

COVID-19 Fact Base – Bain Macro Trends Group

March 2020

BAIN & COMPANY 

AGENDA

COVID-19 Macroeconomic impacts

CEO Game Plan

Most common questions our clients ask us about COVID-19

/ MARCH 12 2020

Question

Emerging facts



COVID-19 DRIVERS

What drives COVID-19's trajectory?

Three main drivers of COVID-19's trajectory:

- **Epidemiology:** infection rate, signaling delay, fraction of serious cases, and fatality rate
- **Government preparedness and response:** containment policies and health system preparedness
- **Societal response:** financial markets, social distancing, consumer confidence and stock outs



EPIDEMIOLOGY

How does COVID-19 compare to other epidemics?

- **Source:** Same branch of coronavirus as SARS
- **Infectivity:** Highly contagious – more contagious than SARS, the flu or Ebola (R_0 2-3.5 - # of secondary infections from one infected individual)
- **Case fatality rate:** 0.5-4%. Less deadly than SARS and the 1918 flu^[1], but more deadly than more recent flus (H1N1 2009, H2N2 1957)



STATUS

What is the current status of the COVID-19 outbreak?

- **117+ countries affected** with 137,000+ cases confirmed (~60% in China) and over 5,000 fatalities



ECONOMIC IMPACT

How will COVID-19 impact the economy, my industry, and my business?

- The macroeconomic impact will depend on the progression of the disease, consumer and government response; **general scenario planning is too uncertain, so companies should identify possible jumps and determine key if/when trigger-point scenarios** and corresponding actions

Note: [1] Assuming sufficient hospital capacity
Source: WHO, Johns Hopkins University, CDC, Bain Macro Trends Group analysis, March 12, 2020

Epidemiology, government response and societal response will determine how the virus spreads and the extent of the economic impact

COVID-19 DRIVERS

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Epidemiology

Key indicators

Case growth (time for 1 case to double)	2-10 days
Incubation period	5.1 days
Fraction of severe or critical cases	5-14%
Case fatality rate	0.5-4%



Government preparedness and response

Country / region	Aggressive containment	Preparedness capacity
China	✓	>80%
Italy	✓	>80%
South Korea	✓ (aggressive testing)	>80%
US		>80%
Germany		>80%
France		≤80%
India		≤60%



Societal response

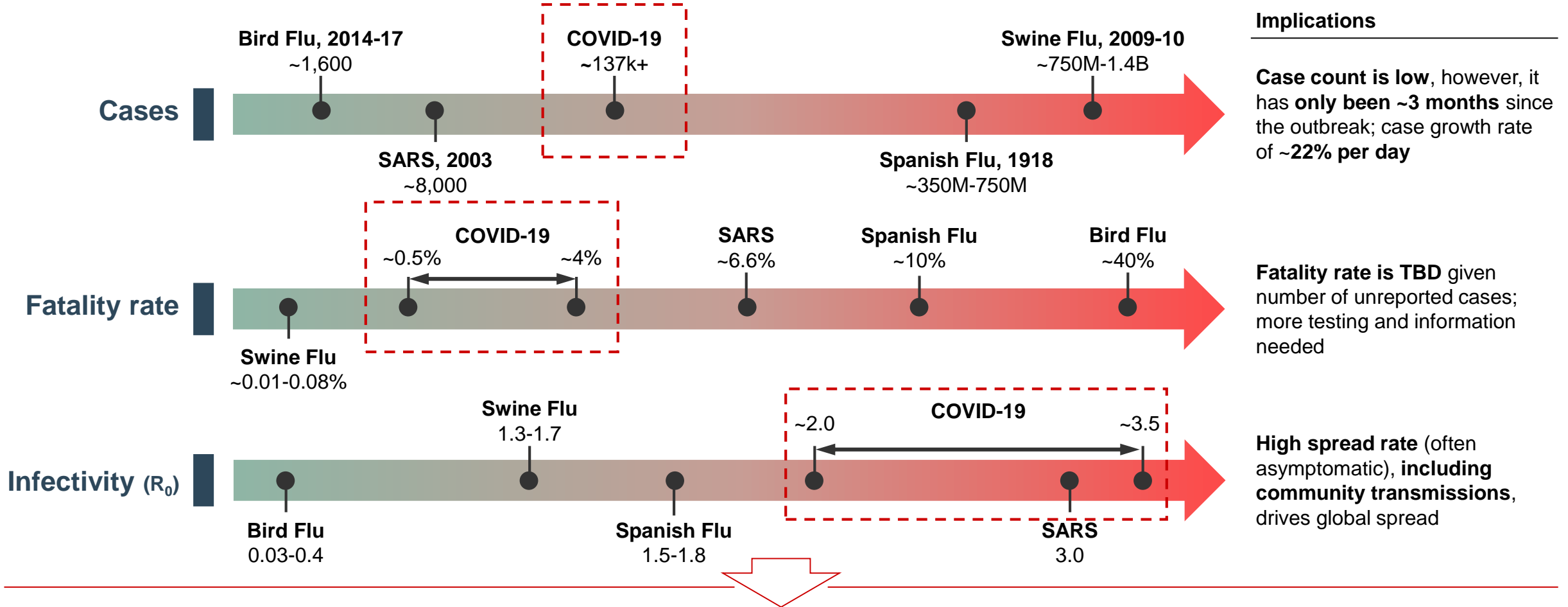
Action	Commentary
Stock outs	<ul style="list-style-type: none"> Spike in pantry and health and safety product purchases in the US since 2/29/20
Social distancing	<ul style="list-style-type: none"> ~800M people in China subject to aggressive social distancing; All of Italy (~60M) on lockdown; other countries expected to follow in various forms
Consumer confidence	<ul style="list-style-type: none"> Decline in consumer confidence levels globally, from ~3% in the US to ~11% in Japan

COVID-19 impact expected to be more severe than other major epidemics from the past century due to its high spread rate amidst greater global interconnectedness

EPIDEMIOLOGY

Severity ■ Low ■ High

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The combination of a relatively low fatality rate, fast rate of spread, and a high proportion of cases with symptoms similar to cold/flu make this uncommonly difficult to address with containment measures

Note: R₀ refers to the average number of people infected by one sick person.

