

LGA COVID-19 EXECUTIVE SUMMARY

A Crisis Management Toolkit for Enterprising Families

March 16, 2020

Devin DeCiantis, Managing Partner & Risk Practice Leader

LANSBERG-GERSICK

www.lgassoc.com/insights

Introduction

Dear clients, friends and members of our extended LGA family,

Now that we have a clearer understanding of nature and spread of the virus, a more coordinated global policy response has begun to coalesce -- acknowledging the need for "social distancing" despite the impact this will have on businesses large and small, and a recognition of the importance of "flattening the curve" to reduce the burden this virus will place on our already strained public health systems (more on both strategies below).

As the pandemic seizes control of daily life, it will also have a clear and material impact on the performance of operating companies and investment portfolios, and **put strains on the physical and emotional well-being of employees, customers, and families** -- particularly **cherished elders** who are most at risk and the **youngest members** who are struggling to find meaning in this chaotic time. We hope the resources below will help enterprising families navigate this complex challenge.

At LGA we are also taking several additional steps to help ensure the health and well-being of clients and our community. We are also collecting and sharing insights to support your individual response to the crisis on our new COVID-19 portal on the LGA website, including the report you are about to review. We hope it will provide you with **critical facts and insights** on the COVID-19 pandemic and **help your decision-makers and your family remain informed** as the situation evolves.

We encourage you to review and share with family members, Board directors and executives to help inform your own response and support strategic conversations – both for coping with the current crisis and for developing protocols and programs to manage the risk of future crises.

Finally, while we will be acting with extra prudence in the days and weeks ahead, we remain available to support you in any way that might be helpful as the situation unfolds.

Sincerely,
Your global team of LGA Advisors

Overview

THIS PRIMER HAS BEEN DEVELOPED SPECIFICALLY WITH ENTERPRISING FAMILIES IN MIND AND WAS DESIGNED TO COMPLIMENT OTHER DATA AND ANALYSIS YOU ARE LIKELY REVIEWING ON A DAILY BASIS



CRISIS MANAGEMENT:

Exploring what enterprising families can do in the <u>short-</u> <u>term</u> to respond to COVID-19 and other high-risk episodes 2

RISK MANAGEMENT:

Exploring what enterprising families can do in the <u>longer-term</u> with respect to Risk Management

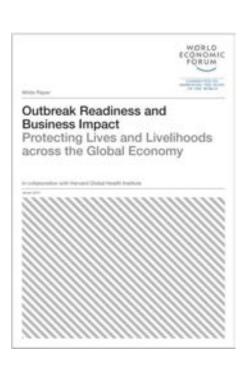
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COVID BACKGROUNDER:

Understanding the origins of the SARS-CoV2 outbreak and its physical, economic, social consequences

Crisis Response Strategies for Pandemics

WORLD ECONOMIC FORUM PROVIDES EXCELLENT GUIDANCE FOR NON-FAMILY BUSINESSES...



Passive

- Wait and see response strategy
- No strategic threat management
- Low levels of Board and management awareness

Active

- Generic business disruption insurance coverage
- Basic outbreak response and business continuity plans
- Board and management with some awareness

Advanced

- Strong Board-level leadership
- Active threat surveillance
- Active supply chain management
- Detailed response and continuity plans
- Active engagement in public/private partnerships to mitigate risk
- Response training and testing through simulation exercises

BUT ENTERPRISING FAMILIES NEED TO MANAGE RISK AT A SYSTEMS LEVEL...



- What risks need to be managed beyond the Business and the Board? (e.g. in terms of ownership and family?)
- What can we do to better coordinate between the Board and the family?
- How will core values anchor our response with respect to employees, customers and suppliers?
- How will our organizational purpose guide our interactions with public health officials and first responders?



WEF: "CLASSIFICATRION OF CORPORATE RESPONSE TO INFECTIOUS DISEASE RISK"

Taking a Systems Level View

SURVEYING OUR CLIENTS, HERE ARE SOME OF THE TOP RISKS OF COVID-19 FOR ENTERPRISING FAMILIES ALONG WITH KEY QUESTIONS THAT ALL FAMILIES SHOULD ANSWER FOR EACH OF THE THREE CIRCLES...

- How have family members been affected by the crisis? (Economically? Physically? Emotionally? Socially?)
- What role is the Family Council playing in leading or coordinating the family's response?
- How is the family supporting those members who are working actively in the business on the front lines of the crisis? How are their families being supported?
- Are there any ways in which activities already undertaken by the business (e.g. investments in process, policy and risk mitigation) be shared with the family – preferably without compromising the needs of the business?
- How are family members NOT working in the business being informed about the corporate crisis response?
- How are the family members tracking the performance of the Board? Via family Directors? Via regular communications from the Board Chair or Secretary?
- What is being done to support the most vulnerable or exposed members of the family?
- How can this crisis be used as an educational opportunity to inform the family about risk more generally?
- How is the family managing the critical role of social distancing? Particularly with respect to care for high-risk groups? (e.g. those >80)

OWNERSHIP

- Direct / indirect
 operating and portfolio
 exposure
- Liquidity / cash crunch
- Ineffective Governance
- Reactive leadership
- Poor communication
- Siloed leadership

FAMILY

- Vulnerable family members
- Stress / anxiety
- Delayed family gatherings

BUSINESS

- Pipeline risk
- Supply chain disruption
- Credit / cash crunch
- FX exposure
- Talent availability

- Have we adapted our existing governance in response to the crisis?
- Do we have a nest egg outside the main business to help buffer against volatility or material loss?
- Are we meeting frequently enough and asking the right questions of management? Of the owners?
- Do we have the capital necessary to provide liquidity to owners or do we need to preserve to protect the business?
- Does the crisis present an opportunity to sell assets? Or to buy assets from others at attractive prices?
- Do we have the necessary information to make strategic decisions during a rapidly changing environment?
- What is being done to protect decision-making capacity in the system?
 - How materially can revenues be expected to decline?
 - How materially can costs be reduced without compromising on performance or core values?
 - Do we have the leaders we need to guide the business through the crisis?
 - Do we have the resources we need? (particularly cash and key inputs, but also talent, credit)
 - How can we use this as an educational opportunity to improve future crisis response and risk management?
 - What opportunities may be available to help replace lost revenues with new product lines or repurpose resources to adapt to changing customer needs?
 - What public resources, incentives and relief may be available to support our crisis response?

Develop a Crisis Response Plan

IDEALLY THIS IS DESIGNED AND TESTED BEFORE A CRISIS EMERGES, THOUGH IT CAN STILL BE A POWERFUL

TOOL FOR FIRST-TIME CRISIS RESPONDERS...

