



COVID-19 Outbreak: Potential impact on consumer and retail companies

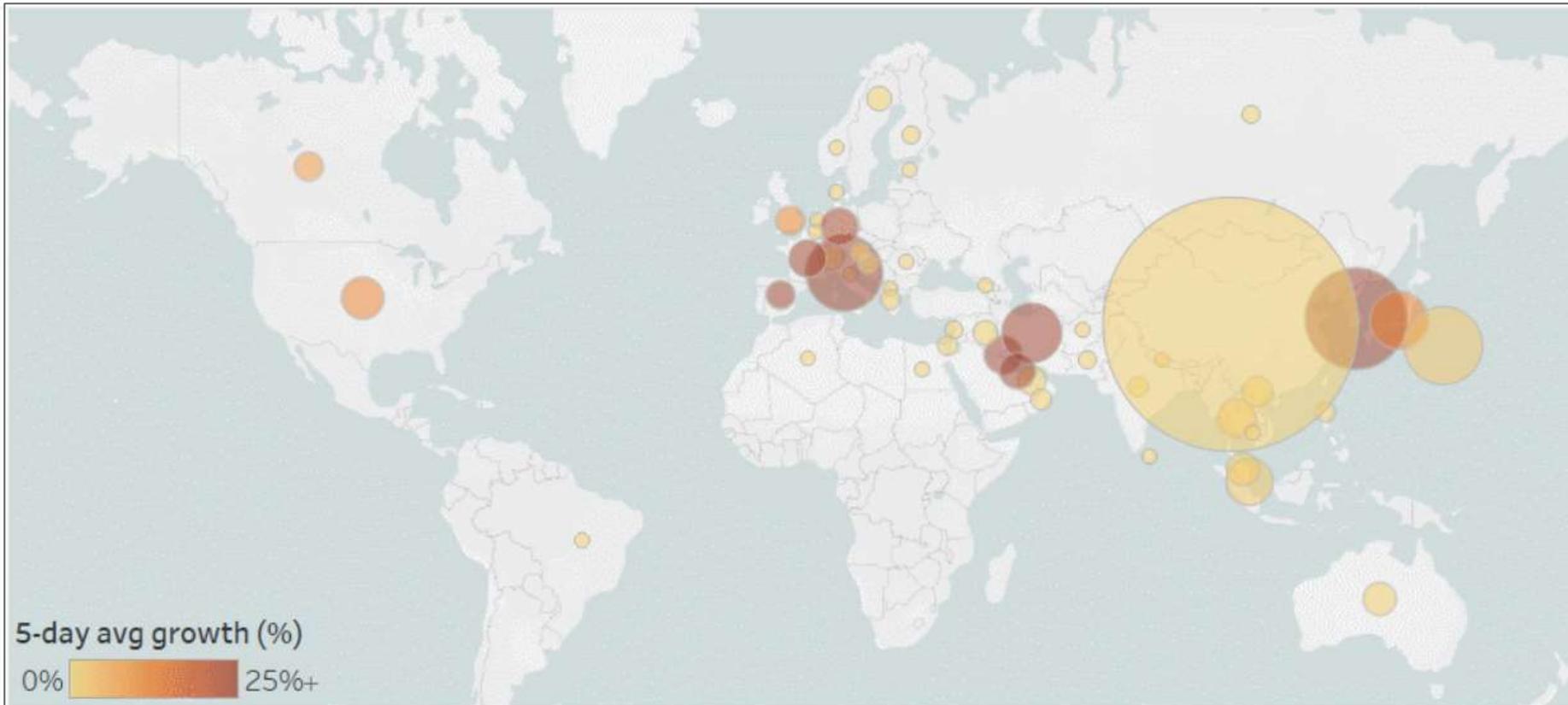
February 28, 2020

Trajectory of the outbreak

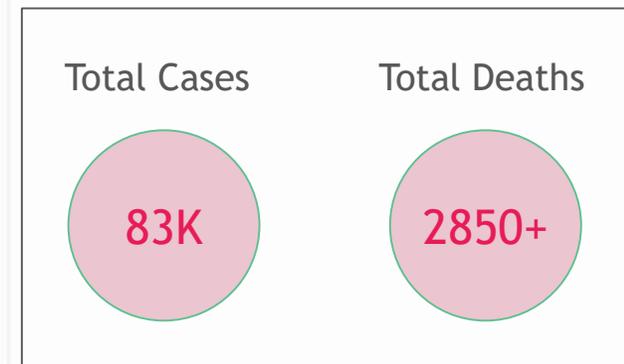
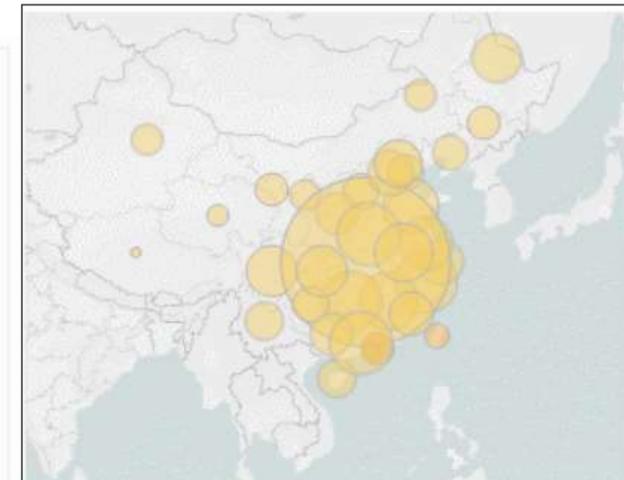
~83k COVID-19 cases with 94%+ concentration still in Greater China - but new hubs emerging

UPDATED -
data as of
Feb 27th

World-wide COVID-19 Cases as of 27th Feb'20 ([Link to animated map of daily movement](#))



Greater China Cases



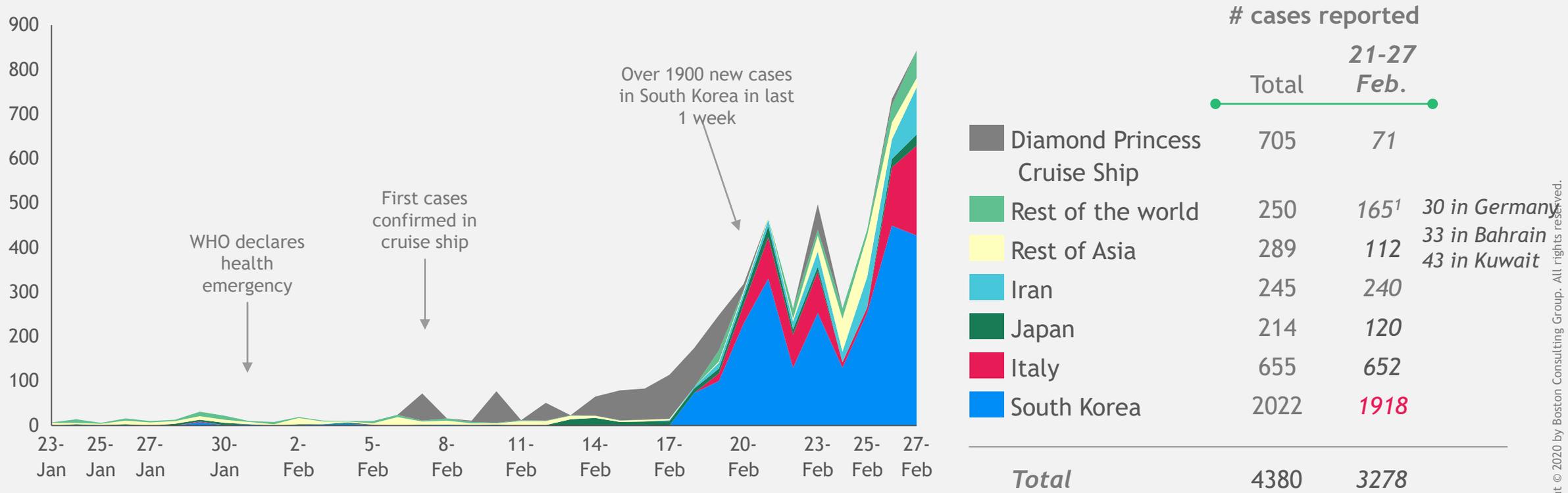
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Note: No of cases scaled by square root is used as size of the bubble to show extent of spread
Source: National Health Commission China, Johns Hopkins CSSE as on 27th Feb, BCG Henderson Institute analysis

Inflection in new cases outside China - mainly in Korea, Italy and Iran

UPDATED - data as of Feb 27th

Daily number of new cases outside Greater China

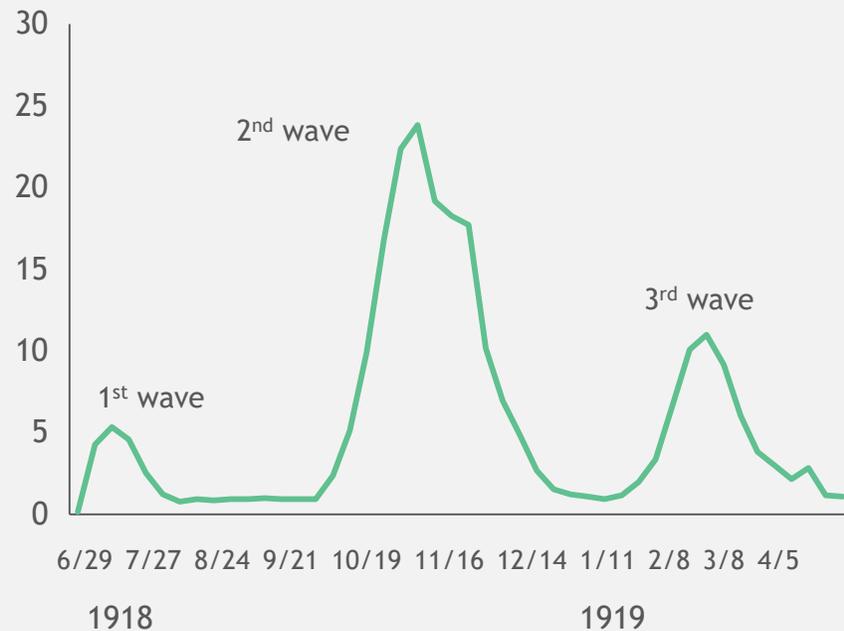


1. 50 of the new cases in rest of the world are from the passengers quarantined from Diamond Princess Cruise Ship (including 42 in the US)
 Source: National Health Commission China (China-specific data), Johns Hopkins CSSE as of 27th Feb, BCG Henderson Institute analysis

