



# Novel Coronavirus (Covid-19) Update

*Where are we now?*

*What's the impact?*

*Where do we go from here?*

Banking, Capital Markets and Advisory

MARCH 2020

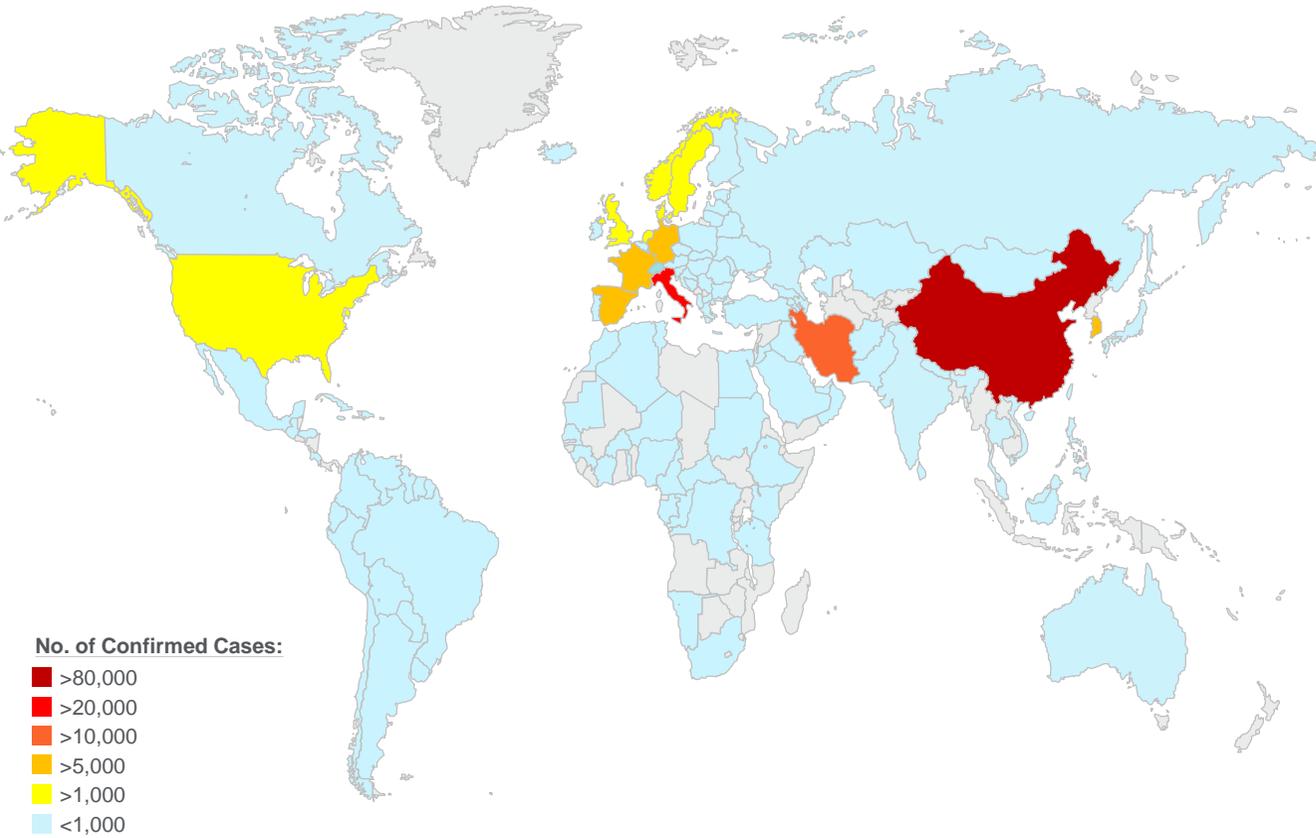
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# 1. Where Are We Now?

# Global Death Toll Now at 6,500+ with Ex-China Exceeding Inside China



<b>Total Confirmed</b> <b>169,387</b>	<b>Total Deaths</b> <b>6,513</b>	<b>Total Recovered</b> <b>77,257</b>	<b>Countries Affected</b> <sup>(1)</sup> <b>148</b>
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No. of Confirmed Cases by Each Country		
81,020	China	5
24,747	Italy	
13,938	Iran	
8,162	South Korea	
7,844	Spain	
5,813	Germany	
5,437	France	
3,774	US	
2,200	Switzerland	
1,739	Denmark	
1,395	United Kingdom	3
1,256	Norway	
1,136	Netherlands	
1,032	Sweden	
886	Belgium	
860	Austria	
839	Japan	
696	Cruise Ship	
428	Malaysia	
401	Qatar	
339	Canada	2
331	Greece	
297	Australia	
293	Czechia	
251	Israel	
245	Portugal	
244	Finland	
226	Singapore	
219	Slovenia	
214	Bahrain	
200	Brazil	1
180	Iceland	
171	Estonia	
140	Philippines	
139	Romania	
129	Ireland	
126	Egypt	
125	Poland	
124	Iraq	
118	Saudi Arabia	
117	Indonesia	
114	Thailand	
113	India	
112	Kuwait	
109	San Marino	
99	Lebanon	Bangladesh, Rwanda, Ethiopia, Cameroon, Uruguay, Cuba, Liechtenstein, Guyana
98	United Arab Emirates	
77	Luxembourg	
75	Chile	
71	Peru	
63	Russia	
61	Slovakia	
61	South Africa	
59	Taiwan	
56	Vietnam	
53	Pakistan	Guam, Kenya, Ukraine, Seychelles, Guadaloupe, Honduras
51	Bulgaria	
50	Brunei	
49	Croatia	
48	Algeria, Serbia	
46	Argentina	
43	Panama, Mexico	
42	Albania	
37	Ecuador	
35	Costa Rica	
34	Colombia	Aruba, Monaco, Jersey, Saint Lucia, Andorra, Nigeria, Nambia, Kosovo, Congo Kinshasa, Trinidad and Tobago
33	Georgia, Cyprus	
32	Hungary	
30	Latvia	
28	Morocco	
27	Belarus	
26	Armenia	
24	Bosnia and Herzegovina, Senegal	
23	Azerbaijan, Moldova	
22	Oman	
21	Malta	
20	Tunisia	
18	Turkey, Sri Lanka	
17	Venezuela	
9	Kazakhstan	
8	New Zealand	
7	Cambodia, Burkina Faso, Reunion, Paraguay	
6	Ghana	

Source: Coronavirus Covid-19 Global Cases by Johns Hopkins CSSE as of March 16, 2020.  
 Note: (1) Countries and overseas territories or communities.

