

# COVID-19 RESPONSE

Responses for Private Equity  
and their portfolio companies

March 2020



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# EXECUTIVE SUMMARY

## Supply and service delivery shocks will lead to shortages in many industries

### For manufacturers

- In some cases, the impact of the initial China epicenter took 6+ weeks to materialize in supply chains
- “Just in time” supply chains from Italy to rest of Europe with 2–3 days, so disruptions will be felt far faster

### For service companies

- Facing issues around service delivery and resilience as a result of the impact of the pandemic on the workforce
- Ranging from customer service (e.g. call center contamination) to serious risk of customer health (e.g. care homes)

## Demand shocks in some sectors are already exceeding the impact of recent major crises

- Travel and leisure-focused assets facing demand shocks of 40–70% for domestic; up to 90% for international focus
- In the past, demand recovery periods in industries such as airlines have ranged from 12–18 months across a variety of event types and characteristics

## Balance sheet and liquidity issues will emerge from these shocks

- Based on experience in China, one full quarter is likely to be needed to stop the outbreak
- Expectation that banks and lenders will act pro-cyclically as they have done in other crises
- Risks to Private Equity owned businesses include near term liquidity issues as well as covenant breaches in Q1/2





# EXECUTIVE SUMMARY

**Many new deal opportunities are likely to arise, but debt market access may prove problematic**

## **Public market opportunities**

- Exposed sectors where the shock is recoverable and temporary
- Resilient, defensible assets with depressed valuations from the broad-based sell off
- Sectors likely to benefit from a reconsideration of risk from pandemics (e.g., healthcare, insurance, labs, etc.)

## **Carve-outs**

- Disposal of non-strategic assets by major businesses requiring an injection of capital, creating an opportunity for rapid action

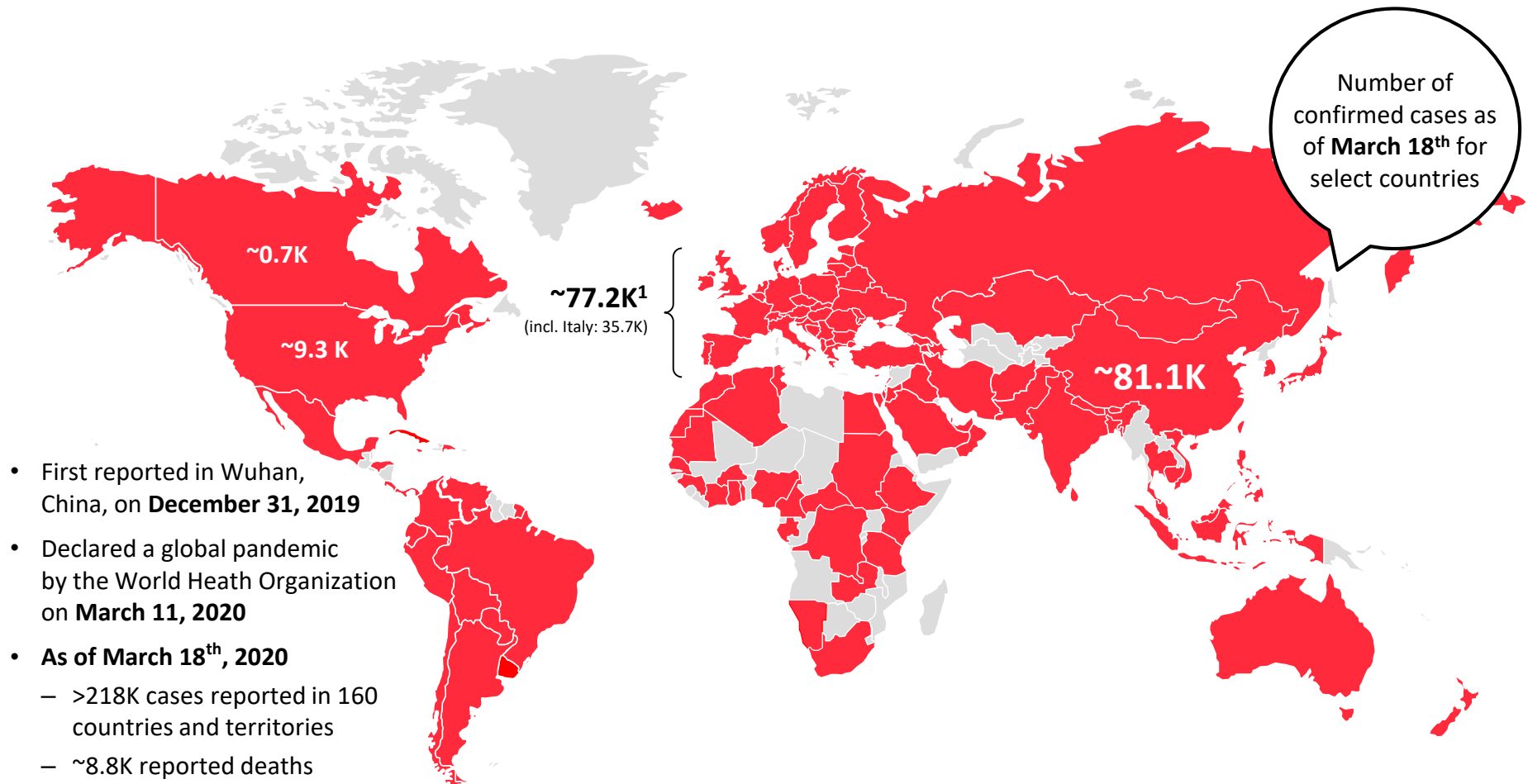
## **Secondary buy-outs**

- IPO route is a non-option for now
- Some funds may need to reduce exposure to certain geographies (e.g., China, Italy) or sectors (e.g., leisure)

## **Purchases from lenders**

- Banks and lenders yet to fully appreciate the scale of impact: few public statements from listed businesses providing clarity of impact; many major geographies fully affected
- Likely many assets end up in the hands of lenders and may be opportunities for rapid recapitalization deals