- How are we tracking our crisis response?
- Are we documenting what is working well and what could be improved to manage future crises?
- How are we sharing these insights throughout the system?

- How are we funding the emergency response?
- Have we made all necessary resources available to the Crisis Response Team?
- How are we deciding which active projects to maintain and which to defer or cancel?

1. Define Crisis and Assess Exposure 6. Reflect, Debrief & Document Crisis Management 5. Release emergency resources 4. Develop internal and external

communication

strategy

- Are we exposed? If so, how much and where?
- Do we have any experience managing other crises like this?

2. Convene

cross-functional

Crisis Response

Team

3. Engage key

internal and

external

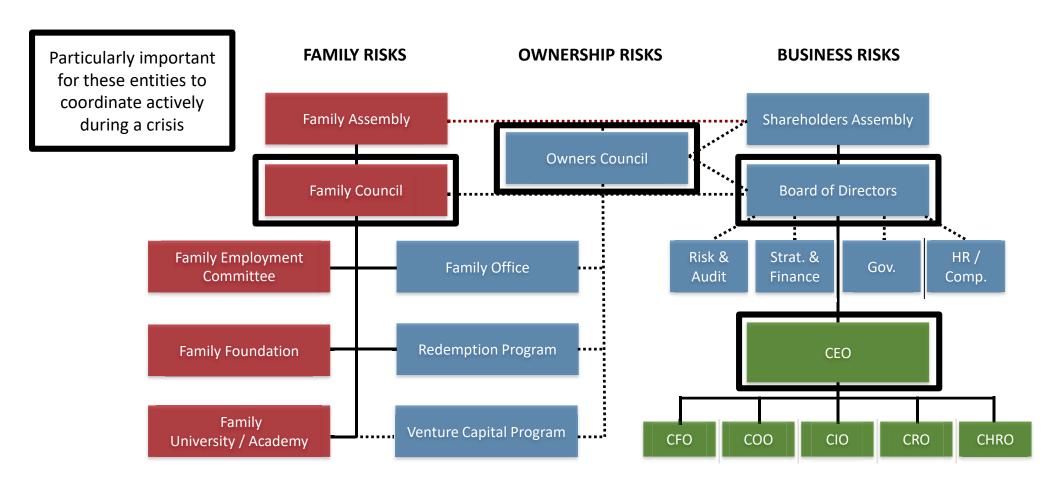
stakeholders

- Do we have leaders from each of our key governance bodies?
- Have we defined the mandate and authority of this group?

- Who needs to be involved in data gathering and response? Who doesn't?
 How are we sharing data between these
- How are we sharing data between these key constituencies?
- Are we providing adequate support for those directly affected?
- What are we telling our internal team? Our external partners?
- Are we doing this alone or hiring outside support?

Assign accountability for key risks appropriately

THE CRISIS WILL IMPACT EACH ASPECT OF THE ENTERPRISE DIFFERENTLY – AND IT'S CRITICAL THAT THE GOVERNANCE ENTITY BEST POSITIONED TO MANAGE THE ISSUE IS ADEQUATELY EMPOWERED AND RESOURCED



How a "Risk Intelligent" Board can support your crisis response

A "RISK INTELLIGENT" BOARD IS:

| Strategic | Provides insight, guidance and reassurance to both executives and the Family Council in a timely and responsive manner | | |
|------------|--|--|--|
| Proactive | Defines the decisions that require the Board's attention and how frequently it ought to convene – particularly during active crises | | |
| Consistent | Establishes the character of the enterprise (particularly around risk culture) – setting the "tone at the top" in terms of the core values of the enterprise which may be challenged during a crisis | | |
| Adaptive | Balances long-term and short-term considerations in terms of resource allocation, frequency of contact, and overall crisis response as facts on the ground and operational context shift | | |
| Empowered | Able to request from management, owners and outside experts any information or resources necessary to support strategic deliberations during the crisis | | |
| Informed | Has access to timely, objective and appropriate information about the enterprise's crisis response (e.g. enterprise risk dashboard) and the ability to share selectively with owners | | |
| Prepared | Ensures the enterprise has protocols and plans in place to respond to future crises whenever the emerge – and commits to documenting those plans during the current crisis | | |
| Reflective | Understands what is working well and what can be improved about its own strategic functi and oversight – both during the crisis and afterwards | | |

How a "Risk Intelligent" Council can support your crisis response

A "RISK INTELLIGENT" FAMILY COUNCIL IS:

| Strategic | Provides insight, guidance and reassurance about the crisis to family members in a timely and responsive manner | | | |
|------------|---|--|--|--|
| Proactive | Shares timely information with the family about how the crisis is affecting the business as well as how activities in the business might be available to support the family | | | |
| Consistent | Holds the Board accountable for living up to the family's core values even during times of organizational stress (e.g. treatment of employees or customers affected by the crisis) | | | |
| Adaptive | Flexible with respect to any planned family social or educational activities, and utilizing digital infrastructure if possible, to engage the family virtually until the crisis passes | | | |
| Empowered | Able to request information or resources as necessary to support the family | | | |
| Informed | Has access to timely, objective and appropriate information about the enterprise's crisis respons (e.g. family risk dashboard) and the ability to share selectively with family members | | | |
| Prepared | Ensures the Council has protocols and plans in place to respond to future crises whenever they emerge – and commits to documenting those plans during the current crisis | | | |
| Reflective | Understands what is working well and what can be improved about its own strategic function and oversight – both during the crisis and afterwards | | | |
| | | | | |

How a "Risk Intelligent" CEO can support your crisis response

A "RISK INTELLIGENT" CEO IS:

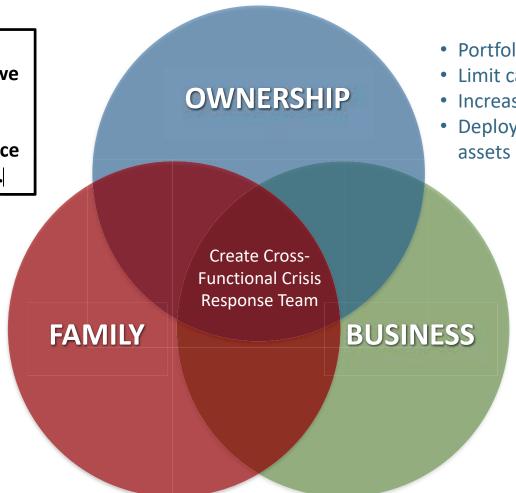
| Strategic | Provides insight, guidance and reassurance about the crisis to the Board, employees and key external stakeholders (e.g. customers, creditors, suppliers) in a timely and responsive manner | | | |
|--|--|--|--|--|
| Proactive | Anticipates the needs of key stakeholders as the crisis unfolds (e.g. cash flow management, capita spending triage, strategic communications, customer credit) and mobilizes necessary resources | | | |
| Consistent | Holds all employees accountable for living up to the family's core values even during times of organizational stress | | | |
| Adaptive | Balances long-term and short-term considerations in terms of expense management, capital spending and talent management until crisis passes | | | |
| Empowered | Able to request strategic input from the Board or outside experts as necessary to support the business during and after crisis | | | |
| Informed | Has access to timely and objective information about the enterprise's crisis response (e.g. risk dashboard) and provides a high-level summary to the Board – updating on a regular basis | | | |
| Prepared | Ensures the executive team has protocols and plans in place to respond to future crises wheneve they emerge – and commits to documenting those plans during the current crisis | | | |
| Reflective Understands what is working well and what can be improved about their own crisis lea performance – and shifts back to conventional leadership paradigm once the crisis has | | | | |