Historically, many outbreaks experienced multiple waves

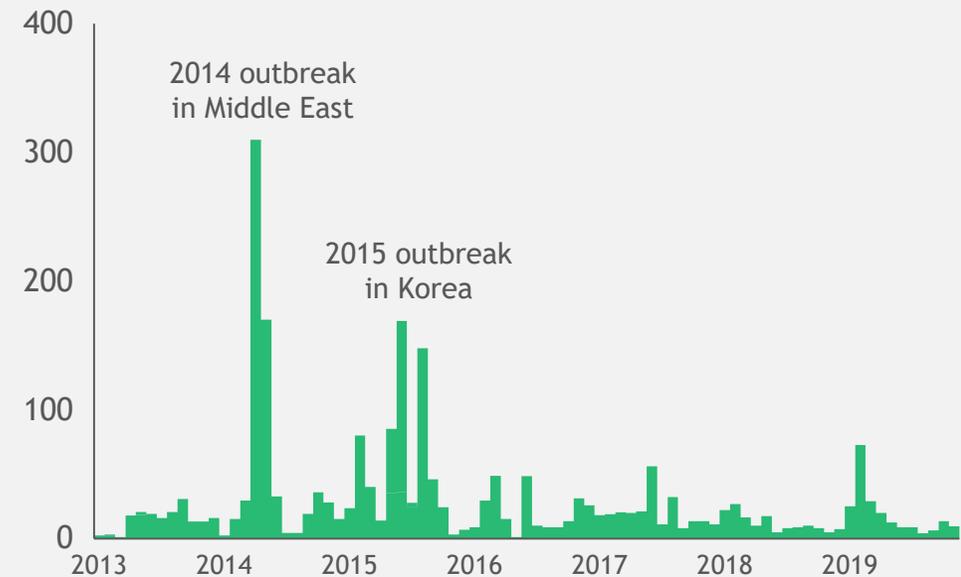
Example: Spanish Flu

UK Deaths per 1,000 persons



Example: MERS (caused by a coronavirus)

Number of monthly cases worldwide



No room for complacency

Companies need to remain vigilant and prepare for downside scenarios:

- Re-acceleration possible—many outbreaks have historically experienced multiple waves
- Outbreak could potentially spread to regions with less capacity to respond effectively
- Though history shows economic impact of SARS outbreak was temporary and contained, China's role in global economy has increased since then, making spillover effects more plausible
- COVID-19 fits a pattern of broader, multi-dimensional risk landscape

***"Every scenario is still on the table"*—WHO Director-General Tedros Adhanom Ghebreyesus, 18 Feb**

Economic impact differ could differ by sector; fashion/ luxury/ restaurant more adversely impacted



What major retailers are saying

What we are hearing (1/4) | Big box & DIY stores

| Company Statement | | Earnings impact | Supply chain hit |
|---|---|---|---|
|  | Due to the current sales mix slanted heavily toward food and consumables, as well as some increased expenses related to the outbreak, <u>we could see a couple of cents negative impact in Q1.</u> (Feb 19) |  |  |
|  Big box stores |  <u>Our Q1 merchandise is already here or on the way. In Q2, the picture is still developing there.</u> For our direct import, our sourcing offices in Asia are in touch with our factories as they're returning to operations ... <u>We are encouraged that we're seeing factories come back to work ...</u> but it is a fluid situation, and it's highly variable in terms of what's the current state. (Feb 25) |  |  |
|  | Well, it's a serious matter ... we do see that there are lower capacities used in the factories and also in the harbors. And <u>for all the products that are very important for us for our spring season start, they are already on their way or they're already in Finland</u> (Feb 7) |  |  |
|  | Coronavirus, of course, it's a major concern over the last few weeks for us ... Another concern is the <u>securitization and the control of our supply chain. ... we have a number of products coming from China to us.</u> And over the past few weeks, we have <u>imagined alternative solutions, alternative road maps.</u> (Feb 27) |  |  |

 No negative impact
  Some negative impact
  Significant negative impact
  No clear read

What we are hearing (2/4) | Furniture, consumer foods, and luxury goods

| Company Statement | | Earnings impact | Supply chain hit |
|---|--|---|---|
|  Furniture |  <p>Our merchandising and supply chain teams are closely watching the impact of the delayed opening of Chinese factories due to coronavirus. <u>We expect to have some product shipment delays, which could affect stock availability in the second quarter.</u> (Feb 19)</p> |  |  |
|  Consumer foods |  <p>...our suppliers in China have experienced some delays in the production and export of these ingredients ... <u>We have initiated contingency supply plans and do not foresee a short-term impact due to these delays.</u> However, <u>we may see tighter supplies of some of these ingredients in the longer term</u> should production or export operations in China deteriorate (Feb 26)</p> |  |  |
|  Beauty & luxury products |   <p>This context will have a temporary impact on the beauty market in the region ... The experiences that we have had with similar situations in the past with SARS, MERS, et cetera, showed that <u>after a period of disturbance, consumption resumes stronger than before.</u> (Feb 6)</p> <p><u>The Group's operating environment remains unsettled</u> ... uncertainties may be temporarily heightened during major events or crises, such as the recent coronavirus epidemic, given the impact on consumption trends and tourism flows, and their ability to affect economic growth. (Feb 12)</p> |  |  |
|  No negative impact  Some negative impact  Significant negative impact  No clear read | | | |

What we are hearing (3/4) | Electronics and toys

| | Company Statement | Earnings impact | Supply chain hit |
|---|--|---|---|
|  Electronics |  Microsoft Although we see strong Windows demand in line with our expectations, <u>the supply chain is returning to normal operations at a slower pace than anticipated at the time of our Q2 earnings call (Feb 26)</u> |  |  |
| |  Work is starting to resume around the country, but <u>we are experiencing a slower return to normal conditions than we had anticipated.</u> As a result, <u>we do not expect to meet the revenue guidance</u> we provided for the March quarter due to two main factors. ... worldwide iPhone supply will be temporarily constrained. While our iPhone manufacturing partner sites ... have reopened they are ramping up more slowly than we had anticipated. (Feb 17) |  |  |
| |  We are actively working to return to full production as quickly as possible ... <u>Overall, we are viewing the situation as temporary in nature.</u> (Feb 24) |  |  |
|  Toys |  <u>There is disruption to our supply chain and commercial operations in China</u> as travel is limited and employees and factory workers have been delayed in returning to work. The impact to our business to date is small. But it's <u>challenging to quantify the potential magnitude at this time</u> as it will depend on how long it takes to contain the outbreak. (Feb 12) |  |  |
| |  <u>It's going to hit the toy business big time</u> ... There is going to be a shortage on hot toys, worldwide ... To date, the impact to our business has been small ... However, the longer it takes to contain the virus, the greater impact it will have. (Feb 23) |  |  |

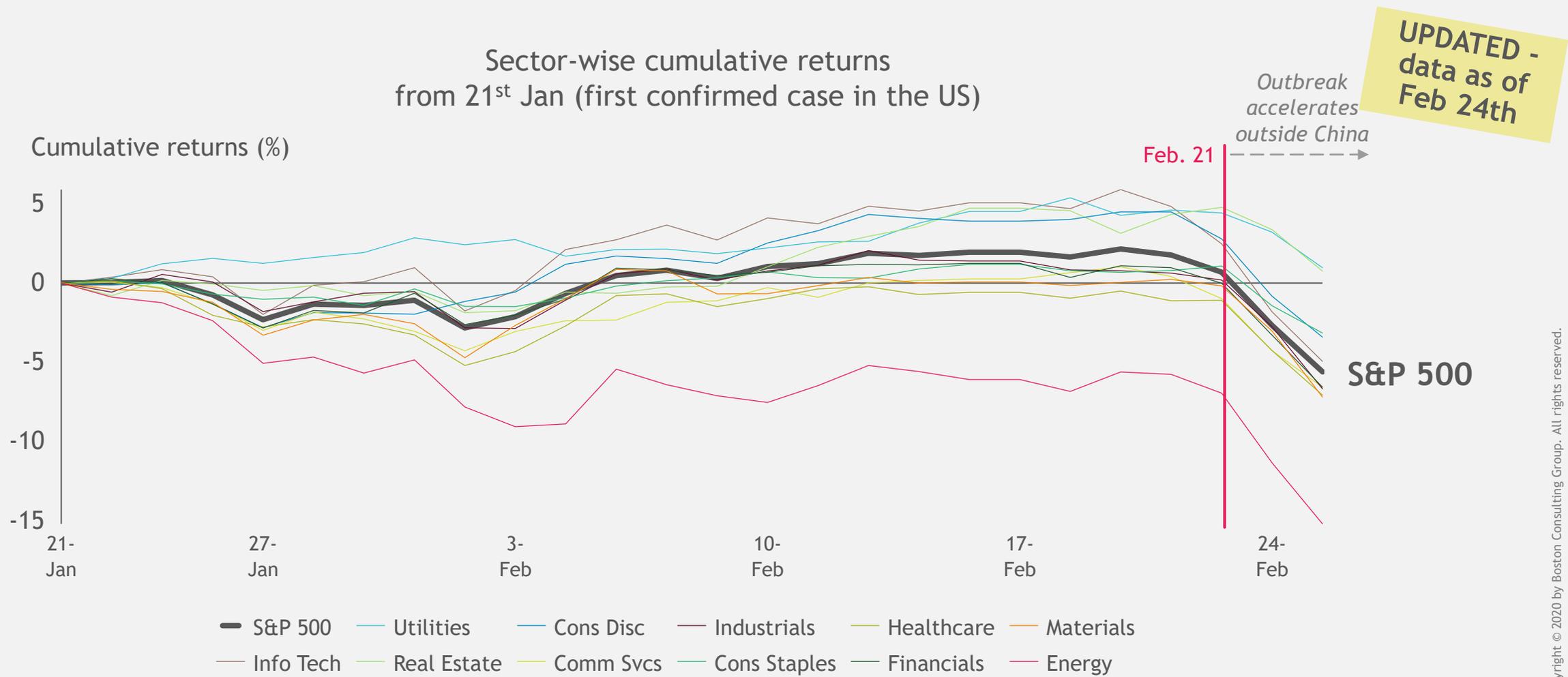


What we are hearing (4/4) | Apparel

| Company Statement | | Earnings impact | Supply chain hit |
|--|---|---|---|
|  | <u>We have seen a slowdown ... Nothing concerning yet</u> , but we're watching this one very, very carefully. ... With respect to the supply chain, we are working with our vendor partners to minimize any possible disruption. (Feb 25) |  |  |
|  Apparel |  In materials, we're assessing possible impacts related to fabric trim and package sourcing and potential delays and capacity challenges that could prove to be difficult in second half of the year. With respect to factories, we're continuing to see closures, changing timelines of when they might reopen, and trying to assess what it means for production fulfillment, capacity, and the prioritization of which products to make. (Feb 11) |  |  |
|  | <u>The coronavirus outbreak may materially impact our sourcing and manufacturing operations</u> as a portion of our products are manufactured in China (Feb 14) |  |  |
|  | <u>While the coronavirus will impact our businesses in the near-term, our long term growth opportunities across AP region are significant.</u> (Feb 12) |  |  |