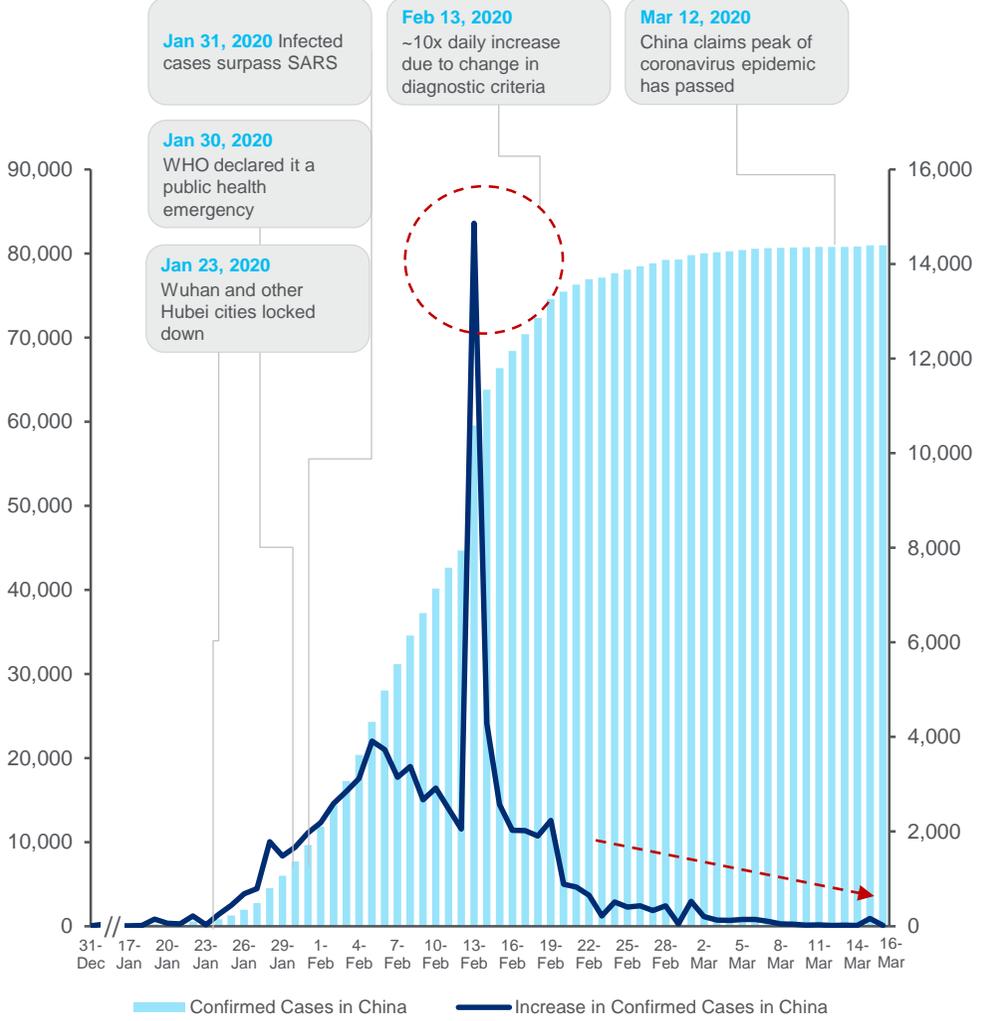


# Confirmed Cases – Moderating in China / Accelerating Outside China

While the number of confirmed cases in China are moderating, there has been a spike outside of China over the past week

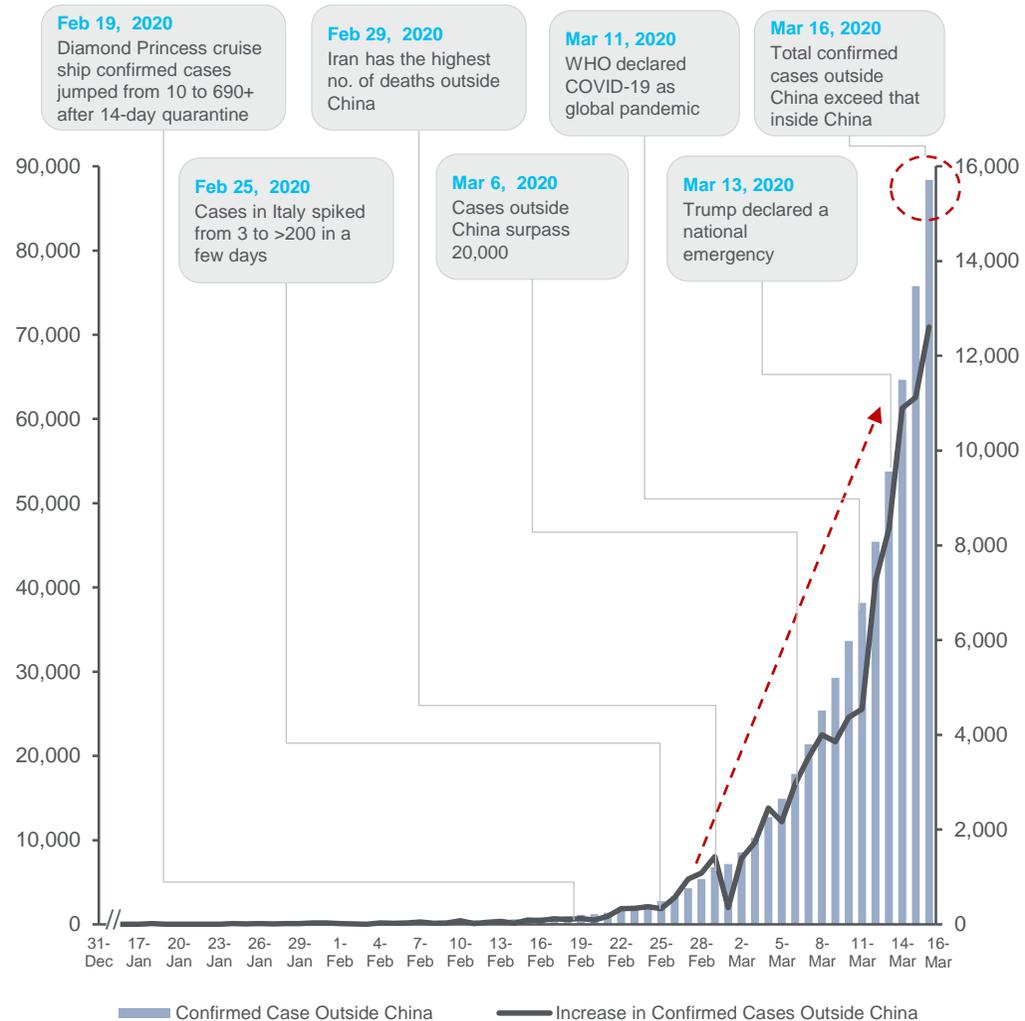
## Number of Confirmed Cases and Daily Increase in China

(No. of Person)



## Number of Confirmed Cases and Daily Increase Outside China

(No. of Person)



Source: News release, Coronavirus Covid-19 Global Cases by Johns Hopkins CSSE as of March 16, 2020.



# On March 11, WHO Officially Declared COVID-19 a 'Pandemic'

With Covid-19 spreading globally across every continent except the Antarctica reporting confirmed cases, WHO has characterized COVID-19 as a pandemic on March 11, 2020



"WHO has been assessing this outbreak around the clock and we are deeply concerned both by the alarming levels of spread and severity, and by the alarming levels of inaction. We have therefore made the assessment that **COVID-19 can be characterized as a pandemic. Pandemic is not a word to use lightly or carelessly.** It is a word that, if misused, can cause unreasonable fear, or unjustified acceptance that the fight is over, leading to unnecessary suffering and death. Describing the situation as a pandemic does not change WHO's assessment of the threat posed by this virus. It doesn't change what WHO is doing, and it doesn't change what countries should do. **We have never before seen a pandemic sparked by a coronavirus. This is the first pandemic caused by a coronavirus. And we have never before seen a pandemic that can be controlled, at the same time"**

WHO Director-General Tedros Adhanom Ghebreyesus

## What Does It Mean?

*Pandemic: "an outbreak of a new pathogen that spreads easily from person to person across the globe".*

This is essentially the highest level classification to describe a disease outbreak under the International Health Regulations

### WHO Risk Assessment

China	Regional level	Global Level
<b>Very High</b>	<b>Very High</b>	<b>Very High</b>

## What Are The Implications?

- The WHO's announcement does not formally trigger any new funding, protocols or regulations
- It is an **acknowledgement** of the disease spreading across several continents
- While the word may evoke fear, it describes how widespread an outbreak may be, not its deadline
- The last time the WHO declared a pandemic was during the 2009 H1N1 swine flu, and it triggered aggressive actions, such as millions in spending to buy vaccines.

# Countries Imposing Strict / Preemptive Measures to Contain Outbreak



## United States

- Declared **national emergency** with 3,774 of reported cases and 41 deaths
- **Schools are closed in at least 30 states**
- Introduced **Europe travel ban** and reported to consider some **domestic travel restrictions**



US President Donald Trump has declared a national emergency



## Europe

- **Italy** with 24,747 reported cases and 1,809 deaths invoked sharp new measures, including closing playgrounds and parks
- **Spain** declared a state of emergency
- **UK** announced 'national effort' to limit virus spread



Italy went into total shutdown



## Middle East

- The number of confirmed coronavirus cases across the Middle East has **exceeded 10,000**
- Governments across the Middle East have **imposed extra closures, temporarily closing city entertainment centers and events amid further travel restrictions**



Saudi Arabia, Qatar ban arrivals from Iraq, Syria, Lebanon



## South Korea

- Declared **highest alert** as infections surge with 8,162 reported cases and 75 deaths
- **136 countries and territories** have issued entry bans for travelers from South Korea
- All **schools** announced to **delay** the semester



Churches closed in South Korea as virus infections increase



## Japan

- **Japan** with 839 reported cases and 22 deaths **Hokkaido declared state of emergency** on Feb 28 until Mar 19
- **Announced schools closures** until April



A state of emergency was declared in Hokkaido



## China

- **China** with 81,020 reported cases, 3,204 deaths and 67,023 recovered
- The **peak reported to have passed** for China
- More **stringent airport checks** introduced as imported cases tick up

