TAKE 5



Coronavirus Update

As the global covid-19 crisis appears to enter a new phase, experts acknowledge that the contagion has hurt not only the health of people, but also the health of companies and investments. Efforts to isolate the virus have stretched supply chains around the world, creating a trade disruption. We reached out to a sampling of our subadvisers for their views on the epidemic's possible impact on markets and investors.

1 The market impact of coronavirus has begun to spread



Kristina Hooper, Chief Global Market Strategist Invesco

The floodgates are opening. Companies are beginning to warn that the coronavirus outbreak will impact earnings, and stocks have begun to react negatively. Apple recently announced that the contagion will cause it to miss revenue forecasts for the quarter. The problems are on both the sales and production ends: Most Apple stores in China remain closed, and while Apple factories there have reopened, they are not operating at full capacity but instead are slowly ramping up production. In addition, Tesla and Alibaba have recently provided coronavirus-related earnings warnings. Alibaba has gone so far as to label the coronavirus outbreak a "black swan event."

Investor worries expand beyond tourism industry

Many investors had been focusing on the front lines of the epidemic – the impact on tourism and transportation. And those are very legitimate concerns, especially given that airlines such as United and American have announced they won't resume regular service to China until April 24 – and there's always the possibility that date could be pushed back. But now, the fact that this contagion will have an impact on both production and demand for a variety of industries is becoming front and center in investors' minds.

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Many factories in China remain closed, and that is sending shock waves through the supply chain. For example, Nissan was temporarily forced to close a factory in Japan because of a shortage in Chinese components. The Chinese automakers' association is even forecasting that auto sales in China are likely to drop more than 10% in the first half of the year.¹

In addition, the impact of the coronavirus has been significant enough that OPEC cut its forecast for global growth in oil demand this year. Of course, this should not come as a surprise: China consumes far more oil today than it did during the SARS outbreak in 2003, and so it's going to have a bigger impact on oil demand.

Many questions remain about the virus

The most difficult part of this situation is not having full information on this particular virus — how quickly a vaccine can be created, how significantly the virus may be able to mutate, and most importantly, how quickly the virus can be contained. The conventional wisdom thus far has been to assume a trajectory similar to that of SARS. However, last week the World Health Organization Director-General cautioned against assuming the situation would be under control by April, suggesting it could still go "in any direction." We are certainly encouraged by reports that infection rates are slowing at the epicenter of the coronavirus, but we are following the situation closely.

Despite these unanswered questions, I continue to believe that governments such as China and the U.S. will provide the policy support needed to combat the effects of this epidemic. China continues to provide significant monetary policy stimulus, including in the last several days. And last week, in his testimony before Congress, Federal Reserve Chair Jay Powell acknowledged the coronavirus threat, recognizing it will impact China and many of its trading partners — including, most likely, the U.S. Powell even left the door open to the possibility that the effects could be significant enough to lead to a "material reassessment of the outlook." We do believe the Fed stands ready to act and provide one or more "insurance cuts" in the face of the contagion.

We believe we are looking at the situation with eyes wide open. We recognize that earnings of many companies will be impacted in the short term. We expect China's economic growth in at least the first quarter to likely fall significantly. However, we have confidence that policy support will be adequate and do believe the economy will snap back as the contagion stabilizes — we see it behaving similarly to a coiled spring because of pent-up demand and positive sentiment around the U.S.-China Phase 1 trade deal. We are confident this will happen — we just don't know when. And so there may be some pain before the situation improves. This suggests investors wait and watch for buying opportunities that may present themselves.

¹ Source: Reuters, "China's auto sales may fall 10% in H1 due to coronavirus - industry association," Feb. 16, 2020



Allianz (II)

Global Investors

Will Wuhan coronavirus hurt the stock market and economy?