Markets looked past Covid-19 until Feb. 21, but began pricing in risks after international spread accelerated



Potential impact on supply chains

Potential for supply chain disruptions in 4 to 6 weeks

- ❖ Early indications point to potential sourcing disruptions in 4-6 weeks as current inventories run low for components as well as finished goods
- ❖ Provinces exposed to COVID-19 are major exporters, including Guangdong and Zhejiang on the coast
- ❖ Factories re-opening but at reduced capacity
- ❖ Transportation limited within China disrupting flow of goods
- ❖ Transport & logistics data suggests bottlenecks at major ports

Four categories most likely to be impacted



Electronics

- One of the largest manufacturing categories within China
- Prevalent in provinces with high infection rate, including epicenter Hubei (top export source for cell phones) and manufacturing hubs Guangdong and Zhejiang
- US sources nearly 50% of electronics imports from China, as well as 80% for toys categories (video games)



Apparel

- Top 5 manufacturing category in the three provinces with highest infection rate
- US sources ~30% of imports from China



Furniture

- Small but widely prevalent manufacturing across the provinces with high infection rates, including Guangdong
- US sources ~40% of imports from China



Pharmaceuticals

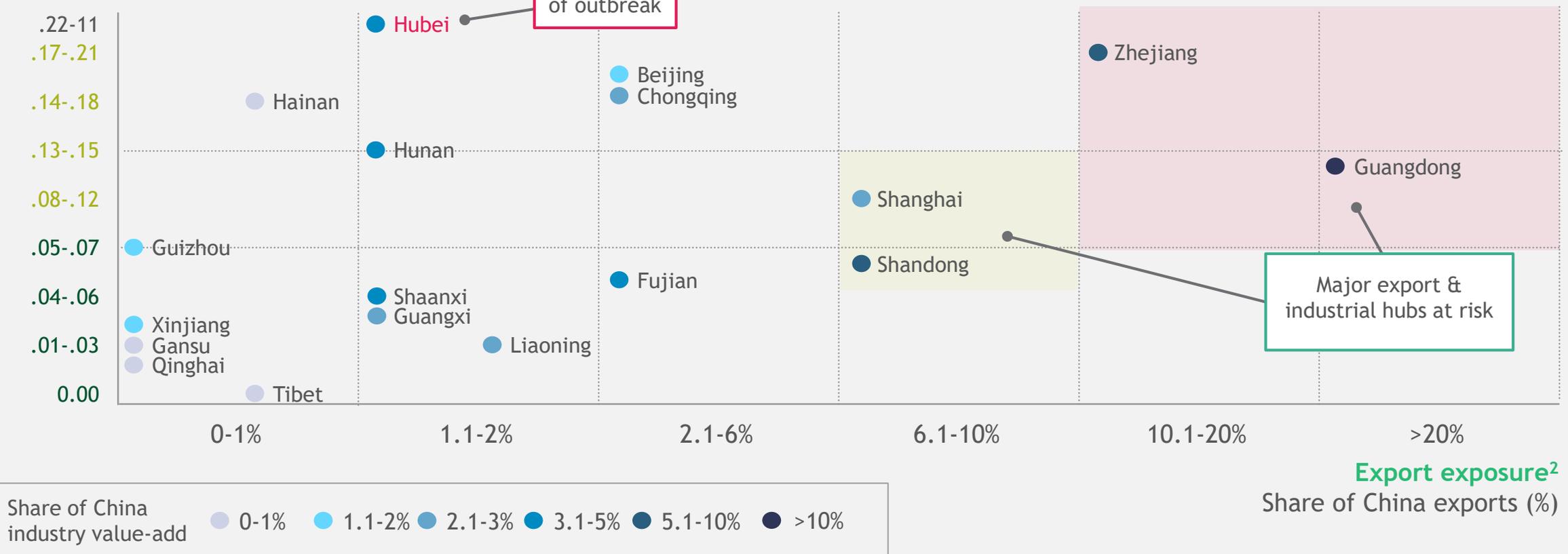
- Top 5 manufacturing category in 8 out of 10 provinces with highest infection rate

Chinese provinces exposed to COVID-19 are key to exports

As of 2/24/2020

COVID-19 exposure

Infection rate per 10k ppl¹



1. Infection rate is the percentage of confirmed infections from the total province population. 2. Export data likely skewed toward localities with large ports.
Source: China National Bureau of Statistics, BCG GA Geopolitics & Trade analysis

Double-click: Infection rate and retail production

| Province | Hubei | Zhejiang | Jiangxi | Chongqing | Beijing | Hainan | Anhui | Hunan | Guangdong | Henan |
|---|---|--|---|--|---|---------------|---|--|---|--|
| Infection rate per 10K ppl ¹ | 11 | .21 | .20 | .19 | .19 | .18 | .16 | .15 | .14 | .13 |
| Retail produced >\$7B (2017) ² | Total: ~\$230B <ul style="list-style-type: none"> Food/Bev. Electronics Other³ Apparel & Luxury Office Supplies Pharma. | Total: ~\$300B <ul style="list-style-type: none"> Electronics Apparel & Luxury Food/Bev Other Office Supplies Pharma Furniture | Total: ~\$180B <ul style="list-style-type: none"> Electronics Food/Bev Apparel & Luxury Pharma. Other | Total: ~\$130B <ul style="list-style-type: none"> Electronics Food/Bev. Other Pharma. | Total: ~\$70B <ul style="list-style-type: none"> Electronics Pharma Food/Bev. | Total: ~\$10B | Total: ~\$250B <ul style="list-style-type: none"> Electronics Food/Bev. Apparel & Luxury Pharma Other | Total: ~\$185B <ul style="list-style-type: none"> Food/Bev. Electronics Pharma. Apparel & Luxury Office Supplies | Total: ~\$1T <ul style="list-style-type: none"> Electronics Other Apparel & Luxury Food/Bev. Office Supplies Furniture Pharma | Total: ~\$60B <ul style="list-style-type: none"> Food/Bev Electronics |
| Share of pop. ('17) | 4% | 4% | 3% | 2% | 2% | 1% | 5% | 5% | 8% | 7% |
| Share of GDP ('18) | 4% | 6% | 2% | 2% | 3% | 0.5% | 3% | 4% | 11% | 5% |
| Share of exports ('18) | 1% | 13% | 1% | 2% | 1% | 0% | 1% | 1% | 28% | 2% |

1. Infection rate is the percentage of confirmed infections from the total province population. Colors organized by green = below median (.08%), yellow = above median but below outlier, red = significant outlier in highest infection rate 2. By gross value of industrial output (descending). Totals include sum across all major retail categories. 3. "Other" contains general merchandise items

Source: National Bureau of Statistics of China, WHO Coronavirus situation reports; BCG analysis

Various transport & logistics disruptions evident within China



Various logistics disruptions within China...



... and at its ports ...



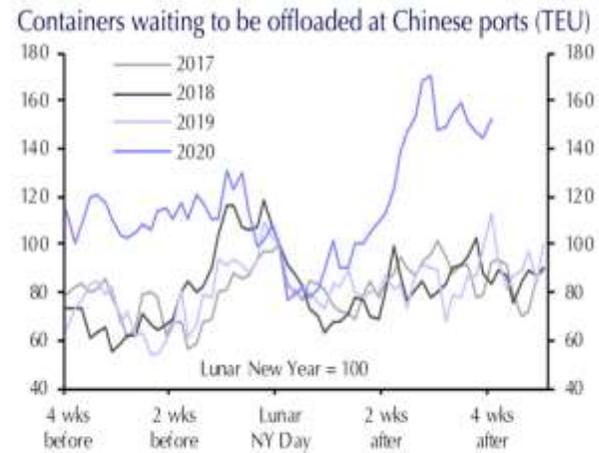
... leading to drop in global shipping demand

Transport within provinces difficult

- Local governments conduct checks & screenings of trucks to prevent virus spread
- Priority given to transport of medical supplies and essentials
- Rail system bottlenecks (including HK cutting rail links)

Factory workers mobility limited

- Guangdong "work resumption" rate only **56%** as of February 19
- Many migrant workers who returned home for Spring Festival yet to return
- Local governments issuing "back to work" measures to support local enterprises



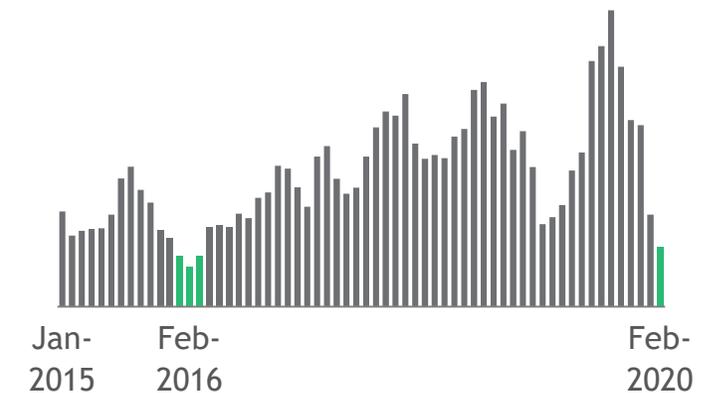
CAPITAL ECONOMICS

Source: Baltic Capital Economics



Offloading delayed by combo of worker shortages and precautionary health screenings

Baltic Dry Index



Baltic Dry Index in February hit lowest levels since historic low in Q1 2016, among lowest daily levels in past 20yrs

What should you do?

