



ACGA fourth column in Directors and Boards Magazine
Contributed by ACGA member, Federated Hermes
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SUMMARY:

The purpose of this article is to highlight the role of board directors in times of public health crisis, and to share global best practices in the areas of business purpose, supply chain management, human capital management and industry collaboration that will help put companies in a stronger and more resilient positions to cope with the unknowns in future.

1. BACKGROUND

A public health crisis often leads to regulatory changes, but more importantly cultural expectations and human behaviour. The 2003 severe acute respiratory syndrome (SARS) epidemic that occurred in Hong Kong in 2003 caused irreversible change in public hygiene awareness in the region. Many buildings there now have published notices on how often the elevator buttons are sanitised. It has become rare to see people spitting in public places, which was a common sight in the years before the late 1990s.

In the UK, the defining scandal was mad cow disease, or bovine spongiform encephalopathy (BSE), a brain disorder linked to humans consuming contaminated meat from cattle being fed recycled carcasses of animals and becoming infected. The outbreak started in 1986 and reached a peak in the early 1990s when there were close to 40,000 confirmed cases¹. Experts believed that the disease was passed onto humans through processed meat products that used mechanically recovered meat, which could have been contaminated. As a result, Japan banned imports of meat-and-bone animal feed from Britain, while the EU announced a ban on British beef and beef products. The US Food and Drug Administration banned protein made from animal carcasses. The BSE crisis led to better testing and control of food safety, heightening consumer risk awareness and enhancing supply chain integrity in the UK.

Similar learnings can be drawn from a food safety crisis in China. The 2008 melamine milk contamination scandal led to a tightened testing process to ensure product safety with greater vertical integration and controls over the Chinese dairy sector. Nowadays, companies are proud of their overall supply chain control and monitoring capabilities and even leverage satellite images, surveillance and blockchain technology to better manage product provenance and safety.

Given the current coronavirus (COVID-19) outbreak, the following sections highlight four topics for board members and executives of companies to consider in the event of a public health crisis. We believe that by managing these key environmental, social and governance (ESG) issues adequately, companies are well positioned to create long-term value for their shareholders, as well as for other stakeholders.

¹ <https://www.bbc.co.uk/news/uk-45906585>



2. A BOARD'S ROLE IN CRISIS MANAGEMENT

We recommend board members, especially the chair of the risk management committee take a proactive role in crisis management.

Board directors have the fiduciary responsibility to protect shareholder interests and it therefore sits within the board's mandate to oversee governance control and risk management in a crisis. A good crisis response is about swiftly addressing what has gone wrong and what management is going to do about it and lessons learned for the future. It is also about communication and engagement - with customers, suppliers, staff, regulators, the public using social media and other communication methods.

An enterprise-wide alert system should be put in place to identify when crisis management should take effect, in which a company should follow its established Business Continuity Plan (BCP). A BCP should have a detailed plan indicating contact arrangements and alternative business procedures built on explicit scenarios to address the different crises a company might face.

Increasingly, companies are adding more scenarios to their BCP, related to cybersecurity attacks and climate change events, such as storms, hurricanes and flooding which have a physical impact on assets.

When reviewing the history of public health crises, it is apparent that the number and severity of cases seemed to have accelerated since the 2000s (Figure 1):

Figure 1: Examples of public health crises since the 1960s

Year	Public health crisis
1963	Birth defects by thalidomide
1981	Toxic oil syndrome or simply toxic syndrome HIV/AIDS
1996	Bovine spongiform encephalopathy (BSE), commonly known as mad-cow disease
2001	Anthrax attacks in the US, also known as Amerithrax
2003	Severe acute respiratory syndrome (SARS)
2004	Avian influenza (H5N1), sometimes avian flu, and commonly bird flu
2008	Tainted milk scandal, involving milk and infant formula, and other food materials and components, adulterated with melamine.
2009	Pandemic H1N1/09 influenza
2012	Middle East respiratory syndrome-related coronavirus (MERS-CoV)
2014	Ebola virus epidemic in West Africa
2015	Zika virus outbreak
2019	COVID-19 or Wuhan coronavirus outbreak

Crisis management should be an integral part of the wider organisation's resilience measures and not simply impromptu actions to be taken when all other options have failed. Crises should be ranked in levels of severity with examples on how severity is defined and when escalation may occur.