Neil Dwane, Global Strategist; Mona Mahajan, U.S. Investment Strategist; Christiaan Tuntono, Senior Economist; Allianz Global Investors

Summary

We expect the Wuhan coronavirus outbreak to hurt China economically in the short term, but we remain positive toward the country's long-term prospects. While supply chain troubles will likely have a broadly negative effect throughout Asia, we don't expect the global economy to be hit as hard as China. Globally, central bank policies, corporate earnings and stabilizing fundamentals remain supportive of risk assets.

Key takeaways

- The recent drag on China's economic growth has been mostly caused by the government's efforts to contain the Wuhan coronavirus necessary steps to get the situation under control.
- China's central bank has already announced a stimulus to bolster its economy, and we expect additional simulative measures due to the coronavirus.
- We remain optimistic about China's long-term potential, although we expect China's insurance sector, airports and leisure industry to suffer in the coming months.
- Much has changed in the world since the SARS epidemic of 2002–2003, and comparisons between it and the new coronavirus may be unhelpful.
- We expect the coronavirus to negatively affect the global economy less than China's, although supply chain problems will likely pressure economic fundamentals, which are fragile albeit improving.

Coronavirus: what's at stake for investors?

The outbreak of the Wuhan coronavirus is the first "black swan" event of 2020. It has made investors exceedingly nervous given China's history of infectious-disease outbreaks and fears of the virus spreading quickly around the globe.

These concerns are understandable, given that hundreds of deaths have already reported and researchers are just beginning to learn how this virus works. The steps China has taken in response – including quarantining tens of millions of people and extending the closure of its stock exchanges beyond the Lunar New Year holiday – have already caused economic damage and a large one-day drop in China's equity market. (However, global markets have rallied after an initial sell-off on hopes that the virus transmission may slow in the coming weeks and new treatments could prove effective.)

Overall, we still have a positive long-term view of China, particularly if the outbreak is brought under control in the coming months. This will take herculean efforts that will undoubtedly come at a huge cost, but we think the Chinese government has the will and means to implement them. In fact, the People's Bank of China already injected huge amounts of liquidity to counter the impact of this new outbreak – though we don't expect this stimulus to improve economic conditions substantially until the virus has been contained.



How could this outbreak affect economic growth?

Global growth will likely be affected by a China slowdown

Although some market-watchers have compared the potential economic impact of this new coronavirus and the 2002-2003 SARS outbreak, there are important differences to consider. We don't yet know the true nature of this new disease, and China has grown much bigger and more economically important since SARS. Moreover, we are now late in the global economic cycle, not at the beginning of an upswing (SARS happened when the global economy was already recovering from the burst tech bubble) and overall, valuations are generally elevated today vs moderate during SARS times. On the positive side, communications and medical technology has improved drastically since SARS. All these factors make the economic impact of this outbreak exceedingly difficult to predict – but a slowdown in China today will likely hurt global growth more than it did 20 years ago.

China's G.D.P. was already falling and will likely drop further

Even before this disease began to spread, China's growth was slowing somewhat as the government worked to lower its economy's overall debt levels and "rebalance" towards a consumption-driven model. We think the Wuhan coronavirus has the potential to depress China's 2020 G.D.P. growth by one percentage point, moving it closer to 5% – though this would still be higher than the growth seen in much of the developed world.

Asia's optimism over trade may subside

Recently, other Asian economies appeared ready to bounce back on optimism surrounding a U.S.-China trade deal. But Asian investors have turned cautious on the realisation that the spread of the Wuhan coronavirus and accompanying quarantines could be much more disruptive to global supply chains than trade tariffs. On the positive side, central banks in Asia still have room to supply monetary stimulus to attempt to jump-start economic growth.

What are the implications for investors?

In China, expect to see more setbacks in key sectors that have already been hurt by the outbreak – including tourism, airlines, gaming, and even oil and other commodities.