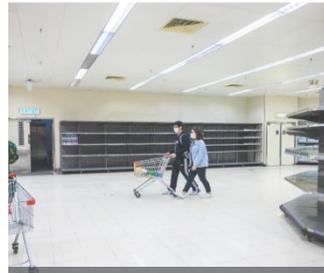


China tightens airport checks as imported coronavirus cases tick up

# Material Impact to our Everyday Life – First in China / Asia



Disruption to Business / Work / School



Supply Shortages



Travel Ban / Border Control



## School Closures

- Schools in Mainland China closed until further notice
- Schools in Hong Kong closed until April (after Easter Holidays)



## Remote Working

- Work-from-Home policies implemented for office workers and civil workers in the past month
- HK Government lifted the Work-from-Home for civil works recently



## Business Closures

- Henan municipal government ordered all business operations to shut
- Businesses that have shut operations in China include Disneyland, Uniqlo, Starbucks, Ralph Lauren, Nike, McDonald's, H&M and Levi Strauss



## Travel Ban and Border Closures

### Travel ban imposed by various countries

- North Korea and Russia closed borders with China
- Italy suspended all incoming flights from China, HK, Macau and TW
- Israel and Singapore barred entry to foreigners who has visited China in last 14 days
- Japan requested visitors from China to quarantine for 14 days and canceled visas to these 2 countries

### Flights to/from China cancelled by various airlines

- British Airways, American, Delta and United cancelled flights to China
- Virgin Australia cancelled HK routes
- Airlines in other countries, from New Zealand to Finland to the UAE, scaled back China service

# Material Impact to our Everyday Life – Now to The Rest of World

## Cancellation / Delay of International Events / Conference



## Lockdown of Entire Cities and Closure of Tourist Spots



## Shortage of Supplies / Hoarding



## School Closures / Remote Working



## Travel Restrictions



DESTINATION	FLIGHT	GATE	REMARKS
BERLIN	LH543	09	:CANCELLED
NEW YORK	AA978	28	:CANCELLED
TORONTO	AC902	11	:CANCELLED
MADRID	IB342	15	:CANCELLED
BEIJING	CX654	02	:CANCELLED
HOUSTON	AA384	08	:CANCELLED

## Social Distancing

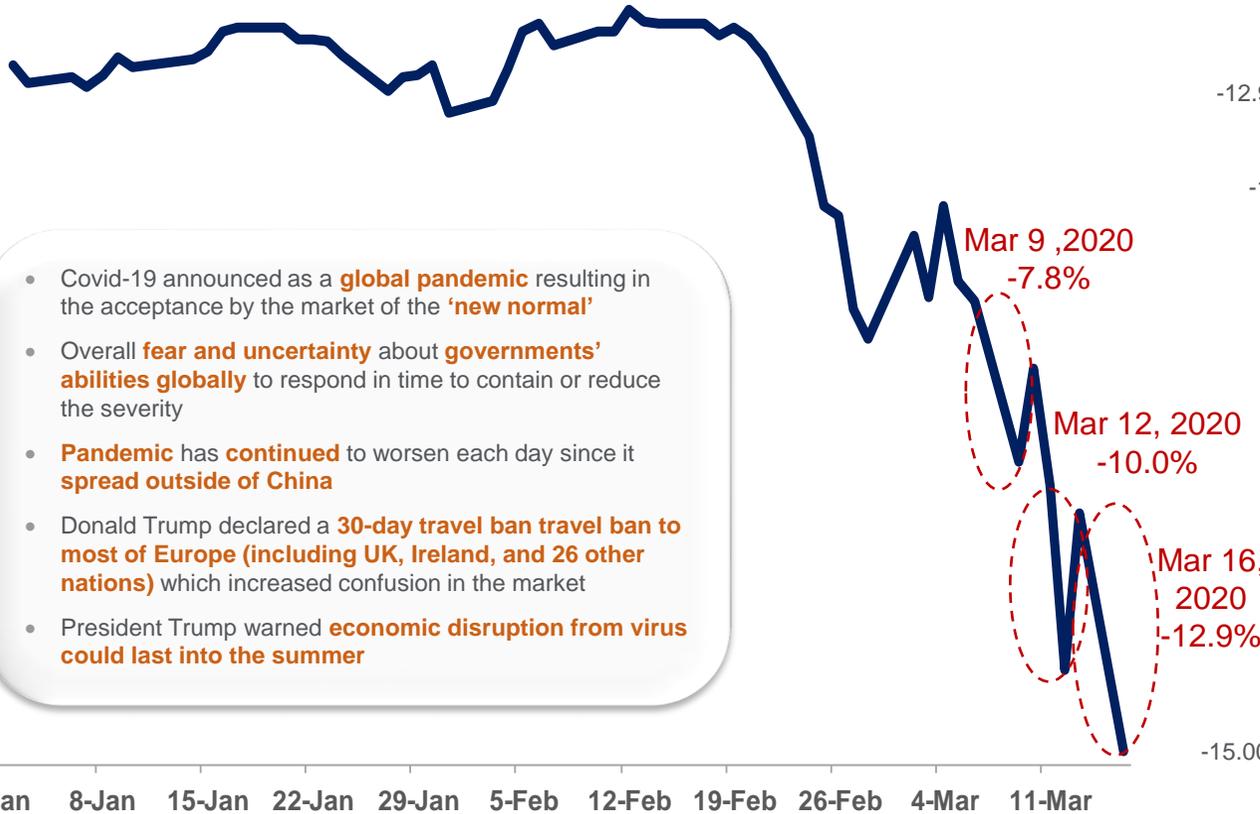


Source: News release.

# Realization of 'New Normal' Resulting in Worst Market Crash Since 1987

On Mar 16, 2020, Dow Jones Industrial Average had its worst drop of 2,997 points since the 1987 "Black Monday"

## A Closer Comparison



Worst DJIA Crashes of 21<sup>st</sup> Century

- Covid-19 announced as a **global pandemic** resulting in the acceptance by the market of the **'new normal'**
- Overall **fear and uncertainty** about **governments' abilities globally** to respond in time to contain or reduce the severity
- **Pandemic** has **continued** to worsen each day since it **spread outside of China**
- Donald Trump declared a **30-day travel ban** to **most of Europe (including UK, Ireland, and 26 other nations)** which increased confusion in the market
- President Trump warned **economic disruption from virus could last into the summer**

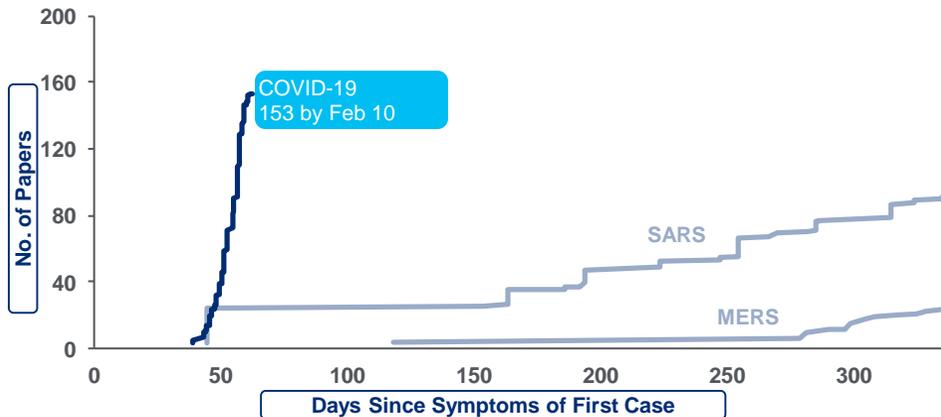


Source: Factset market data as of March 16, 2020. CNBC.