We recommend company board directors and executive management teams consider including or updating their BCP with public health scenarios, taking into consideration the global supply chain, international operations with staff travelling worldwide and customer needs in time of crisis. The BCP should be regularly reviewed and if needed, emergency monitoring measures should be put in place. Using the COVID-19 crisis as an example, we recommend board directors and senior executives to consider the following as the crisis unfolds:



- **Manage according to the momentum of crisis:** The board should ensure that the company has established a 24/7 communication platform for key personnel to be kept informed. A dashboard should be established to monitor death toll and case statistics²; social media search trends and discussion on relevant chatrooms. The company should provide regular updates on its corporate social media account to maintain engagement with stakeholders. When COVID-19 was first reported, it was difficult to gauge whether it would turn epidemic, however, when China's national health commission confirmed human-to-human transmission on 20 January 2020, the crisis level should have been escalated to one where the highest form of disruption could be possible.
- **Manage the complexity as crisis unfolds:** The board should maintain close communication with the executive management team to understand and anticipate the impact of a crisis. Expected impact includes inventory management (**see section 3 on business purpose**) and interruption in the supply chain (**see section 4 on supply chain management**). During a public health crisis, employees may be required to self-quarantine and may not have strong enough broadband access, adequate equipment or access to materials, especially if they have not had an established practice of flexible and agile working (**see section 5 on human capital management**). Other unintended consequences include psychological impact of the crisis on employees and workers (**see section 6 case study: 2001 anthrax attacks**).
- **Document learning to enhance innovation and crisis resilience:** The lessons learnt during a crisis, from emergency board meetings to tactical responses that are not in the current processes, should be documented for future analysis to improve business processes, competency and inform long-term strategy and risk management planning. This may include stepping up industry collaborations (**section 7 on industry collaborations**) or accelerating research and development to automate certain operations, drone delivery and driverless car pilots. They could be great ways of minimising the impacts of a public health crisis and may even prove to be instrumental in delivery of much needed medical and production supplies to high risk areas. A crisis also enables companies to review their revenue resilience as well as that of their operations and supply chain. Industries that rely on in-person attendance and flow of travellers, such as events hosts, venue hire, hospitality business and airlines, should be diligently reviewing the options for revenue diversification.

3. BUSINESS PURPOSE

We recommend boards consider establishing a clear business purpose statement to guide ethical behaviour in times of crisis

Amidst the coronavirus outbreak, prices of some healthcare products have rocketed - not only in Mainland China, Hong Kong, but also in Indonesia, the US and on ecommerce platform such as Amazon. For example, face masks were sold at HK\$90 each in a Hong Kong pharmacy store in late January.

According to conventional economic theory, prices increase when there is supply shortage. In extreme scenarios like this, short-term arbitrage opportunities emerge for healthcare products or even toilet rolls. However, this prompts questions over companies' business purpose and ethics.

Some larger organisations recognise the importance of business ethics, through which companies earn their social licences to operate. For example, Watsons of **CKH Holdings (1: HKG)** secured supply

² <https://www.worldometers.info/coronavirus/>



of surgical masks and insisted selling them at a reasonable price; **Convenience Retail Asia Ltd (831: HKG)** gave free surgical masks to the elderly; **Hong Kong Television Network Ltd (1137: HKG)** decided to decrease its sales commission for selling surgical masks to 5% from 25% to reduce prices and ensure access to healthcare products. **Alibaba (BABA:NYSE)** connects regions in need to medical supplies like face masks and respirators as global shortages of the essential items continue, whilst committing to fighting counterfeits online. Alibaba and **JD.com (JD.NASDAQ)** have vowed to freeze the price of masks sold on their platforms to ensure accessibility of key supplies. As inventories get depleted and the crisis continues, considering new options of local manufacturing that shortens time to market is essential.