In the U.S., risks are more sector-specific – oil and energy, travel and tourism, and some retail/luxury brands could slide lower. But if the virus is contained in the U.S., we believe investors will once again focus on the fundamental factors that have been moving markets – including corporate earnings, Fed monetary policy, broader economic data and U.S. politics.

In Europe, we had started to see tentative signs of stabilisation in manufacturing and trade. But the Wuhan coronavirus may derail this modest recovery in the short term, since European economies are large trading partners of China and Asia.

Globally, until this epidemic is brought under control, multinational corporations will worry about lost revenues, lower trade, and potential store closures in China. Supply chains globally will likely feel an impact if the flow of goods slows or people move around less – whether from quarantines or general virus fears.

Overall, barring any lasting economic shocks from the epidemic, we continue to see a supportive backdrop for risk assets, in the U.S. and globally, with an environment of generally low rates, low inflation and stable growth. But more equitymarket volatility should be expected, particularly after a stellar year in 2019. Keep in mind that equity markets have typically experienced between one and three corrections of 5%-10% per year. The Wuhan coronavirus could still spark the first correction of 2020.



Previous outbreaks caused only temporary setbacks for U.S. stocks



Source: FactSet. Data as at 3 Feb 2020. Past performance is no guarantee of future results.

What does the coronavirus mean for investors?

Alex Dryden, Jennie Li, Meera Pandit, J.P. Morgan Asset Management

J.P.Morgan Asset Management

Financial markets have fallen sharply on concerns of the coronavirus, a respiratory illness first identified in Wuhan, China, spreading globally. While the headlines have been worrying, and no loss of human life is insignificant, it is important to understand the facts. The framework we have adopted for discussing this virus is to consider the three components of a pandemic—contagion, severity and treatment—and how the evolution of those components can shift the market narrative.

Contagion

As of January 30, there were approximately 9,776 confirmed cases. While China is the epicenter of the virus, there were 118 confirmed cases outside of China in 22 different countries and regions. As a point of comparison, the SARS (severe acute respiratory syndrome) outbreak in 2003 lasted about 9 months, from November 2002 to July 2003, with cases spanning 29 countries. While Chinese authorities have responded by placing over a dozen cities on lockdown, there have been a number of challenges in preventing the spread of the virus:

- **Chinese New Year:** Inception of the illness occurred just before Chinese New Year, when an estimated 400 million Chinese take approximately 3 billion trips over the 40-day festival period.
- **Incubation:** The virus could have an incubation period of up to 14 days, meaning it could take up to 2 weeks before an infected individual presents symptoms, making policing the spread of the virus challenging.
- Airborne nature: The virus spreads via droplet transmission (coughs, sneezes etc.)

The rising contagion level is what seems to have triggered uncertainty amongst investors.



Severity

There is no clear information on the actual severity of the virus. As of January 30, there were 213 confirmed deaths related to coronavirus; however, there are few details related to these deaths (e.g., age of patients, additional complications, how quickly they sought medical help). Historically, severity levels have varied dramatically. According to the World Health Organization (WHO), of the 8,098 global cases of probable SARS reported, there were 774 deaths, or a 9.6% fatality rate; meanwhile, the Swine Flu outbreak in 2009 had a much lower level of just 0.03%. Historical analysis related to pandemics is somewhat limited as each illness has its own unique components and considerations.

One promising sign is that there are 187 reported cases of patients who have recovered and were discharged from the hospital. If severity does begin to rise along with contagion, then investor concerns may mount further as potential loss of life and economic damage rises.

Treatment

Viruses, such as the coronavirus, are difficult to treat. It is possible to vaccinate against many viruses, but the development and roll-out of a potential vaccine can take time. At this stage, treatment options are relatively unknown, adding to investor uncertainty.

Economic and market implications

On a recent Monday, the Dow Jones Industrial Average fell more than 500 points, or about -1.5%, in the morning. Oil sold off about -3% and the U.S. 10-year Treasury fell to 1.61% by midday and have both since fallen further. At this point, the market is reacting to contagion, as we have seen identified cases rapidly increase. What may exacerbate or alleviate the market reaction is how treatment and severity evolve.