Taking a Systems Level View

SURVEYING OUR CLIENTS AND STUDENTS, HERE ARE SOME OF THE TOP RESPONSES TO THE COVID-19 OUTBREAK THAT ENTERPRISING FAMILIES CAN DEPLOY ACROSS EACH OF THE THREE CIRCLES...

We would love to hear about your response to the crisis so we can aggregate and share with other enterprising families around the world as we all brace for a few tough months ahead.

- Defining appropriate social distancing within the family
- Share coping strategies and resources from business and Board
- Group Insurance
- Emergency travel services
- Emotional support



- Portfolio rebalancing
- Limit cash distributions during crisis
- Increase frequency of Board meetings
- Deploy war chest to acquire strategic assets at attractive valuations

- Strong leadership
- Liquidity mgmt.
- FX hedging
- Communication strategy
- Travel protocols
- Flex. work.

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Adaptive Strategies Support Family Enterprise Resilience

LGA RESEARCH ON STRATEGIES THAT FAMILIES OFTEN USE IN EMERGING AND FRONTIER MARKETS PROVIDE HELPFUL INSIGHTS FOR ALL COMPANIES ON THE FRONTLINES OF CRISIS MANAGEMENT

| | ADAPTIVE STRATEGY | EXAMPLES FROM GLOBAL RESEARCH | EXAMPLES FROM COVID-19 CRISIS |
|--------------------|--|--|---|
| Redundancy | Building backup systems and resources in to protect against disruptive events and ensure continuity of your operations | A Caribbean hotel chain maintains backup generators and telecom services to sustain activity during frequent natural & social shocks | Credit Suisse established parallel decision-making teams across their top executives. The two teams do not meet and work in different locations to prevent infection. |
| Modularity Output | Investing in joint ventures to connect a family's local leadership into a larger network and gain access to expertise, resources, and scale of external partners | A European private bank utilized affiliated financial hubs to move capital and information across borders over centuries – thriving despite wars, recessions and political social change | 40+ restaurants, hotels, and cinema chains in Wuhan adjusted their staffing model and shared employees with Hema (a supermarket chain owned by Alibaba) to provide emergency delivery services as demand spiked |
| Migration | Quickly pivoting to new markets in response to rapidly changing conditions that make existing operations infeasible | A Yemeni conglomerate converted vacant buildings near manufacturing facility into housing for workers to avoid crossing sniper fire | Chinese restaurants repurposing waiters to support home deliveries; Retail salespeople becoming online influencers on WeChat; and shifting advertising online |
| Symbiosis | Developing <u>close relationships with</u> <u>influential actors</u> to secure growth opportunities, enhance access to resources, and stabilize delivery of services | LG) thrive under protectionist policy designed to | Google is building a portal to self-diagnose COVID-19 symptoms and identify nearby test centers at Walmart parking lots, supporting CDC and other public & private initiatives aimed at slowing social transmission |
| Simplification | Reducing complexity to cope with chronic resource scarcity – shifting to the most essential products, services, and processes | A Venezuelan manufacturer responded to a prolonged shortage of key materials and currency by focusing only on most vital products | Italian authorities control the threat of community transmission by only allowing critical retail services to remain open (i.e. groceries, pharmacies and banks) |
| Heterogeneity | <u>Promoting diversity</u> within the portfolio among suppliers, customers, products and regions to minimize systemic collapse | A Jordanian manufacturer built 14 factories across 7 countries to reduce dependence on a single market and engage global family | Social media platform Kuaishou (a \$28B company) just launched new online education programs to service 200+ million students forced out of school/university |

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From Crisis Management to Risk Management

THIS SECTION PROVIDES A BACKGROUND ON COVID-19 WHICH CAN SERVE AS THE BASIS FOR CONVERSATIONS WITHIN THE FAMILY ABOUT THE RISKS ASSOCIATED WITH THE CRISIS AS WELL AS YOUR SYSTEMATIC RESPONSE



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COVID BACKGROUNDER:

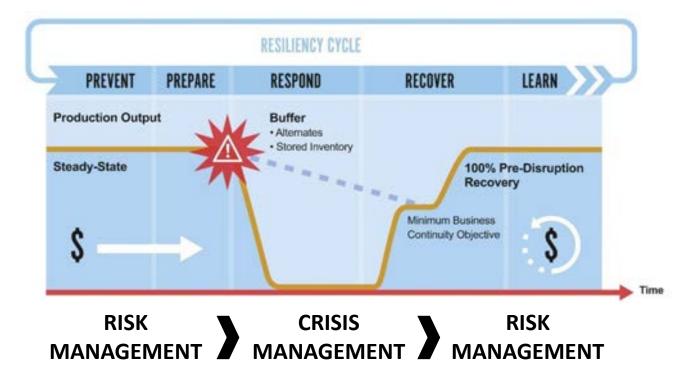
Understanding the origins of the SARS-CoV2 outbreak and its physical, economic, social consequences

From Crisis Management to Risk Management

RISK MANAGEMENT IS A FORM OF "CRISIS PREVENTION" THROUGH ENHANCING ORGANIZATIONAL RESILIENCE

British Standard Institute's BS 65000 Standard defines "Organizational resilience" as:

"The ability of an organization to anticipate, prepare for, respond and adapt to <u>incremental change</u> and <u>sudden</u> disruptions in order to survive and prosper."



Risk and the Family Enterprise

WHY FOCUS ON RISK MANAGEMENT?