It is always our strong belief that companies can only create and preserve long-term value if they profitably provide goods and services that solve societal needs. Since 2016, we have requested that companies articulate a societal corporate purpose in our corporate governance principles that cover 21 regions, including mainland China and Hong Kong. We argue that shareholder value is not the objective of the corporation but an outcome of the corporation's activities. We urge companies to issue a statement of purpose to ensure better, more transparent and more socially responsible corporate governance.

4. SUPPLY CHAIN MANAGEMENT

We recommend companies improve global supply chain risk management by conducting impact assessment.

Understanding the global supply chain is a challenging task for most global companies. Since Toyota advocated the just-in-time production model to enhance cost and operational efficiency, crisis resilience for companies has reduced, as reported by Apple during the COVID crisis³. It is reported that the company may consider moving its production to Taiwan⁴. We expect the company to have conducted climate change impact testing for this move as Taiwan is particularly susceptible to storms, ranked third to last in the latest Climate Change Performance Index in December 2019⁵. Similarly, if Honda is shifting production to the Philippines⁶, a country most susceptible to climate change as ranked by the Global Peace Index 2019⁷, an impact assessment should have been conducted prior to key business relocation decisions.

Using a combination of structured and unstructured data, we are able to model the severity of company level asset exposure in the Hubei province (Figure 2). These were collected both from individual company reports and data providers that specialise in gathering and modelling geospatial information. Further, whenever possible, we associated each asset with a production level, or a product line, thus creating a more complete picture of the risk that a disruption could have to each company's operations. Similar analysis was conducted for neighbouring vicinities, as seen in Figure 3. Finally, this risk exposure was aggregated to estimate the impact at the fund level, given the fund's exposure to individual companies.

Wuhan, the epicentre of COVID-19, is one of the manufacturing hubs in the Hubei province, which accounts for a quarter of China's steel output. Steel demand, production and logistics challenges

³ Walters, R., Mcgee, P. and Blackshaw, T. (2020) Coronavirus forces Apple to warn over iPhone sales Financial times 17 February 2020. <https://www.ft.com/content/ab59aac6-51ce-11ea-8841-482eed0038b1?shareType=nongift>

⁴ <https://www.taiwannews.com.tw/en/news/3877773>

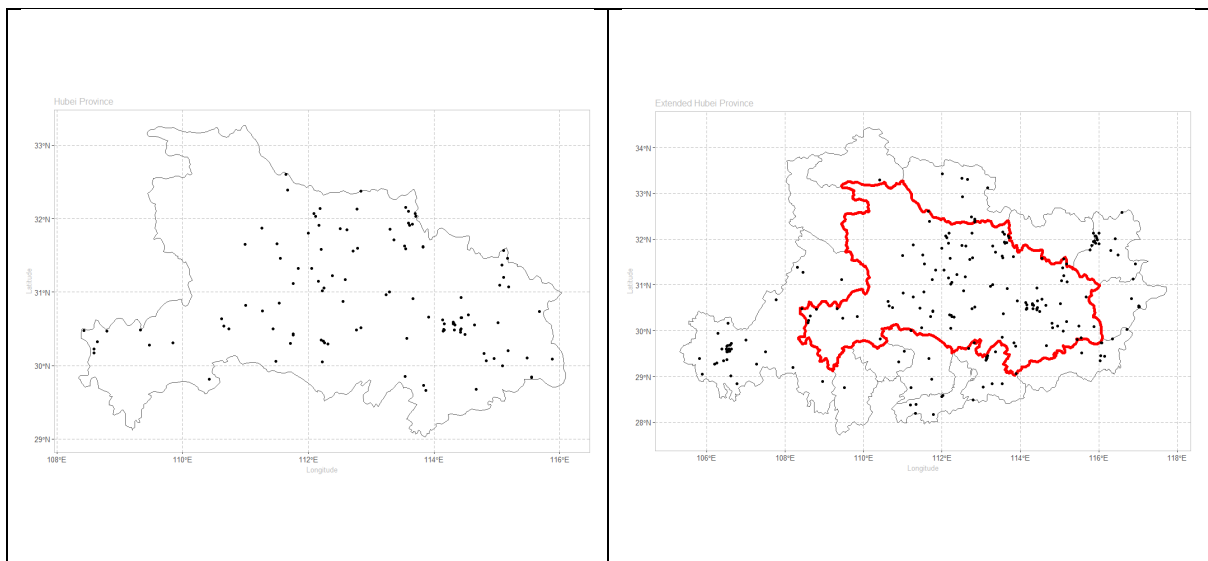
⁵ <https://focustaiwan.tw/society/201912110019>