Four actions to get started now

- 1. Take care of your people**
 - Co-ordinate with authorities
 - Ensure safety of your people in impacted areas
 - Make available company's resources as appropriate
 - Proactively support vulnerable suppliers
- 2. Develop a contingency plan and setup a central response team if the outbreak accelerates within your markets**
 - Plan to stabilize cash-flow to ensure liquidity
 - Ensure supply of critical products (e.g., health, fresh, etc.)
 - Develop labor mobilization plan
 - Build-up ecommerce / delivery capabilities
- 3. Proactively get ahead of any potential supply disruptions**
 - Identify categories with potential supply disruptions
 - Work with suppliers to understand risk
 - Identify other sources / countries if current suppliers face issues
 - Proactively assess potential threats and monitor leading indicators
- 4. Communicate to relevant stakeholders**
 - Customers: Reassure service levels, communicate e-comm / delivery options, proactively warn any supply disruptions, etc.
 - Investors: Communicate risk and layout mitigation plan
 - Internal staff: Communicate impact to business and effort to build contingency plan

Potential way to structure a central response team



Be part of the solution: How to navigate the crisis



Now: Tackle immediate priorities

Protect your people, ensure continuity, and mitigate short-term losses



➤ Near-term: Prepare for the rebound

Pro-actively seize demand rebound and bring business back on track



➤ Medium-term: Pursue structural enhancements

Build long-term advantage by making strategic enhancements



Day-to-day agile approach to navigate changing environment



Now: Take decisive actions to minimize disruptions (I/II)



Take control of the situation

Set-up a rapid-response team to take clear decisions and control of the situation

Communicate decisively and regularly to prevent misinformation and organizational paralysis

Clearly direct your people on what to do, inform them about business & health impact

Actively monitor the situation and use an agile approach to navigate the changing environment



Protect people & customers

Update hygiene program (incl. quarantine requirements) to ensure safe environment for employees and customers

Arrange flexible working plans and provide required infrastructure/ solutions

Observe employees' morale and performance during crisis period, plan for relief measures



Ensure operational continuity

Categorize your operations by business criticality (systemic, critical, optional)

Define clear contingency plans for systemic and critical operations and put safeguarding measures into place

Stabilize cash flows to ensure sufficient liquidity, e.g. by mitigating or redirecting discretionary spend (such as marketing)



Now: Take decisive actions to minimize disruptions (II/II)



Serve your customers' needs

Reach out to customers/distributors to understand their needs (e.g. provide credit line), leveraging your salesforce in new ways

Shift to online channels to provide products and services by working with both O2O & offline partners to cope with sudden shifts in demand

Optimize pricing and product offering to meet immediate consumer needs (e.g. "stocking up" and "home enjoyment")



Ensure a robust supply chain

Adjust inventory level in real time, reshuffle to new reality, and avoid inventory glut

Identify alternative suppliers for critical components, plan for changing lead times and re-route logistics

Set up dedicated funding or adjust trade terms to address cash flow concerns of suppliers



Execute on your purpose

Live your purpose now to help the society and economy get back on track

Leverage your resources to make a difference by providing products and services to affected people (beyond monetary donations)

Engage your staff, your customers and business ecosystem to create tangible impact



Executing on your Purpose: an example

BCG has helped leading Asian retailer to develop crisis relief plan in three steps

Step 1: Help with sourcing of key products (incl. masks & sanitizer)

Investigate demand planning /
supply needed; identify key
products with supply shortage

Identify branded suppliers to
source, leveraging BCG global
contacts

Quickly align with supply chain
and store ops to ensure
shipment and delivery

Set up SWAT PMO

Step 2: Launch market- wide social impact campaigns

e.g. Refill stations for free
refills of own brand sanitizers

e.g. Free hand washing stations
in areas with high traffic

Promote hygiene education via
social media ; accompanied
with instore educational
campaign

Step 3: Develop medium term OB strategy and advocacy plans

Leverage learnings from
sanitizer's quick
implementation

Prioritise key crisis products
that need development

Develop ways of working for OB
to ensure quick route to market

Develop brands to enhance
customer advocacy



Near-term: Targeted efforts required to achieve rebound



Closely monitor and synchronize the team

Conduct top-down scenario assessment on possible “inflection time point” - when the situation gets stabilized and consumption confidence returns

Look for new channels and new disruptive formats that works under epidemic

Reward innovative ideas and proactive movements, closely monitor competitive moves

Re-define budgets and targets monthly by geography

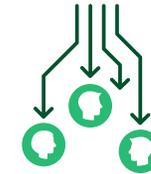


Build value chain preparedness

Maintain ongoing relationship and extend credit to key distributors to secure core channels and quickly replenish after the epidemic

Leverage intelligence (e.g. activate your salesforce for customer/ distributor reach out or surveys) to identify "infection point" and ramp up sales activities, inventory, and trade support

Deploy resources to jumpstart social/O2O strategic collaborations, and pilot test new operation models



Adjust communication message

Explore opportunities to configure “comeback celebration campaign” in advance, quickly pick up ad spending post-epidemic

Avoid removing all ads, cautiously select marketing channels during epidemic

Craft new product and service story and create new selling points

Case-study: National retailer helped to gain consumer confidence in Fukushima crisis

It launched "Gambaro Nippon" Campaign to support government and serve local communities with highest level of commitment and integrity

- Gambaro Nippon" campaign: a nationwide bargain sale to boost consumer confidence and alleviate mood of "self-restraint"
- Provide consumers with opportunities to contribute to disaster recovery through charitable activities such as its yellow receipt campaign
- Advocate the belief that it's good to shop again and it's acceptable to have fun again

Business impact: Both the retailer and associated specialty stores achieved higher-than-expected sales during the campaign

Social impact: Enhanced relationship with government for re-gaining consumer confidence and better connections with local communities



Case-study: A well-known retailer deployed various employee assistance and empowerment in response to Hurricane Katrina



Implemented community services

- Eventually donated ~\$32M to various Katrina relief efforts
- Shipped ~2,500 truckloads of merchandise aid in 3 weeks
- Re-open 111 out of 125 stores within 10 days
- Distributed free merchandise to worst-hit areas
- Put a price-freeze into effect in the region affected



Provided employee assistance

- More than 34,000 employees were displaced, with 98% contacted through emergency call-center
- Promised displaced employees work at any other store
- Offered a one-time cash payment
- Expanded emergency call center to 80 people and fielded 43,000 calls within four weeks



Empower talents at front-line

- In several cases store managers allowed emergency personnel or local residents to take store supplies as needed, free of charge
- Associates turned the store into a headquarters and sleeping area for local police, many of whom had lost their homes in the storm



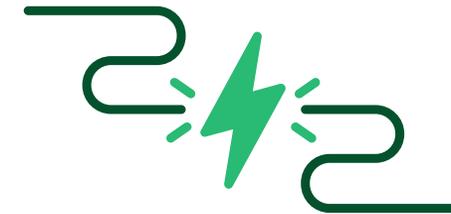
Long-term: Prepare for the future and build structural advantage

Previous crises show that business positions will change as industries recover. We foresee game-change demands shifts in many sectors, e.g.

Boost in e-commerce and online service delivery - accelerated change in retail and F&B

Significant health care boom in emerging markets (e.g. China), incl. spill-over effects on related industries (e.g. insurance)

Further diversification of international supply chains - ongoing contingency planning as new normal



Business leaders need to be alert and active in understanding shifts, how to invest and position for this new reality, and build structural advantage



Examples: Companies provided support to customers in exchange for channel advantage; actively built partnerships

Support dealers on cash flow with funding

Car manufacturer

2003-SARS: Car dealers in trouble with cash flow, as consumers delayed purchases

Adjusted performance target on dealers:

- Car manufacturer canceled performance review to ease dealers' pressure

Established contingency fund:

- Established 10M fund to support dealers on employee salary

Launch joint-logistics to support distributors

National F&B player

COVID-19: logistics capacity highly constrained, causing challenges to distributors

Carefully tracking and targeted supply:

- Contacted distributors one-by-one during critical reopening period

Joint-dispatch to support distributors, using its own logistics company

Full distribution capacity restored >50%, matching the 60% store reopen, leading competition by ~20%¹

Gain RTM control w/ customer credit ease

Int'l apparel retailer

2003-SARS: Its customers suffering from poor cash flow from people not going out

Offer credit ease to local key customer in return for high data transparency and brand-led-retail

Take the chance to increase direct-owned store presence as well as eCommerce to uplift business share in DTC

Form partnership and seek sources of growth

Int'l apparel retailer

2003-SARS: More potential partners with high willingness to collaborate after SARS

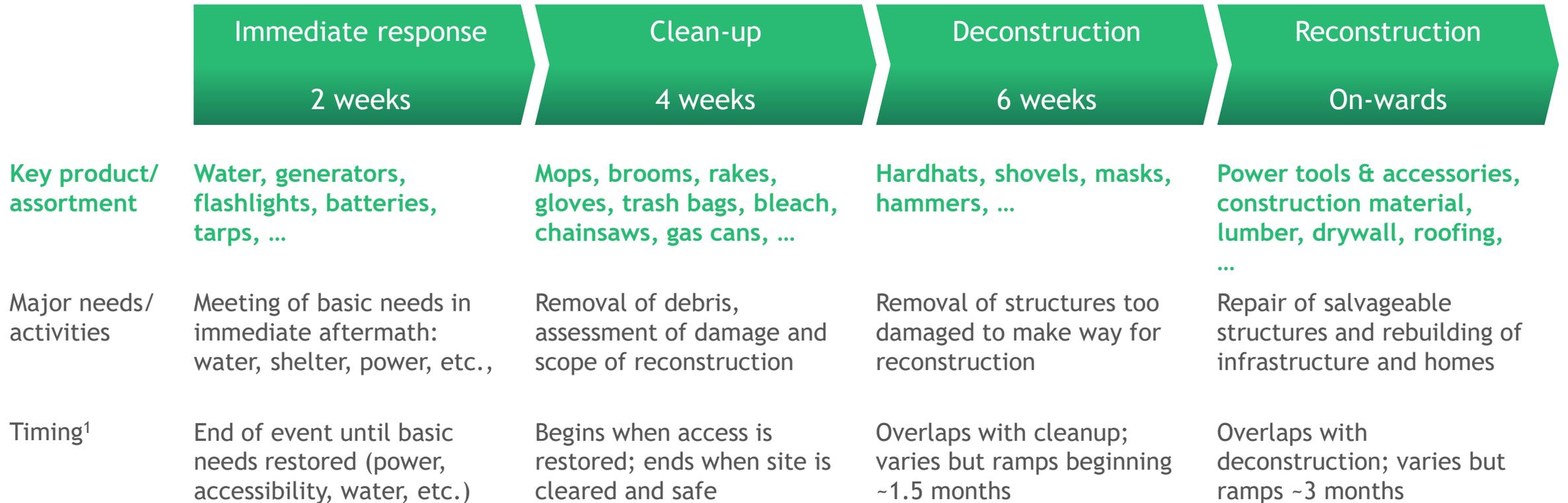
Collaborate with technology partners and build eco-system