Source: National Health Commission of the PRC; Lit research, Bain Macro Trends Group analysis, March 12, 2020

Current status of the COVID-19 outbreak

CURRENT STATUS

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COVID-19 global impact to date^[1]

137,000+

Confirmed cases of COVID-19

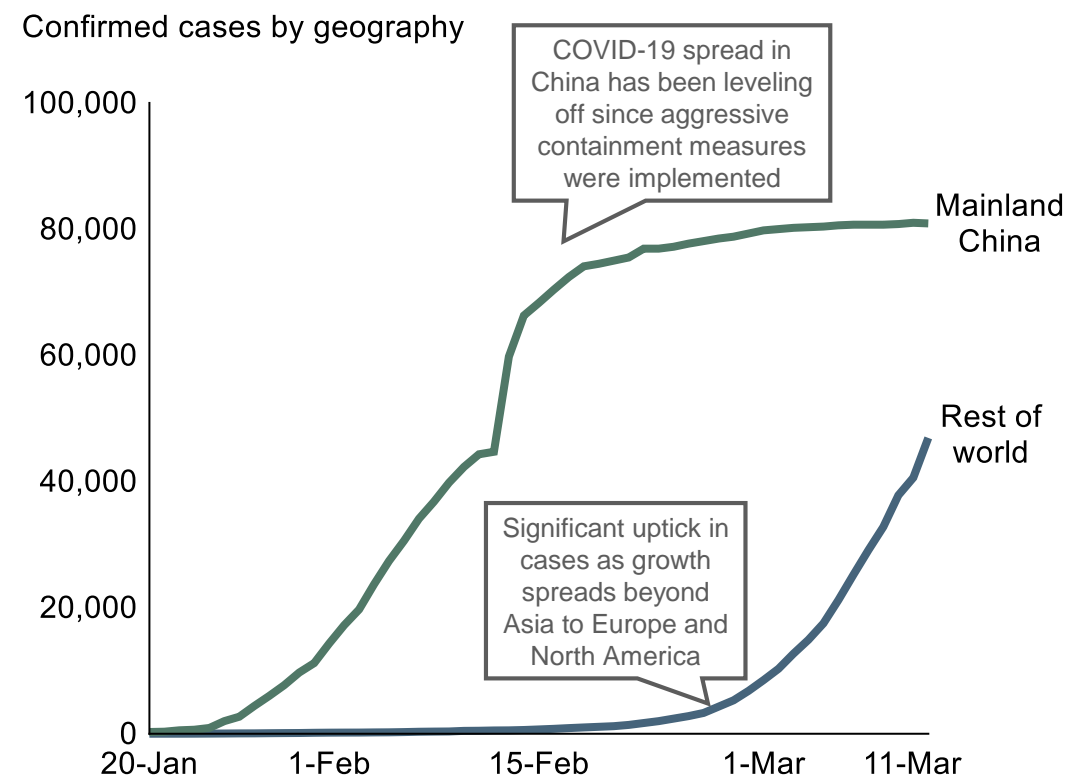
5,000+

Fatalities attributed to COVID-19

69,000+

Confirmed recoveries from COVID-19

COVID-19 impact: China vs. rest of world^[1]



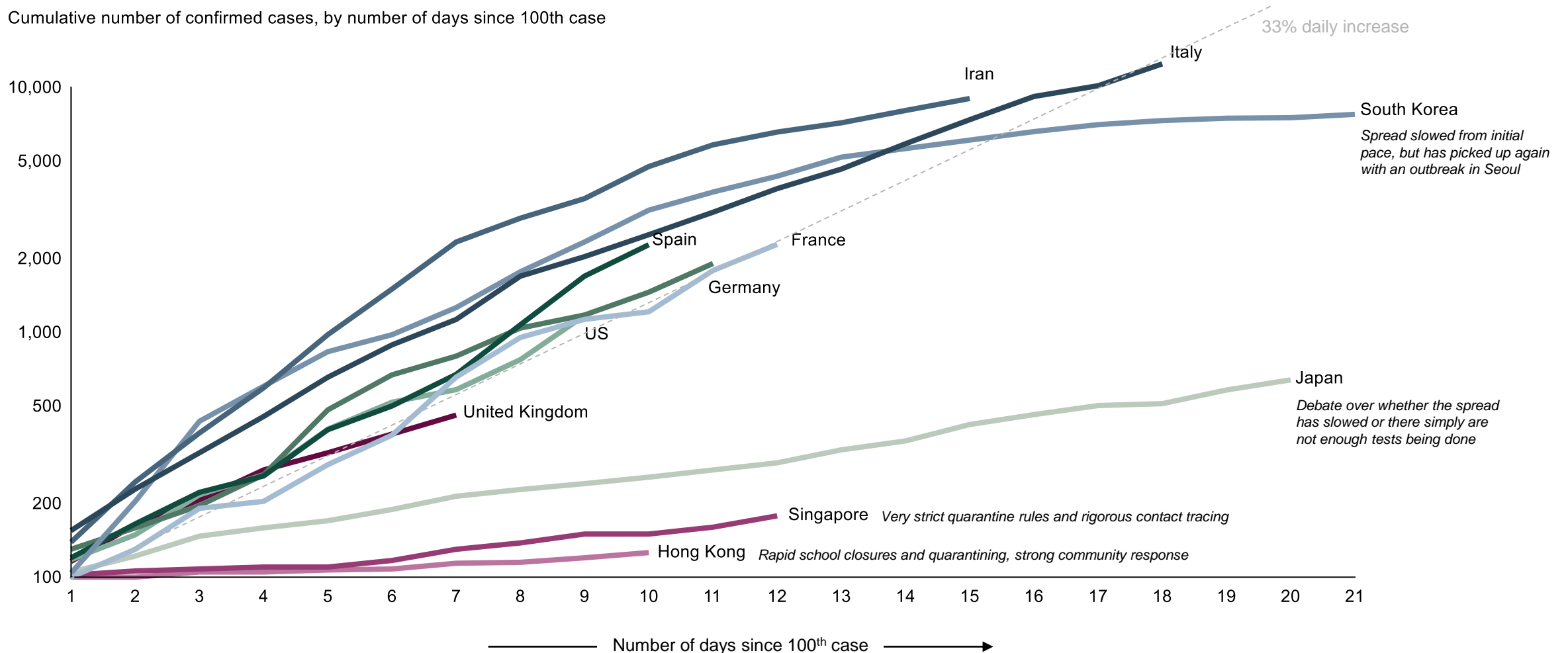
Note: [1] Updated as of March 12, 2020
Source: Johns Hopkins University, CDC, WHO, Bain Macro Trends Group analysis, March 12, 2020

