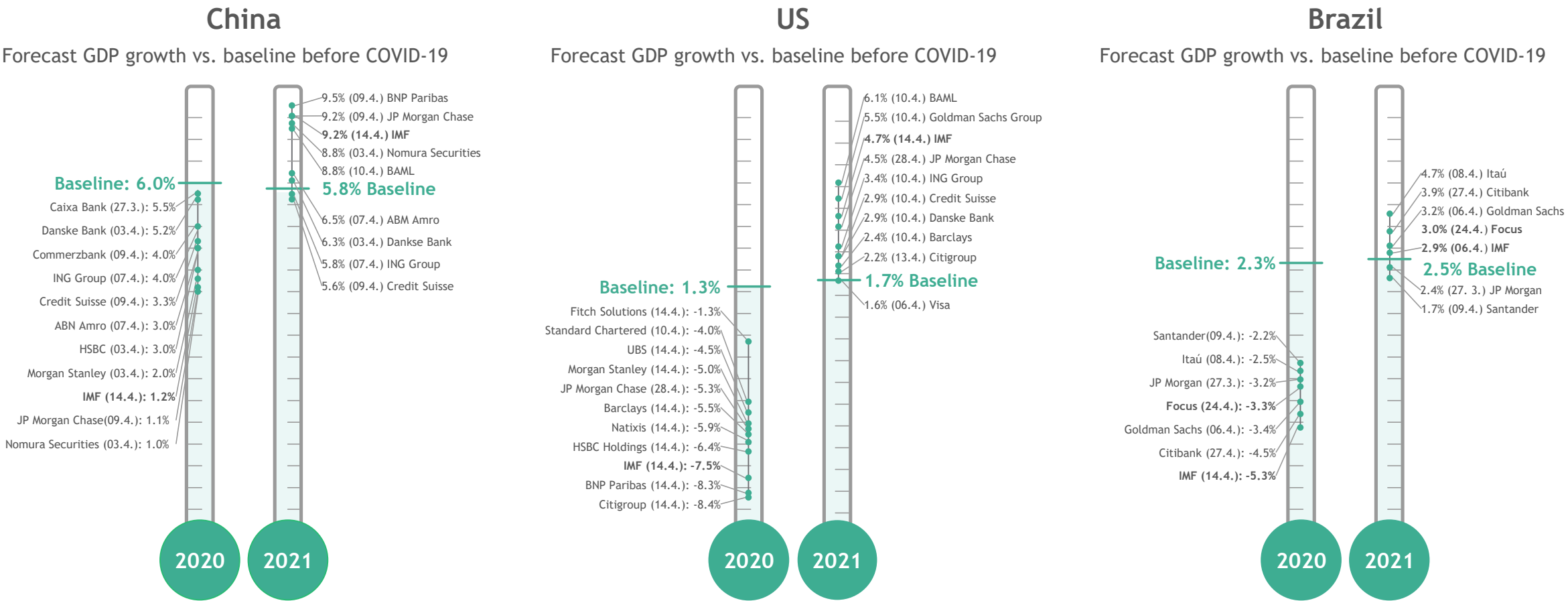


- Greece experienced a sustained depression and L-shape
- Growth has struggled at a much slower pace, with recurring damage to supply side

Note: Canada trend (1985-2008); US trend (2003-2007); Greece trend (1995-2006)  
Source: NBER, BEA, Statistics Canada, Hellenic Statistical Authority (ELSTAT), BCG Center for Macroeconomics analysis