- e.g. introduced Brand Co.+ Sportsband Kit in Apr. 2008, with chip integrated in shoes
- e.g. Brand Co.+ Sportswatch introduced in Sep. 2010

1. By end of Feb.9th

Source: Press release, expert interviews; BCG analysis

Case-study: Int'l hardware retailer utilized data analytics to provided assortments relevant to different phases after Hurricane Katrina



1. Timing of each event may have a long "tail;" this analysis focuses on the heaviest periods of each phase for merchandising and supply chain planning purposes
Source: conversation with the company's hurricane response team

Appendix: Case studies from crisis situations

Overview: Companies in different sector/scale implemented distinct responses, both in near- and mid- terms

Small/mid size companies, esp. in foodservice, entertainment, travel & tourism, fashion/luxury retailing sectors
Often more susceptible to negative impact and facing "the matter of survival"

1 Ensuring continuity

"People": Stabilize morale and retain talents through emergency response protocol and employee safety methods
"Money": Maintain healthy cash flow by minimizing expenditure & adjusting payment terms
"Goods": Proactively manage inventory level to respond to demand drops/spikes

3 Capturing bounce-back

Review budget/planning: Adjust mid-term budgeting & incentives to plan for business recovery & market rebound
Anticipate and invest: Timely investments during market downturn to prepare for comeback
Build talents amid new business reality and needs: Retain and upgrade talent to outperform competitors

Near-term

Mid-term

2 Minimizing disruption

New channels/media: Source compensating growth from disruptive business model or emerging/new channels
Staff empowerment: Encourage (and control) grass-root leadership and ideas against usual hierarchy
Corporate social responsibility (CSR): Launch CSR, build image, implement influence and boost consumer confidence

4 Building advantages

Product & assortment: new product innovations and collaborations; range/assortment driven by data analytics
Channel & eco-system: Optimize route-to-market, build up channel/digital eco-systems and build up partnerships
Digital & social: Enhance digital marketing, social and CRM capabilities to capture more membership and higher value

Larger size companies, usually branded MNCs in FMCG, grocery/fashion retailing;
relatively better at "weathering the storm", yet tangible impact expected

Case-study (ensuring continuity): Xijiade proactively manages its cash flow and cost level amid 2019-nCoV

Key initiatives

- Negotiate for zero, partial or delayed rent payment while stores are closed for business
- Encourage all store owners, BD partners and regional managers to communicate with landlords on the severity of the outbreak
- Explain the reason for store closings and negotiate with landlords, as such places for public gatherings have to be closed per national regulations on the epidemic prevention and control
- Negotiate rent reduction/waiver or delayed rent payment with landlords as stores are closed and not profit-making
- HQ to develop and distribute "Letter to Ask for Rent Deduction" and "Letter to Landlords/BD partners" to facilitate the negotiation process

Implications to small/mid scale companies

Negotiate partial or delayed rent payment

- Negotiate with landlords for rent reduction/waiver
- Postpone rent payment for all stores

Negotiate with suppliers on payment terms

- Negotiate with suppliers to extend payment terms and commit to long-term partnerships for win-win growth across the industry chain

Close unprofitable stores and downsize workforce

- Accelerate evaluation and closing of unprofitable stores
- Downsize workforce for cost-saving
- Trim unnecessary spending via strict approval process

Set up temporary expense approval system

Establish cash flow alert

- Monitor cash flow closely, set the threshold for early warning, and adjust short- and long-term cash mgmt and planning

Source short-term financing channel

- Estimate own cash flow as the outbreak develops and explore financing channels as needed in 6 months to improve cash flow

Case-study (ensuring continuity): Meizhou Dongpo looks for creative ways to utilize raw materials and workforce during 2019-nCoV

Context

Founded in 1996, Meizhoudongpo now operates over 100 chain restaurants across China with a revenue of over RMB 100mn; it has been included in HBS MBA case study

- Restaurants are hit the hardest by the coronavirus outbreak; particularly, Meizhoudongpo's revenue plummeted by 80% and suffered RMB 70mn losses in booking cancellations, labor and rental costs
- Wang Gang, its founder, said in an interview that "layoffs and restaurant closings are the least likely countermeasures"

Set pop-up vegetable shops to reduce inventory



- For de-stocking, Meizhoudongpo set up stands outside restaurants to sell vegetables and semi-finished dishes to people from neighboring communities,
- Such audience accounts for 60% of its customer base



Minimize raw material-related losses; vegetable stands contributed 10% to its total revenue during this critical period

Optimize staffing and share idle employees



- Optimized staffing leads to a huge number of idle employees
- Share idle employees with O2O retailers in urgent need of labor forces; interview and train them to perform picking and packaging duties



Hundreds of employees have found temporary jobs via this scheme

Case-study (ensuring continuity): Bestore, Huazhu and Pangdonglai adopted multiple measures to stabilize morale in responses to 2019-nCoV

Key initiatives



- Set up a task force as early as Jan. 20
- Report confirmed cases on a daily basis
- Stock up medical face masks, disinfectants and hand sanitizer
- Communicate epidemic plan to all employees to ease anxiety
- Ask HQ staff to work from home even before CNY started



- Set up a task force and hold regular meeting every day
- Leverage Huazhu's own info platform, Huatong, to facilitate timely update
- Implement stringent disinfection and protective measures, and reduce human-to-human contact through self check-in



- Provide at least RMB 2mn compensation in the case of any employee dying from the epidemic on-the-post

Implications to small/mid scale companies

Set up a task force

- Set up a task force for coordinated management of prevention and control measures
- Identify back-up for major positions to ensure smooth operation

Track and monitor employees' health

- Strengthen monitoring of employees' health status via daily reporting
- Employees who are not feeling well are required to self-quarantine

Educate and comfort employees

- Compile information from authoritative sources to educate and comfort employees
- Provide subsidy for employees who get sick due to the outbreak

Develop safety and protection plan

- Developed an environmental safety and protection plan and implement strict company-wide control measures to prevent the spread of the virus

Prepare and distribute protective supplies

- Purchase, stock up and distribute protective supplies, incl. masks and disinfection alcohol

Provide remote-working solutions

- IT functions provide telecommunication, teleconferencing and video-based store visit solutions to enable work-from-home

Mobilizing all staff to capture Omnichannel/O2O sales opportunities



Develop **"online promoters"** program, promote direct 1-to-1 engagement



Convert offline consumers to **"private domain traffic,"** accelerate CRM



Cosmetics company deploying beauty consultants to become online "KOL" and conduct live streaming on multiple platforms



Confectionery company building 1-to-1 relationship with consumers on WeChat moments



Build and expand **O2O/new platforms**



Accelerate **social commerce,** reduce reliance on traditional marketing and retail channels



Noodle shop adopting "Big delivery, Small canteen" model, offer rapid meal delivery from shops to compensate for traffic drop



Fresh retailer deploying store staff to target nearby residential communities and recruit consumers to order via WeChat

Case-study (minimizing disruptions): CPG companies are shifting marketing focus and capturing consumer behaviors/emotions during 2019-nCoV

Challenges in marketing emerge...

Reduced marketing effectiveness, due to lowering consumer sentiment, unstable audience emotions as well as sales loss in offline

Marketing in offline (outdoor, in-store, etc.) almost ineffective as physical store traffic plummeted

Marketing content required to cater to consumer emotions in special circumstances - fighting against virus has become "one-and-only" social media theme



...CPG companies are shifting marketing focus to encounter the situation



Reduce marketing investments but avoid complete absence on media

- Q1 marketing spend reduced by at least 30% (80% for some companies), basic level maintained for future demand bounce-back
- Shifting Q1 marketing spend to Q2 and consider to increase marketing contents that associated with positive energy and mainstream tonality



Capture consumer behavior change and focus on personalization

- Marketing personalized to individual mobile; paused 100% offline ads and 90% online media, remaining 10% focusing on Tik-tok and Taobao live-streaming
- L'Oreal Paris for instance - its Taobao live-stream viewership during 2019 nCoV so far reached 70% of that in 2019 double-11, doubling of the company's expectation



Be selective on marketing contents and speak to consumer emotions

- Pause all high-fashion and entertainment topics, such as New York Fashion weeks, marketing related to celebrity endorsement, etc.
- Contents focusing on "fighting against virus" and "love and family", aligning with mainstream tonality on social media

Case-study (minimizing disruptions): Companies explore alternative channels or business models to compensate growth during SARS and 2019-nCoV

Focus on "non-core" retail channels



2003-SARS: Restaurant channel plummeted during SARS due to reduced traffic

- Temp. shifted channel focus :**
- Tsingtao actively developed channel network, shifted marketing resource from restaurant to community shops
 - Maintained 7% growth in 2nd season while industry was in decline

Leverage emerging touch-points



2019-nCoV: High demand growth from MT/eCom put pressure on limited supply

- Actively cooperated with O2O platform in the face of 10x order/demand growth**
- Analyze eCom sales data to ensure assortment precision
 - Require open access for take-out order data to plan supply accordingly
 - Joint dispatching with different platforms, adopting various delivery methods

Shift to online 2C business model



2003-SARS: Significantly reduced offline traffic and business (B2B) demand

- Alibaba launched C2C eCom platform in May, 2003 to supplement decline in B2B**
- Alibaba launched a "Integrity Link" ads to promote e-commerce
- JD shifted from physical stores to eCom and launched website beginning of 2004**
- Leveraged QQ for online commerce during 2003

Tap into social commerce aggressively

Intimate-wear retailer

2019-nCoV: Significantly reduced offline traffic in physical stores

- Brand Co. initiated mini-program campaign targeting 100Mn RMB in online sales**
- Asked all employees to push wechat mini program to social circles
 - Chairman and CEO both leading in sales ranking, showing dedication to the initiative and motivating rest of the staff

Case-study (minimizing disruptions): Aeon supported gov't to gain consumer confidence in Fukushima crisis

Aeon launched "Gambaro Nippon" Campaign to support government and serve local communities with highest level of commitment and integrity

- Gambaro Nippon" campaign: a nationwide bargain sale to boost consumer confidence and alleviate mood of "self-restraint"
- Provide consumers with opportunities to contribute to disaster recovery through charitable activities such as Aeon's yellow receipt campaign
- Advocate the belief that it's good to shop again and it's acceptable to have fun again