Most Western countries are on the same COVID-19 trajectory; some, such as Hong Kong and Singapore, have taken aggressive action and managed to slow the spread

CURRENT STATUS

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Cumulative number of confirmed cases, by number of days since 100th case



Source: Johns Hopkins University, CDC, WHO, Financial Times, Bain Macro Trends Group analysis, March 12, 2020

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Growth rate of infections has started to slow across Asia Pacific, but is accelerating in other regions, particularly Europe and the Middle East and North America

CURRENT STATUS

/ MARCH 12 2020 / NOT EXHAUSTIVE

Country	Cases	Fatalities	Recoveries	Timing		Confirmed case growth ^[1]		Fatalities growth ^[1]	
				First Case	First Death ^[2]	Feb 5 – 10	Mar 5 – 10	Mar 5 – 10	
Mainland China	80,700	3,100	61,600	1-Dec-19	9-Jan-20	9%	↘	0%	1%
Italy	12,400	800	1,000	31-Jan-20	21-Feb-20	8%	↗	21%	34%
Iran	9,000	350	2,900	19-Feb-20	19-Feb-20			18%	22%
South Korea	7,700	60	250	20-Jan-20	20-Feb-20	7%	↘	4%	9%
France	2,200	40	10	24-Jan-20	15-Feb-20	13%	↗	36%	41%
Spain	2,200	50	150	1-Feb-20	3-Mar-20	15%	↗	46%	63%
Germany	1,900	<10	25	27-Jan-20	9-Mar-20	3%	↗	25%	
US	1,100	30	10	21-Jan-20	29-Feb-20			29%	18%
Japan	640	15	120	16-Jan-20	13-Feb-20	3%	↗	10%	11%
UK	460	<10	20	31-Jan-20	5-Mar-20	32%	↘	27%	43%
Singapore	180	0	100	23-Jan-20	-	10%	↘	6%	
Malaysia	150	0	30	25-Jan-20	-	8%	↗	21%	
India	60	<10	<10	30-Jan-20	-			13%	
Taiwan	40	<10	20	21-Jan-20	16-Feb-20	10%	↘	1%	0%
Brazil	30	0	0	26-Feb-20	-			51%	
Mexico	<10	0	<10	28-Feb-20	-			7%	