# Economic forecasts point toward severe downturn

Data as of 29 April

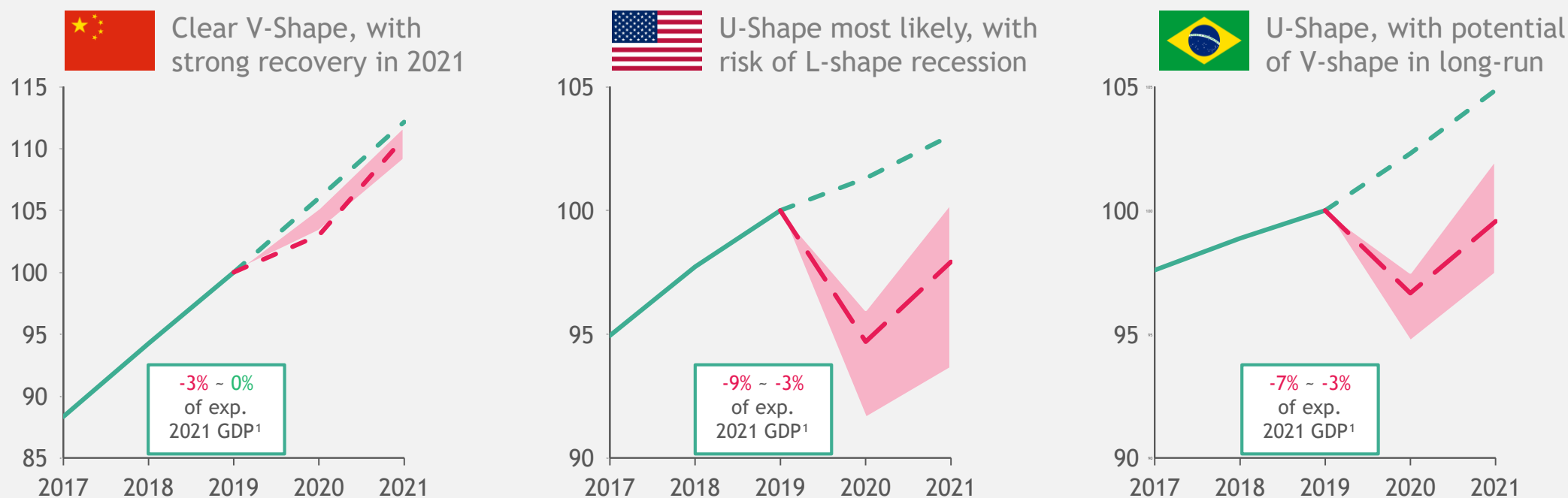


Note: As of reports dated 27 March 2020 to 29 April 2020  
1. For US, estimated since GDP growth mentioned for second half of 2020 as average  
Source: Bloomberg, IMF, Press search, Focus Report, BCG analysis

# Depth of "Fight" will vary among countries according to economic recovery

Data as of 29 April

## GDP Projection (as % of 2019 GDP)



1. Expected 2021 GDP based on median GDP growth from several Financial Institutions in Jan 2020;  
Note: Post COVID-19 scenarios for China and US based on median from several Financial Institutions; for Brazil, scenario based on Focus report from 24 April 2020  
Source: Bloomberg, IMF, Focus Report, BCG analysis

Over the last weeks, Brazilians are showing a rising feeling of sadness and stronger concerns on health and job insecurity, but keeping hope of a vaccine

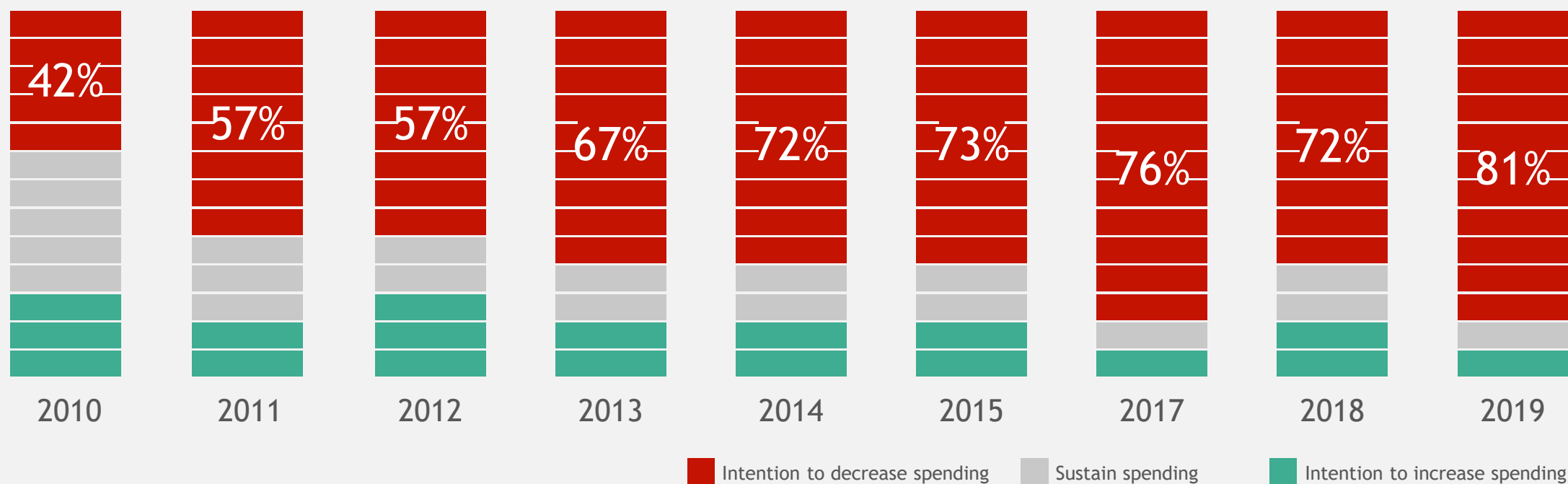
Top words that come to mind when Brazilians think about the virus (*Free response, unaided associations*)