# Unsubstantiated Information Spreading Further Fear / Confusion

Misleading science and news flow are resulting in community panic and may make the pandemic worse by prompting false policy moves or encouraging risky behavior

## Significant Number of Research Papers Published



- At least **153 studies** examining every aspect of COVID-19 have been posted or published since the start of the outbreak
- By comparison, it **took over a year for 50% of that number during the 2003 SARS outbreak**

- Swift outbreak has resulted in significant amount of **pre-prints (c.60%)** – immediate online posting without external checks, scrutiny or validation
- One scientific post suggests links with **HIV**, a second says it may have **passed on via snakes**, while a third claims it is **from outer space**

## Spread of Misleading News on Social Media Platforms



**The novel coronavirus sickness is caused by 5G**

**Commentary:** Flagged false by Full Fact: there's no evidence that 5G impacts the immune system, and no proof that it has any link to the novel coronavirus



**A coronavirus vaccine already exists**

**Commentary:** While researchers in several countries are working to develop a vaccine, no such vaccine has yet been developed, according to FactCheck.org and Politifact



**Hong Kong toilet paper may be out of stock as production will be halted to direct materials for mask production**

**Commentary:** The Hong Kong government said there are sufficient stocks alongside other daily necessities and no need to panic

**Scientists predicted the virus will kill 65 million people**

**Commentary:** "We modeled a fictional coronavirus pandemic, but we explicitly stated that it was not a prediction," the Johns Hopkins Center for Health Security said in a statement. "We are not now predicting that the nCoV-2019 outbreak will kill 65 million people"

# Accelerated Global Effort for a Vaccine but Timing Remains Uncertain

## What are the vaccines being developed?



### Whole virus vaccine

- Weakened or dead forms of the virus that causes the disease
- Effective at providing immunity in the long run, but contains risk that some could develop symptoms of the illness due to the vaccination

Johnson & Johnson CODAGENIX INC. The University of Hong Kong



### Subunit vaccine (protein-based)

- Do not carry the risk of causing an infection in people who receive them as not containing any live pathogens
- Researchers are investigating a recombinant protein subunit vaccine that targets spike (S-) protein which the new coronavirus uses to attach to and infect cells

NOVAVAX  
Creating Tomorrow's Vaccines Today

VAXIL

THE UNIVERSITY OF QUEENSLAND AUSTRALIA

三叶草生物制药  
Clover Biopharmaceuticals

gsk

Texas Children's Hospital



### Nucleic acid vaccines

- Using nucleic acids such as DNA or RNA to deliver immunity
- To date, it is a technique only available in veterinary medicine

inovo

moderna  
messenger therapeutics

UREVAC

appliednsciences

ToxIS

Imperial College London

## When will the vaccines be ready?

- At least **1 year** and **may not be available during current outbreak**, according to various sources<sup>(1)</sup>

## Will COVID-19 go away on its own in warmer weather?

*“For the novel coronavirus, we have reason to expect that like other betacoronaviruses, it may **transmit somewhat more efficiently in winter than summer**, though we don’t know the mechanism(s) responsible. The size of the change is expected to be **modest**, and not enough to stop transmission on its own. Based on the analogy of pandemic flu, we expect that SARS-CoV-2, as a virus new to humans, will face **less immunity** and thus **transmit more readily even outside of the winter season**. **Changing seasons and school vacation** may help, but are unlikely to stop transmission. Urgent for effective policy is to determine **if children are important transmitters**, in which case school closures may help slow transmission, or not, in which case resources would be wasted in such closures.”*

Marc Lipsitch, Dphil  
Professor of Epidemiology and Director

HARVARD  
T.H. CHAN  
SCHOOL OF PUBLIC HEALTH

CENTER for  
COMMUNICABLE  
DISEASE DYNAMICS

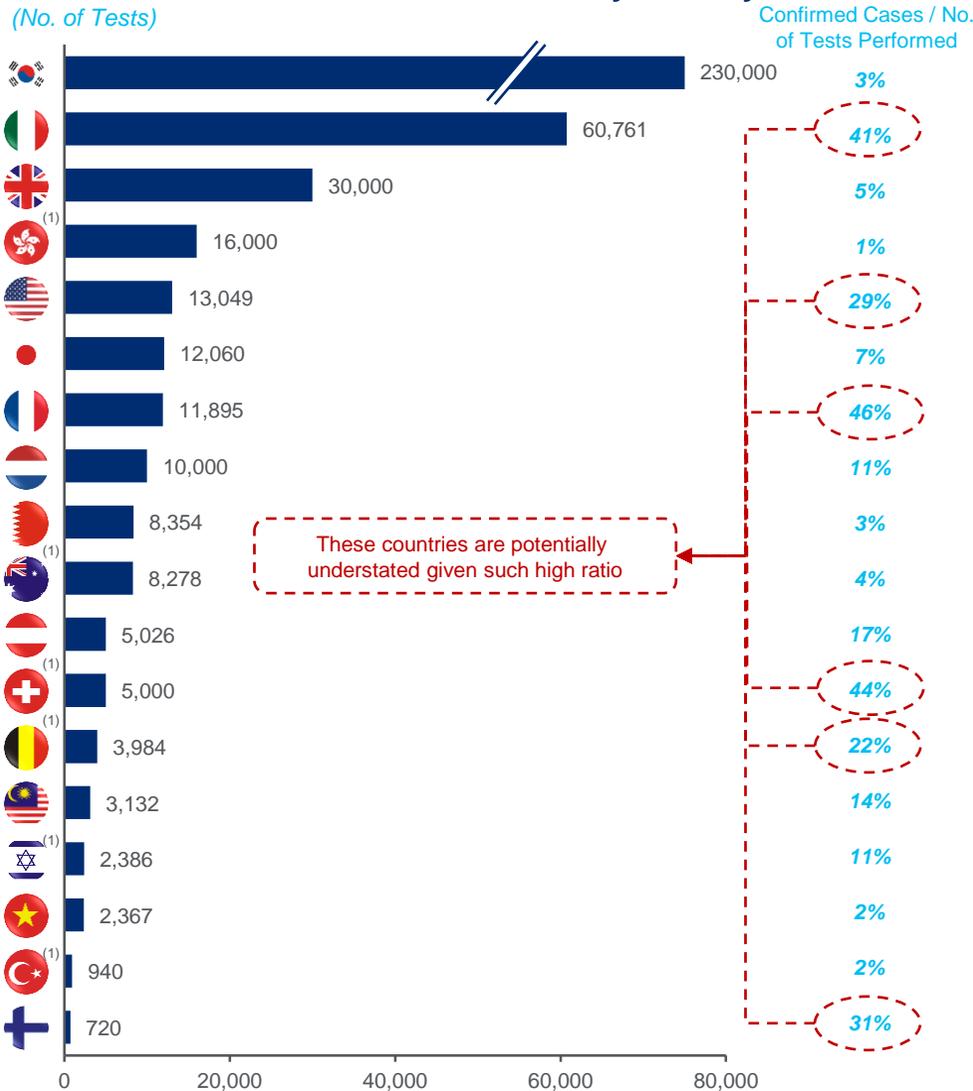
**While Covid-19's mutation is rendering the development of the vaccine more difficult, researchers around the world are working at an accelerated pace. In the interim, it is suggested and hoped for that seasonal change will help curb the spread though intense public health interventions and medical remedies remain key in a complete suppression.**

# The Importance of Testing in Sizing the Impact

Countries are conducting testing at different rates and this may likely result in reported cases being understated; there could be significant increase of reported cases in the near-term as result of this

## Number of COVID-19 Tests Performed by Country

(No. of Tests)



## The Importance of Testing in Containment

- Testing large numbers of people helps identify infection “hotspots” and limiting / containing further contagion within the community / country



- Shortage of tests can result in the lag in identifying cases thereby understating the true extent of the spread of the virus and slowing down efforts to prevent it
- Thus far, countries have been testing at different rates:
  - South Korea has been aggressive with its testing and till date has not imposed a country wide lockdown
  - US only began increasing testing since Feb 27 after CDC issued new testing rules though reports suggest it remains disparate across states
  - Testing labs in Africa countries (like Senegal and Nigeria) are primarily located in large cities and not equipped to scale to test thousands of people a day

## Potential Supply Constrain

- The rise in reported cases globally has prompted increasing testing demands and there are reports on laboratories facing potential shortages of key materials and chemicals



- Qiagen, a major manufacturer of extraction kits, said in a statement this week that because of the coronavirus outbreak, demand is “challenging our capacity to supply certain products” and that it was increasing production in sites in Germany, Spain and Maryland



- Roche, another supplier of lab materials and equipment, said in a statement: “Our manufacturing network has robust business continuity plans for dealing with the impact of a potential health crisis and is actively assessing and monitoring this evolving health situation”

Source: Worldmeters. News release. Official numbers released by each respective government. Number of confirmed cases as of March 16, 2020.

Note: (1) Estimated number based on latest official numbers.

# COVID-19 vs. Other Major Viruses

Coronavirus has already surpassed the 3 major virus outbreaks (SARS, Avian Flu, MERS) over the past 20 years in terms of number of deaths, infected cases and number of countries affected

## No. of Infected Cases



## No. of Deaths and Fatality Rate (%)



## No. of Countries Affected<sup>(1)</sup>



Year Identified



Source: WHO, Johns Hopkins University.