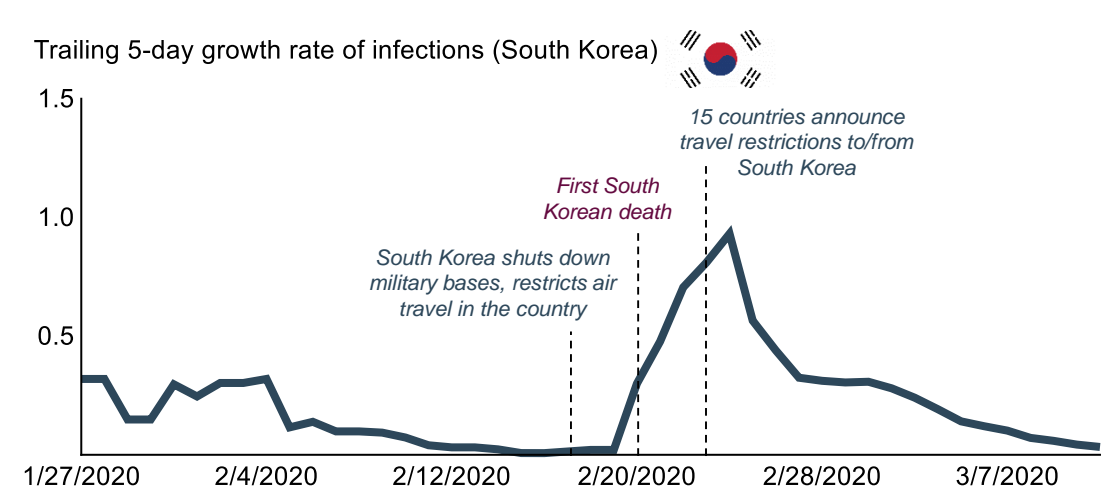
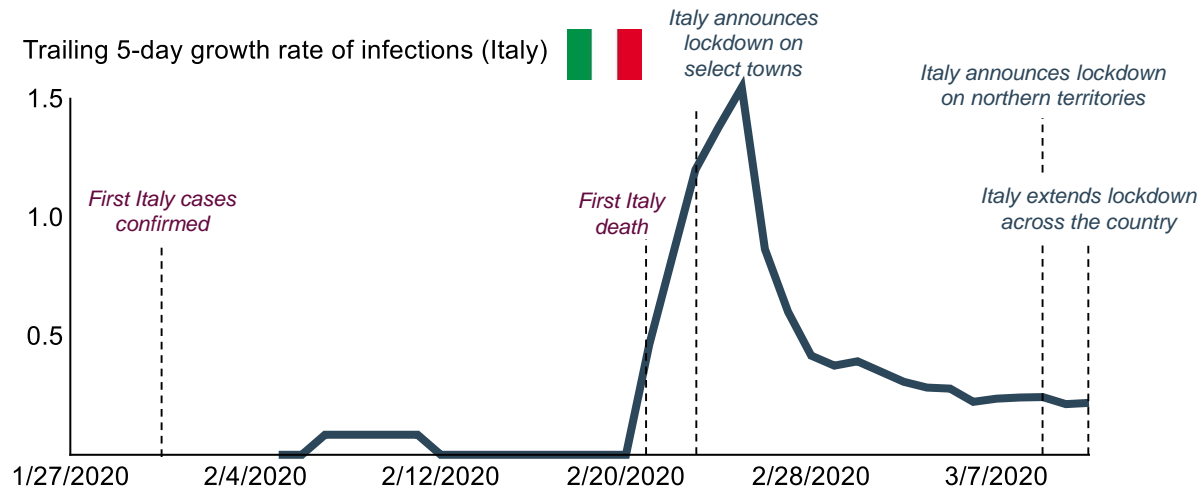
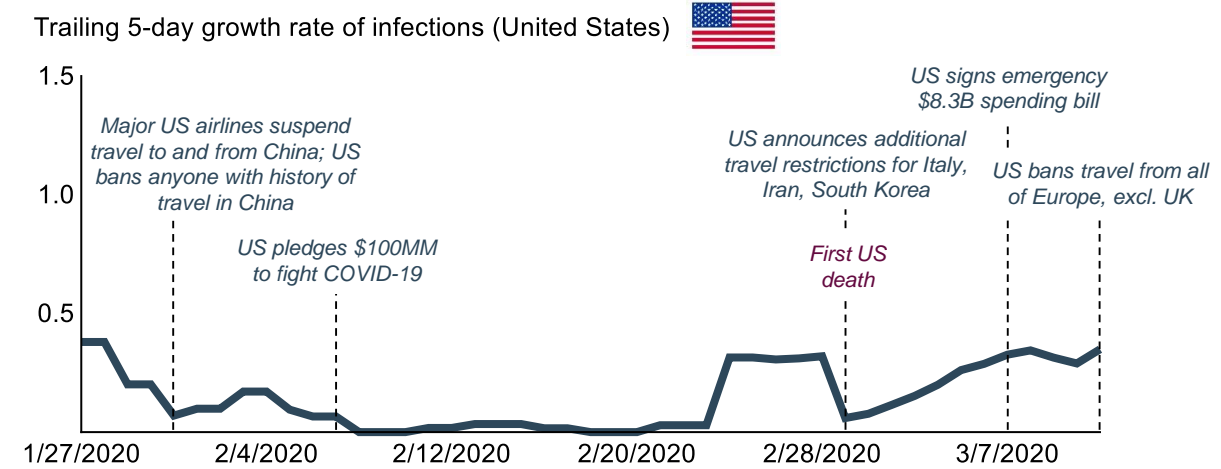
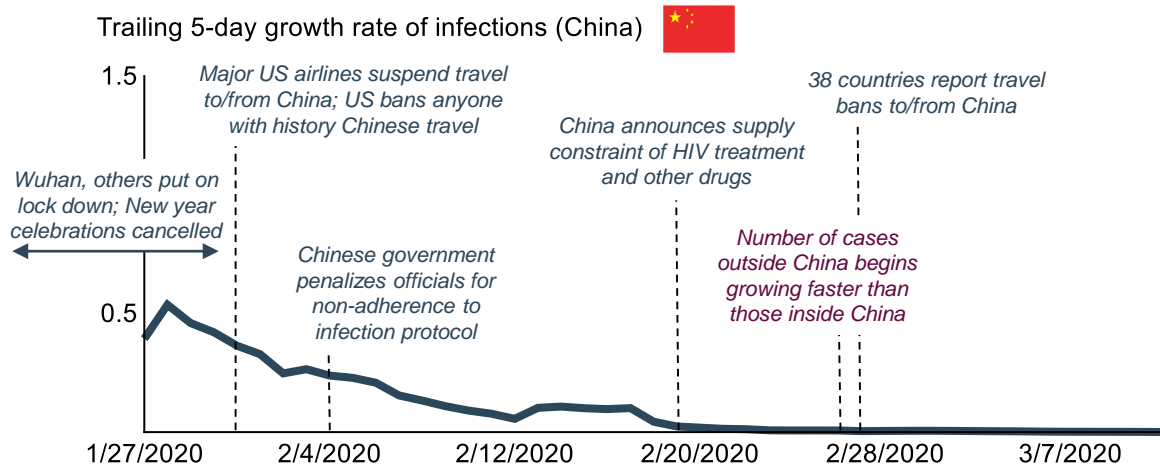
Note: [1] Growth rate calculated as compounded daily growth rate over the 5 day period; [2] Several countries shown have had 0 COVID-19 related deaths; All figures approximate
Source: Johns Hopkins University, CDC, WHO, Bain Macro Trends Group analysis, March 12, 2020

Growth rates have varied over time; China's aggressive action decelerated the growth rate, while other countries slow to action have experienced spikes

CURRENT STATUS

■ Government actions ■ COVID-19 progression

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Note: 5-day compounded daily growth rate between Jan 27, 2020 and March 11, 2020, as available
 Source: Johns Hopkins, WHO, CDC, Bain Macro Trends Group analysis, March 12, 2020

Consumer buying behavior reflects consumers' elevated level of concern; globally, consumer confidence has fallen

ECONOMIC IMPACT

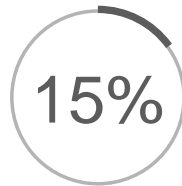
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US consumers have elevated level of concern, starting to act

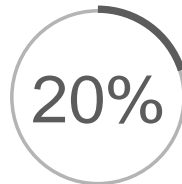
US buying behavior of pantry, health and safety products has grown significantly YoY

Globally, consumer confidence has started to fall

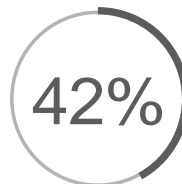
Dip in consumer confidence since 1 Jan 2020^[1]