Question text: “You mentioned that you are aware of a global virus outbreak. What comes to mind when you think about the virus?” Similar responses categorized together.  
Source: BCG COVID-19 Consumer Sentiment Survey - BR: April 17-19, 2020 (N = 1,284, weighted)

# From 2010 to 2019 we experienced a long and steady decline in consumer intentions to increase spending

% of consumers willing to increase/ decrease spending



Note: Question text: "Are you willing to increase/decrease your spending on the following 12 months?".

Source: Consumer Sentiment pre-covid Dec '19 (N=2,842, weighted); BCG analysis

# Decreased spending as general expectation, but many categories improving vs. pre-covid

Net variation of category spending across multiple surveys (%)

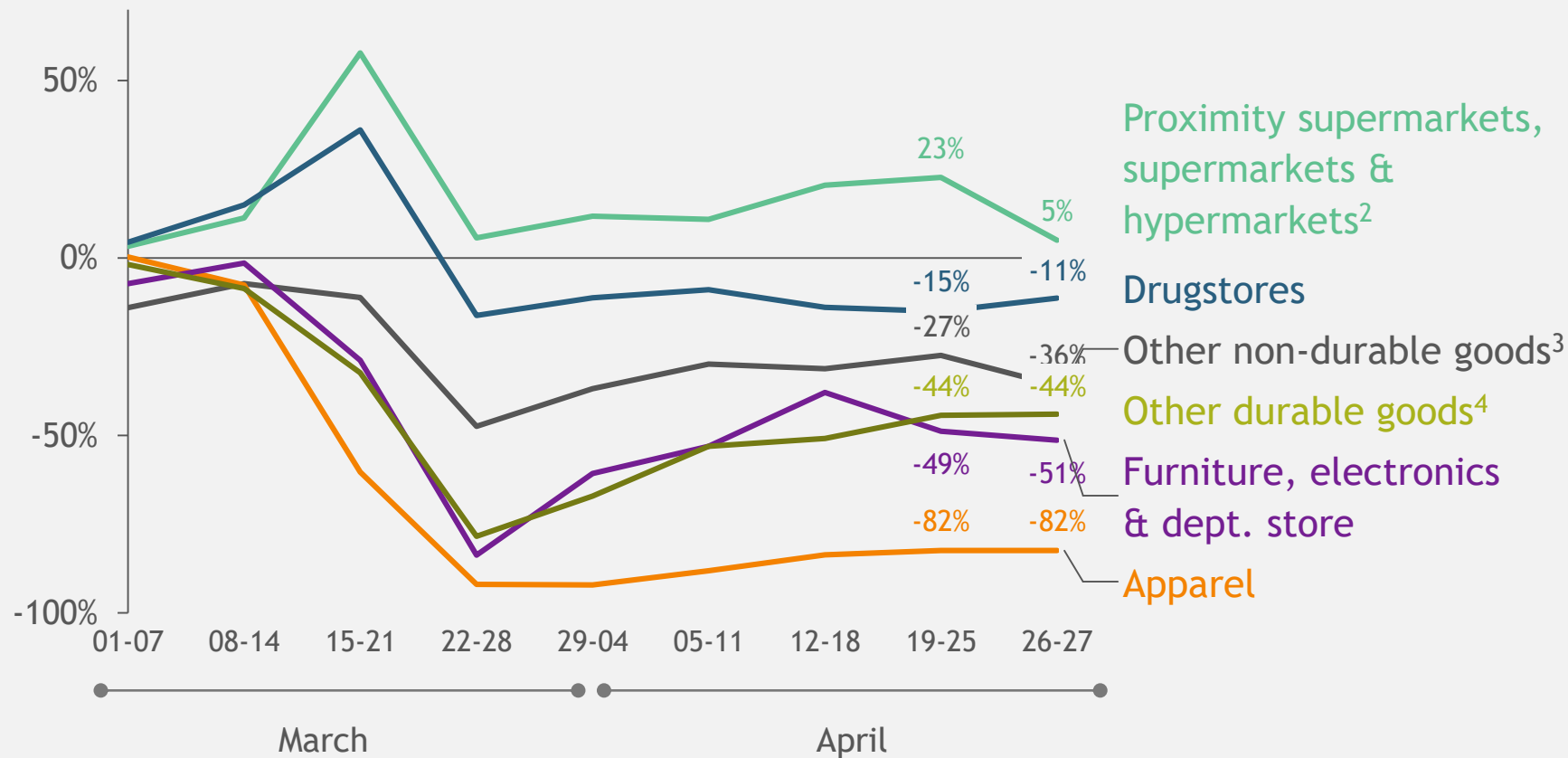


BCG COVID-19 Consumer Sentiment Survey: March 31-April 2 '20 (N=1255; Weighted); Consumer Sentiment Survey: April 17-19 '20 (N=1284; Weighted); Consumer Sentiment pre-covid Dec '19 (N= 23 2842, weighted) 1. Considered similar if value is +/- 5% of pre-covid survey Note: Question text: "How do you expect your spend to change in the next 6 months across the following areas?"

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# COVID-19 impacting retail channels distinctly

Offline sales change (%) over equivalent days in Feb '20<sup>1</sup>



How Brazilians are  
planning to  
behave in the  
following months?