- Strategic risk management is about making better decisions about the future
 - Governance requires decision-making
 - Decision-making requires risk-taking
- As leaders stare out into an unknowable future, they are forced to assign probabilities to a distribution of potential outcomes...then take a leap
- With the right data, processes, policies and people, modern family enterprise leaders can be rational and even strategic about managing and mitigating risk



GRAPHIC: CFA Institute

Longevity and Family Enterprises

DISPROPORTIONATELY REPRESENTED IN STUDIES OF LONGEST-LIVING COMPANIES

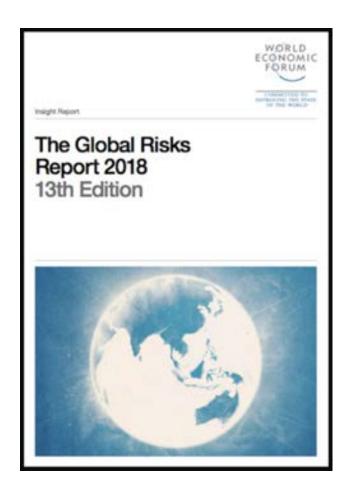
- Collins & Porras / Royal Dutch-Shell studies / Tercentenarian Club / Les Henokiens
- Survival is built into their DNA!
 - Long-term planning horizon
 - Speed of decision-making
 - Fiscal prudence
 - Focus on managing downside vs. chasing upside
 - Building good will / nonmarket strategies
 - Reputation management
 - Commitment to community / stakeholders



Doesn't make FBs immune to 21st century business dynamics

FBs can no longer afford to manage risk *reactively*...

We can't study risk in isolation



"Humanity has become remarkably adept at understanding how to mitigate conventional risks that can be relatively easily isolated and managed with standard risk management approaches."

"But we are much less competent when it comes to dealing with complex risks in the interconnected systems that underpin our world, such as organizations, economies, societies and the environment."

SOURCE: World Economic Forum (WEF), "Global Risks 2018," January 2018.

Consider Building a Family Enterprise Risk Management Framework

What could possibly go wrong with our existing risk models?

- How are risks interconnected?
- Have we devoted enough resources to preventative maintenance & disaster planning?
- Do we have a documented crisis response plan?
- Do we model a broad range of scenarios during strategic planning?

What processes do we have to manage risk?

- Are we tracking the right data?
- What do we do with the data?
- How do we respond to risk events?
- Do we have a healthy risk culture?
- How do we evaluate and adjust our risk appetite and risk capacity over time?
- What is our process for setting and spending reserves?
- How do we communicate about risk?
- What do we do when a new risk emerges?



What structures do we have to manage risk?

- How involved is the Board in managing risk?
- Who is accountable for managing each key risk?
- What resources are available to train and support them?
- How do we compensate those managing risk?
- Who designed this structure and how often is it reviewed?

What are the key risks to our strategy, operations and overall enterprise?

- How do we gather information about risk?
- How do we rank these risks in terms of probability and impact?
- Do we consider internal and external risks?
- How are these risks integrated into broader strategic planning?

How much risk should we take?

- Is there consensus or dispersion among owners in terms of risk appetite?
- Are we good at taking risks?
- Have we articulated our Risk Appetite in a clear, concise and actionable Statement?
- Have we measured our Risk Capacity?
- Have we adjusted our Risk Capacity to accommodate our Risk Appetite?

Primer on the Pandemic

THIS SECTION PROVIDES A BACKGROUND ON COVID-19 WHICH CAN SERVE AS THE BASIS FOR <u>CONVERSATIONS WITHIN</u> <u>YOUR FAMILY ENTERPRISE</u> ABOUT THE RISKS ASSOCIATED WITH THE CRISIS AND YOUR SYSTEMATIC RESPONSE



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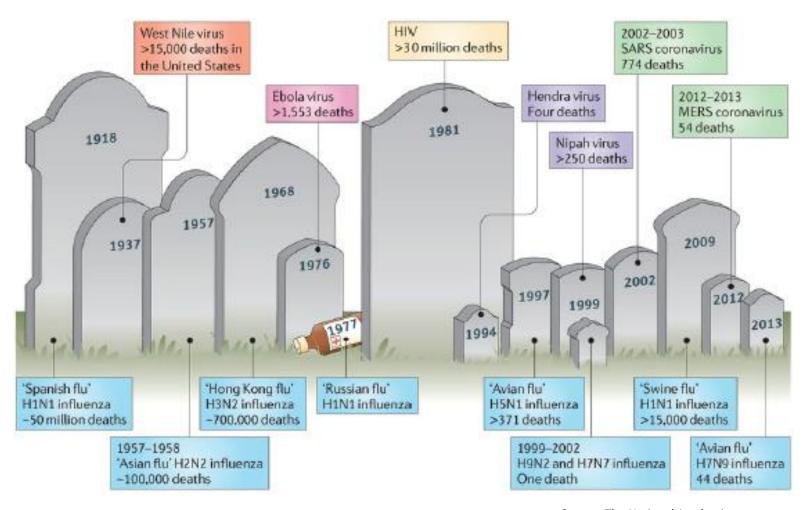
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Historical Precedent

VIRAL EPIDEMICS AND "ZOONOTIC DISEASES" ARE ACTUALLY QUITE COMMON...





LANSBERG-GERSICK Source: The National Academies Source: Wikimedia 20

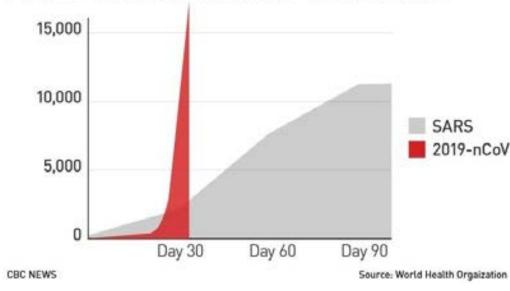
Historical Precedent

EARLY INDICATIONS SUGGEST THAT THIS NOVEL CORONAVIRUS HAS A MUCH LARGER POTENTIAL FOR MASS INFECTION THAN SARS OR MERS...

| 1. Total Infections, Deaths, and Fatality Rate | | | | | | | |
|--|-------|-------|------------|------------|---|--|--|
| | SARS | MERS | SARS-CoV-2 | H1N1 in US | Current Seasonal Fl in US ^{1 2} | | |
| Total cases | 8,096 | 2,499 | 109,209 | 60,837,748 | 32mm-45mm | | |
| Deaths | 774 | 861 | 3,788 | 12,469 | 18k-46k | | |
| Fatality rate | 10% | 34% | 3.47% | 0.02% | 0.06-0.10% | | |

¹ Preliminary Burden Estimate for the Seasonal Flu by US CDC from October 1, 2019, through February 22, 2020.





SOURCE: Goldman Sachs

"Coronavirus may infect between **40-70% of world's population...** This is **qualitatively different from SARS** and MERS in the sense that it is ten times bigger than SARS already...and it is way more widespread."