Anticipate serious health impact

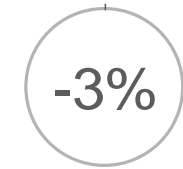
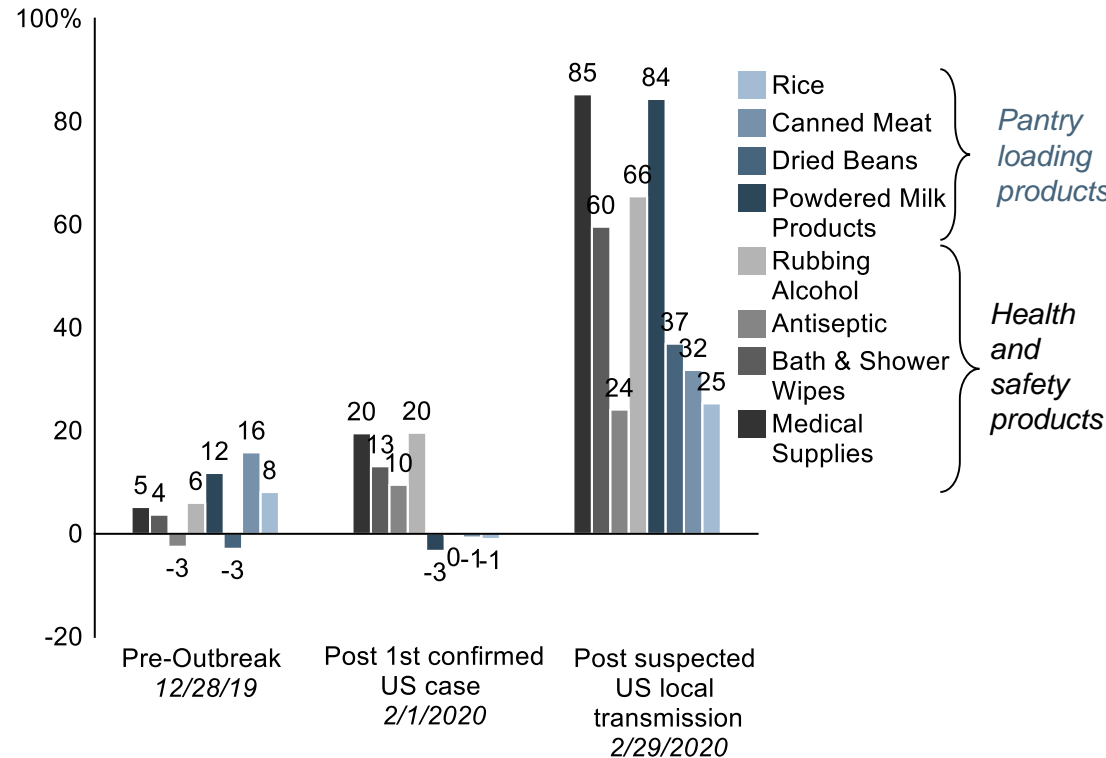


Anticipate serious financial impact



Have taken a concrete action in response

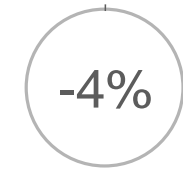
US sales % growth vs. year ago



US



Japan



UK



France

China's trajectory suggests that an extreme decline in economic activity is short-term; industries have started to recover, at varying speeds

Significant near-term shock from sharp contraction in activity

~-2%

Estimated **China Q1 GDP decline**, year-on-year

-4.3

The national **consumer confidence index** fell to 65.3 in Feb, its **lowest level in 3 years**

PMIs also fell significantly from January to February

-14.3

Manufacturing fell from 50.0 to 35.7

-24.5

Services fell from 54.1 to 29.6; **transportation, tourism and catering** sectors most affected

Early signs of a recovery starting to emerge



Increase in daily coal consumption at six major power groups, reaching a **5-week high in early March**

~90%

Rate of work resumption (at firms with over RMB 200m in revenue) in 11 mainland regions



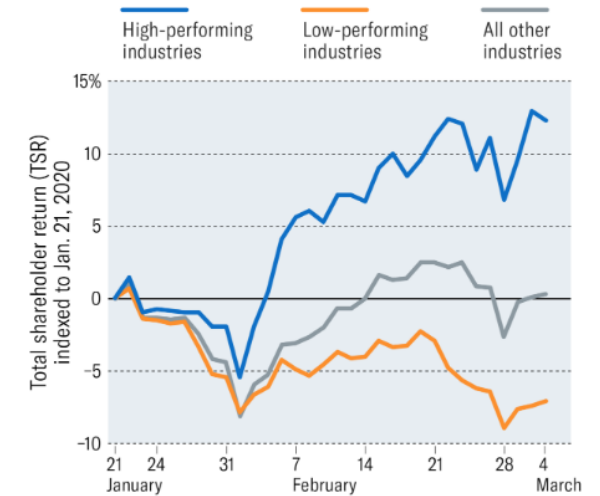
Highest traffic congestion levels in most major cities **since the outbreak**

~65%

Increase in average daily passenger volumes on metros across China (last week of Feb)

Recovery will likely vary by sector

Covid-19 Recovery Dynamics Differ Across Sectors in China



Note: Based on the 500 largest companies by market cap in Greater China as of Jan. 1, 2020; industry groups based on GICS classifications; industry groups with indexed TSR >5% as of March 4, 2020, are classified as high performers; TSR <-5% classified as low performers
Source: S&P Capital IQ, BCG Henderson Institute Analysis



- Leading high-performers include **software and services** and **healthcare equipment and services**
- Slower to recover industries include **transportation, retail and energy**

Normal economic scenarios are insufficient given the level of uncertainty; COVID-19 requires an inverted approach to planning, specific to each business

ECONOMIC IMPACT

Normal scenario-based stress-testing is not applicable in this situation.

We are too far into the event with bi-modal outcomes and big possible jumps in the situation.

Businesses need to identify what their key jump points and identify actions against each point.

- Normal scenario planning starts with a set of likely and stressor scenarios.
- Scenarios are analyzed for their impact to the business.
- Actions steps are devised to be activated against those scenarios. Business operates based on the most likely scenario.
- Signs and signposts are identified and monitored to know when there are likely turns in the road ahead, and when business needs to take steps under a new scenario.
- Highly “bi-modal” outcomes: unknowable probabilities of ending up in either a minimally disruptive cluster of scenarios, or a highly disruptive cluster of scenarios.
- Three big factors are all introducing non-linear “jumps” if things get worse.
- Normal signs/signposts do not provide enough forward-visibility for pre-emptive actions. The time-scale of events is days-to-weeks, not months.
- Look at the “full” spectrum of outcomes—no probability-weighting judgments.
- Identify the key “jumps” in implications for the business:
 - Aim for 3-5 key jumps (e.g., major cost-cutting, layoffs, invoking capitalization buffers)
 - Need to identify “What is the breaking point of the business?”
 - Action items should then be tied to each of the key jump levels.