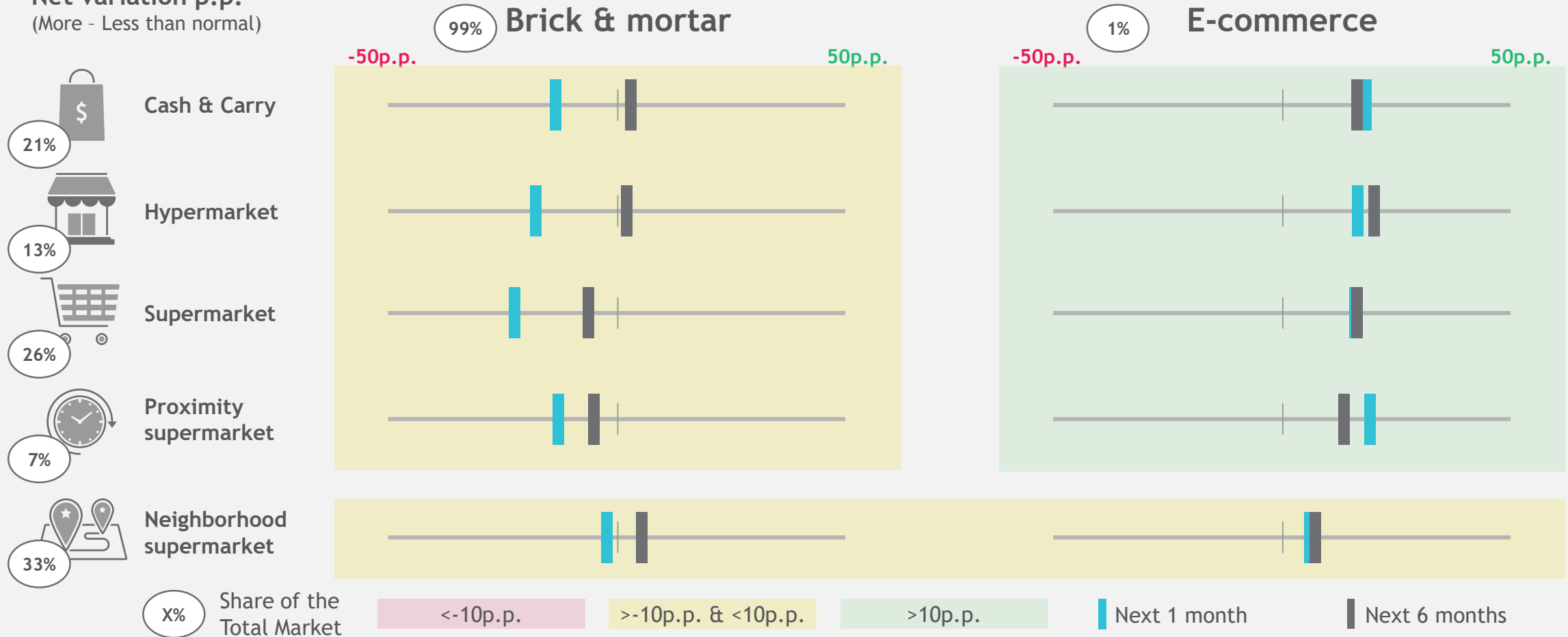
Note: 1. Excludes Carnaval and Easter break; 2. Does not include cash & carry; 3. Excludes gas stations; 4. Excludes building materials; Hypermarket (e.g. Carrefour, Extra, Walmart, Zaffari), Supermarket (e.g. Pão de Açúcar, Dia, Mambo), Proximity supermarket (e.g. Carrefour express, Minuto Pão de Açúcar, Dia %, Todo dia)

Source: Impacto do COVID-19 no Varejo Brasileiro, Cielo



# Next 1 & 6 months: E-commerce shows persistent high intention over time; brick & mortar rebound

Net variation p.p.  
(More - Less than normal)



Note: Question text: "Thinking about your next purchases, how much do you expect your spending to change on