Business impact: Both Aeon and associated specialty stores achieved higher-than-expected sales during the campaign

Social impact: Enhanced relationship with government for re-gaining consumer confidence and better connections with local communities



Case-study (minimizing disruptions): Walmart deployed various employee assistance and front-line empowerment in response to Hurricane Katrina



Implemented community services

- Eventually donated ~\$32M to various Katrina relief efforts
- Shipped ~2,500 truckloads of merchandise aid in 3 weeks
- Re-open 111 out of 125 stores within 10 days
- Distributed free merchandise to worst-hit areas
- Put a price-freeze into effect in the region affected



Provided employee assistance

- More than 34,000 employees were displaced, with 98% contacted through emergency call-center
- Promised displaced employees work at any other store
- Offered a one-time cash payment
- Expanded emergency call center to 80 people and fielded 43,000 calls within four weeks



Empower talents at front-line

- In several cases store managers allowed emergency personnel or local residents to take store supplies as needed, free of charge
- Associates turned the store into a headquarters and sleeping area for local police, many of whom had lost their homes in the storm

Case-study (capturing bounce-back): Lyfen and SF Express made bets on strategic investments post-2003-SARS, which boosted later growth

Lyfen: Grew store network for stronger presence



- Leading retailers shut down due to the 2003 SARS epidemic
- Lyfen, a small snack retailer under 1.5 years old then, aggressively raised funding and **acquired 40+ stores in prime locations in Shanghai at low prices**
- After 2003, **the number of Lyfen stores increased from 4 to 88 with an annual growth of 20-30%, and has become a leading snack brand**

Source: Press release; BCG analysis

SF Express: Signed aircraft lease agreements at scale, tapping into air express business



- 2003 SARS epidemic crippled the shipping sector
- SF Express founder Wang Wei **set a foothold in air express services** and became the 1st shipping company to use all-cargo aircrafts:
 - Mortgaged his property and **leased 5 all-cargo aircrafts from Yangtze River Express**
 - Signed for **dedicated belly freight of 230 routes**
- Leveraging timeliness of air freight, SF Express greatly expanded its express business later on, **with an annual growth of >50%**

Case-study (capturing bounce-back): C-trip solidified leadership position with a focus on developing & acquiring talents during 2003 SARS

Ctrip : Retaining staff and acquiring industry talents to harvest retaliatory consumption

- Travel and tourism plummet during SARS, business of Ctrip declined 70%¹
- Ctrip estimated SARS would pass within 2-3 months and the industry will embrace retaliatory consumption
 - Refuse to lay-off employees, adjusted work duration and reduce salary to 60% instead
 - Acquired talents from competitors
 - Organized extensive internal trainings during this time
- Captured post-SARS consumption, 3rd season sales grew 73% compared to 1st season in 2003



Case-study (capturing bounce-back): Haidilao revises business planning to cope with weakened demand and prepare for recovery

Haidilao : Adjusted business planning to prepare for recovery

- Revise business plan
 - Re-set financial planning, phasing, targets and incentives
 - Adjust supply chain and goods delivery/allocation plan
- Enhance brand influence via social welfare programs
 - Strengthen brand influence and awareness by participating in social welfare programs and publicizing company-wide prevention and control measures in PR campaigns
- Implement cost-control initiatives
 - Review promotion plans and focus on ROI
 - Suspend brand marketing activities
 - Postpone field store visits





Case-study (building advantages): Home Depot utilized data analytics to provided assortments relevant to different phases after Hurricane Katrina



1. Timing of each event may have a long "tail;" this analysis focuses on the heaviest periods of each phase for merchandising and supply chain planning purposes
Source: conversation with The Home Depot's hurricane response team

Case-study (building advantages): Companies provided support to customers in exchange of more channel control; also actively built partnerships

Support dealers on cash flow with contingency funding



2003-SARS: Volvo dealers in trouble with cash flow, as consumers delayed purchases

Adjusted performance target on dealers:

- Volvo canceled performance review on Feb. to ease dealers pressure

Established contingency fund:

- Established 10M fund to support dealers on employee salary

Launch joint-logistics to support their distributors



2019-nCoV: logistics capacity highly constrained, causing challenges to distributors

Carefully tracking and targeted supply:

- Contacted distributors one-by-one during critical reopen period in mid Feb

Joint-dispatch to support distributors, using its own logistics company

Full distribution capacity restored >50%, matching the 60% store reopen, leading competition by ~20%¹

Form digital partnership and seek sources of growth



2003-SARS: More potential partners with high willingness to collaborate after SARS

Collaborate with technology partners and build eco-system

- e.g. introduced Nike + Sportsband Kit in Apr. 2008, with chip integrated in shoes
- e.g. Nike + Sportswatch introduced in Sep. 2010

Note:1. By end of Feb.9th

Source: Press release, expert interviews; BCG analysis



Case-study (building advantages): Starbucks revived business through frequent customer/community engagement via CRM programs post 2008-crisis

Starbucks facing severe challenges during 2008-2009...

900+ Shops shut down '08-09

7,000+ Employees laid off during '08-09

Cheaper Product offerings from competition, i.e. McD

...Starbucks prioritized on building strong engagements and collect ideas from communities, loyal customers as well as employees



Establish community via social media marketing

Roll out "My Starbucks Idea" to involve customers on products, services, layout, advertising, corporate social responsibility, in-store music, etc.

- 93k+ ideas gathered; 100+ ideas implemented
- 1.3M users on social media with 5.5M PV per month



Interact with customers via CRM/loyalty programs

Upgrade iPhone app with features such as store locator, nutrition-based information and rewards program
Start to allow customers to customize drinks and share with community via "MyStarbucksSignature"



Motivate/empower staff thorough digital platform

Separate webpage for employees for idea generation
Starbucks' Twitter handling established in 2008, following a suggestion from one barista

Case-study (building advantages): Leading CPG companies applied Zero-based-budgeting (ZBB) for strict cash flow and cost control, after 2008-financial-crisis

Context



Leading CPG companies struggled with declining business after the financial crisis and began to apply ZBB

As of 2016, 40% of US companies had adopted ZBB to control cost, incl. leading FMCGs such as P&G, Unilever, Coca Cola, Kraft and ABI

Value of ZBB

Ensure all expenses are **necessary and effective** in **boosting revenue and growth**

Previous practices

- **Based on historical levels:** refer to past budgets and revenues and apply certain growth rates
- **Expenditure “black box”:** control large budgets only, without specific planning and stipulation of each budget
- **Ex-post mgmt:** Finance only intervenes when there is a budget overrun, but lacks early warning and mgmt system

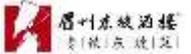
Zero-based budgeting

- **Based on strategic goals:** review correlation between expenditure and strategic goals and start budgeting from a "zero base"
- **Expenditure transparency:** business units calculate bottom-up spend of each initiative for sanity check
- **Ex-ante alert:** Finance can track expenses in real time based on budgets and is able to identify risks at early stage

2%
cost saving

at a higher spend efficiency, with growth ensured

Implications (small/mid enterprises): Need to focus on surviving the crisis first and then proactively plan for bounce-back post 2019-nCoV

| | | | Case-study ref. |
|-----------|---|---|---|
| Near-term |  "People" - talent retention | Stabilize morale and prioritize employee safety; establish "emergency war room" to ensure speedy response and swift decisions during crisis period |  |
| |  "Money" - cash flow mgmt. | Re-negotiate payments and reduce all non-essential expenses; seek for potential short-term funding support from partners/investors |  |
| |  "Goods" - inventory mgmt. | Reduce excess inventory and close poor-performing stores; re-allocate resource based on market needs, i.e. reducing dine-in hours and increase delivery crew size |  |
| Mid-term |  Planning & system | Adjust annual planning & projections to reflect estimated impact and budget resources early to jumpstart recovery |  |
| |  Strategic investments | Identify undervalued opportunities with strong growth potential, or of strategic value to current business |  |
| |  People & organization | Grow talent pool and leverage down-time to up-skill workers; set up organization for success during recovery |  |

Implications (larger companies): Should aim to stabilize the business and build structural capabilities during or post 2019-nCoV

| | | | Case-study ref. |
|-----------|--|---|---|
| Near-term |  Alternate of channel | Shift attention to social/O2O, increase level of consumer engagement and diversify promo mechanism; make sure sufficient inventory, resources and talents deployed |  |
| |  Fulfillment guarantee | Secure inventory and logistics capacity for product with high demand; particularly watch out the sales shift from offline to online and get prepared/coordinated |  |
| |  CSR and community assistance | Initiate authentic, relevant campaigns re. current situation, not just donations; strive to elevate corporate image and enhance gov't relationships through CSR |  |
| |  Talent/staff empowerment | Empower staff, particularly first-line, to better capture biz and reduce comm. cost (esp. during work-from-home), i.e. flexibility in markdown, social idea gathering |  |
| Mid-term |  Product/program innovations | Design collaboration to express positive energy; launch programs tailored to "stay at home", such as in-home fitness program for sportswear |  |
| |  Business planning/analytics | Utilize analytics to assemble range/assortment that best suits current consumer needs; implement reasonable discount or markdown to drive sales |  |
| |  Route-to-market optimization | Support customers or suppliers in exchange for better control, such as real-time data reporting, CRM bridging/placement, etc.; increase DTC esp. online business |  |
| |  Eco-system development | Seek out partnership with potential digital eco-system players - potential partners also look for collaboration and sources of growth, which makes things easier |  |
| |  Digital/social mkt enhancement | Diversify digital mkt and enhance capabilities, fully utilize social to stay engaged, invest in media that are "currently relevant", i.e. more gaming/sports watching |  |
| |  CRM and membership build-up | Capture loyal customers' value to compensate loss from offline; increase membership and uplift customer bonding |  |

Appendix: China production data

Chinese provinces exposed to COVID-19 are key to exports

As of 2/24/2020

COVID-19 exposure

Infection rate per 10k ppl¹



Export exposure²
Share of China exports (%)

1. Infection rate is the percentage of confirmed infections from the total province population. 2. Export data likely skewed toward localities with large ports.
Source: China National Bureau of Statistics, BCG GA Geopolitics & Trade analysis