# COVID-19 SPREAD GLOBALLY



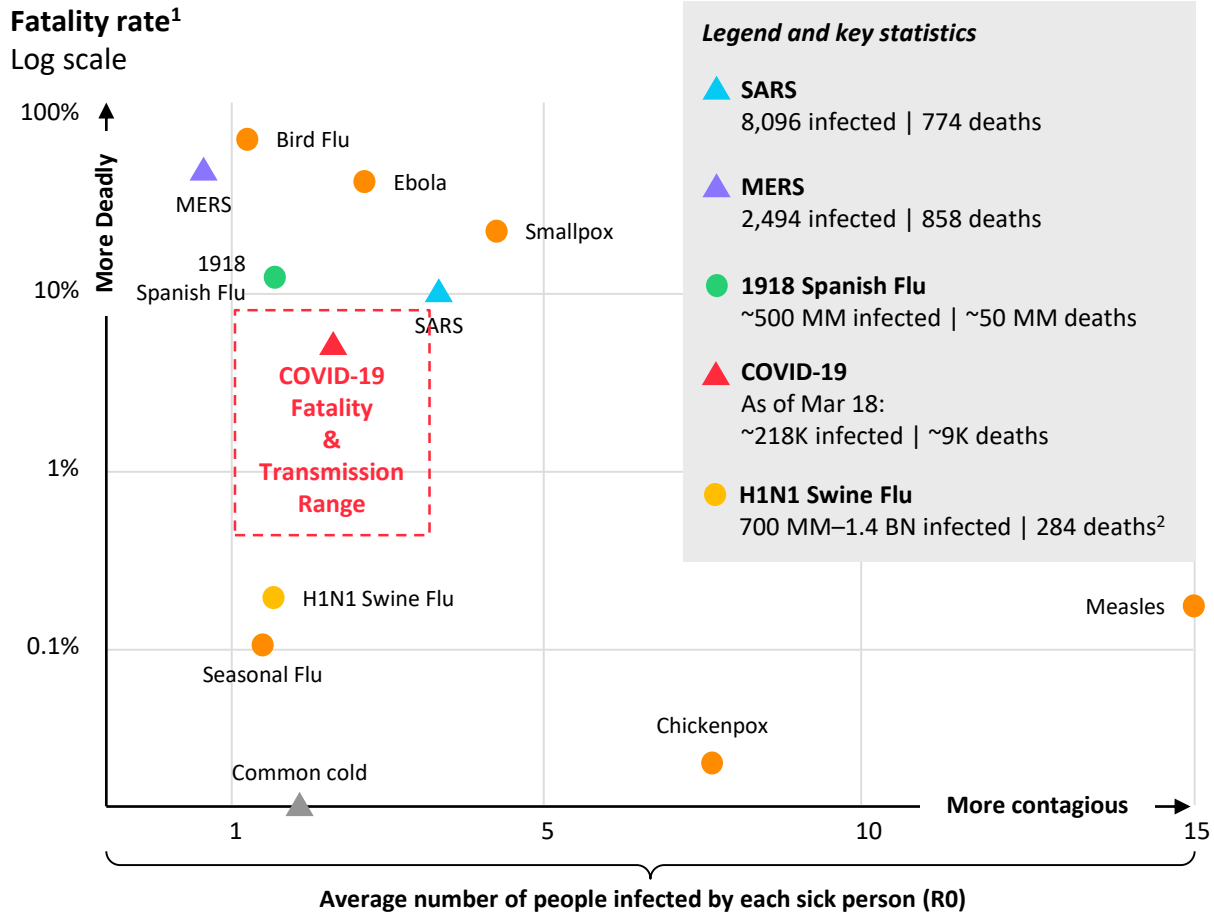
- First reported in Wuhan, China, on **December 31, 2019**
- Declared a global pandemic by the World Health Organization on **March 11, 2020**
- **As of March 18<sup>th</sup>, 2020**
  - >218K cases reported in 160 countries and territories
  - ~8.8K reported deaths

1. Countries included: All Countries in "European Region" Sub-region in WHO Situation Report  
Source: Map from CDC ([link](#)), Numbers from John Hopkins University & Medicine ([link](#))



# HOW DOES COVID-19 COMPARE TO OTHER DISEASE OUTBREAKS?

COVID-19 is currently more deadly than the Flu, but the science on transmission and mortality continues to evolve



## Additional details

- R-naught (R0) represents the number of cases an infected person will cause. R0 for COVID-19 is currently estimated at between 2 and 3 (with edge of range estimates closer to 1.4 and 3.6), which means each person infects 2-3 others<sup>3</sup>; R0 for the seasonal flu is around 1.3<sup>4</sup>
- The global case fatality rate for confirmed COVID-19 cases is currently 4.4%<sup>5</sup> according to WHO's reported statistics versus 0.1% for the seasonal flu; the rate varies significantly by country (e.g., Italy – 7.9%, South Korea – 0.97%<sup>6</sup>)
- We expect case fatality rates to fluctuate as testing expands identifying more cases and as existing cases are resolved

▲ Denotes Coronaviruses

1. New York Times ([link](#)) for fatality and R-naught comparisons, CDC timelines for case numbers (selected link: CDC [SARS](#) timeline); 2. Updated CDC estimates ([link](#)); 3. The R0 for the coronavirus was estimated by the WHO to be between 1.4 -2.5 (end of January estimate) ([link](#)), other organizations have estimated an R0 ranging between 2-3 or higher ([link](#)); 4. CDC Paper ([link](#)); 5. WHO Situation Reports – 55; 6. Calculated as Number of Deaths / Total Confirmed Cases as reported by John Hopkins University

# THREE IMPACT SCENARIOS TO CONSIDER: WORKING ASSUMPTION IS (B) WITH A CLEAR POSSIBILITY OF (C)

## A

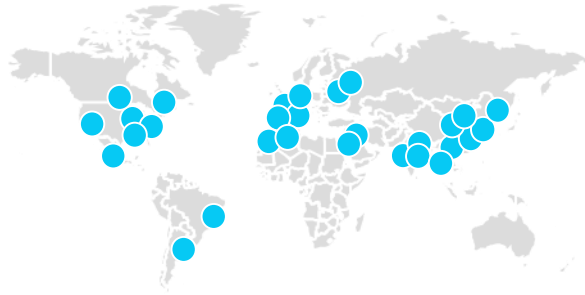
Local isolation efforts  
continue



Ongoing **local disruptions**.  
Global supply chain slowed  
due to Chinese focus.

## B

Pandemic spread addressed  
with isolation efforts



Large-scale disruptions and  
**lock-downs on all levels**.  
Global supply chain halted in  
high-production areas.

