

# PricewaterhouseCoopers: Macroeconomic Impact of the COVID-19 in China and Policy Suggestions



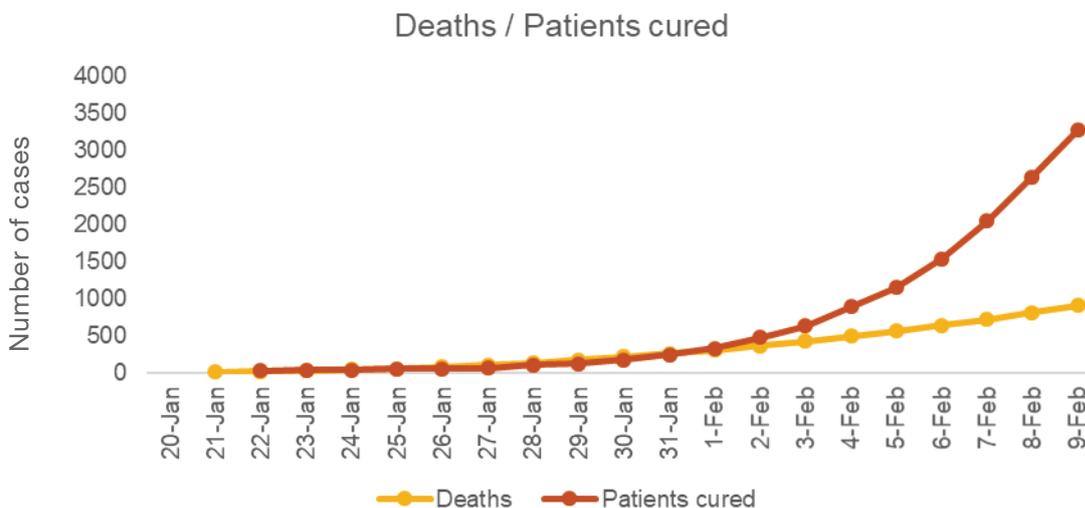
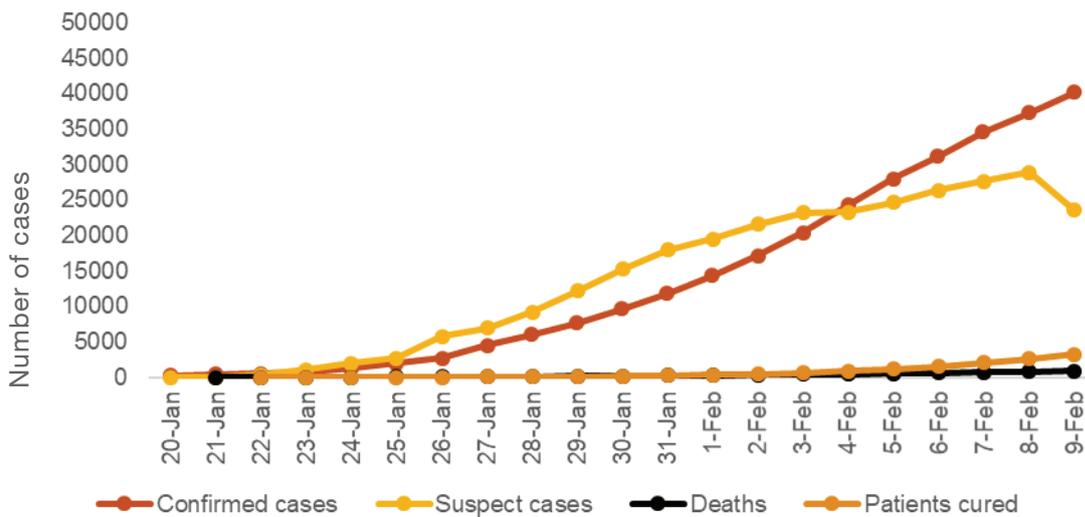
The outbreak of the COVID-19 not only threatens people's lives and safety, but also has a significant impact on China's economic development this year. Based on our close monitoring of the current situation, PwC analyzes the impact of the outbreak on economic growth and individual industries, and proposes countermeasures and macro policy recommendations.