Double-click: Infection rate and retail production

| Province | Hubei | Zhejiang | Jiangxi | Chongqing | Beijing | Hainan | Anhui | Hunan | Guangdong | Henan |
|---|--|--|---|--|---|---------------|---|--|---|--|
| Infection rate per 10K ppl ¹ | 11 | .21 | .20 | .19 | .19 | .18 | .16 | .15 | .14 | .13 |
| Retail produced >\$7B (2017) ² | Total: ~\$230B • Food/Bev. • Electronics • Other ³ • Apparel & Luxury • Office Supplies • Pharma. | Total: ~\$300B • Electronics • Apparel & Luxury • Food/Bev • Other • Office Supplies • Pharma • Furniture | Total: ~\$180B • Electronics • Food/Bev • Apparel & Luxury • Pharma. • Other | Total: ~\$130B • Electronics • Food/Bev. • Other • Pharma. | Total: ~\$70B • Electronics • Pharma • Food/Bev. | Total: ~\$10B | Total: ~\$250B • Electronics • Food/Bev. • Apparel & Luxury • Pharma • Other | Total: ~\$185B • Food/Bev. • Electronics • Pharma. • Apparel & Luxury • Office Supplies | Total: ~\$1T • Electronics • Other • Apparel & Luxury • Food/Bev. • Office Supplies • Furniture • Pharma | Total: ~\$60B • Food/Bev • Electronics |
| Share of pop. ('17) | 4% | 4% | 3% | 2% | 2% | 1% | 5% | 5% | 8% | 7% |
| Share of GDP ('18) | 4% | 6% | 2% | 2% | 3% | 0.5% | 3% | 4% | 11% | 5% |
| Share of exports ('18) | 1% | 13% | 1% | 2% | 1% | 0% | 1% | 1% | 28% | 2% |

1. Infection rate is the percentage of confirmed infections from the total province population. Colors organized by green = below median (.08%), yellow = above median but below outlier, red = significant outlier in highest infection rate 2. By gross value of industrial output (descending). Totals include sum across all major retail categories. 3. "Other" contains general merchandise items

Source: National Bureau of Statistics of China, WHO Coronavirus situation reports; BCG analysis

Double-click: Infection rate and retail production

| Province | Heilongjiang | Shanghai | Ningxia | Tianjin | Guizhou | Shandong | Jiangsu | Fujian | Shaanxi | Sichuan |
|---|--|---|---------------|---|---|--|---|--|---|--|
| Infection rate per 10K ppl ¹ | .13 | .12 | .10 | .09 | .09 | .08 | .08 | .07 | .06 | .06 |
| Retail produced >\$7B (2017) ² | Total: ~\$70B • Food/Bev. • Other ³ | Total: ~\$157B • Electronics • Food/Bev. • Pharma. • Apparel & Luxury | Total: ~\$10B | Total: ~\$116B • Electronics • Food/Bev • Pharma. • Other • Apparel & Luxury | Total: ~\$60B • Food/Bev. • Electronics | Total: ~\$715B • Food/Bev. • Electronics • Other • Pharma. • Apparel & Luxury • Office Supplies • Furniture | Total: ~\$1T • Electronics • Food/Bev. • Apparel & Luxury • Other • Office Supplies • Pharma. | Total: ~\$315B • Apparel & Luxury • Electronics • Food/Bev. • Office Supplies • Furniture | Total: ~\$90B • Food/Bev. • Electronics • Other • Pharma. • Apparel & Luxury • Office Supplies • Furniture | Total: ~\$240B • Food/Bev. • Electronics • Other • Pharma. • Apparel & Luxury • Office Supplies • Furniture |
| Share of pop. ('17) | 3% | 2% | 0.5% | 1% | 3% | 7% | 6% | 3% | 3% | 6% |
| Share of GDP ('18) | 2% | 4% | 0.4% | 2% | 2% | 8% | 10% | 4% | 3% | 5% |
| Share of exports ('18) | 0% | 7% | 0% | 2% | 0% | 7% | 17% | 4% | 1% | 2% |

1. Infection rate is the percentage of confirmed infections from the total province population. Colors organized by **green** = below median (.08%), **yellow** = above median but below outlier, **red** = significant outlier in highest infection rate 2. By gross value of industrial output (descending). Totals include sum across all major retail categories 3. "Other" contains general merchandise items

Source: National Bureau of Statistics of China, WHO Coronavirus situation reports; BCG analysis

Double-click: Infection rate and retail production

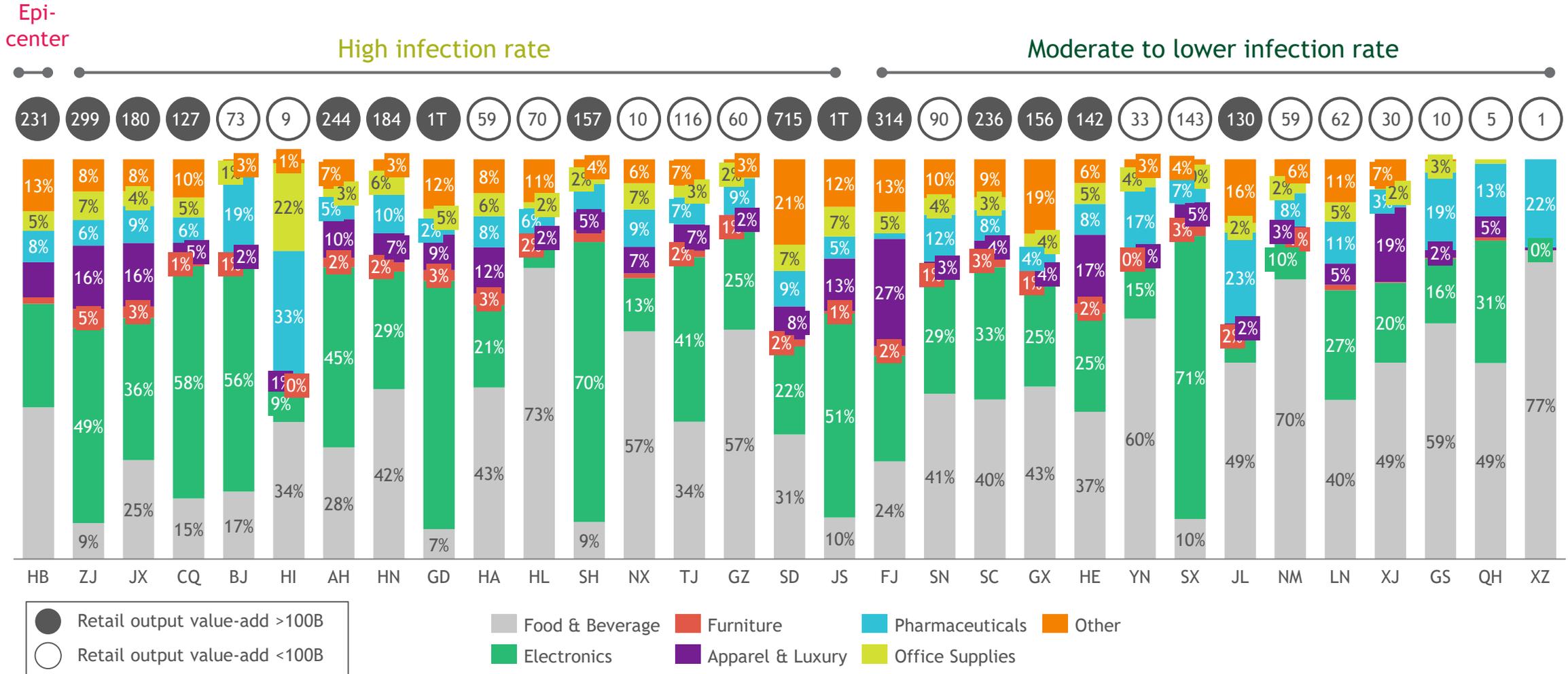
| Province | Guangxi | Hebei | Yunnan | Shanxi | Jilin | Inner Mongolia | Liaoning | Xinjian | Gansu | Qinghai | Tibet |
|---|---|--|--|--|---|---|---|--|---------------|--------------|--------------|
| Infection rate per 10K ppl ¹ | .05 | .05 | .04 | .04 | .03 | .03 | .03 | .03 | .03 | .03 | .000 |
| Retail produced >\$7B (2017) ² | Total: ~\$160B <ul style="list-style-type: none"> Food/Bev. Electronics Other³ | Total: ~\$140B <ul style="list-style-type: none"> Food/Bev Electronics Apparel & Luxury Pharma. Other Office Supplies | Total: ~\$30B <ul style="list-style-type: none"> Food/Bev. | Total: ~\$140B <ul style="list-style-type: none"> Electronics Food/Bev Pharma. Apparel & Luxury | Total: ~\$130B <ul style="list-style-type: none"> Food/Bev Pharma. Other Electronics | Total: ~\$60B <ul style="list-style-type: none"> Food/Bev | Total: ~\$60B <ul style="list-style-type: none"> Food/Bev. Electronics | Total: ~\$30B <ul style="list-style-type: none"> Food/Bev. | Total: ~\$10B | Total: ~\$5B | Total: ~\$1B |
| Share of pop. ('17) | 4% | 4% | 3% | 2% | 2% | 2% | 3% | 2% | 2% | 0.5% | 0.25% |
| Share of GDP ('18) | 2% | 4% | 2% | 2% | 2% | 2% | 3% | 1% | 1% | 0.3% | 0.2% |
| Share of exports ('18) | 1% | 2% | 0% | 1% | 0% | 0% | 2% | 1% | 0% | 0% | 0% |

1. Infection rate is the percentage of confirmed infections from the total province population. Colors organized by green = below median (.08%), yellow = above median but below outlier, red = significant outlier in highest infection rate 2. By gross value of industrial output (descending). Totals include sum across all major retail categories 3. "Other" contains general merchandise items

Source: National Bureau of Statistics of China, WHO Coronavirus situation reports; BCG analysis

Electronics and apparel are important categories impacted by virus

Composition of retail-relevant products output value by province



Source: National Bureau of Statistics of China, WHO Coronavirus situation reports; BCG analysis

Retail sectors by top ten highest producing provinces (II)