## C









Pandemic spread after  
isolation efforts have failed



**Widespread disruptions** to  
global supply chains. Supply  
chain shortage coupled with  
demand shocks.

# WHAT WE ARE HEARING FROM CLIENTS BY SECTOR

Selected examples

Sector	Positioning	Commentary
 <b>Luxury goods</b>	<b>Adverse</b> Re-assess exposure	Chinese market demand severely impacted; supply chain from Northern Italy also disrupted; brands routing stock more to e-commerce and new markets e.g. Russia
 <b>Manufacturing</b>	<b>Adverse</b> Re-assess exposure	Well documented shortages from shutdowns in China; less well documented European “just in time” disruptions from Italy risking production continuity
 <b>Tourism &amp; leisure</b>	<b>Adverse</b> Re-assess exposure	Cruise industry severely impacted. Large hotel chains also facing significant drops in income. Event industry on hold
 <b>Transportation</b>	<b>Adverse</b> Re-assess exposure	Airline impact similar or greater to 9/11 in terms of demand drop, with international harder hit than domestic, and wide variations between operators
 <b>Payments</b>	<b>Mixed impact</b> More diligence needed	Payments companies facing volume headwinds and increased risk; this could, however, accelerate the shift to digital in the US as consumers shift to e-commerce & contactless
 <b>Retail</b>	<b>Mixed impact</b> More diligence needed	Food retail, especially value players, are booming as people are eating-in more given the effect of quarantines. Mass retail also benefitting
 <b>Insurance</b>	<b>Mixed impact</b> More diligence needed	Life and health insurance exposed in the short-term but may see an increase in uptake in the medium-term. Events, travel, and business interruption exposed but wider P&C expected to be resilient
 <b>Education</b>	<b>Mixed impact</b> More diligence needed	Private schools and pre-K expected to suffer from social-distancing in some areas. Online platforms may benefit



# DEEP DIVE: SUPPLY SHOCKS

# IMPACT OF LOCK-DOWNS ON US MANUFACTURING

Several segments of US manufacturing are expected to be impacted by containment measures adopted in China, South Korea, and Italy

Import categories	2018 US Imports (\$ BN)	% US imports from countries with lock-downs			
		Total	China	S. Korea	Italy
<b>Machinery and equipment</b>	385	33.9%	26.8%	4.3%	2.8%
<b>Electrical machinery and equipment</b>	181	29.8%	25.6%	3.4%	0.8%
Metals	180	17.6%	12.9%	2.7%	2.1%
Minerals	152	4.0%	0.8%	2.4%	0.8%
<b>Computer and electronic products</b>	147	54.6%	49.6%	4.8%	0.2%
Food, beverages and tobacco	141	9.9%	5.8%	0.7%	3.5%
Optical, photographic, and medical instruments	97	14.4%	10.9%	1.5%	2.0%
<b>Rubber and plastics</b>	87	32.1%	25.5%	5.3%	1.3%
<b>Textiles and apparel</b>	82	52.9%	50.3%	0.4%	2.2%
<b>Chemicals and chemical products</b>	60	25.9%	20.4%	3.3%	2.2%
<b>Furniture</b>	59	59.1%	56.3%	0.5%	2.3%
Motor vehicles and vehicle parts <sup>2</sup>	36	14.2%	5.9%	6.4%	1.9%
Aircraft and aircraft parts	36	9.4%	3.3%	2.8%	3.3%
<b>Non-metallic mineral products</b>	28	40.5%	33.3%	1.6%	5.6%
Wood and wood products	21	19.3%	18.4%	0.0%	0.8%
Paper and paper products	17	24.7%	19.8%	3.5%	1.4%
<b>Ships and ship parts</b>	8	32.4%	2.1%	0.4%	30.0%
<b>Railway and railway parts</b>	7	50.6%	49.3%	0.5%	0.8%
<b>Printing and media</b>	4	35.5%	32.0%	1.5%	2.0%
<b>Total imports<sup>1</sup></b>	<b>2,314</b>	<b>26.1%</b>	<b>20.7%</b>	<b>3.2%</b>	<b>2.2%</b>

## COVID-19 impact

- Several sectors of US manufacturing should expect disruptions in supply chain resulting from containment measures adopted in China as well as South Korea and Italy
- China is a key supplier for the computer and electronics, and manufacturing industries, which are among the most heavily hit industries from COVID-19 supply chain disruptions
- Supply chain tensions are adding to existing trade tensions between US and China, which had already negatively impacted the economics of the businesses in several industries

**Most impacted categories (above 25% of imports)**    Magnitude of impact

1. Includes other categories not detailed in the table given fragmentation and low share of imports from three countries with lock-downs

2. Electronics components for vehicles are classified as Electronic Products in data set

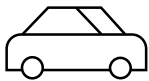
Source: UN Comtrade Data

# CONTEXT: SIGNIFICANT DISRUPTION ON GLOBAL SUPPLY CHAINS IN CHINA

Containment efforts in China in Q1 2020 have led to stalling of economic activity, leading to disruption of production and contraction of freight transport, and impacting significantly global supply chains

## Disruption in production in China/examples

### Automotive



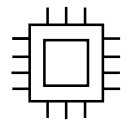
- **47 out of 47** top 4 global industry players<sup>1</sup> factories in China shut down beginning of Feb. and are slowly reopening one by one
- **~30%** unit production drop in China between January and March – representing **1,7M** vehicles

### Pharmaceuticals



- **1<sup>st</sup>** manufacturing shortage of drug for US market originating in China in mid February, **20** identified at risk
- **450 Chinese drug ingredients at risk for Indian pharmaceutical market**, which relies at 70% on China for raw materials

### Electronics

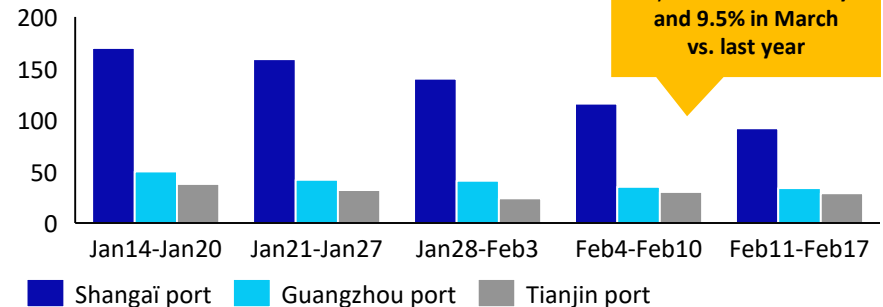


- **~12%** smartphone unit production drop between January and March in China
- **20% to 40%** LCD screen unit production drop for the month of February