the following channels...?"; Cash & Carry (e.g. Tenda, Atacadão, Assaí), Hypermarket (e.g. Carrefour, Extra, Walmart, Zaffari), Supermarket (e.g. Pão de Açúcar, Dia, Mambo), Proximity supermarket (e.g. Carrefour express, Minuto Pão de Açúcar, Dia %, Todo dia), Neighborhood supermarket (unbranded)

# Next 1 & 6 months: ... with no expected rebound for electronics, mono and multi brand apparel stores

Net variation p.p.  
(More - Less than normal)

-50p.p. Brick & mortar 50p.p.

-50p.p. E-commerce 50p.p.

Non-essential



Drugstore



Dept. store  
(electronics & apparel)



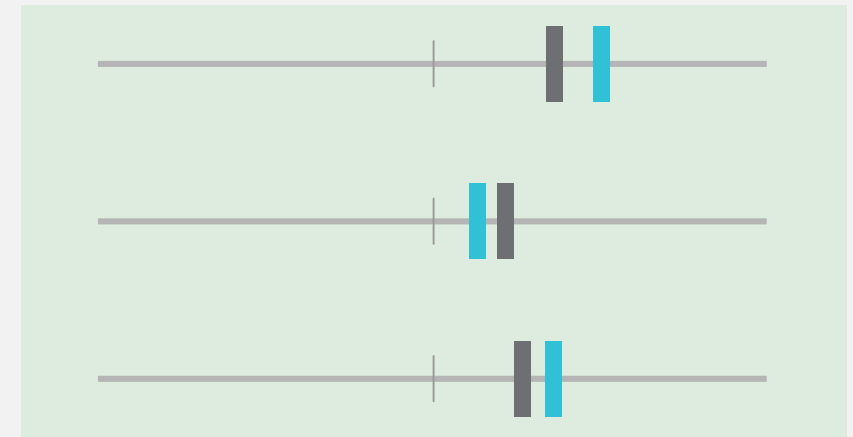
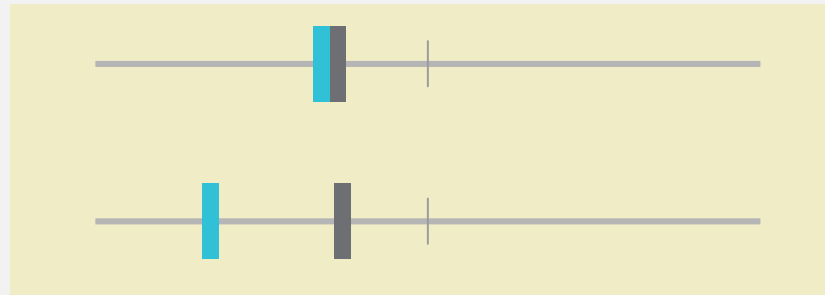
Electronics store