What we saw back in 2003 with the SARS outbreak was that it had the most significant impact on air travel, tourism, and domestic demand in Asia. Hong Kong, for example, experienced some of the most severe economic impacts, with its G.D.P. growth falling by -0.5% y/y in 2Q 2003, and its retail sales declining by -7.7% y/y that quarter. China's growth slowed to 9.1% y/y, and its retail sales, industrial production, and fixed asset investment suffered. However, these rebounded quickly as the new cases dropped and the Chinese government offered supportive economic measures. As highlighted in the chart below, U.S. equities fared better than stocks in Emerging Markets Asia when concerns over SARS were rising. However, Asian stocks rebounded once concerns about SARS abated. This indicates that prevailing market conditions and fundamentals have a more prominent influence on returns. Unfortunately, the current environment is one of slowing global growth and earnings.

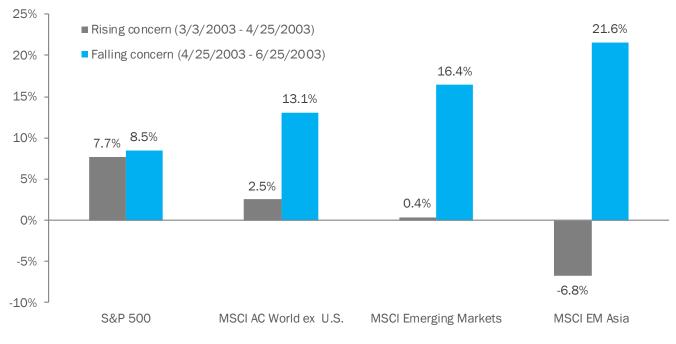
The coronavirus is likely to impact the economy and markets in similar ways, although perhaps to a greater extent. In China, for example, the nature of its economy has changed materially since the SARS outbreak, shifting from an industrializing economy to a more consumer and service-oriented economy. To complicate matters, this outbreak coincides with the Lunar New Year in China, the most important holiday for travel and consumption. As mentioned above, the estimated 3 billion trips taken over this period are likely to be negatively impacted by travel restrictions for 35 million people, and others canceling their plans. Already, travel was down 28.8% on the first day of Lunar New Year compared to the first day last year, according to the Ministry of Transport. Additionally, last year Chinese consumers spent nearly \$150 billion in just the first week of Chinese New Year according to the Ministry of Commerce, but this year, with many confined to their homes, consumption may also drop. A few major multinational companies are temporarily closing factories in the region or re-routing supply chains.



Impacts to the Chinese economy, which has already faced headwinds from slowing global and domestic demand and external trade pressures, are likely to be the most pronounced, and are likely to elicit a policy response from the Chinese government. However, for U.S. investors, markets may be more likely to stabilize, as we have seen few protracted market declines due to health crises, geopolitical risks, natural disasters or political turmoil.

Equity performance during the SARS Outbreak

Price index, U.S. dollar



Source: Factset, MSCI, Standard and Poor's, J.P. Morgan Asset Management.

Coronavirus Business Impacts Likely Short-Lived

ClearBridge Investments

The short-term negative economic impact will likely motivate China and other countries to add to existing fiscal and monetary stimulus measures.

Key Takeaways

- Efforts to contain the rapidly spreading virus have curbed industrial activity at the epicenter of the outbreak in China and caused most consumers to remain home, slowing retail and tourist activity.
- Companies followed by ClearBridge most affected by the national shutdown include semiconductor equipment makers, global retailers and online travel agencies. We believe, however, that such impacts will likely be temporary.
- Dynamic changes in the Chinese economy since its last major health scare in 2003 make comparing the impacts of each outbreak less relevant.