—Harvard epidemiologist Marc Lipsitch

² For comparison, in 2019, there were 200,000 pneumonia-related hospitalizations and 50,000 deaths in th United States.

China Bought the West Time...But it Has Been Wasted

"EPIDEMIC PREPAREDNESS STARTS <u>YEARS</u> BEFORE AN OUTBREAK"

— EMANUELE CAPOBIANCO, INTERNATIONAL FEDERATION OF RED CROSS AND RED CRESCENT SOCIETIES

Why haven't Singapore, Hong Kong and Taiwan been more severely impacted?

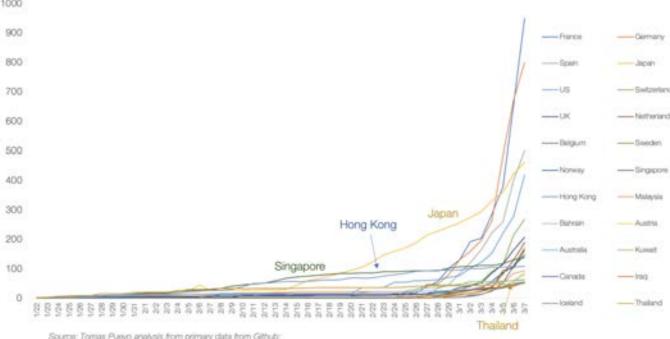
"All of them were hit by SARS in 2003, and all of them learned from it. They learned how viral and lethal it could be, so they knew to take it seriously. That's why all of their graphs, despite starting to grow much earlier, still don't look like exponentials..."

"Coronavirus: Why You Must Act Now", Medium, Tomas Pueyo

"Following SARS in 2003, Taiwan established a central command center for epidemics. By Jan. 20, it was coordinating the government's response to the coronavirus. It quickly compiled a list of 124 "action items," including border controls, school and work policies, public communication plans and resource assessments of hospitals..."

"What We Can Learn From Singapore, Taiwan and Hong Kong About Handling Coronavirus", Time Magazine, MARCH 13, 2020

Chart 9: Total Cases of Coronavirus Outside of China (Countries with >50 cases as of 3/7/2020)



uros: Formas Pusyo analysis from primary data from Genuto:
https://genuto.com/CSSEGISandData/COVID-19/biob/master/csse_covid_19_data/csse_covid_19_time_series/time_series_19-covid-Confirmed.cov

Tracking COVID-19

AFTER EARLY CHALLENGES WITH TRACKING IN WUHAN, DATA IS NO LONGER A MAJOR HEADWIND (THOUGH UNDIAGNOSED CASES – PARTICULARLY WHERE COMMUNITY TRANSMISSION HAS BEGUN UNDETECTED OR ACTIVE TESTING IS LIMITED – WILL INFLATE THESE FIGURES SUBSTANTIALLY)





SOURCE: WHO 3/14/2020

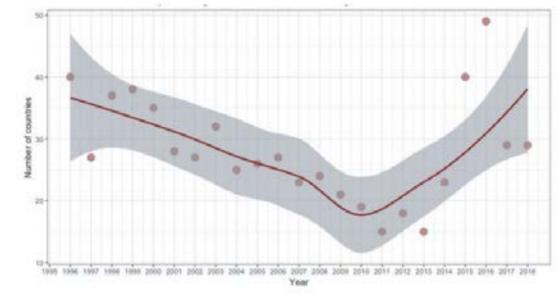
SOURCE: Johns Hopkins University 3/14/2020

Epidemiology

A VIRAL OUTBREAK OF THIS TYPE AND MAGNITUDE WAS NEVER A MATTER OF "IF" BUT "WHEN" – AND THE BEHAVIORAL RESPONSE, WHILE SLOWER THAN EXPECTED INITIALLY, HAS ACCELERATED CONSIDERABLY

Figure 1: Number of countries experiencing significant disease outbreaks, 1995-2018





Source: Harvard Global Health Institute/World Economic Forum analysis of data from WHO Disease Outbreak News (http://www.who.int/csr/don/en/)



The frequency and diversity of disease outbreaks are expected to grow steadily.



In a modern economy, relatively small numbers of infections could have massive economic effects that can extend far beyond the original outbreak's footprint.

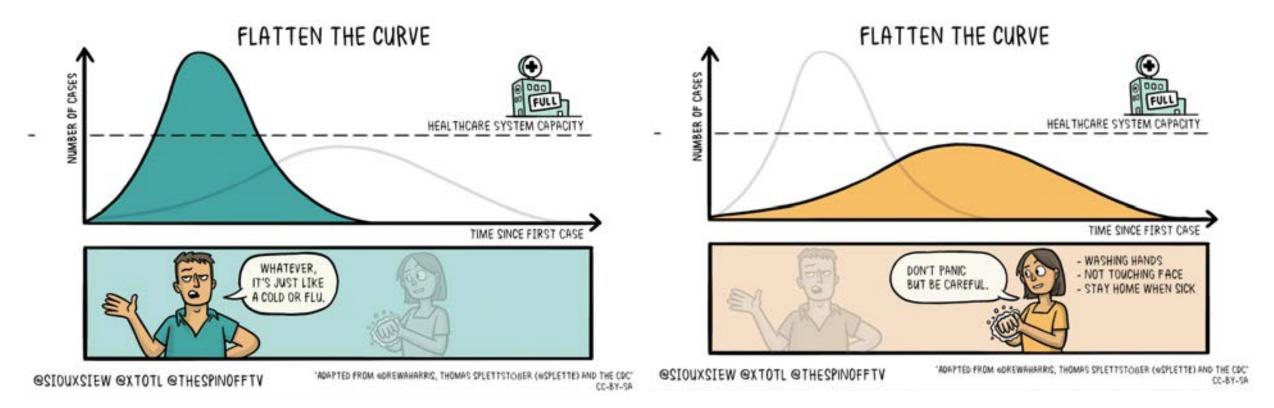
Outbreaks with low infection rates but widespread fear of infection could reduce customer footfall, depressing retail and entertainment spending.

Most economic losses caused by infectious disease outbreaks result from the actions of uninfected individuals.

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"Flatten the Curve"

ONCE AN OUTBREAK HAS REACHED EPIDEMIC OR PANDEMIC PROPORTIONS, MASS INFECTIONS ARE VIRTUALLY INEVITABLE, SO THE GOAL BECOMES LIMITING THE BURDEN ON THE HEALTH SYSTEM



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Social Distancing to Mitigate Contagion

SOCIAL DISTANCING IS A CENTURIES OLD PRACTICE. DURING THIS OUTBREAK, IT BEGAN AS A VOLUNTARY MEASURE BUT IS INCREASINGLY BEING IMPOSED BY AUTHORITIES TO MITIGATE THE RISK OF COMMUNITY TRANSMISSION...