Note: (1) Countries and overseas territories or communities. (2) As of March 16, 2020. (3) WHO. (4) As of November 30, 2019.

# COVID-19 (2020) vs. SARS (2003): A Much Greater Impact



  
The Global Cost of the Outbreak

**c.\$1 Trillion**

Estimated Global Costs<sup>(1)</sup>

**\$40 Billion**

The Global Cost of SARS Outbreak<sup>(2)</sup>

  
GDP Impact

**0.25%**

Estimated Real GDP Loss Globally for 2020<sup>(1)</sup>

**0.1%**

Nominal GDP Lost Globally<sup>(2)</sup>

  
Recovery Time

**Potentially Longer**

As 1/3 of China Economic Growth Comes from Consumer Spending

**5 Months**

Time Taken for Chinese Stocks to Recover from SARS<sup>(3)</sup>

  
Hotel Occupancy

**85%**

Decline in Hotel Occupancy Rates in Mainland China<sup>(4)</sup>

**82%**

Decline in Hotel Occupancy Rates in Beijing<sup>(5)</sup>

  
Travel Disruption

**c.70%**

Decline in Passenger Transportation by Road, Rail and Air between China and Infected Areas<sup>(6)</sup>

**Up to 70%**

Decline in International Travel to Areas Affected by SARS<sup>(6)</sup>

  
No. of Deaths

**6,513**

Death as of March 16, 2020

**774**

Total Death



Source: Oxford Economics, Broker consensus, STR, Factset Market Data, Estimating The Global Economic Costs of SARS, The Economic Impact of SARS in Beijing, China.

Note: (1) Oxford Economics. (2) Sourced from Estimating The Global Economic Costs of SARS by Jong-Wha Lee and Warwick J. McKibbin. (3) Factset Market Data. (4) According to data from STR, hotel occupancy between

February 3 and 10, 2020 in Mainland China dropped by 85%. (5) The largest YoY decrease in Hotel Occupancy Rate in Beijing in 2003 is May, decline by 81.5%, sourced from Philippe Beutels Na Jia Qing-Yi Zhou

Richard Smith Wu-Chun Cao Sake J. De Vlas in The economic impact of SARS in Beijing, China. (6) Broker consensus.

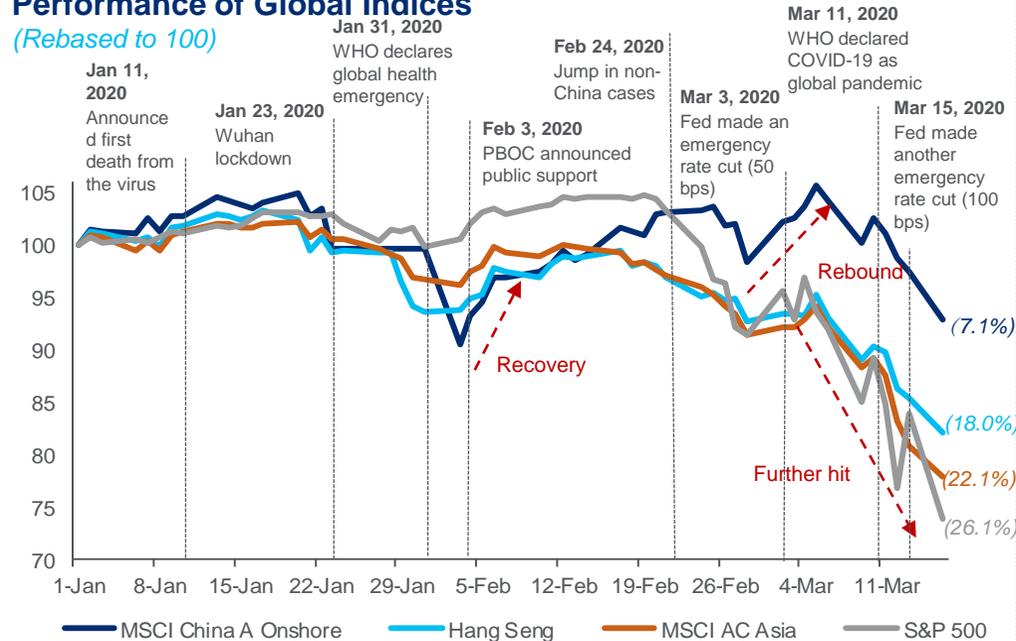
## 2. What's The Impact?

# Impact on the Global Public Markets

Market went through a short-term hit and recovery, but now facing a downward trend again due to concerns of global spread

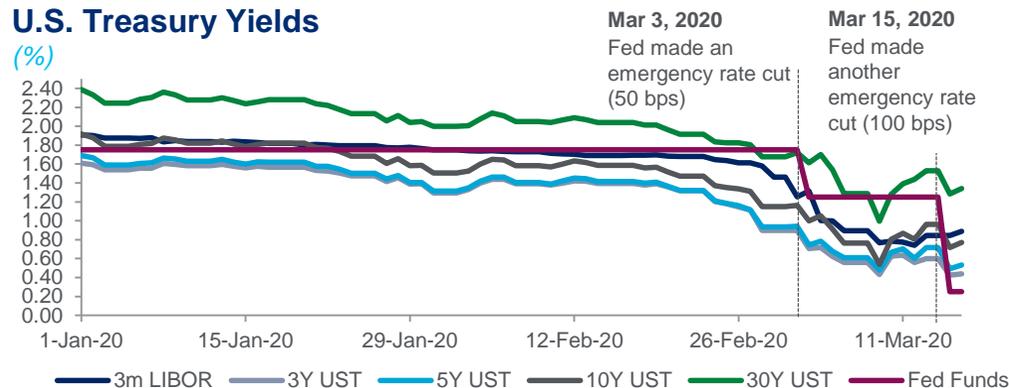
## Performance of Global Indices

(Rebased to 100)



## U.S. Treasury Yields

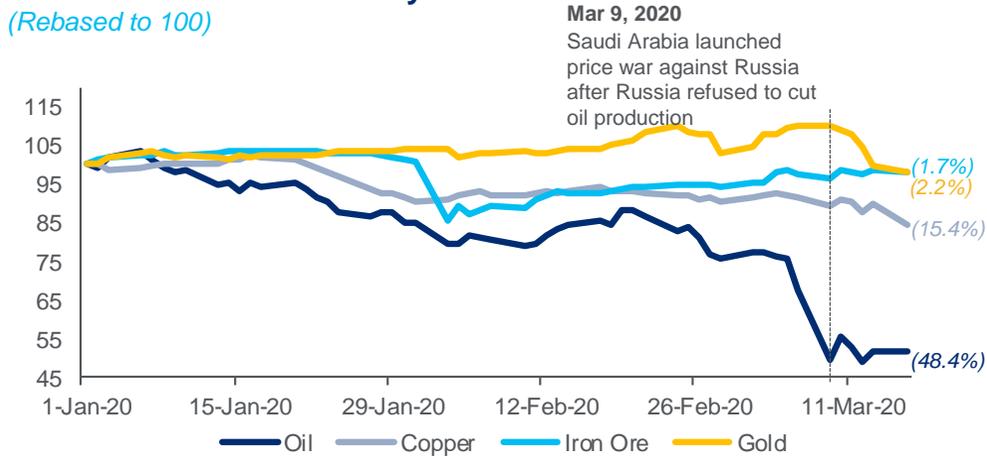
(%)



Commodity prices in general have declined though gold prices have increased given demand for safe haven

## Performance of Commodity Prices

(Rebased to 100)



### Oil

- Oil sell-off could continue in 2Q20 due to global widespread of Covid-19, and Saudi's failure to cut a deal with Russia to decrease production
- Demand by China has declined by 3 million barrels a day (20% of total consumption)<sup>(1)</sup>
- Expect transport fuel demand in advanced economies fall to a similar extent as it did in China in 1Q, driving global demand collapse and stock build for over 1 billion barrels<sup>(2)</sup>

### Copper

- Sharp decline in copper price due to outbreak, and restricted movement of people is disrupting the end-use copper demand; the recovery could take at least 1-2 months
- China accounts for nearly half of global copper demand and hence market projects a lower copper price for 2020

### Iron Ore

- The end-user markets, especially the construction sector, will continue to be delayed until the situation improves

### Gold

- Gold prices have risen as the outbreak has stirred demand for safe haven

Source: FactSet, Bloomberg, news release. Market data as of March 16, 2020.