ClearBridge

Investments



Technology, Retail Sectors See Initial Impacts of Chinese Efforts to Contain Outbreak

The outbreak and rapid spread of the coronavirus this month beyond its origin in central China has severely limited business activity across the country. As the world's second largest economy directs its efforts to containing the virus and treating the affected, reports suggest industrial production in the city of Wuhan and the Hubei province – ground zero for the virus – has been shut down. Air travel in and out of China has also been curtailed, with several global carriers suspending service into Shanghai and Beijing, where normally bustling streets are nearly deserted.

The companies we follow at ClearBridge that conduct business in China or rely on Chinese demand are also beginning to quantify the estimated impacts of the virus outbreak on their operations. Here is a brief summary of what we are hearing and our projected impacts on specific companies and industries.

From an information technology standpoint, Wuhan is a technology manufacturing hub that houses several large Chinese semiconductor manufacturers including leading Chinese flash memory producer YMTC, which by our estimates accounted for about 8% of memory semiconductor equipment spending in the fourth quarter. We expect suspension of manufacturing by YMTC would be an incremental negative for semiconductor capital equipment stocks including Applied Materials, Lam Research and ASML, electronic sensors maker TE Connectivity and display equipment providers and a slight positive for NAND manufacturers by removing incremental supply from the market.

Consumer demand in China has already been affected by precautionary store closures and lower foot traffic to retailers remaining open.

- Starbucks shared in its first-quarter earnings call that the coronavirus is taking its toll on the business, causing it to keep full-year guidance unchanged despite positive margin trends. More than half of the over 4,000 Starbucks locations are currently closed while open locations are seeing fewer visits. China is home to 13% of the company's locations and generates about 10% of overall revenue. Past health scares in China demonstrate how sales can be impacted. During the 2003 SARS outbreak, sales at Yum China (operator of KFC, Pizza Hut and Taco Bell franchises in China) fell between 20% and 30% in the quarter when the health scare peaked. KFC was negatively impacted by two separate food scares where sales declined by 25% in the first half of 2013 and 16% in the second half of 2014. Yum regained all of its lost 2003 sales the following year as brand strength was strong. Recovery was more difficult in 2013 and 2014 due to lingering brand issues and an economic slowdown. Starbucks believes strong brand strength on the mainland will enable sales to normalize once the virus threat fades.
- Internet and media stocks have less direct revenue exposure to China but could also be impacted in limited ways. Over the past week, Disney closed both its Shanghai and Hong Kong theme parks to reduce the spread of the virus. Closure of the parks for longer than a week will negatively impact current quarter earnings. Online travel agencies Expedia and Booking Holdings, meanwhile, could be hurt by reduced outbound travel by Chinese tourists. Over the weekend, the country banned group travel reservations out of the country. China is currently the largest single market for outbound international travel with about 160 million such trips taken by Chinese travelers in 2019.

Much of the impact on global cosmetics, luxury goods and spirits companies will depend on the duration of the crisis. Fourth quarter and full-year earnings for these companies are just beginning to come in and we have seen luxury names announce strong full-year numbers. Short-term negatives in these areas are generally absorbed through cost savings in marketing, rents and in other channels. The Chinese consumer will remain an important source of demand and we are confident that a permanent impairment is not in store.



China Acting Aggressively to Control Outbreak

China has experienced similar health scares in the past, most notably the SARS outbreak in 2003, but a lot has changed since then, making comparisons less relevant. Over the last 17 years, China's G.D.P. has grown from about 4% of global output to close to 16% and Chinese tourism has increased ten-fold. The creation of a massive, dense high-speed rail system, with Wuhan as a major hub, raises the risk of contamination compared to 2003 when such a system did not exist. The rapid rise of the Chinese economy means more is at stake, however, the government's more transparent approach and rapid mobilization in dealing with the outbreak could mitigate some of these risks. In addition, the government's decision to delay the return to work for its population following the Chinese New Year as well as the power of social media in communicating to its population how to take precautions against the virus' spread have also helped.