# Part 1

## I. The status and prospect

Since the first case confirmed on December 8, 2019, the COVID-19 disease that broke out in Wuhan has continued to spread for 2 months. According to the official data reported on “Sina News”, as of 14:00 on February 10, 2020, the cumulative total of confirmed cases ran up to 40,235 nationwide, while suspect cases were 23,589, and 909 people died. Among them, Hubei Province, the worst-afflicted area, reported 29,631 confirmed cases (16,902 in Wuhan) and 871 deaths (681 in Wuhan). Among other provinces, Guangdong, Zhejiang and Henan each had more than 1,000 confirmed cases. There is no doubt that the severity of this new outbreak has exceeded the SARS 17 years ago, whether in terms of confirmed cases or deaths.

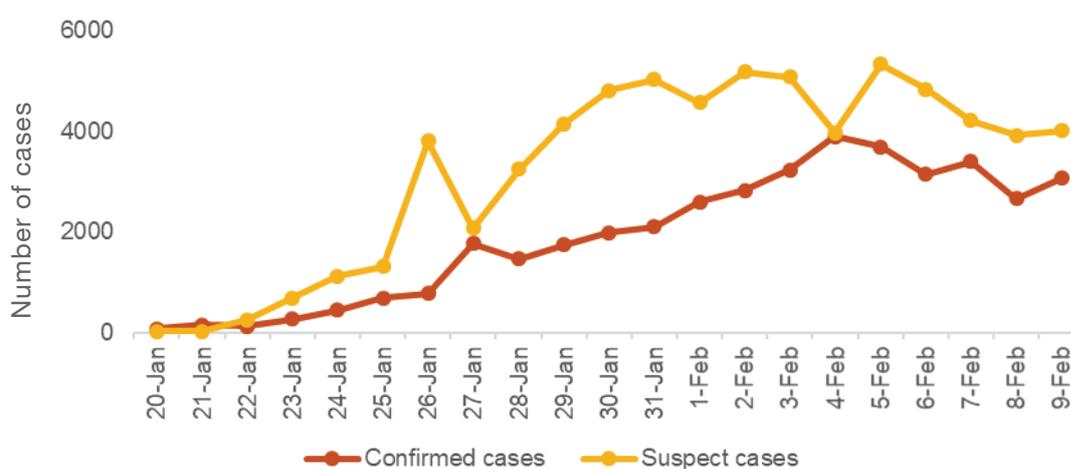
**Chart 1: Cumulative Nationwide Movements of the COVID-19**



Source: Sina News

It is worth noting that, since governments at all levels have significantly strengthened their prevention and control measures after the Spring Festival, cities with severe outbreaks, such as Wuhan, have in fact “sealed up”. In addition, most imported cases in other cities outside Hubei have passed the incubation period. In the past 5 days, the increase of newly confirmed cases across the country has slowed down. This is a positive signal. Nonetheless, due to the complex ways the Novel Coronavirus spreads and the uncertainties associated with a number of factors, such as the probability of virus mutation, the disease prevention experts have not yet been able to pin down the exact date when things will turn for the better.

**Chart 2: Daily Nationwide Increases**



Source: Sina News

In the near future, two major factors will affect the development of the outbreak.

**1) The negative factor:** After the Lantern Festival, more and more cities have wholly or partially resumed work, and the inter-provincial and inter-city human traffic has increased significantly. The risk of the virus spreading through the large-scale return to work of migrant workers will significantly increase. There can be no underestimation of the risk of a second round of virus eruption in other major cities, such as Beijing, Shanghai, Shenzhen, and Chongqing. At the same time, the outbreak is spreading to the rural areas in Hubei and other regions, where severe lack of medical resources is a high probability, making things even harder for the prevention and control of the disease.