Two lepers denied entrance to town. Woodcut by Vincent of Beauvais, 14th century

"Social distancing is a term applied to certain nonpharmaceutical infection control actions taken by public health officials to stop or slow down the spread of a highly contagious disease.

"The objective of social distancing is to reduce the probability of contact between persons carrying an infection, and others who are not infected, so as to minimize disease transmission, morbidity and ultimately, mortality."

SOURCE: Wikipedia



"The ultimate goal is to reduce the basic reproduction number, the number of people a single infected person will infect, to less than one. "If you can bring it under one, the epidemic starts to dwindle"

"COVID-19 means its time for Canada to get serious about aggressive social distancing: experts," National Post



"The World Health Organization has suggested keeping at least one metre apart from others to prevent spread from coughing, sneezing or direct contact."

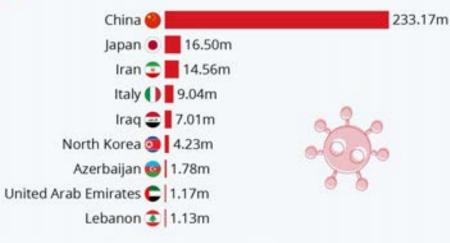
SOURCE: Emanuele Cremaschi, GETTY IMAGES file photo, via <u>The Spec</u>

Impact of regulated social distancing

PUBLIC HEALTH OFFICIALS HAVE SHUT DOWN LARGE GATHERINGS IN MOST MAJOR ECONOMIES, FORCING BUSINESS AND CULTURAL EVENTS TO BE CANCELLED, POSTPONED OR SHIFTED ONLINE...

The Coronavirus Is Keeping Millions Of Kids Out Of School

Number of children impacted by country-wide school closures due the coronavirus*



^{*} As of March 4, 2020. Refers to learners enrolled at pre-primary, primary, lower-secondary, and upper-secondary levels of education. Source: UNESCO



statista 🗹

Major Events Cancelled Amid Coronavirus Outbreak

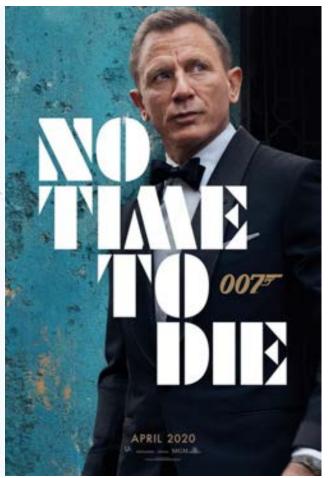
Selection of international trade shows/conferences cancelled or postponed due to the coronavirus outbreak*



^{*} Latest available information as of March 4, 2020 Sources: Organizers and media reports







Economic impact

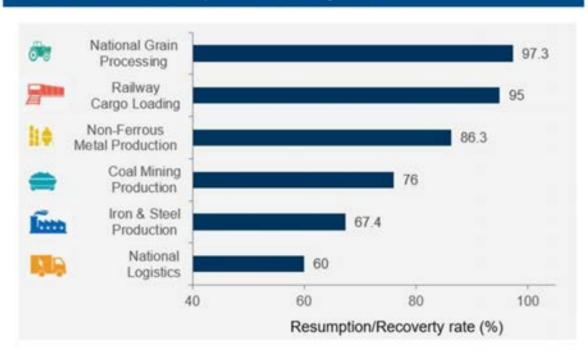
ESTIMATES VARY CONSIDERABLY, BUT THE TREND IS CLEARLY NEGATIVE

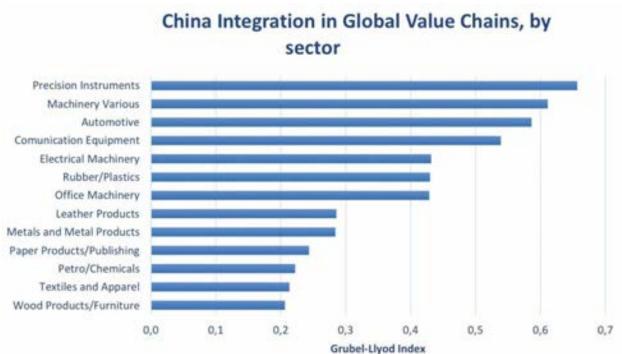
- Expected impact of COVID-19 could be larger than SARS in 2002-2003 (\$54B)
- If 8,098 SARS infections caused \$50B in economic losses, how much damage would 550,000 4 million coronavirus infections cause?
 - Estimated \$1-3 trillion knocked off global GDP
 - Global equities shed \$10+ trillion in first month
 - Airline industry forecasts \$100+ billion loss of revenue in 2020
 - Travel industry forecasts \$10+ billion loss in 2020
 - Supply chain disruptions (e.g. autos, cellphones)
 - Lost productivity (factories still not back to 100% capacity)
 - Direct cost of testing and treatment
 - Fiscal and monetary stimulus

Key industries slow to recover in China

CHINA'S CENTRAL ROLE IN GLOBAL SUPPLY CHAINS AMPLIFIES THE ECONOMIC CONSEQUENCES OF A SLOWER RETURN TO FULL MANUFACTURING OUTPUT

1. China: Business Resumption Rate for Key Sectors





SOURCE: Goldman Sachs SOURCE: The Guardian

Certain industries may be quicker to recover than others

RESEARCH SUGGESTS THAT THE ENDURING CONSUMER RESPONSE WILL NOT BE EVEN ACROSS SECTORS...