AGENDA

COVID-19 Macroeconomic impacts

CEO Game Plan

Our overall view – a ‘wait and see’ approach is a non-starter

- **COVID-19 is unlike any previous crisis**; traditional ‘crisis response’ approaches will not be sufficient
- The process of ‘containment’ and ‘slowing the spread’ that is phasing in country by country will **create major disruption in itself**, irrespective of the seriousness of the virus spread itself
- **Prepare for the worst**, and be thankful if it doesn’t eventuate; **‘wait and see’ approach is a non-starter**
- High likelihood of a **substantial revenue disruption, leading to a potential liquidity crisis** for many
- The **recovery may not be a quick ‘bounce back’**, plan for multiple quarters of lower revenue
- **Employees and customers** likely experiencing **fear/panic**
- You need to appoint a **senior, fully dedicated COVID-19 “war room” team**, focused on this all day, every day
- As CEO, it’s critical for you to be out in front with a **planned cascade of possible actions** based on which scenarios unfold, likely **more aggressive than your team can imagine right now**
- **Customers will change behaviors in non-reversible ways**, accelerating prior trends; **bold action now** can set you up for success **through the downturn and beyond**

CEO checklist:

We recommend organizing efforts around the following six urgent priorities



Protect Your Employees and Customers

- Implement the best known guidelines available for both employees and customers - overinvest
- Monitor global health guidelines, other companies - and continue to fine tune
- Over-communicate with full transparency
- Provide assistance to epidemic-limiting initiatives in any way possible (CSR)



Model your exposure; Stress test P&L and liquidity

- Outline macro scenarios by market, translate to revenue decline and P&L scenarios
 - Units, revenue, costs
 - Cap Ex, working capital, cash/liquidity
 - 13 week, 4Q outlook
- **Build extreme downside scenarios – this has the potential to be a “100 year” event**
- Outline major operational actions triggered
 - Do now ‘handbrake’ actions vs. do-later ‘break glass’ initiatives



Defend against revenue declines

- Take a customer centric view to this situation – how will you build trust, loyalty and market share through and beyond this crisis?
- Build specific revenue mitigation actions for core revenue stream declines
- Pivot resources to pockets of current and future growth, online and beyond



Stabilize operations to “new normal”

- Stabilize supply chain of physical goods from likely geographic and labor disruptions
 - Manufacturing, distribution, suppliers, suppliers to suppliers
- Build contingency operational plans for all aspects of business
 - Front line facilities, costs, variable labor staffing
 - Cross regional variations in utilization
 - HQ, IT



Plan urgent cost take-out to conserve cash

- Spend handbrakes
 - Immediate actions (e.g. hiring freeze, op ex, cap ex, working capital)
- Set aggressive ‘break glass’ cost actions triggered by more extreme revenue scenarios
 - This is (may be) about saving the company – no ideas are too extreme
- Mid-term, outline a plan to lean out the cost structure for the future – more automated, more variable, more shock resistant



Play Offense, not just defense

- Define how you will outperform competitors and take share through and beyond the crisis
 - M&A roadmap
 - Product/service/customer intimacy investments
- Prepare for ‘bounce-back’ and recovery
 - E.g. Marketing investment, leveraging macro trends for “if, then” moves
- Plan for and leverage a ‘leap-frog’ change in customer behaviors
 - Especially digital



Protect your Employees and Customers (partial checklist)

Employee Safety

- Follow the **most conservative CDC protocols e.g.** Unicredit worked with 2 virologists to deeply understand Covid transmission à define actions for HQ buildings (in few days they redefined the HQ buildings spaces allocations) and branches (activities moved remotely; branch closures plan but preserving minimum service level, ..)
- Follow official advice **on deep cleaning and sanitization of most used areas/facilities in offices**
- Equip employees with any needed sanitary or **personal protection equipment** (disinfecting wipes, masks, gloves, etc.)
- Re-iterate the importance of **staying home** if you are feeling ill
 - Consider **screening employees for symptoms** (temperature, etc.) and sending home staff that display signs of illness
 - **Policies around sick and personal time may need to be relaxed** during this time in order to ensure employee and customer safety
- Consider shifts to **alternative working arrangements** (e.g. working remotely) and leverage best practices and infrastructure to engage employees (e.g. videoconferences) - prepare for “smart” or home working adequately e.g. laptops, connectivity etc.
- Reduce or eliminate all **non-essential travel**
- **Regulate/minimize visits from third-parties to offices**; implement visit declaration forms and visitor screening policy

Customer safety

- Follow CDC guidance on customer facing operations and **frequently communicate potential impacts to customers**; shift online where possible (sales and servicing)
- **Reach out to key accounts** and maintain open lines of communication; implement **voice of customer monitoring / social listening** to understand consumer and customer experience and sentiment
- Prepare **communications plan** to re-assure customers on product and operational safety concerns and communicate measures to monitor
 - Maintain consistent “brand image”
- Communicate proactively – list of open branches, services available, potential disruptions in service in specific branches etc.
- Think through team splits in specific branches – will cause some customer disruption but might be useful to ensure branches keep on working

CSR efforts

- Mobilize **impactful donations / supplies** to provide assistance to epidemic-ridden geographies
- Support **epidemic limiting efforts** in any way possible

Ensure you are over-communicating with full transparency to employees and customers



Defend against revenue declines

Take a customer centric view – build trust, loyalty, market share

- **Proactively contact all key customers** to let them know about ‘business continuity’ and ‘extraordinary actions’ being taken
 - E.g., Waive cancellation fees
- Issue **targeted account management / marketing campaigns directed at highest risk segments** to proactively double down on potential **segment / customer specific concerns**

Build specific mitigation actions for core revenue stream declines specially in wholesale banking