The early stages of these types of events tend to add a great deal of uncertainty. Risk assets have begun to respond to this uncertainty, with stocks selling off, the CBOE Volatility Index rising nearly six points, and high yields spreads widening approximately 65 basis points. Over time, as the global health community gets a better handle on the disease (containing its spread, potentially developing a vaccine) uncertainty will ebb and risk assets should normalize. Typically both economies and financial markets have experienced relatively quick bounce-backs from these types of events. The expected short-term economic weakness caused by the outbreak will likely motivate China and other countries to add to existing fiscal and monetary stimulus measures. Chinese G.D.P. will fall in the first quarter due to the shutdown, which will have an impact on global G.D.P. Preliminary estimates have wide ranges, but right now most economists do not believe this will lead to a recession either in China or globally.

U.S. equities are more exposed to China than U.S. G.D.P. and the re-injection of economic risk in China has sparked a sell-off in cyclical stocks, especially commodity and energy shares. While the U.S. has a substantial trade gap with China, trade done by S&P 500 companies is much more balanced as many companies have Chinese operations that sell goods/products back into the mainland. These entirely Chinese transactions do not impact U.S. G.D.P., but do impact the company's financial well-being.

5

Revisiting China's Equity Markets as Coronavirus Spreads

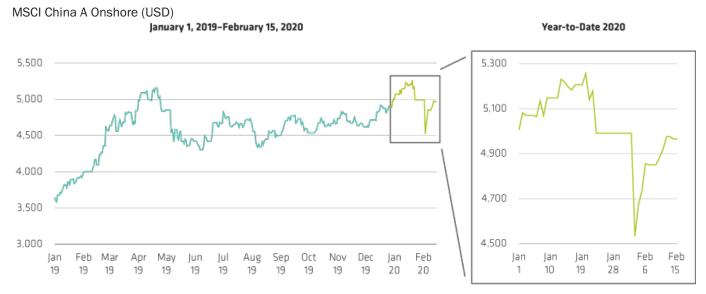
John Lin, Stuart Rae, AllianceBernstein



Growing fears about the coronavirus have hit Chinese stocks. While markets will remain unstable until China gets the outbreak under control, equity investors should revisit lessons from previous epidemics and consider the potential longer-term effects of the current crisis.

As the death toll rose and global infections spread, investors' reaction to the coronavirus intensified. The MSCI China A Onshore Index tumbled by 9.2% on February 3 in U.S.-dollar terms, but rebounded over the next two weeks to recover most of the losses by February 15. (Display). The recent volatility followed a 2019 rally in which Chinese stocks surged by more than 37%. Investors fear that the lockdown of millions of people could inflict a big blow on China's economy that might also affect global growth. Yet they've also been reassured by rapid Chinese government stimulus to offset the potential damage.

Chinese Stocks: Virus Crisis Triggers Volatility After Strong 2019 Rally

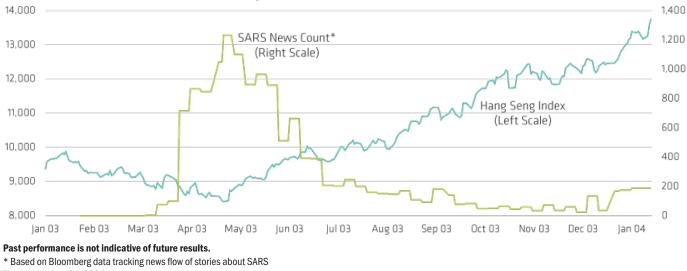


Past performance is not indicative of future results. Through February 15, 2020

Source: Bloomberg, MSCI, and AlianceBernstein (AB)

Market Rebounds Are Often Quick

These concerns are understandable. However, in similar past episodes, market corrections were relatively brief and comparatively shallow. For example, during the severe acute respiratory syndrome (SARS) epidemic in 2003, the Hang Seng Index dropped by about 7.7% from March 5 through April 25, when new infections were increasing, but recovered quickly when the situation improved (Display). Similar market patterns have played out in previous epidemics and pandemics. In each case, market sentiment shifted from initial panic to bargain-hunting when investors gained confidence that the disease had come under control.