Tourism and Aviation / airlines Automotive Oil and gas Consumer products Consumer electronics hospitality and semi-conductors Estimated degree of impact, in terms of Longest duration Estimated global **Q2** Q2 Q4 Late Q3 / early Q4 Q3 **Q3** restart Travel slowdown to and from Emergence of new sites of Signs of ongoing disease Uncertainty and reduced Global slowdown in demand to Existing market structure Key insights major Asian travel hubs (20%+ community transmission (e.g., expansion in Europe (2nd industry activities (-20% improve and consumer confidence already in middle of shifting (e.g., YoY decrease) and select Iran, South Korea) likely to largest global automotive decline in Chinese demand). to recover when disease is given recent trade tensions, European destinations (e.g., compound existing losses producer, 6.1% of total EU compounded with travel perceived "under control" moves to diversify supply chain). France), coupled with decrease in incurred by Asia-Pacific carriers. employment) to amplify impact, restrictions and recent spread seeing sustained demand in China and likely to be exacerbated into Chinese tourism spend (\$2778n. Travel restrictions, drop in to Middle East, have led to a (e.g., express delivery, food despite ongoing Chinese 16% of international tourism spend consumer confidence, corporate economic restart. Likely to drop in prices, where up to 50% delivery, though hampered by labor Wuhan - a hub for compound existing market is attributed to global slowdown in 2019), likely to reduce demand policies to limit mass gatherings shortage) semiconductors and fiber-optics vulnerabilities (e.g., trade globally (up to 40% decline 2020 and non-essential travel are Whereas impact during SARS is critical in supply chain Retailers with thin margins in output) until disease is "under acutely impacted industry tensions, declining sales) worldwide - and shutdowns are was short lived, industry restart affected areas likely to face severe control" across transmission Impact across airlines to vary. Headwinds faced likely to persist. will be highly dependent on drops in demand and, in parallel, impacting sites downstream complexes, likely far into Q4 improved markets and Chinese with smaller airlines with low into Q3 given tight inventories liquidity and working capital 28% of South Korea exports are Several EU and APAC countries margins and smaller cash (fewer than 6 weeks) and demand, as the world's 2nd constraints, forcing companies at electronics, leading to further are highly dependent on tourism reserves more at risk, but larger complex supply chains (and largest oil consumer and risk (especially smaller and supply chain disruptions if (7-20% of national GDP) thereby minimal ability to shift. medium-sized enterprises) to lay global network at risk is largest importer of liquefied increases in-country suggesting much broader, supply chains) natural gas (Chinese imports off workers or dock salaries Hospitality sector could transmission, despite a China prolonged slowdown have decreased 10% YoY) Hubei province accounts for 9% Governments may step in with proactively protect and prepare

of total Chinese auto

production (incl. global

automakers and component

parts), disrupting global supply

chains until activity fully resumes

Lower short-term prices could

lead to sharp increases in prices

as demand rebounds and supply

lags - companies could prepare

contingency plans, inc.

employee protection

stimulus strategy (e.g.,

payments)

behavior

postponing employee benefit

Risk mitigation by pursuing online

/ omnichannel strategies given

accelerated trend in consumer

Source: IHS Market; McKinsey Global Institute Analysis; Press reports

its people, anticipate near-term

manage reputational risk and

anticipation of long-term impacts

fall in demand, prepare to

review annual planning in

As with tourism, expected

domestic travel (~2 quarters),

longer for international (~3-4

quarters), if not longer based on

recovery to be faster for

disease evolution

McKinsey and Company

weeks estimates for

semiconductors)

Recovery will differ by sub-

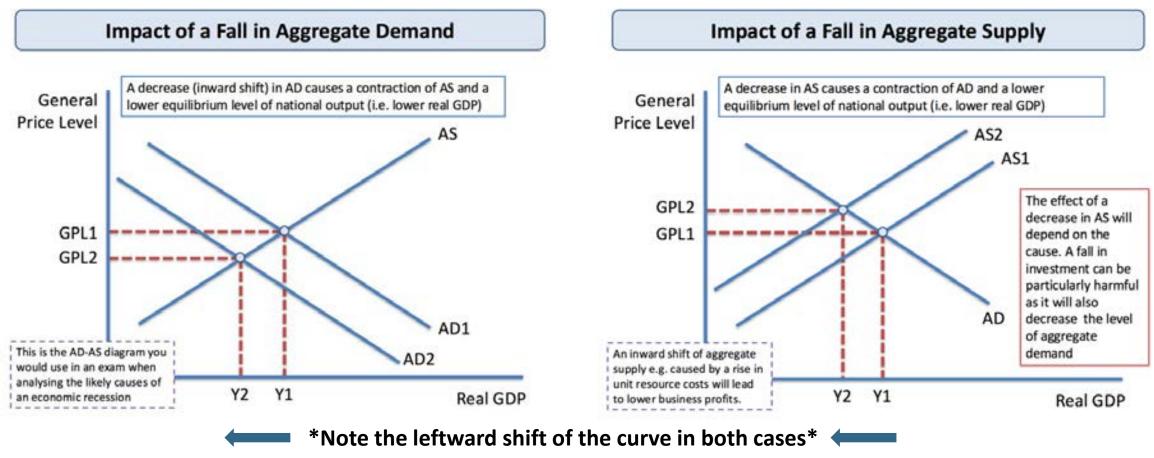
intensity and availability of

dwindling inventory (e.g., 2-6

segment, depending on labor-

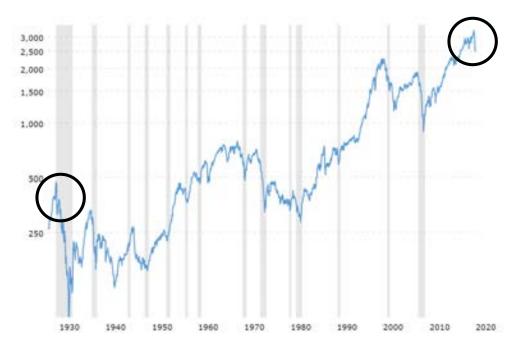
Simultaneous Demand and Supply Shocks

MACROECONOMIC REFRESHER: <u>DEMAND</u> IS THREATENED BY "SOCIAL DISTANCING", WHILE <u>SUPPLY</u> IS AFFECTED BY LABOR AND SUPPLY CHAIN SHORTAGES...BOTH ACCELERATING A DROP IN TOTAL ECONOMIC OUTPUT WITH AN UNCERTAIN IMPACT ON INFLATION



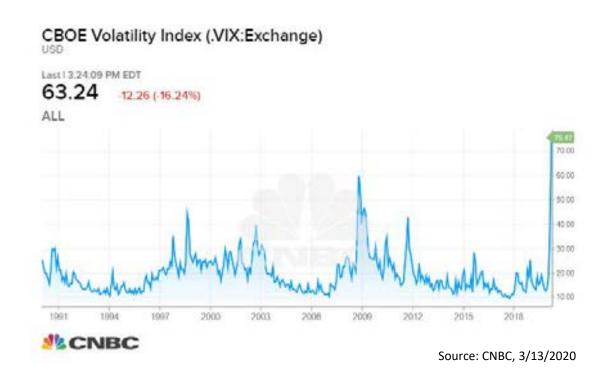
Markets anticipating looming economic slowdown / recession