Apparel and Luxury



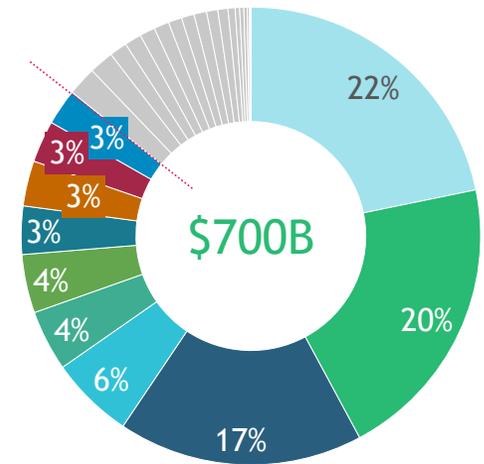
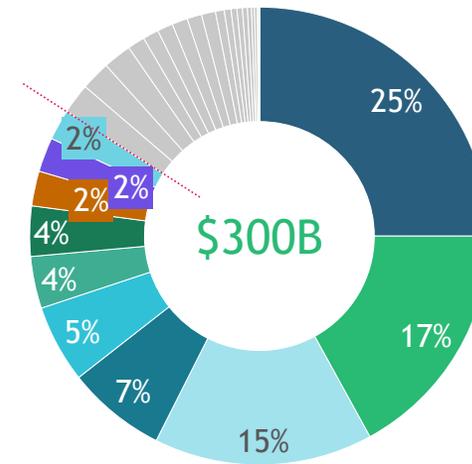
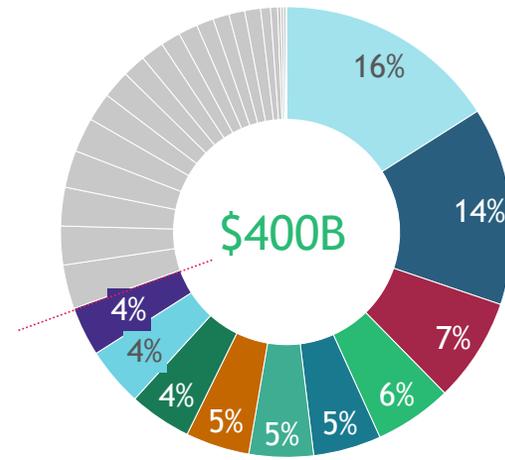
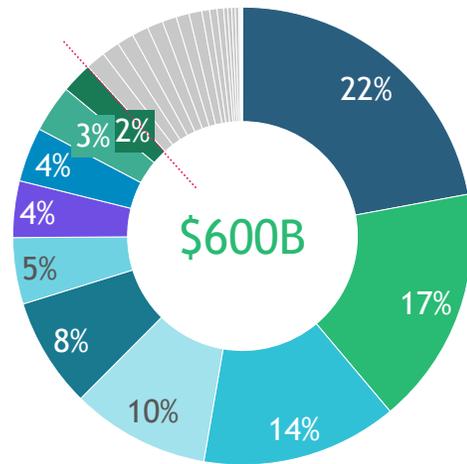
Pharmaceuticals



Office Supplies



Other



Source: National Bureau of Statistics of China; BCG analysis

Backup: detail into retail categories

Retail categories

- 1) Food & Beverage
- 2) Electronics
- 3) Apparel & Luxury
- 4) Furniture
- 5) Office supplies
- 6) Pharmaceuticals
- 7) Other - general merchandise



Sectors included from National Bureau database

- 1) Manufacture of Beverages; Manufacture of Canned Foods; Manufacture of Food; Manufacture of Distillate Spirits; Manufacture of Liquor, Beverage and Refined Tea; Manufacture of Sugar Processing of Food from Agricultural Products
- 2) Manufacture of Communication Equipment, Computers and Other Electronic Equipment; Manufacture of Electrical Machinery and Equipment
- 3) Manufacture of Leather, Fur, Feather, Down and Related Products; Manufacture of Textile Wearing Apparel, Footwear and Caps; Manufacture of Textile Wearing Apparel, Footwear and Headgear; Spinning and Weaving of Cotton and Chemical Fibers and Their Finishing Through Printing and Dyeing; Spinning and Weaving of Wool and Its Finishing Through Printing and Dyeing; Tanning and Dressing of Leather
- 4) Manufacture of Furniture
- 5) Manufacture of Instruments and Meters, Machinery for Cultural Activity and Office Work; Manufacture of Paper and Paper Products
- 6) Manufacture of Medicines
- 7) Cultural, Educational, Arts and Sports Goods; Manufacture of Articles for Culture, Education and Sport Activities; Manufacture of Rubber and Plastic Products; Other Manufacturing; Processing of Timbers, Manufacture of Wood, Bamboo, Rattan, Palm and Straw Products

China is the dominant foreign supplier for US retailers

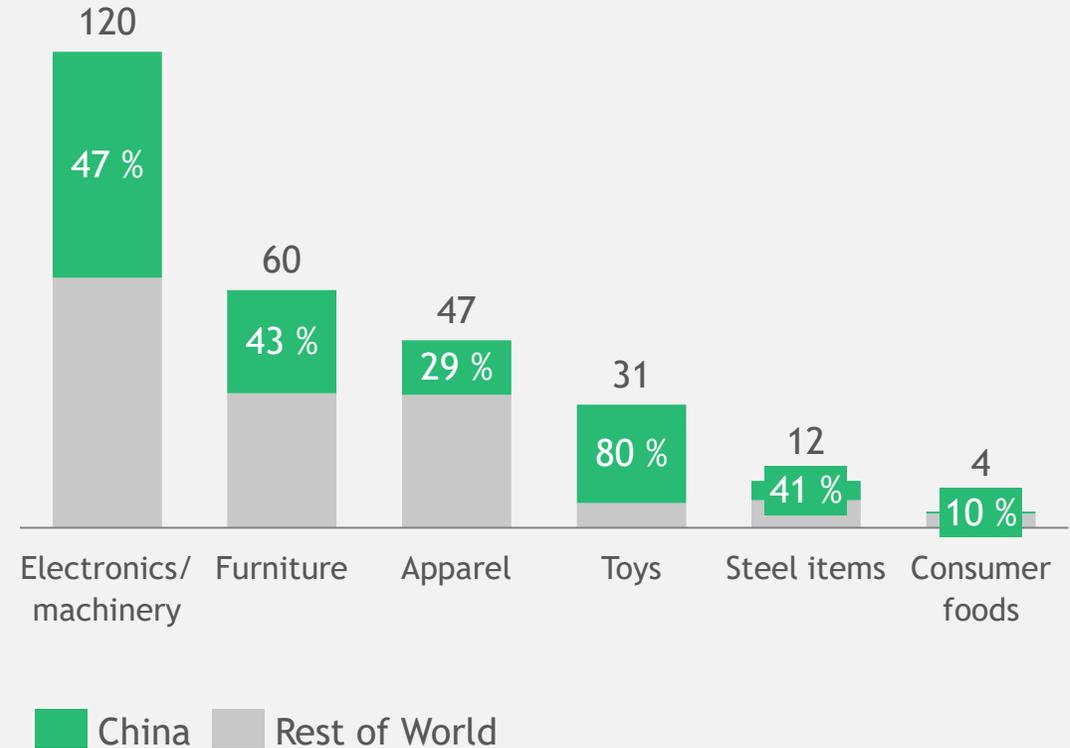
Dependency across all retail products
(China share of US imports, 2019)



China share of US imports

- >80%
- 51-80%
- 21-50%
- 11-20%
- <10%

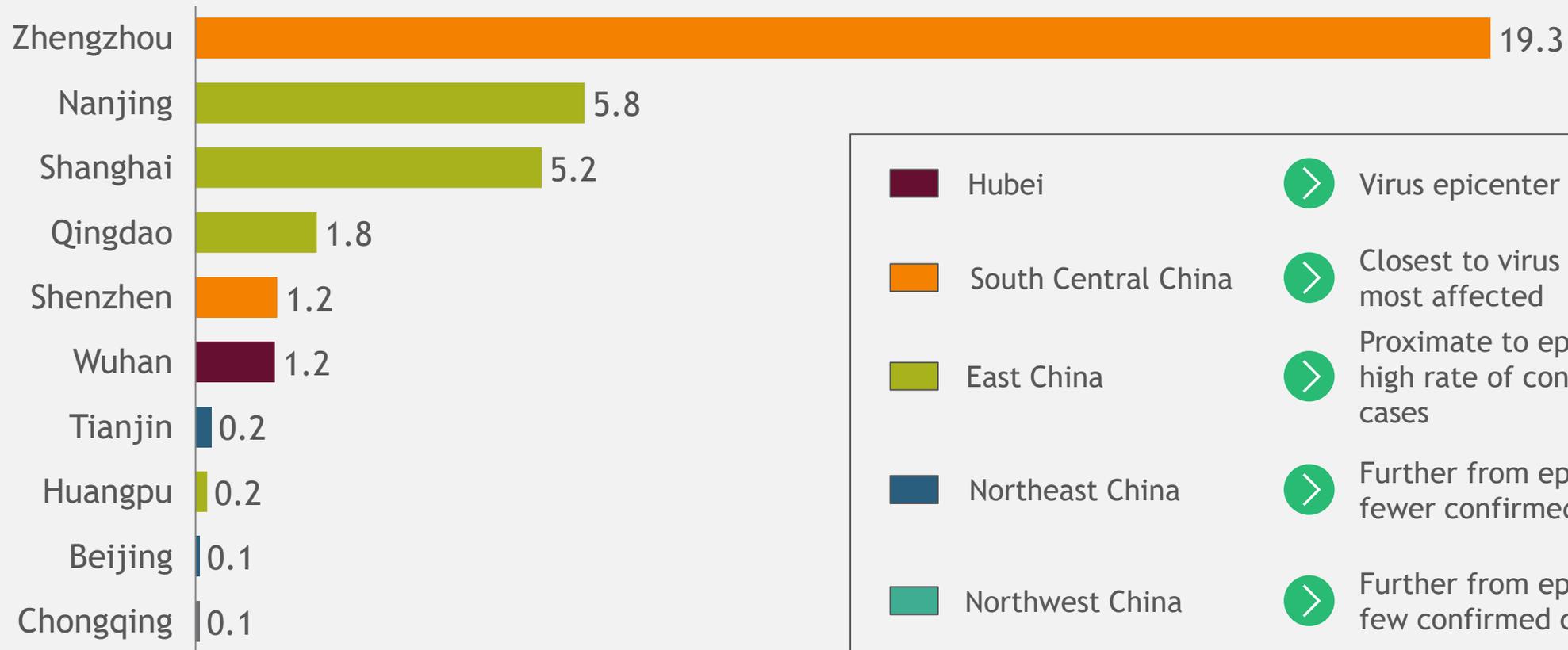
Dependency by major retail category
(2019 US imports, \$B)



1. Each product corresponds to one US HTS tariff line.
Source: IHS Markit Global Trade Atlas; BCG GA Geopolitics & Trade analysis

China cell phone exports to US show Wuhan exposure

Top10 districts in China exporting cell phones to US, 2018 (\$B)



Note: Cell phones are under tariff heading HS 851712.

Source: IHS Markit Global Trade Atlas; BCG GA Geopolitics & Trade analysis

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