⁶ <https://www.autoindustriya.com/auto-industry-news/2019-ncov-forces-honda-supplier-to-shift-production-from-wuhan-to-ph.html>

⁷ <http://visionofhumanity.org/app/uploads/2019/06/GPI-2019-web003.pdf> (page 48, Figure 2.35)

persist after extended travel restrictions were implemented in China in early January. Aside from reduced steel production, auto makers like General Motors, Nissan, Toyota, Ford⁸, auto parts suppliers⁹, consumer electronics and their suppliers like Apple and Foxconn¹⁰, pharmaceutical companies and drug makers like Cipla, AstraZeneca, Bayer and GSK could be affected¹¹. The actual impact, especially the supply chain impact, can only be quantified through engagement with companies.

<p><i>Figure 2 Sample portfolio to assess asset exposure In Hubei province</i></p>	<p><i>Figure 3 Sample portfolio to assess asset exposure in Hubei province, and neighbouring areas</i></p>
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5. HUMAN CAPITAL MANAGEMENT

We recommend board members review flexible work practices to support improved health and agility of the workforce.

The nature of work is rapidly evolving. In a knowledge economy where intangible assets, such as human capital, are estimated to comprise on average 52% of a company’s market value¹², it is vital that companies look beyond physical assets to understand sources of long-term value.

There is significant benefit to wider society from happy and fulfilled employees, given that many people spend more time at work than anywhere else. Metals and mining corporation, **Rio Tinto (RIO:LN)**, has wellbeing programmes which encourage employees to improve physical activity,

⁸ <https://asia.nikkei.com/Spotlight/Coronavirus-outbreak/Honda-supplier-to-shift-production-from-Wuhan-to-Philippines>; <https://www.nytimes.com/2020/01/29/business/china-coronavirus-economy.html>

⁹ <https://www.suppliersof.com/all-other-motor-vehicle-parts-manufacturing/cn/Hubei/Wuhan/8037>

¹⁰ <https://www.reuters.com/article/us-china-health-foxconn/foxconn-says-plans-in-place-to-meet-production-obligations-after-virus-outbreak-idUSKBN1ZS094>

¹¹ <https://www.ft.com/content/8630c51c-4cc0-11ea-95a0-43d18ec715f5?shareType=nongift>

¹² https://www.ey.com/en_us/board-matters/how-and-why-human-capital-disclosures-are-evolving



nutrition, sleep and mental health¹³. A key part of worker wellbeing can be due to the working arrangements available to them. Companies which effectively implement an agile working policy can give employees greater flexibility and can lead to a better work-life balance and job satisfaction. For an employer, this will enhance the attraction and retention of talent and maximise productivity. Global energy management firm, **Schneider Electric (SU:FP)** is an example of a great flexible working policy¹⁴.

If companies in China had already implemented best practice agile working arrangements, would the coronavirus' impact on productivity have been lessened? Workers who were already familiar with working from home arrangements for example would better adapt to getting on with their roles, despite the necessary change in working arrangements.

Hang Seng Bank, part of the HSBC Group (**HSBC.LN**) management trainees were recently outed in the press for going hiking instead of working from home, amid the virus outbreak¹⁵. This highlights that the success of agile working depends on a number of factors, including a commitment from individuals and teams to maintain levels of productivity, respect for all stakeholders, and sustaining the expected standard of work, regardless of working arrangements. Companies need to invest the time to ensure these factors are embedded in their company culture.