**2) The positive factor:** As the Leishenshan (Thunder Mountain) Hospital, Huoshenshan (Vulcan Mountain) Hospital, and Fangcang Hospital become operational, and medical teams from other provinces have arrived at Wuhan and other severely afflicted areas in Hubei to aid the fighting of the virus, bringing huge relief to Wuhan and those afflicted areas in Hubei overstrained in medical resources; in second-tier cities, such as Hangzhou, Nanjing, and Suzhou, countermeasures such as isolation and screening have been tightened.

## Part 2

### II. Impact of the outbreak on the economic growth

In the short term, the impact of the COVID-19 disease on China's economic growth will be very obvious. Since the outbreak, many domestic and foreign institutions have made their estimations (see Figure 1). Most of them believe that the GDP growth rate in the first quarter may be about 4%, a decline by about 2 percentage points. The growth rates in the next three quarters will gradually pick up depending on when the outbreak ends, and the annual GDP growth will show a "V-shaped" pattern.

All things considered, this outbreak will far surpass SARS 17 years ago in its impact on the economic growth. On the one hand, the scale of this outbreak as of now is already much larger than the previous one, whether in terms of confirmed cases or deaths. On the other hand, as compared with the SARS period, things have become very different in terms of growth environment, industrial structure, and the room for policy stimulus, which are less favorable to offsetting the impact than years before. However, like any disaster, the impact of the Novel Coronavirus disease is sure to be temporary. When the outbreak is over, the economic growth will soon return to normal as determined by the general course of things.

In light of the prevailing analyses and estimations of domestic and foreign institutions, we believe that if the outbreak could be largely over in late March or early April, the growth rates in the four quarters of this year may reach 4.5%, 5.0%, 5.8%, and 5.7% respectively. The annual growth rate may be 5.2-5.3%.

**The impact of the outbreak on the economic growth mainly concentrates in the “troika” of the economy, namely consumption, investments, and import and export.**

■ **In terms of consumption:** This outbreak began before the Spring Festival, and is having a huge negative effect on consumption. The Spring Festival, the most important traditional festival in China, is one of the peak consumption seasons. During the Golden Week in the 2019 Spring Festival, national retail and catering businesses achieved sales of more than RMB 1 trillion. Due to the outbreak, however, consumption during the 2020 Spring Festival has dropped steeply. Specifically, the catering, hospitality, tourism, entertainment, and transportation are among the worst hit industries with revenues almost drying up. Of course, thanks to the traffic control and isolation, online shopping, online ordering, and online entertainment remain relatively active, which may partially offset the adverse effects described above. Certain pent-up demands will surely be released after the outbreak is over, but losses due to lack of catering and entertainment consumption during this period will be hard to recoup, and the spending power of certain consumer groups may also suffer from the outbreak. All considered, it is expected that the overall growth rate of retail sales of consumer goods in the first quarter may slow down by 5-6 percentage points. It's important to note that consumption has become the number one driving force for economic growth in China after years of structural demand-supply adjustments, as demonstrated in 2019 when consumption accounted for approximately 60% of China's GDP. As a result of the outbreak, the contribution of consumption to GDP in 2020 will experience a big drop. This is also one of the key reasons why the current outbreak is creating a greater impact than SARS in 2003.

■ **In terms of investments:** due to the outbreak, many businesses have been unable to resume production on time and forced to have their production orders cancelled, and investments are bound to shrink accordingly. However, all considered, investments will suffer less as compared with consumption. This is because of the general overcapacity prevailing in China's manufacturing industry. In the automotive industry, for example, both car sales and production had been declining in 2019, and the dealers and manufacturers have large inventories. The short-term suspension of work and production imposed by the delayed return to work of the workers have limited actual impact on the enterprises. For infrastructure projects, the resumption of work may be delayed for some projects, but the work will soon resume one

after the other when the outbreak is over, and there will be insubstantial impact at the end of the year. In fact, the outbreak may serve as a big incentive for additional investments in some large-scale medical infrastructure projects. In addition, the government has recently in a short period launched a series of rescue measures, such as expansionary fiscal policies, tax cuts and fee reductions, for enterprises affected by the outbreak, especially small and medium-sized enterprises, and these measures will help business enterprises maintain necessary investment levels.