## Contraction of freight transport

Container cargo volume at Chinese ports has reduced strongly during Jan and Feb. 2020 as ports were forced to operate with reduced staffing

### Chinese ports volume of container cargos (In '000 TEU<sup>2</sup>)



**Air Cargo** is impacted as well, several operators having suspended deliveries in Hubei Province

### Hong Kong airport freight traffic (In tonnes)



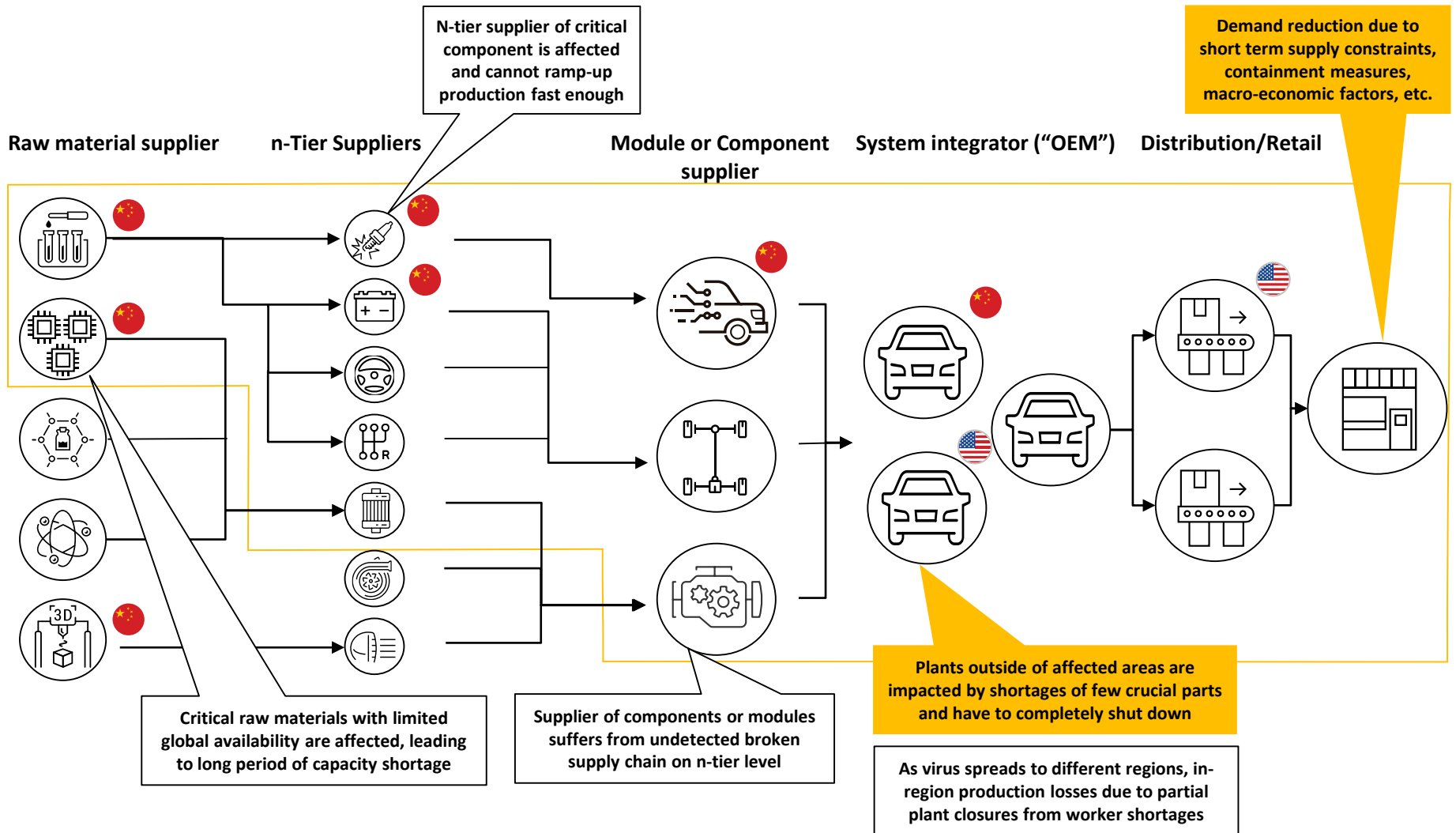
1. Toyota, VW, Hyundai, GM 2.TEU: total equivalent units

Source: Shanghai International Shipping Institute; Airport Authority of Hong Kong, NBC News, Automotive logistics, Reuters, HIS Markit, Financial Times, Forbes, Wall Street Journal



# N-TIER SUPPLY CHAINS NOW PUTTING OEMS & DISTRIBUTION UNDER THREAT

Auto and industrial companies have been buffeted in two waves: global supply chain disruption (in-process) and internal operational regional disruptions (potential)



# IS YOUR COVID-19 SUPPLY CHAIN RESPONSE ADEQUATE?

## Structures, Governance, Processes



- Is your response team sufficiently staffed, equipped, and focused solely on the task?
- Does the team have immediate and permanent access to the full organization and board-level decision-makers?
- Do they run efficient real-time processes for issue identification, solution development, decisions, and reporting?

## Comprehensive Transparency



- Do you know which parts of your full supply chain are potentially affected?
- Do you track the status of every potentially impacted part of the supply chain?
- Do you know the (financial) impact of every critically affected part of your supply chain on your own business?
- Do you know the impact on your customers' supply chains?

## Organization Enabled



- Is every operations team potentially affected by a supply chain disruption trained to support transparency creation, solution development, or implementation?
- Are capabilities and resources available to support the supply chain also beyond the organizational boundaries (transport, quality, engineering, ...)?

## Crisis Management



- Has your response team leadership the authority to take the required decisions to solve disruptions?
- Does the response team have the right information at hand to make decisions immediately at scale that will impact significant parts of the business?
- Is the top management frequently updated on status and challenges?

## Speedy Mitigation



- Do you have a clear framework on how to prioritize scarce resources and management attention?
- Does your solution development focus on the most critical parts: short time to impact and/or no solutions available?

## Robust Plans



- Do you guide solution development with a standardized set of levers?
- Do you systematically require back-up plans for solutions that are not yet implemented?
- Are you prepared for new parts of the supply chain being affected?
- Do you have a back-up plan for your response team?