Ensuring that staff have the technology capabilities to cope with their full workload whilst working from home is crucial to business continuity as well as the wellbeing of workers. **Ping An Insurance (2318: HKG / SHA: 601318)** in its latest financial results announcement published in late February prided itself for being able to leverage its advanced technology platform to deliver business promises, enabling most of its staff to work at full capacity and to deliver a full year financial audit on time.

Of course, there are plenty of businesses where a particular type of agile working arrangement may not be possible due to the nature of the business or production processes. Companies which require workers to be onsite need an effective monitoring system in the event of a public health crisis. For example, do they have an established process for quarantine, are there heat sensors, are there health personnel readily accessible?

Companies need to develop and implement a human capital management strategy to promote best practice physical and mental workplace wellbeing. Certain companies may have existing practices that do not incentivise reporting or if work is paid only if workers turn up, they may not report that they have a fever or call in sick, exacerbating the issue of spreading a virus. Companies should rethink alternative practices and have the right incentive systems in place.

Looking to industry associations and rankings can also be useful to inform the level of work required by companies to reach best practice. Equileap for example ranks companies on their gender equality performance and its scorecard includes flexible working options¹⁶.

¹³ <https://www.riotinto.com/en/sustainability/health-safety-wellbeing>

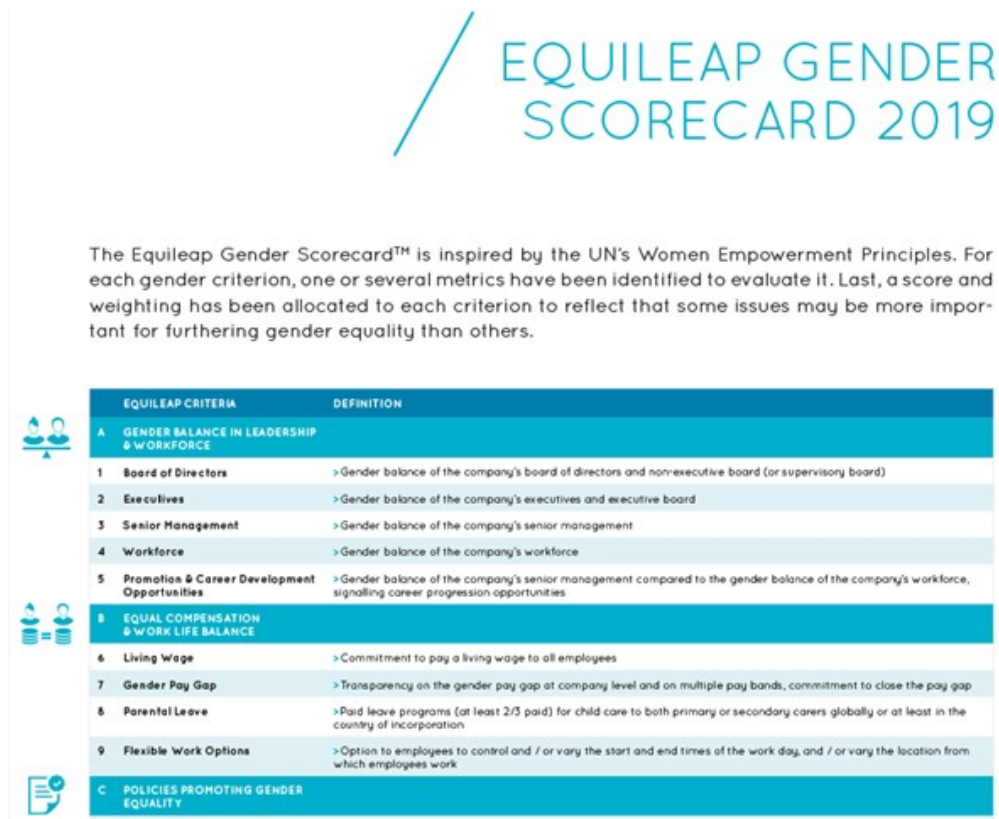
¹⁴ <https://blog.se.com/life-at-schneider-electric/2017/08/01/flexible-work-options/>