In 2003, Chinese Stocks Rebounded Quickly from SARS Outbreak

Through January 21, 2004

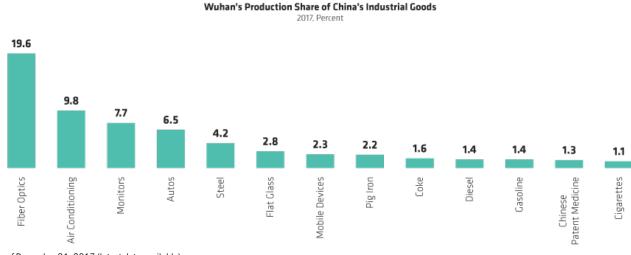
Source: Bloomberg, J.P. Morgan, MSCI, and AlianceBernstein (AB)

For now, there's no such certainty about the coronavirus. As a result, the volatility we've seen will probably persist until some tangible good news is received. But investors should also remember that the snap back from panic to positive momentum can be quick—especially in China's markets, which are dominated by retail investors.

Varied Effects on Production and Consumption

Even without clarity on the virus, the potential macroeconomic effects can be assessed. Efforts to stem the spread of the virus by confining people to homes and imposing a quarantine on entire cities will, of course, have a real impact on the economy, via production and consumption.

Over the last two decades, China has become the world's factory, supplying goods and raw materials to many industries. Factory shutdowns are likely to result in varying degrees of supply disruption. For example, Wuhan—the epicenter of the coronavirus—is a manufacturing hub for telecom equipment, from fiber optic cables (Display) to printed circuit boards (PCBs). Production of these components may be impacted, which would have broader implications for technology supply chains, both in China and potentially globally, if the disruptions persist.



How Important is Wuhan to Chinese Industry?

As of December 31, 2017 (latest data available) Source: China International Capita Corporation and AlianceBernstein (AB)

Wuhan is also the headquarters for a few large industrial companies, including one of the largest automakers in China. At these companies, production will undoubtedly be curtailed until the outbreak comes under control and the factories can resume normal operations.

Declining consumption will hurt retailers—especially those with predominantly brick-and-mortar stores. However, e-commerce companies may weather the storm well, as consumers shift demand to online retail vendors. Some of China's online supermarkets and food delivery services have already reported increased usage as shoppers stay away from stores. Investors will need to monitor how different industries and companies will be affected in different ways by fallout from the coronavirus crisis.



Will the Virus Lead to Longer-Term Changes?

During an endless news cycle of unfolding dramatic events, it's hard to think past the immediate crisis. However, we think that the current events could potentially trigger longer-term structural changes that will affect companies and industries. Indeed, the 2003 SARS epidemic probably helped push the adoption of e-commerce in China and in Asia overall.

What might happen after the coronavirus? Right now, we're in the midst of the largest-ever experiment of working from home in China and large parts of Asia. Tens of millions of Chinese students are being forced into online learning as schools shut down for extended periods. These experiences could trigger fundamental changes in how people work and how lessons are taught in the education system. If this happens, could we see a decade of growth in the adoption of remote working and learning products? How would the infrastructure for communications networks and data centers change to accommodate higher demand? Questions like these are hard to consider now, but when the immediate danger subsides, they will become more relevant for investors.

As long as the coronavirus situation remains unresolved, we think investors in China should reduce exposure to companies that are directly affected, including in the leisure and travel industries. At the same time, based on experience, a Chinese portfolio should be positioned for the long term and prepared for the possibility of a sharp recovery when the crisis is resolved.



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