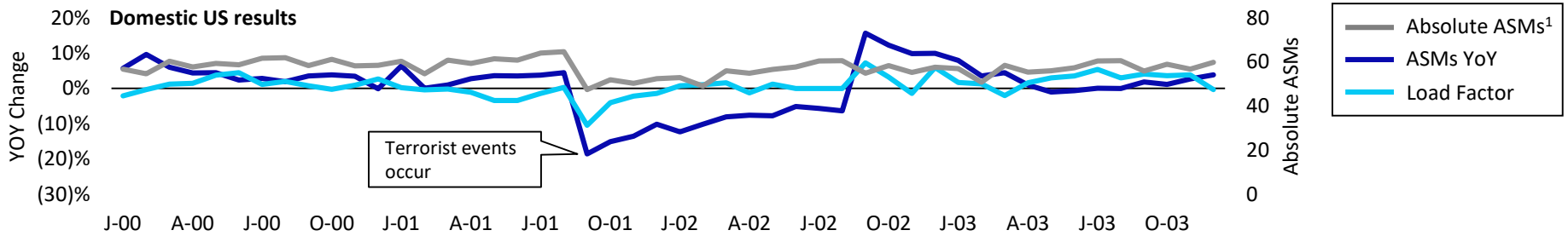
# DEEP DIVE: DEMAND SHOCKS



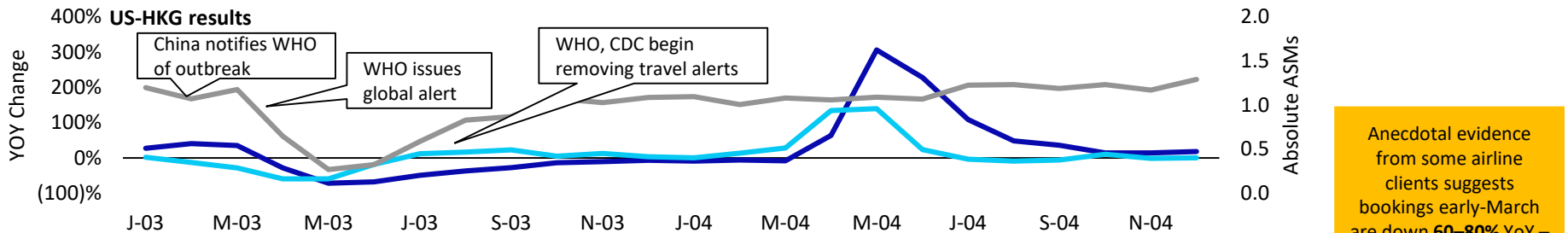
# DEMAND SHOCKS: AVIATION INDUSTRY REACTION TO HISTORIC EVENTS

While the industry reacted differently to each event, reaction to large-scale, geographically-diverse impacts saw double-digit capacity reductions with gradual, 12–18 month recovery periods (and COVID-19 impact may be larger)

## 9/11/2001 Immediate impact event followed by gradual recovery

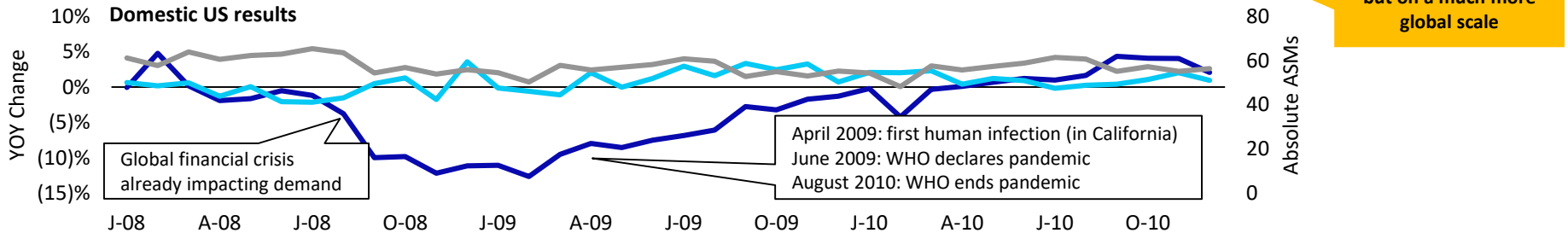


## SARS Immediate and geographically-focused impact event followed by quick recovery



Anecdotal evidence from some airline clients suggests bookings early-March are down 60–80% YoY – Similar to SARS impact but on a much more global scale

## Global Economic Crisis and H1N1 Gradual impact followed by gradual recovery



1. Available Seat Miles  
Source: PlaneStats.com/T100

# IS YOUR COVID-19 DEMAND RESPONSE ADEQUATE?

## Capacity and supply

- Do you have a house-view on how demand will evolve in the coming weeks and months in different scenarios?
- Is your capacity planning/sourcing department closely aligned with your commercial team plan to deliver on this?
- If needed, are you in a position to buy-up scarce stock to trade through supply disruptions?

## Pricing

- Do you have a view on where you will get the most return for price discounts to remain competitive but not destroy margin in the long-term?
- Are your discounts structured in a way that is temporary and stimulates short-term demand?
- Are your pricing levers aligned with operations/supply chain as a tactic to alleviate potential constraints?

## Customer focus

- Do you know who your best customers so that you can double-down on these?
- Do you have a close understanding of customer economics and a clear segmentation to allow for laser-focus?
- What levers can you pull to ensure you are investing in these valuable customer relationships e.g., payment terms, protected shipments?

## Marketing and PR

- If you need to pull back on marketing budget, do you have a clear view on how to maximize ROI on remaining spend?
- Have you aligned your messaging around value proposition and positioning to shifting customer needs? e.g., flight to quality

## Go to market

- Is there an opportunity to reset your channel mix/external partner or intermediary strategy to reflect shifting demand drivers and unbalanced regional recovery patterns?
- Is there an opportunity to “prune” under performing sales personnel and redeploy the remaining team to the most geographies and customer segments?

## Inorganic growth

- Can you be opportunistic to find value in the market for the right acquisition, to enter new markets, add capability, or simply to grow in scale?