Mono brand store  
(apparel)



Multi brand store  
(apparel)



X% Share of the Total Market

<-10p.p.

>-10p.p. & <10p.p.

>10p.p.

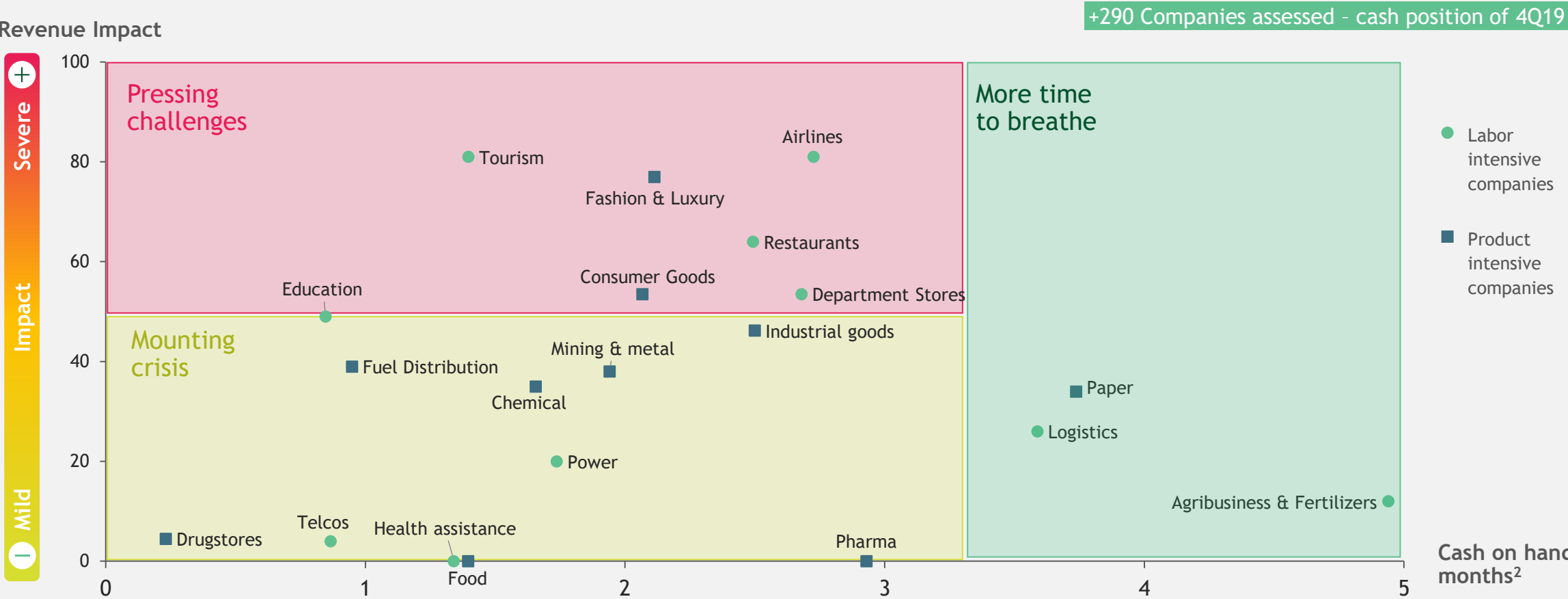
Next 1 month

Next 6 months

Note: Question text: "Thinking about your next purchases, how much do you expect your spending to change on the following channels...?"