Note: (1) Bloomberg. (2). Broker consensus.

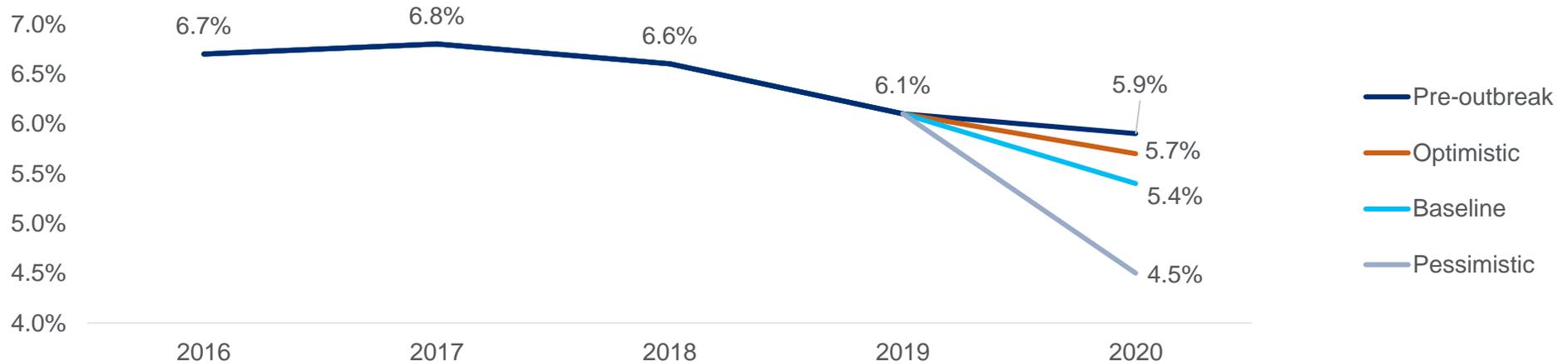
# Economic Impact on China

2020 real GDP growth is forecasted to be less than 4.5% in the worst case scenario



Scenario	Date by when the Covid-19 outbreak is under control	Probability	GDP Growth
Optimistic	End-Feb	25%	5.7%
Baseline	End-Mar	50%	5.4%
Pessimistic	End-Jun	20%	4.5%
Nightmare	Not contained in 2020	5%	<4.5%

## Scenario analysis of China real GDP growth (% change, yoy)

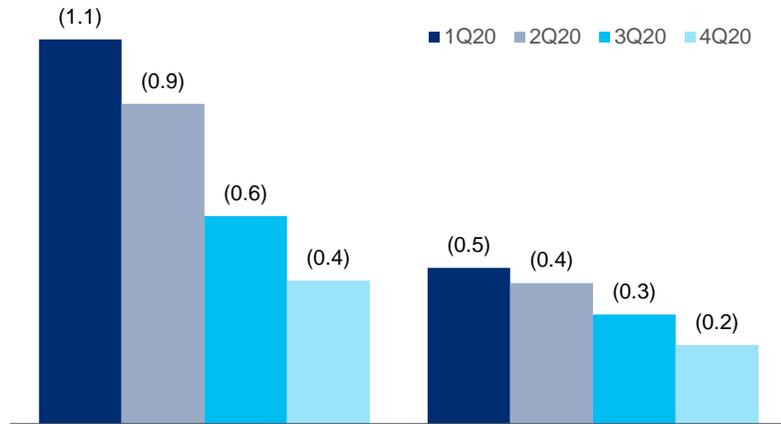


Source: EIU.

# Economic Impact on the Rest of the World

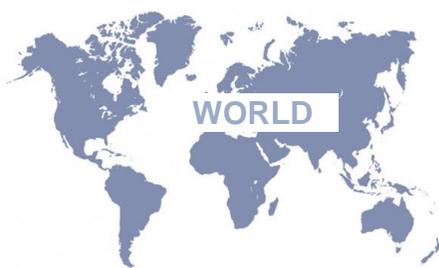
## Market expects global GDP growth to decline<sup>(1)</sup>...

### Impact of Coronavirus Outbreak on GDP (GDP Level, Cumulative % from Baseline)



Impact on  
2020 GDP  
Growth (%)

**Asia**  
**(0.4)%**



Impact on  
2020 GDP  
Growth (%)

**World**  
**(0.25)%**

## Why is China so important to the global economy...

The Largest Manufacturing Economy<sup>(2)</sup>

The Second Largest Importer of Goods<sup>(4)</sup>

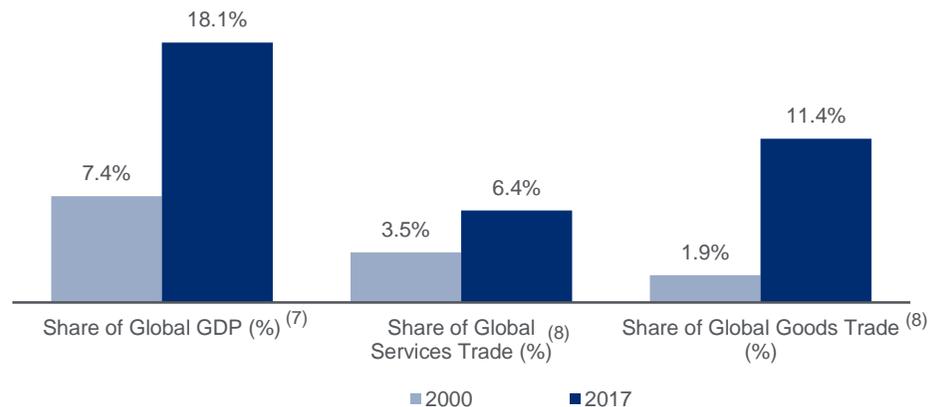
The Largest Exporter of Goods<sup>(3)</sup>

The Largest Trading Nation<sup>(5)</sup>

The Fastest Growing Consumer Market<sup>(2)</sup>

The Largest Labor Force<sup>(6)</sup>

### China's Contribution to Global Activity: Then and Now (%)



Source: News release, Oxford Economics.

Note: (1) Oxford Economics. (2) The New York Times. (3) Financial Times (4) CNBC. (5) Forbes. By market capitalization and trade volume. (6) World Bank. (7) IMF (GDP based on PPP, share of world). (8) McKinsey Global Institute analysis.

# Disruption to Global Manufacturing and Supply Chain

The Coronavirus is disrupting the global manufacturing and supply chain, threatening the availability of TVs, personal computers, mobile phones, automation, auto and other technology products.

## China PMI estimated to drop below 48<sup>(1)</sup>

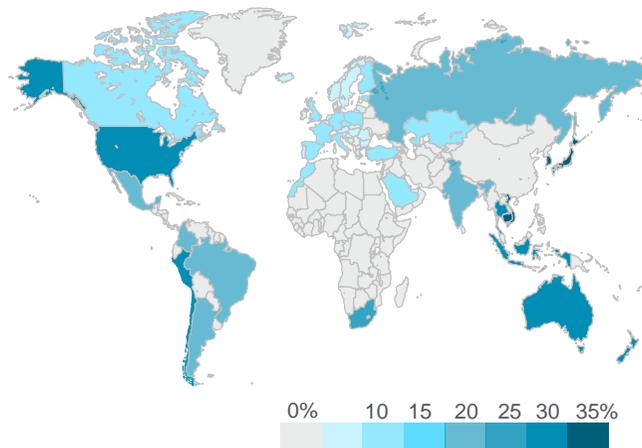
### China Caixin General Manufacturing PMI Performance



- **Labor shortages** and **plants shutdowns** are impacting the production and supply of raw materials, which in turn is adversely affecting both **B2C** and **B2B** sectors
- **Supply chains are starting to come back online in China**, and the rate of resumption of work at its factories and provinces has also inched up<sup>(10)</sup>

## Impact is amplified by China's importance to the global supply chain<sup>(2)(3)</sup>

### Share of All Imports of Intermediate Coming From China



- **75%** of total value of components used in TVs and **~85%** in smartphones come from China
- **All** critical components like mobile displays, open cell TV panels, LED chips are imported from China
- **28.2%** share of manufacturing output<sup>(1)</sup>
- **c.51,000** companies globally have one or more direct suppliers in Wuhan and at least **5 million** have one or more tier-two suppliers in the region<sup>(8)</sup>