# DEEP DIVE: PORTFOLIO EXPOSURE

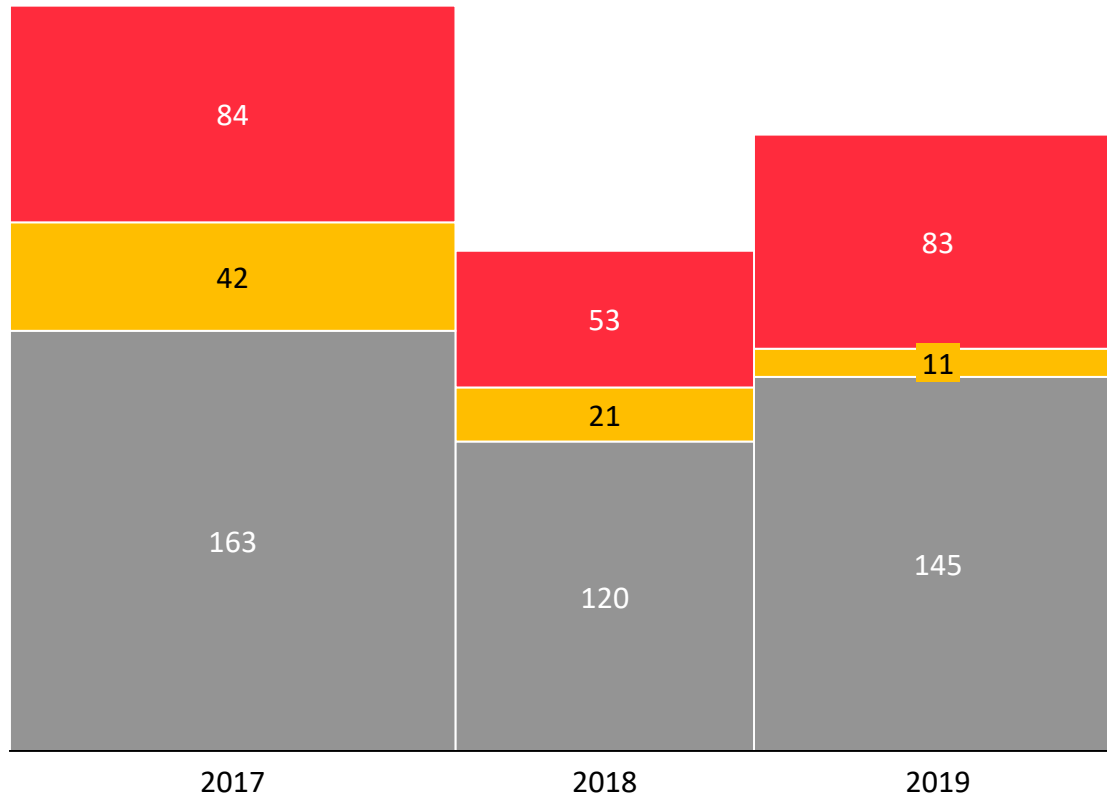


# SIZE OF THE THREAT TO PE INDUSTRY

Looking at the deals from the top ~40 funds since 2017, more than a third have occurred in sectors that are experiencing added risk from the effects of COVID-19, representing \$110BN

## Industry risk profile of large PE deals

Number of deals, 2017–2019



■ Neutral ■ At-risk ■ Severe risk

Source: Mergermarket, Oliver Wyman analysis



# 41%

of major LBOs and Public to Private deals from 2017–2019 have been on companies in **industries vulnerable to** economic downturn caused by **COVID-19**

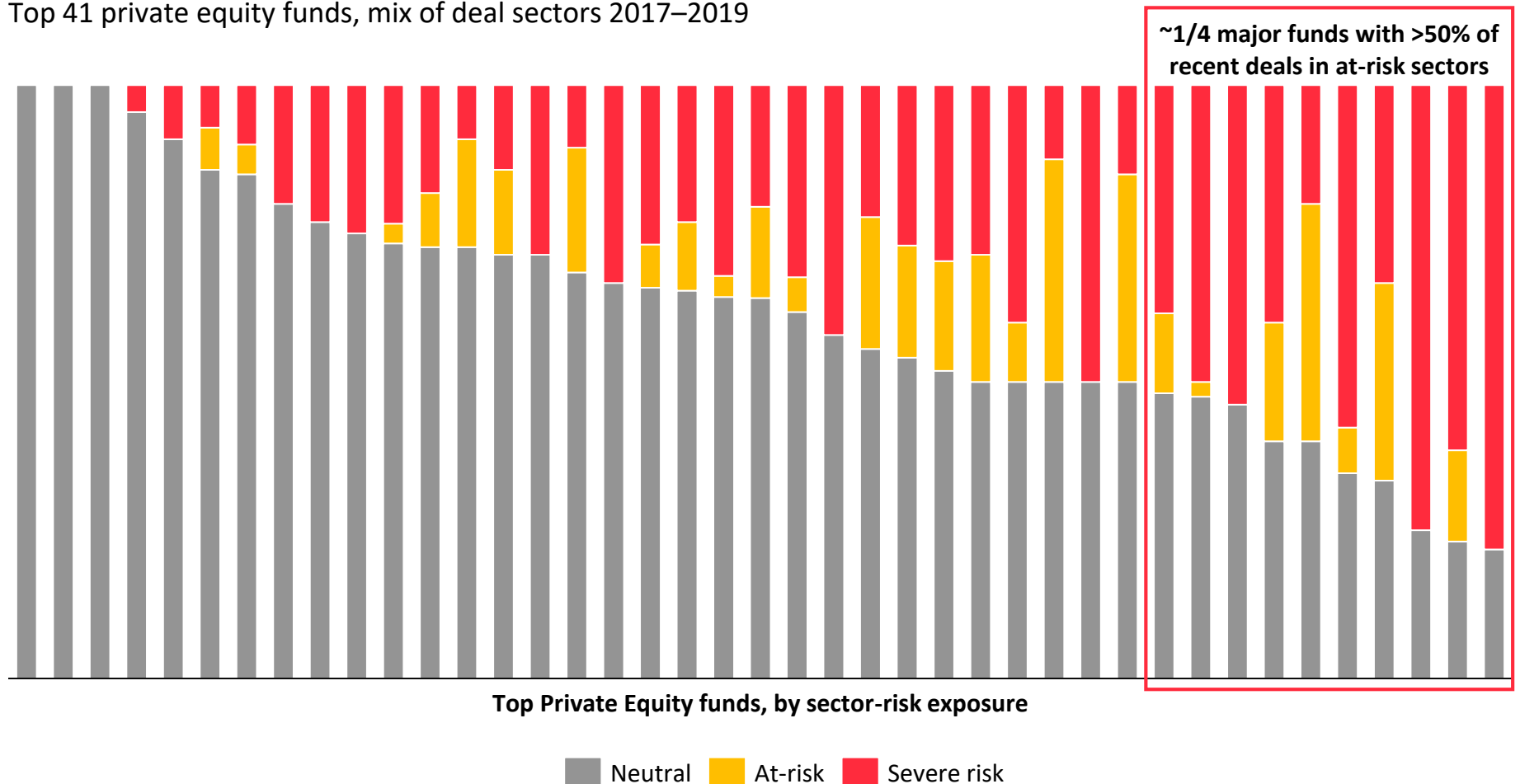
Examples of industries classified “at-risk” include transportation, manufacturing, and energy