Considering the relatively small impact of the outbreak on investments, and the likely increase of the government's investment stimulus efforts, the contribution of investments to the GDP growth is expected to increase in 2020.

- **In terms of import and export trade:** due to the slowing down of growth in consumption and investments forced by the outbreak, and the implementation of the first phase agreement in the Sino-US trade war, the import and export trade will continue to further level off in 2020. After the World Health Organization announced on January 31 that the outbreak constitutes a public health emergency of international concern (PHEIC), some countries have adopted short-term measures, such as evacuation of repatriates, entry restrictions, and suspension of flights, and import and export as well as foreign direct investments (FDI) have suffered as a result. On the other hand, many people have, due to the outbreak, cancelled their plans to travel abroad during the festival, which will lead to a significant decline in China's service trade imports.

Taken together, in the outbreak period (the first and second quarters) as well as the whole year, China will maintain a surplus position with regard to its current account in the balance of trade, but the margin may be lower than last year. The contribution of net exports to the GDP growth is expected to remain basically the same as 2019 or experience a slight decrease. With the international balance of payments remaining basically stable and given the commitment to maintaining a basically stable exchange rate in the first phase of the Sino-US trade agreement, the RMB-USD exchange rate is expected to remain stable in 2020.

### III. Impact of the outbreak on different industries

The COVID-19 disease will have different effects on different industries in China. Generally speaking, it will have huge impacts on tourism, offline entertainment, hotels, aviation, logistics, and labor-intensive manufacturing, while it will have a relatively favorable impact on pharmaceuticals, e-commerce, online entertainment and insurance.

#### Negatively impacted industries

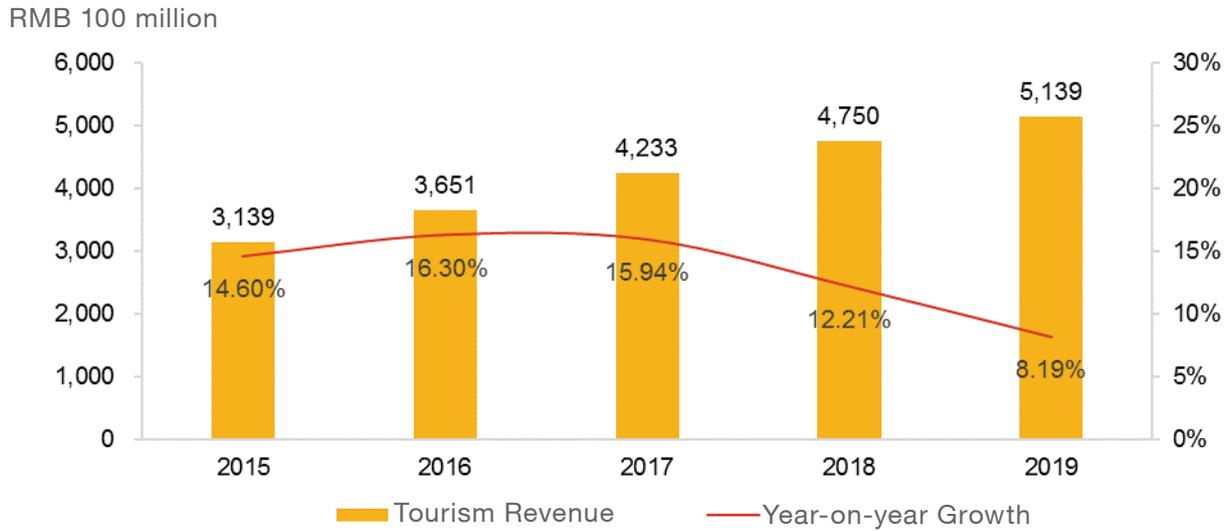
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##### Culture, leisure and tourism