## Different levels of supply chain impact on various sectors

Pharma & Biotech	<ul style="list-style-type: none"> <li>• c.15% of world API facilities based in China<sup>(4)</sup></li> <li>• c.85% of medicines in US Strategic National stock pile use some component from China<sup>(4)</sup></li> <li>• China accounts for &gt;30% of global antibiotics exports<sup>(6)</sup></li> </ul>	
Components	<ul style="list-style-type: none"> <li>• YMTC and XMC, China's leading NAND Flash memory producer have operations in Wuhan</li> <li>• Total capacity utilization for all LCD fabs in China could fall as much as 20% in Feb<sup>(5)</sup></li> <li>• Korea and Japan sources c40% and &gt;45% of electronic components from China while Taiwan sources &gt;30%<sup>(6)</sup></li> </ul>	
Auto	<ul style="list-style-type: none"> <li>• Volkswagen has 24 plants in China accounting for 40% of production<sup>(7)</sup></li> <li>• Korea and Japan sources c30% and &gt;35% of auto parts from China<sup>(7)</sup></li> <li>• US sources &gt;15% with reported delays of new Tesla Model 3 sedans<sup>(6)</sup></li> </ul>	
Smartphone	<ul style="list-style-type: none"> <li>• Smartphone shipments in China could decrease by 40%-50% in Q1<sup>(4)</sup></li> <li>• ~3-5 million iPhones, and AirPods production are forecasted to be pushed to Q2 2020<sup>(9)</sup></li> </ul>	

Lowest Impact 





 Highest Impact

Source: News release. Broker consensus, IHS Markit, Canalis Research.

Note: (1) Trading Economics. (2) Economic Times. (3) 1businessworld.com. (4) Broker consensus. (5) IHS Markit. (6) EIU. (7) CNN. (8) Dun & Bradstreet. (9) Canalis Research. (10) CNBC.

# Summary Impact on Select Industries

## Immediate Impact



### Auto and Logistics

*Disruption to supply chain affecting production and ability to complete orders*



### Travel / Tourism and Gaming

*Travel bans and fear crippling the industries especially those dependent on China*



### Consumer Discretionary

*Highly impacted due to reduced consumption and low sentiment*

## Protracted Impact



### Financial Institutions

*(1) Insurance purchases remain robust (2) Banking operations adversely impacted (3) Current situation presents opportunities for Fintech (4) Potential heightened credit risk*



### Real Estate and Construction

*Reduced sales and delayed construction schedules due to preventive measures*



### Oil and Gas

*Negative impact of potential China slowdown on global oil and gas market*



### Consumer Staples

*F&B seeing reduced demand while take-home essentials are faring well*

## Positive Impact



### Pharmaceuticals and Healthcare

*Increasing demand for vaccines / antibiotics and medical services*



### Online Entertainment and Education

*Consumers spending on internet services expected to spike for entertainment and education*



### E-commerce

*Consumers avoiding bricks-and-mortar stores for fear of infection*

# Impact on Select Industries – Immediate

## Auto and Logistics

- Companies in this sector have been affected from both **production and demand** side
- Further, most auto OEMs have been impacted locally in China as well as overseas operations which **depend on supply of parts / components from China**
- Logistic sector overall has been **impacted severely with increased operational complexity**

China set to lose out on production of **800,000<sup>(1)</sup>** units of cars

Projected decline in Chinese 2020 auto demand: **3%-5%<sup>(1)</sup>**

**>51,000<sup>(2)</sup>** companies worldwide have direct suppliers in affected regions

**>8<sup>(2)</sup>** post and parcel operators suspended services to China alone

**>45%<sup>(2)</sup>** scheduled departures on a major maritime Asia-Europe route had been cancelled in the past four weeks as of Feb 20

**<50%<sup>(2)</sup>** trucking staff on duty in China

## Travel/ Tourism and Gaming

- Macau casinos reopen for masked punters after **two-week virus suspension**
- Demand for travel is plummeting, as **companies curb business trips, airlines slash flights** to affected areas and organizers cancel major events
- Airlines' and airports' fundamental data** are expected to continue its **decline** over the next quarter
- Online travel platforms** are similarly affected with significant **decline in bookings** and **increased refunds**

 **~70<sup>(3)</sup>** airlines canceled flights to China

 **500+<sup>(5)</sup>** trains were impacted

 **7+<sup>(4)</sup>** global hotel chains waived cancellation fees

 **8/10<sup>(6)</sup>** hotel rooms vacant

 Macau ordered **all** casinos to close for 2 weeks

 **80<sup>(6)</sup>** cities globally with partial lockdown measures in place

## Consumer Discretionary

- Reduced consumption level** coupled with **low sentiment** have adversely impacted the space
- Further **prolonged decline** expected for **jewelry, duty-free, cosmetics** and **sportswear** sectors
- Fashion retailing** and **luxury goods** sector is significantly more exposed to Asian and Chinese consumption today v SARS period



Source: FactSet, news release, Market data as of March 13, 2020.

Note: (1) Nbcnews. (2) McKinsey, Coronavirus COVID-19 Facts and Insights. (3) Gatechecked.com (4) From South China Morning Post, include 5-star hotel group The Peninsula Hotels, Shangri-La Hotels and Resorts, French hospitality group Accor, Hilton, Marriott International, InterContinental Hotels & Resorts and Rosewood Hotels and Resorts. (5) China.Caixin.com. (6) South China Morning Post.

# Impact on Select Industries – Protracted

## Financial Institution

### Insurance: Purchases remain robust

- More broadly **life and health** insurance sales are expected to be robust across the region
- This is driven largely **by purchases in Hong Kong** from locals; while cross border may decrease it is expected to recover quickly due to rising insurance awareness similar to during SARS

Hong Kong life insurance industry  
new premium growth rate over next 4 quarters after SARS

**20% - 60%**  
yoy<sup>(1)</sup>

### Banking Operations: Currently adversely impacted

- Greater challenges expected with **declining volumes in trade, FX and payments**
- **Lending to tourism, lodging, restaurant and physical retail waning** while **higher unemployment will weigh**
- Regional banks with **greater economic exposure are getting more severe impacts**
- A **swift recovery is likely** when outbreak is fully contained

Chinese banks' FY20E NIM: **-0.1bps to -1.2bps<sup>(1)</sup>**

Chinese banks' FY20E earnings: **-0.5 to -1.0%<sup>(1)</sup>**

### Fintech: Potential opportunity to expand

- **Expected to see increased traffic/volume** given more payments will be made virtually due to restricted brick & mortar shopping and declining cash purchases
- **Decline in domestic offline flow** will counter-impact select players (Alipay etc)
- Major Fintech players are viewing the outbreak as an opportunity for **expanding market share and presence**



Set up a service channel **exclusively** for customers in Hubei, with **expedited** services

陆金所  
Lufax.com



Ensure online assistant service are **7 x 24** and product provided are **sufficient**



Offers a **series of online courses** on wealth management in different channels

### Credit risk: A potential crisis?

- The longer the situation lasts, the **greater the risk given erosion of financial cushion**
- Rapid growth of consumer and SME lending by banks and Fintech players could be impacted as most of the growth has been targeting underbanked populations
- **Remains too early** to fully assess given defaults tend to occur and be recognized on a few months lag

Potential NPL size at Chinese banks  
(worst case estimates by Bloomberg)



**3x**

c.US\$800bn

# Impact on Select Industries – Protracted (Cont'd)

## Real Estate and Construction

- **Sluggish sales** alongside **delays in construction**
- China: **sharp decline** in property market transactions in the month of February
- China: **Potential for strong 2Q rebound** given sales are typically skewed to 2Q, housing purchases are simply delayed and policy relaxations are expected
- HK: **office rents plummet** as coronavirus drags commercial property transactions to an **all-time low**
- HK: Property market expected to **continue to decline** following impacts from trade war and protest



100+ Chinese real estate firms issued bankruptcy filing statements in first two month of 2020<sup>(1)</sup>