# We foresee the majority of sectors facing liquidity challenges with the top line impact of covid-19

Data as of 15 April



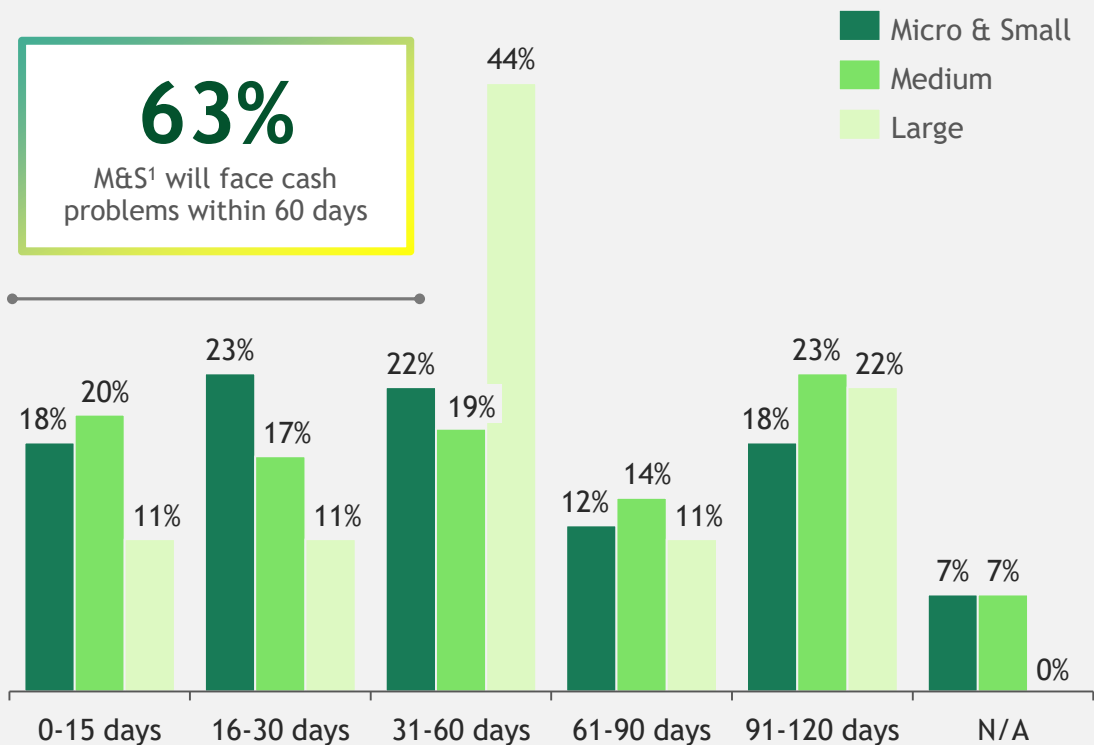
1. Sectors were categorized according to short-term expected impact: Mild impact (0-20%), Impact (20-60%) and Severe impact (60%+); 2. Sectors were categorized in labor intensive (variable costs reduction equivalent to 75% of revenue impact) and product intensive (variable costs reduction correspondent to 50% of revenue impact); Cash on hand months = Weighted Sector Average of Cash Equivalent/(Total costs/12) - Cash Equivalent includes cash, bank certificates of deposit, financial applications and other money market instruments. Source: Elo Performance Insights Report position of 26.03.20 and 15.04.20; FGV; BCG Henderson Institute; Receita Federal; BCG analysis