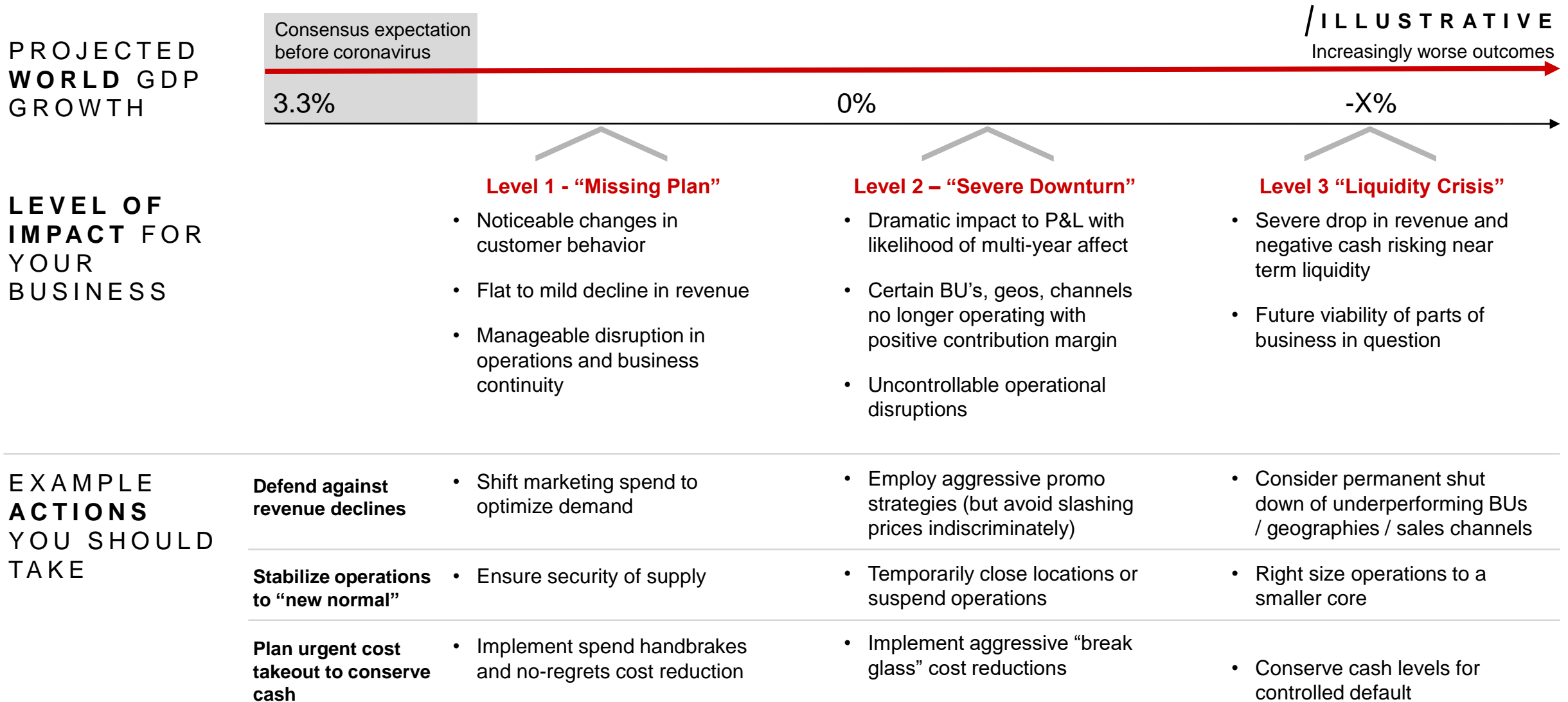
- Develop and execute on actions to **mitigate downside risks**, identifying the best way to approach the most affected **customer segments, geographies, channels**
- Review current sales pipeline and orchestrate executives to **reach out on all late stage opportunities**
- Actively think about potential disruptions to industries and **segregate the riskiest portfolio (airlines, tourism etc.) to specific account managers or create a specific unit to deal with them**

Pivot resources to current and future growth

- In the short- and medium-term, identify **new / accelerated revenue opportunities**
 - E.g., pushing e-commerce as opposed to in-person purchases, capitalizing on ‘in-demand’ products or services
- *For the longer-term opportunities – see “Play Offense, not just defense”*



Model your exposure; Stress test P&L and liquidity: There will be critical “triggers” where more aggressive actions will be needed



Source: IMF World Economic Outlook, January 2020; Bain Macro Trends Group analysis, March 9, 2020

Getting started:

We recommend immediately launching three actions in parallel



Align your senior team with a wake up call

- Must get full team aligned with the true severity of the macro COVID-19 situation, and worst case financial scenarios
- Set safety as #1 priority...
- ... and cash conservation and liquidity a close #2...
- Avoid inaction, “wait and see” could damage the company



Establish a dedicated senior team in a “war room” setting

- Stand-up a senior, dedicated team from multiple disciplines (ops, sales, HR, finance)
- Prioritize and action major work streams; set a tone of daily progress using Agile approach
- Break the usual reporting and update cycles – urgency requires a different model, i.e. daily informal CEO updates
- Put in place a tracking tool



Outline macro scenarios and translate to contingency plans

- Outline specific macro COVID-19 scenarios, by major geography
- Translate those scenarios into tangible revenue decline and operational disruption scenarios
- Begin to outline no-regret moves – there *will* be impact, start acting
- This needs to be done in days, not weeks (and from there can iterate)



Align your senior team with a wake up call

Get full team aligned with the true severity of the situation

- Illustrate the potential magnitude of the impact in the worst-case scenario, underscoring the highest risk areas (e.g., what is the total dollar revenue if we went to zero in all biggest red dots on the map?)
- Set expectations that needs will change based on how the situation evolves

Set safety as #1 priority...

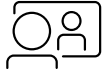
- It goes without saying – follow the most conservative CDC protocols (e.g., limit unnecessary travel, cancel / hold remote large non-critical large meetings) and call for re-examination of / potential changes to policy (e.g., visitor policy, employee benefits, shifts to remote working and leverage best practices and infrastructure to engage employees)

... and cash conservation and liquidity a close #2...