# SIZE OF THE THREAT TO PE INDUSTRY

At a fund level, there is a variety of risk exposures, but about 1/4 of major funds appear to have an outsized risk profile

## Industry risk profile of large PE funds

Top 41 private equity funds, mix of deal sectors 2017–2019



Source: Mergermarket, Oliver Wyman analysis

# SUPPORT



# KEY CONSIDERATIONS FOR NEAR-TERM BUSINESS CONTINUITY



## 01 Establish transparency

- Understand and project **short and long-term demand shifts** as well as potential **bottom-line and balance sheet impact** of the crisis in different scenarios
- Set up '**Liquidity Offices**' to establish **cashflow risk and devise actions** to mitigate short-term crunches
- Leverage **tools for integrated financial planning** to validate the viability of the company financing and to identify potential future **liquidity shortages or covenant breaches**



## 02 Support rapid action

- Focus on key **levers to mitigate supply shortage** from reallocation within supply chain to reengineering complex parts
- Apply **rapid cost reduction and cash flow improvements**
- **Optimize commercial decisions in dynamic market situations**, pulling levers like pricing to maximize ROI across product lines and customer segments
- Understand the abilities and requirements of **commercial banks and policy makers** with regards to financial support instruments and **access financing and state aid**

# LIQUIDITY OFFICE

In our experience with at-risk businesses, we have set up central “liquidity offices” to achieve rapid cash flow visibility and develop action plans, deploying standard models to increase speed and reliability

## Week 1

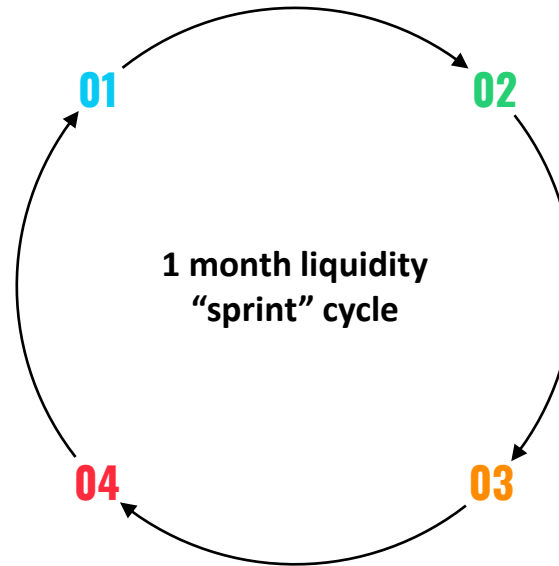
### Cash flow forecast by entity

- Report liquidity status (cash available, unused credit lines, etc.) by entity
- Forecast expected cash flow by entity using the “direct method”, including
  - Planned payments to third parties
  - Expected cash received from customers
  - Planned financing activities
  - Payments to sister companies
- Document assumptions (e.g., revenue forecast, margins)

## Week 4

### Liquidity optimization measures

- Discuss cash forecast after top management adjustments with entities
- Integrate cash forecast in shareholder and lender reporting
- Discuss measures for liquidity improvement with management of entities and start implementation



## Week 2

### Validation and consolidation

- Review liquidity status and cash forecast with each entity
- Challenge assumptions and ensure consistency e.g., with corporate-level forecasts
- Apply corrections if necessary
- Consolidate liquidity status and cash forecast across entities