MARKETS SUFFERING FROM LARGEST STRING OF 4%+ LOSSES SINCE 1929...THOUGH VALUATIONS STILL NEAR ALL-TIME HIGHS



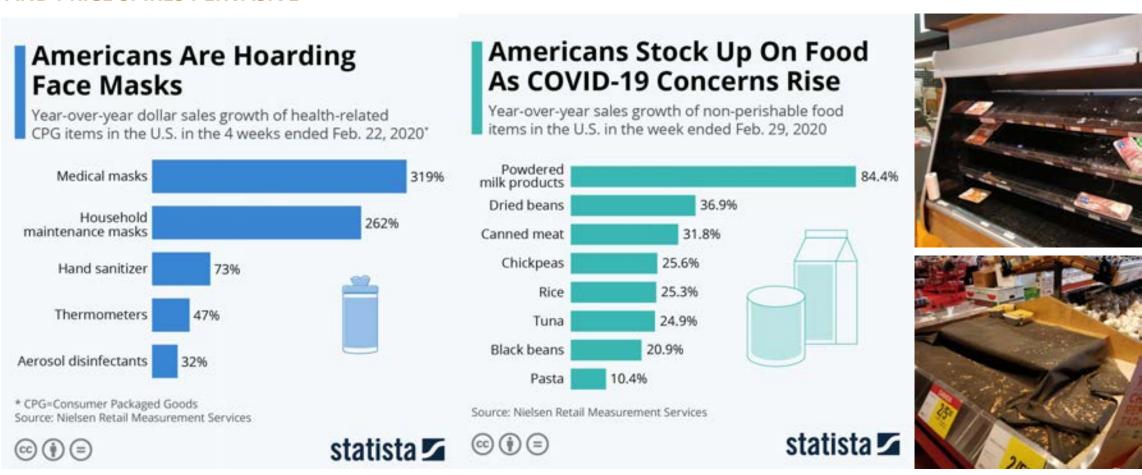
Source: Macrotrends, 3/13/2020

MARKET'S "FEAR GAUGE" SURPASES LEVELS LAST SEEN DURING 2008-09 CRISIS...



Panic is changing consumer behavior

HOARDING OF KEY MEDICAL SUPPLIES AND FOOD IS DISRUPTING MARKET EFFICIENCY – WITH SHORTAGES AND PRICE SPIKES PERVASIVE



SOURCE: Nathalie DeCiantis, Toronto 3/13/2020

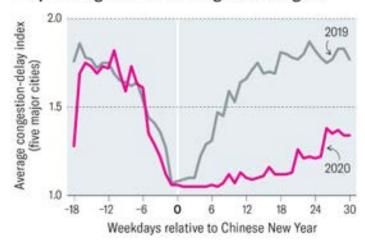
Conditions in China are beginning to improve

THIS PROVIDES AT LEAST ONE POSSIBLE RECOVERY MODEL

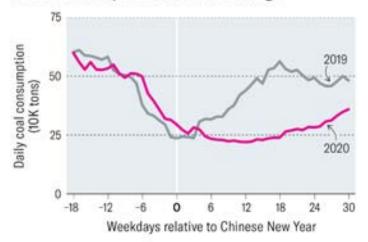
Impact of Covid-19 in China: Emerging Signs of Recovery

China appears to be in the early stage of an economic rebound, according to data for three benchmarks.

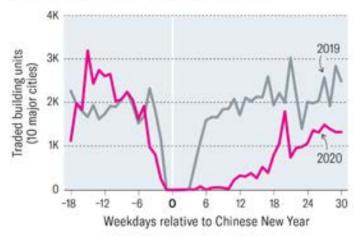
People and goods are starting to move again.



Coal consumption is increasing, which indicates that production is resuming.



Property transactions are resuming, signaling that confidence isn't broken.



Note: Data re-based for weekdays excluding weekends relative to start of Chinese New Year (Feb. 5, 2019, and Jan. 25, 2020). Cities in the congestion-delay index are Beijing, Shanghai, Guangzhou, Shenzhen, and Wuhan. Daily coal consumption is the sum of averages from Jerdin Electric, Guangdong Yudean Group, Datang International Power Generation, and Huaneng Power International. Cities analyzed for building units traded are Beijing, Shanghai, Guangzhou, Shenzhen, Hangzhou, Narijing, Qingdao, Suzhou, Nanchang, and Xiamen.

Source: Wind, occoal.com, and BCG Center for Macroeconomics.

THBR

Silver Lining: Finding Opportunities within the Crisis

SOME INDUSTRIES HAVE SEEN STRONG GROWTH DURING THE PANDEMIC...

Medical services & devices

- Online medical care
- medical supplies,
- pharmaceuticals,
- insurance

E-commerce & online entertainment

- Online shopping surges as supermarket shelves empty
- Online games and live webcast surging in popularity
- Delivery and ride-share services adapting (e.g. touchless delivery)

Online Education

- 730,000 of the 900,000 students in Wuhan learning online through Tencent Classroom
- 300+ million students are at home as schools around the world have been closed to limit community transmission – with online portals flourishing

Telecommuting

- DingTalk (Alibaba) installed 1.1 billion times since outbreak
- Zoom (ZM) shares up 50% YTD on increase virtual meetings
- Even "ZOOM" shares
 (ZOOM) have more
 than doubled even
 though they have
 nothing to do with the
 video conferencing
 company

Additional Resources

VISIT THE LGA COVID-19 PORTAL VIA THIS LINK OR CLICK ON ANY OF THE EXTERNAL RESOURCES BELOW

DATA DASHBOARDS

- World Health Organization Dashboard
- Johns Hopkins Dashboard

UPDATES AND CHECKLISTS

- <u>US Centers for Disease Control Situation Updates</u>
- <u>European Center for Disease</u> Prevention & Control
- <u>The European Commission: The</u> Coronovirus Response Team
- <u>Debevoise & Plimpton</u> Coronavirus Resource Center
- How does quarantine actually work? (World Economic Forum)

POLICY AND ECONOMIC ANALYSIS

- What Coronavirus Could Mean for the Global Economy (BCG Henderson Institute)
- Coronavirus: Why You Must Act Now (Medium)
- How do I self-quarantine? (Marketwatch)
- The SARS Epidemic: What Have We Learned? (Journal of the Royal Society of Medecine)
- How Chinese Companies Have Responded to Coronavirus (HBR)
- The SARS Epidemic: What Have We Learned? (Journal of the Royal Society of Medecine)

RESOURCES FOR FAMILIES

- Talking to Children About COVID-19 (Coronavirus): A Parent Resource (NASP)
- At-Home Resources for Kids (and their parents) (KiwiCo)

LANSBERG-GERSICK

For more information

We would love to hear about your own response to the crisis so we can aggregate and share with other enterprising families around the world as we all brace for a few tough months ahead.

We would be happy to schedule a phone or video call to discuss.

Feel free to contact Devin DeCiantis, our LGA Risk Practice leader at deciantis@lgassoc.com or +1.203.497.8855

Additional resources on Crisis and Risk Management for Enterprising Families and information about the rest of our services and global advisory team available at www.lgassoc.com

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