29

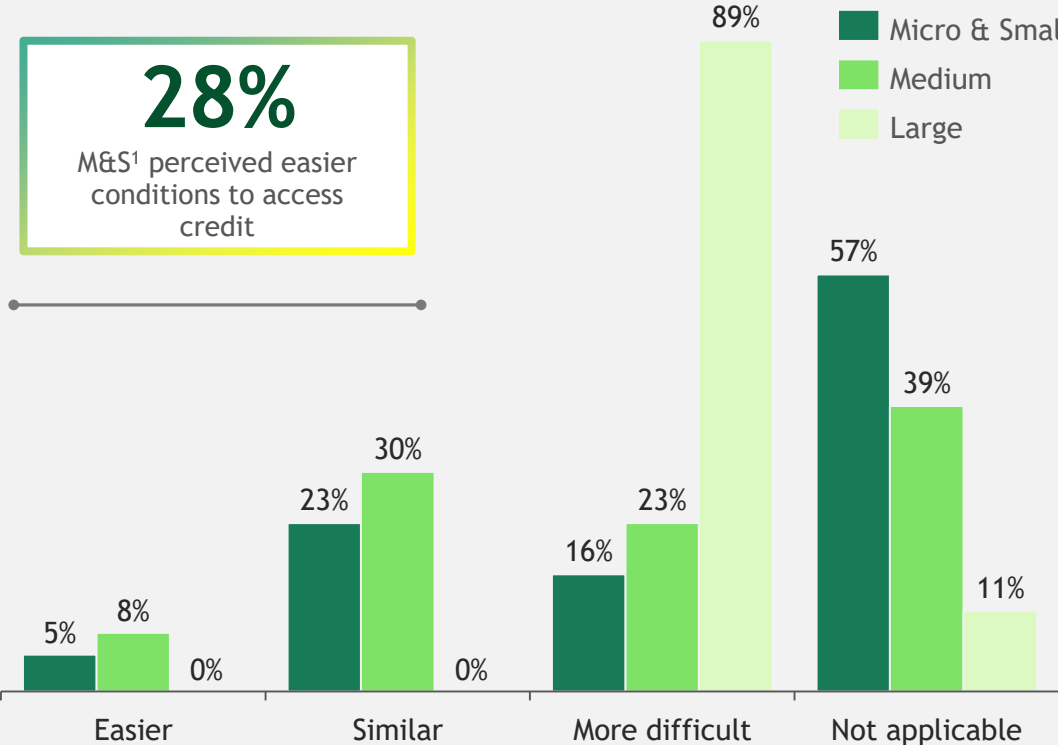
# Cash flow problems from hiatus in business activities with potential to quickly hamper firms, specially M&S<sup>1</sup>

Data as of 26 March

# Days of business suspension supported before cash flow issues



Companies perception on access to credit after Covid-19 outbreak



1. Micro & Small companies  
Source: XP Investimentos (n=392 companies) as of March 26, 2020



1

## COVID-19 Context and Development

Disease progression and response

Government policies and economic stimulus

2

## Economic, Business, and Societal Impact and Scenarios

Economic scenarios

Consumer sentiment

Business engagement and response

3

## Leadership in Crisis

Principles for leadership in crisis

# COVID-19 impact and responses to be assessed under three lenses



## Impact on Healthcare

How to ensure the healthcare system can cope with a new fast spreading disease and mitigate casualties?



## Impact on Corporate

How to minimize the impact on the economy and support most impacted industries?



## Impact on People

How to minimize the impact on people and support most impacted families?

# Managing the crisis: what could be done



## Minimize healthcare impact

- Control disease's spread velocity (modeling, more testing, stringent quarantines rules, tracking)
- Protect people - in particular high risk population
- Increase capacity to deal with surge of patients (repurpose capacity, ramp-up supplies production)
- Support the healthcare system and professionals
- Treat the disease (treatments, vaccines)



## Minimize Corporate impact

- Create stimulus package for the economy - tax, funds, interests
- Support most vulnerable businesses, in particular SMEs and autonomous
- Provide more flexibility for businesses
- Refocus workforce to work on new demand
- Selectively re-open workspace, as much as possible



## Minimize People impact

- Provide support for
  - Low income families
  - Quarantined people
  - Stay-at-home workers
- Support can include minimum income guarantee, donations, low interest loans, paid sick leaves, suspension of individual taxes, mortgage and utilities payment

Q & A



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