¹⁵ <https://www.scmp.com/news/hong-kong/society/article/3050067/hang-seng-bank-management-trainees-flout-work-home-rules-go>

¹⁶ <https://equileap.org/scorecard/>



Figure 4: Equileap's scorecard



The Equileap Gender Scorecard™ is inspired by the UN's Women Empowerment Principles. For each gender criterion, one or several metrics have been identified to evaluate it. Last, a score and weighting has been allocated to each criterion to reflect that some issues may be more important for furthering gender equality than others.

We also recommend board members ensure human rights risks are adequately managed. Employee rights are a priority on the investor agenda as they underpin a company's wider corporate culture, business ethics and enterprise risk management, all of which affect reputation and ability to create and preserve value over the long term. In the event of a public health crisis, employee medical rights may be vital.

Companies need to consider their contractors' terms and access to healthcare as part of this, as there is risk where there is misalignment. The same rule applies to their suppliers, in world where the networks of production and transportation that provide consumers with goods and services are global, vast and complex. Companies must regularly review and update their policies, due diligence procedures and relationships to combat this. In this sense, employee rights become a wider human rights issue and these companies must have good quality relationships with their contractors and supply chain, based on respect for their employees' rights, to be more resilient in times of a crisis.

6. CASE STUDY: 2001 ANTHRAX ATTACKS

The US in 2001, experienced a series of anthrax attacks, over the course of several weeks, beginning on 18 September 2001— one week after the September 11th terrorist attacks. Letters containing anthrax spores, that could cause a serious bacterial infection, were mailed to several news media offices and to two US senators, killing five people and infecting 17 others. There was also a copycat hoax where a letter containing a harmless white powder was opened.

The US House and the Senate office buildings were closed for three working days following the incident. Whilst no one on Capitol Hill became seriously ill or died, the incident caused widespread panic. It is estimated that 5,000-6,000 congress people, staff and journalists lined up to receive free doses of the antibiotic Cipro despite little to no risk of exposure.



Many staff felt frustrated over the minimal information given to them, about treatment options, side effects and potential interactions with other medications.

Prior to this, there was little systematic data on the mental health effects of a bioterrorism threat. Subsequently, research was conducted on Capitol Hill staff to determine the effect that this had on employees. Conditions found included post-traumatic stress disorder. The study found that 30% of those not exposed believed they had been exposed. In addition, a substantial percentage suspected that they had symptoms of anthrax infection and many of them sought medical care.

It can be extrapolated that in significant public health incidents, there are public health consequences other than infection. In this case, many people lost at least some faith in the health authorities, had worsening mental health and took medication that may not have been necessary.

Whilst a different public health crisis, lessons can be learned from this and applied in the COVID-19 context. The lasting impact that these attacks had on those involved, even with very little to no risk of exposure underscores the importance of appropriate mental health support. This current crisis provides an ideal time for employers to review their mental health offering from a crisis perspective, as well as forming an integrated part of an overall employee wellness benefit. The vitality programme of **AIA Group Ltd (1299: HKG)** covers mental health, stress and leverage user data to address these issues proactively¹⁷. It is well established that employers who provide sound mental health support are likely to see decreased absenteeism, increased productivity and associated economic gains.

7. INDUSTRY COLLABORATION

Work together to fight global public health challenges: we recommend companies actively participate in industry associations in preparation for a public health crisis.

Like climate change, we cannot combat global challenges without working with our partners, peers and even competitors. One example is the African swine fever (ASF), a highly contagious viral disease, while not harmful to humans, it kills approximately 80% of infected pigs. The disease is endemic in sub-Saharan Africa and viral outbreaks have occurred in parts of Europe, Russia, Brazil and Eastern Asia. It reached China, the world's largest pork producer, in 2018 and has to date resulted in an estimated loss of 100 million pigs. As a consequence, pork prices have soared, as have beef and poultry. Though there is currently no commercially available vaccine against ASF, research is ongoing across the world and in January 2020, government and academic researchers in the US announced the development of a promising experimental ASF vaccine. Their work could benefit from active participation from companies to accelerate sales and distribution once ready.