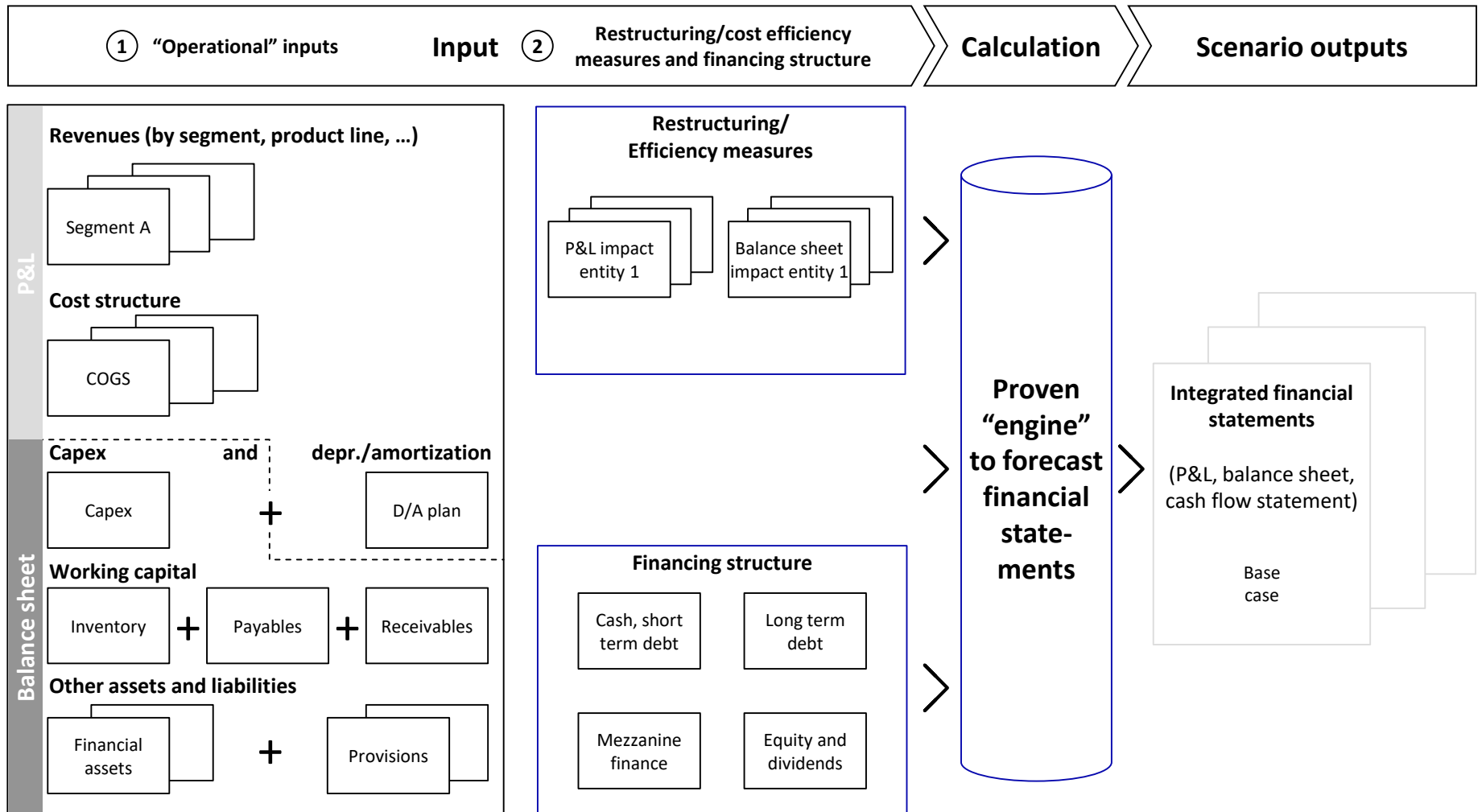
## Week 3

### Discussion with management

- Hold cash management meeting with top management to discuss
  - Plan and actual deviations for the liquidity status
  - Cash forecast vs. prior period
  - Review assumptions
  - Overall trend
- Agree on top management adjustments for the cash forecast (e.g. security buffer)
- Define measures for liquidity improvements (e.g., payment schedules, intercompany financing)

# LIQUIDITY OFFICE

Our standard model converts multiple P&L and balance sheet inputs with a proven calculation engine into integrated financial statements



# OUTLOOK: MID TO LONG TERM SUPPLY CHAIN MEASURES

Besides short term measures, companies need to increase their mitigation and preparation... after the crisis is before the crisis



## Inbound Supply Chain

- How comprehensive is your supply chain risk management, and how do you adjust your risk appetite?
- How resilient is your supply chain or your supplier landscape?
- How and when to lock-in transportation capacities and prices?
- How much control do you need of core elements to better mitigate certain risks?
- How do you optimize for cost vs. flexibility or even agility?
- Do you have a watch-tower on guard that spots weak signals and increases stock?
- ...



## Outbound Supply Chain

- How much/where should you store products now before a likely reduction/shut-down of production?
- How to best ramp-up distribution flows again after the crisis (direct delivery vs. regular vs. ...)?
- How to flex your own distribution cost early on?
- How can you leverage the supply chain flexibility to your advantage in customer negotiations?
- How can you utilize supply chain agility as a competitive advantage e.g., to gain (and retain) share in times of supply disruptions?
- ...



## S&OP considerations

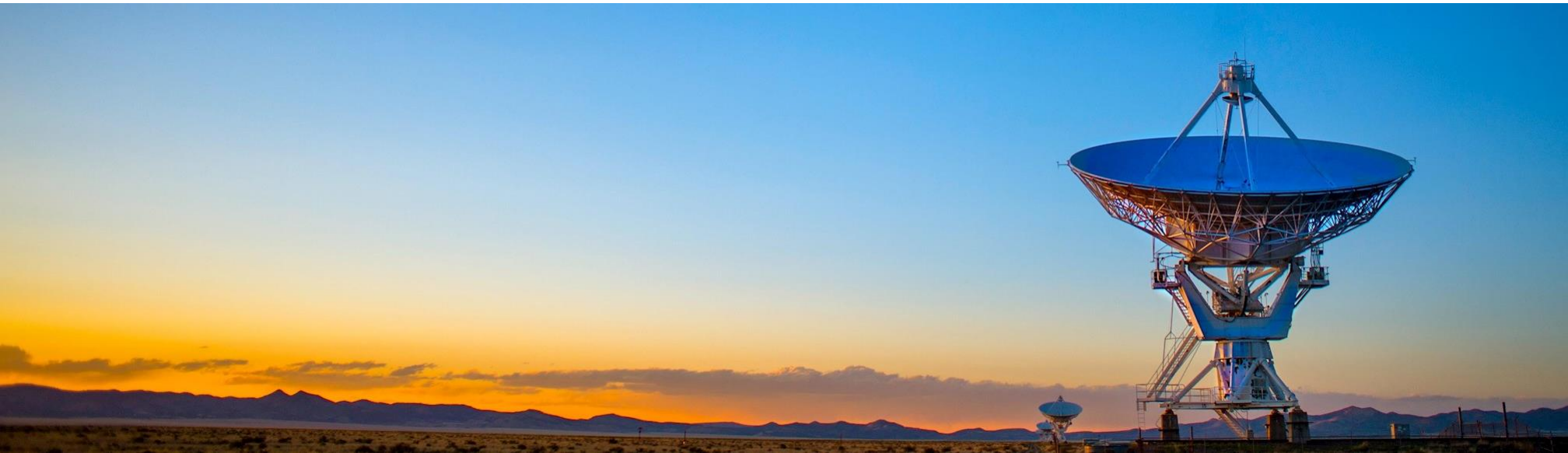
- What's your hierarchy of products/production? In the case of scare supplies, what gets produced/not?
- How is demand likely to change shortly before and shortly after the crisis? How best to adapt production and the resulting supply chain?
- Should you change your share of made-to-stock/made-to-order in light of a crisis?
- Is a temporary slow-down in demand and supply the time to run more trails? How to use idle supply chain and production capacity best?
- ...

# READ OUR LATEST INSIGHTS ABOUT COVID-19 AND ITS GLOBAL IMPACT ONLINE

Oliver Wyman and our parent company Marsh & McLennan (MMC) have been monitoring the latest events and are putting forth our perspectives to support our clients and the industries they serve around the world. Our dedicated COVID-19 digital destination will be updated daily as the situation evolves.



[Visit our dedicated COVID-19 website](#)





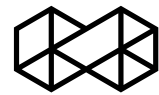
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