- Ensure executive mind-shift to cash, reinforce balance sheet, engage in renegotiations, assess / rethink overhead (e.g., conduct rolling 4 quarter, 13 week cash flow and liquidity assessment); however, make sure to trim parts that are unlikely to prompt uproar (e.g., think twice before cutting service salaries)

Avoid inaction, “wait and see” could damage the company

- Pursue ‘no regrets’ moves swiftly, as most decisions are ‘two way doors’ that can be reversed
- Obtain buy-in to stand up a centralized war room, get going, and start managing communications / engagement plan and day-to-day responses – war room leaders must be ‘100% time dedicated’
- Employees will be looking to leadership for guidance and direction; inaction can cause instability



Establish a dedicated senior team in a “war room” setting

Stand-up the team

- Establish a **centralized control** effort
- Staff a **senior, 100% time-dedicated team** and ensure sufficient cross-functional and leadership representation
- **Decide on decision rights** (RAPIDs)
 - For the war-room team
 - Revisit **decisions made by CEO vs. Board** and agree path to **fast-track** (input and agree rights may also change)

Prioritize, action major work streams

- Work streams should focus on the **critical action plans** for the business
 - E.g., defending against revenue declines, stabilizing operations
- Drive team to **quick 80/20 output**, which can be refined later
- Determine **essential sub-teams / initiatives and owners**
- Outline **clear daily responsibilities**

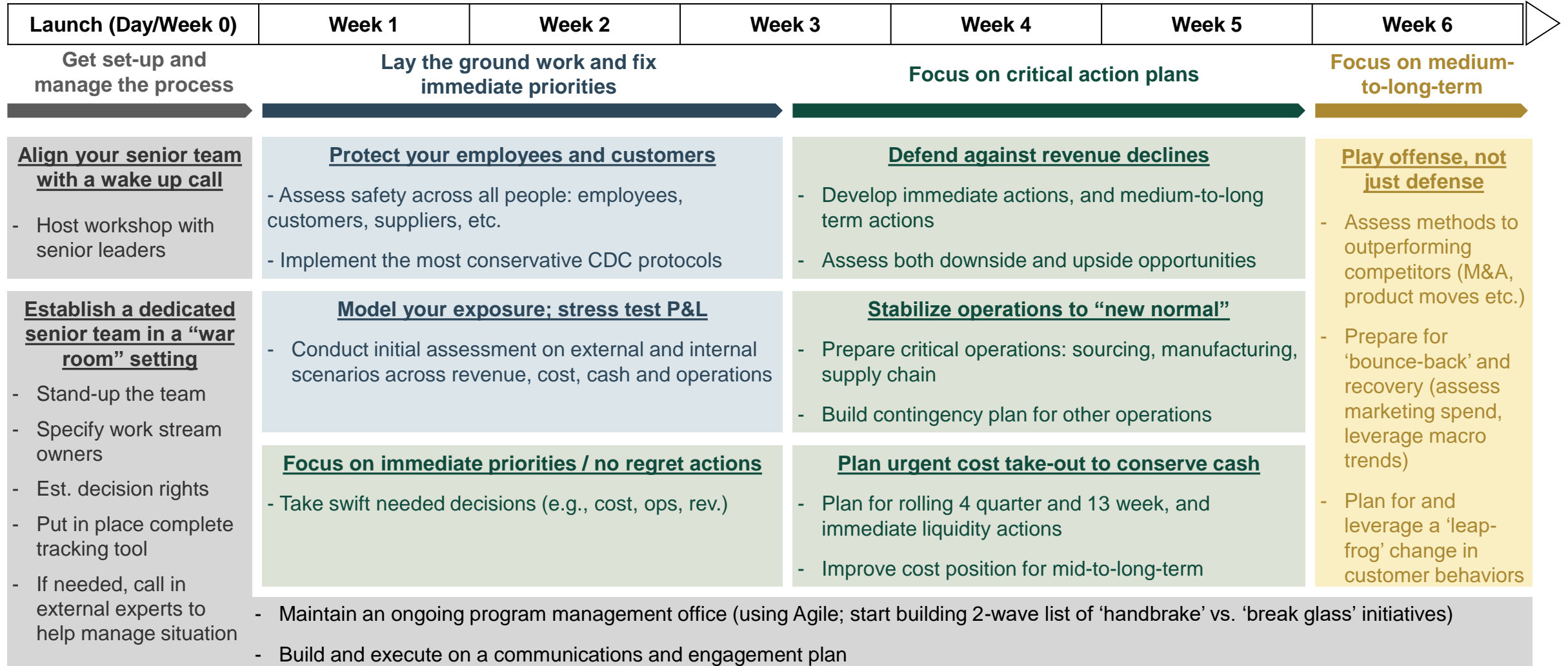
Initiate tracking tool; set tone of daily progress

- Put in place **complete tracking tool now** – doing this by the time you desperately need them will be too late
- Establish a **clear rhythm/scrutiny**
 - E.g., Agile approach – daily huddles, weekly “sprints”
 - Ensure all stakeholders join for swift, well-aligned, well-informed decisions

Break usual reporting and update cycles

- **Update scenarios** and revise action plans as new data emerges
- **Over-communicate** relevantly, consistently, and transparently to all stakeholders
 - Daily informal CEO updates
 - Announcements to customers
 - Engaging with key value chain partners both internally and externally

Representative war room plan



How Bain can help

Workshop with senior team

- Share macro outlook; align around **magnitude of the disruption** ahead
- Share best practices and run **ideation sessions**
- Establish a **blue print** for action

Organize your war room approach

- **Launch team**, align on team **decision rights**, develop CEO/Board fast-tracked decision rights, clarify work streams
- Get a rhythm going (e.g., **Agile, daily huddles**)
- Lead/coach **transformation office** (e.g. start building list of actions - 'handbrake' vs. 'break glass' initiatives)
- Put in place a **tracking tool**

Scenario modeling

- Drive assessment of company exposure and **stress test the P&L** (e.g. scenario analysis across revenue, cost, cash and operations)
- Outline **actions triggered** by worsening scenarios

Deep dive on highest criticality areas

- Develop **detailed action plans** with milestones and trigger points for more important focus areas

Go on offense

- Begin scanning **M&A** landscape and organic growth opportunities, as well as front running recovery plans
- Develop strategy to prepare for **shift in customer behaviors**