In 2016, the UN called for concerted action from governments and industry to address another global public health threat, the development and spread of antimicrobial resistance (AMR). In response, the AMR Industry Alliance was set up by the life science industry to develop sustainable solutions to mitigate the development of AMR. Today over a 100 biotech, diagnostics, genetics and pharmaceutical companies have joined the Alliance to support proactive actions, expertise sharing and collaboration between companies. These companies include **AstraZeneca (AZN:LN)**, **Cipla (CIPLA:NSE)**, **Johnson & Johnson (JNJ:NYSE)**, **Merck (MRK:NYSE)** and **Novartis AG (NOVN:SWX)**. One key output was the development of a unified approach to help reduce environmental discharge of antibiotics and the development of discharge targets.

¹⁷ <https://www.aia.com/en/healthy-living/the-healthiest-workplace.html>



How a crisis can change people's expectations from the government

The BSE or mad cow disease inquiry set up by Tony Blair early in office, though long, detailed and complicated, was held in public. Now people in the UK are hardly surprised by the grilling of ministers and key players, for their role in failing to contain a crisis and what could be done to reduce the negative impact on people and businesses. Civil servants were urged by the BSE inquiry to be less ready to sit on bad news. Ministers, bruised by the experience of BSE and other public health disasters, are more open on public health risks. The public now expects government to be honest with them about the risks.

Conclusion

The covid-19 outbreak is not only a threat to global health but it is also impacting global trade. The world's largest container shipping company, AP Moller Maersk, warned that the outbreak has affected earnings in first quarter, due to lower production at Chinese factories¹⁸. Schneider Electric, the electrical equipment company, has already experienced a EUR300m impact on its revenues in first quarter as factories in China were closed¹⁹. Companies such as mid-market fashion brands with supply chain exposure to China are raising concerns about the potential disruption of manufacturing and dispatch delays of autumn-winter stock²⁰. Samsung Electronics and Apple Inc may also experience delays in the launch of their products. Given that revenues at Samsung Electronics amounted to 12.5% of South Korea's GDP in 2019²¹, we expect the current market correction could be beyond the knee jerk reaction of the virus to include real impact on the economy.

Public health crises can be exceptionally fast moving and the severity of a public health crisis is in many ways unpredictable, this is particularly relevant to the current COVID-19 outbreak. We believe that company board members and executives must consider ESG to better prepare them and mitigate the impacts of a public health crisis to ensure their businesses operate sustainably for the long term. In this article, we have outlined a number of areas where board members can contribute in crisis management, setting the tone on business purpose, overseeing improvements in supply chain management and human capital management. We have included best practices examples on these topics from companies around the world.

At EOS at Federated Hermes, our engagers are discussing the impact of COVID-19 with our companies, seeking insights into the asset exposure in the virus affected regions through the use of our proprietary quant tools. These conversations are highly connected to the engagement themes outlined in our Engagement Plan. A published version can be accessed here²². We hope that by being open and transparent about addressing public health crisis through the lens of ESG, we can support companies in being better prepared to create long-term value for all stakeholders.

¹⁸ <https://www.ft.com/content/417e21bc-53b4-11ea-90ad-25e377c0ee1f>

¹⁹ <https://www.ft.com/content/99374146-53b8-11ea-8841-482eed0038b1>

²⁰ <https://www.ft.com/content/85ce58be-534b-11ea-8841-482eed0038b1>

²¹ Song J and White E (2019) Coronavirus disruption at Samsung could threaten S Korea economy *Financial Times* 26 February 2020.

²² <https://www.hermes-investment.com/ukw/eos-insight/eos/eos-engagement-plan-2020-2022/>