China office rental market **stagnated** due to quarantine



Hong Kong property transactions fell to a **13-month low**<sup>(2)</sup>

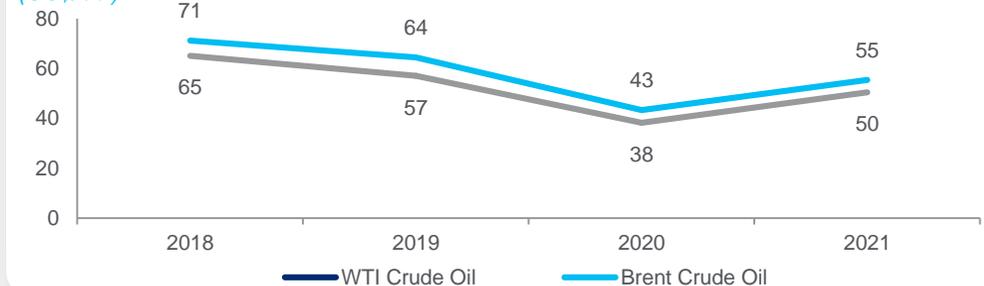
Value of all Hong Kong properties changing hands in January **declined 17%** to HK\$29 billion<sup>(2)</sup>

## Oil and Gas

- EIA forecasts Brent crude oil prices will average **\$43/b in 2020**, down from an average of \$64/b in 2019. For 2020, EIA expects prices will average **\$37/b during the second quarter**
- Oil prices plummet as coronavirus outbreak, quarantines **soften china's demand**
- China's coronavirus-hit industrial enterprises could receive a welcome **boost** from plunging oil prices
- Outbreak have a **relatively limited impacts on gas** as oversupply dominates fundamentals

### EIA's Crude Oil Forecast

(US\$/bbl)



## Consumer Staples

- **Food and beverage, especially restaurants**, have been impacted by low demand
- **Orders for food delivery has increased** though lockdowns have impacted delivery itself
- **Widespread panic-buying of take-home essentials** continues to fare well for tissues companies

YTD share price performance ↑



YTD share price performance ↓

### Online Delivery



### Beer



### Restaurants



Source: FactSet, Bloomberg, broker consensus and news release. Market data as of March 13, 2020.

Note: (1) Bloomberg. (2) South China Morning Post.

# Impact on Select Industries – Positive

## Pharmaceuticals and Healthcare

- **Key beneficiaries** include manufacturers of medical supplies, internet healthcare companies, diagnostic companies and manufactures of anti-viral therapeutics
- **Global biopharma** companies have announced vaccine or drug development initiatives
- Overall **China pharma sector** expected to be resilient

Announcement of vaccine or drug development initiatives



YTD share price performance



## Online Entertainment and Education

- Consumers spending on internet services expected to spike for **online games and media streaming**
- Schools **exploring online education options** as authorities postpone the new semester until early March

ByteDance 字节跳动 **+77%** in weekly downloads of Xigua video app<sup>(1)</sup>  
 Tencent 腾讯 **40-50%** yoy increase in demand for games in Feb<sup>(2)</sup>  
 bilibili **Surging traffic** for news and entertainment content

YTD share price performance

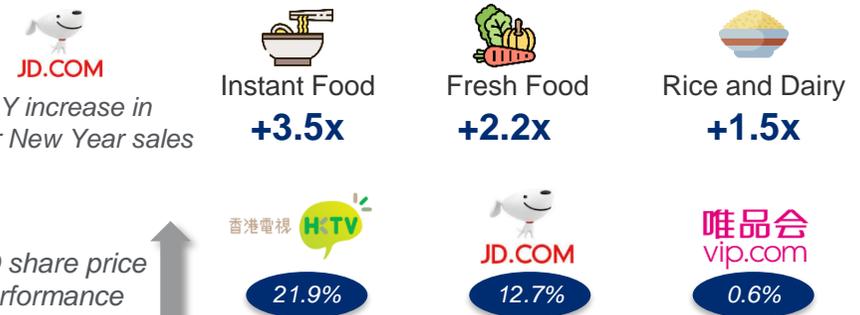


## E-commerce

- Consumers **shun bricks-and-mortar stores** for fear of infection and switch to online e-commerce channels
- Demand for **food and beverage, health supplements, masks and sanitary products** have seen a drastic YoY increase
- However, an extended outbreak **could potentially affect logistics** (especially those with lower in-house capabilities) and **constrain supply**

YoY increase in Lunar New Year sales

YTD share price performance

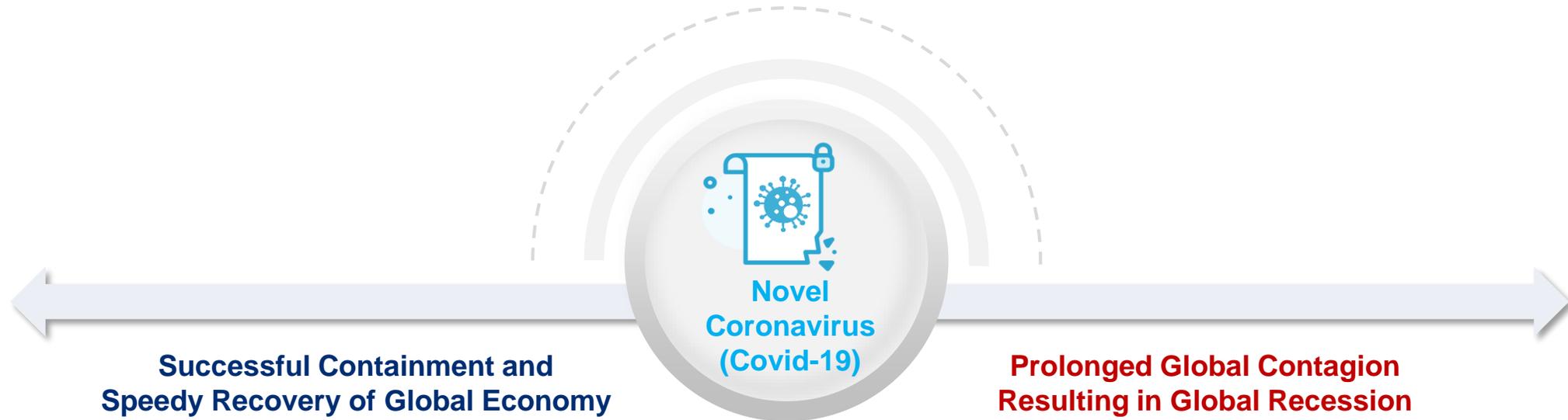


Source: News release, Factset. Market data as of March 13, 2020.

Note: (1) Reuters as of week of Jan 20-26, 2020. (2) News release.

### 3. Where Do We Go From Here?

# Spectrum of Potential Outcomes / Views on the Epidemic



- ✓ Social distancing, improved hygiene habits / awareness and seasonal change proved effective in reducing number of new reported cases
- ✓ Increased testing and swift intensified responses including quarantine and broad travel restrictions resulted in a global containment
- ✓ Successful vaccine development and effective deployment through global coordination
- ✓ Situation to peak by April with new reported cases stabilizing and global outbreak contained
- ✓ Global business/economy resume to normal supported by macro policies in place
- ✓ Recovery to begin by May, with speed differing by sectors

- ✗ Continued rapid spread of the virus with significant rise in # of cases globally and increasing fatality rate – extensive global pandemic
- ✗ Outbreak resistant to seasonal effect with increasing transmissibility and global expansion with potential for reverse importation into China
- ✗ Dislocation of global economies and markets – World Bank estimated that a severe pandemic could result in a 5% decline in global GDP
- ✗ Shutdown in global manufacturing and substantial demand shock that lasts through bulk of 2020 (decline in consumption etc.)
- ✗ Heightened fear / xenophobia / nationalism and extended market volatilities

**It still remains too early for the full implication to be assessed and above represents the spectrum of extreme contrarian views on the potential outcome. Given the level of uncertainty, governments and corporates around the world are planning ahead in terms of risk management / contingency measures**

# Potential Structural Implications on China and the World

The global spread of the Coronavirus has adversely impacted economies, business operations and our everyday lives. Going forward, this epidemic has the potential for more far-reaching structural implications.

1

## Impact on China's Geopolitical Affairs and Policies

Outbreak may potentially impact China's various political affairs and regional strategic initiatives



Improving quality of life / standard of living



- Investments in healthcare
- Policy reforms and public awareness
- Fast-tracking biosecurity law



2

## Reevaluation of Supply Chain Strategies and Globalization Model

Ongoing spread of a new coronavirus has resulted in the shutting down of major business hubs in China



Many global MNCs such as Apple has still maintained substantial reliance on China primarily due to costs

Outbreak may potentially increase the diversification of manufacturing base to regional countries / onshore



3

## Global Accelerated Advancement of Technology/Digitization/Healthcare



Increasing dependence of non-traditional methods of consumption

AI analytics built to identify outbreaks



Robotics deployed to ensure containment

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