After the outbreak situation became serious nationwide, the Ministry of Culture and Tourism has issued a series of papers, and suspended the group travel and “air ticket + hotel” package offerings of nationwide travel agencies and online tourism companies. At the same time, various local cultural and tourism authorities have been busy deploying prevention and control measures. In Beijing, for example, various large-scale events have been cancelled, including the temple fairs, with the Palace Museum closed to the visitors for the first time in its history. In China’s cultural and tourism system, all public cultural service institutions, including libraries, art galleries, cultural centers, and museums, have stopped receiving visitors and cancelled various cultural activities, while major tourist attractions across the country have stopped receiving visitors. In addition, various troupes and performing organizations have also cancelled or postponed their performances, while the theaters and cinemas have been temporarily closed to the public. At this point, all public cultural, travel, entertainment and leisure activities across the country have been completely suspended.

The suspension of the above activities mainly aims to minimize the gathering of people, cut off the channels for virus transmission, and curb the spread of the disease. The restart will have to depend largely on the outbreak. Based on the scale of tourism revenues during the Spring Festival in 2019, the outbreak is expected to cause RMB 500 billion in losses to the tourism industry in 2020, or about 2% of GDP in the first quarter.

## Tourism Revenue in the Spring Festival in Recent Years



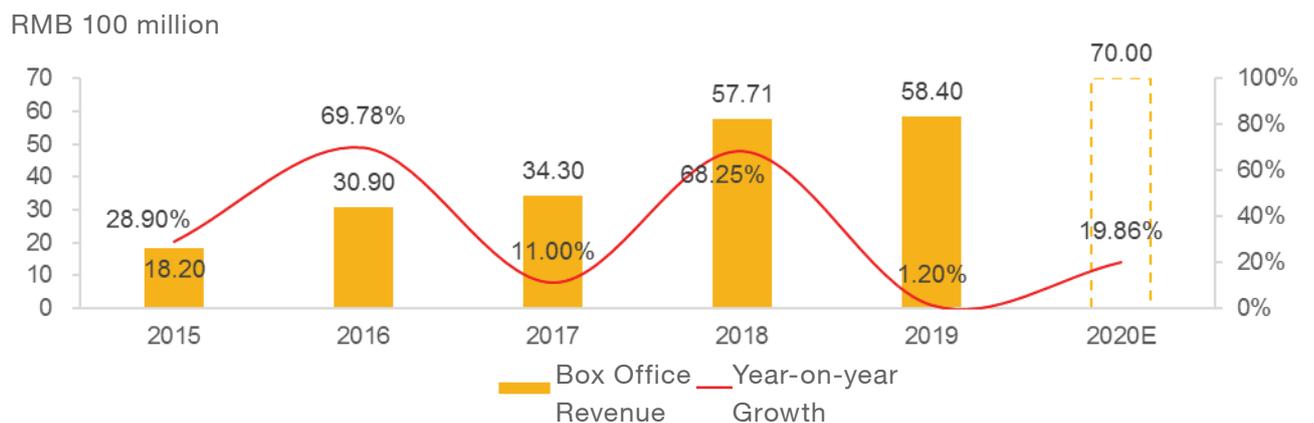
Source: China National Tourism Administration

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## Movies and entertainment

Every year, the “Spring Festival” is a major target of the movie market. Eight movies featured in the seven-day holiday last year raked in RMB 5.84 billion in box office, setting a new record for the same period. In the 2020, nine movies had been set to make a killing, with the box office expected to approach RMB 7 billion. However, following the escalation of the outbreak and staying home of the people, these movies had to be pulled off the market, with much ado coming to an unprecedented nothing.

## Box Office Revenue in the Spring Festival in Recent Years



Source: China Film Administration

Historical data tells us that the increasing box office in the Spring Festival is gaining weight as part of the annual box office. After it exceeded 5% in 2016 for the first time, the box office in the golden week in 2018 and 2019 both increased to more than 9% of the annual gross income, as the Spring Festival becomes increasingly important for the movie industry. We expect that with the helpless results from the Spring Festival, the outbreak will grossly set the movie industry back, and the annual box office may experience zero or even slightly negative growth.

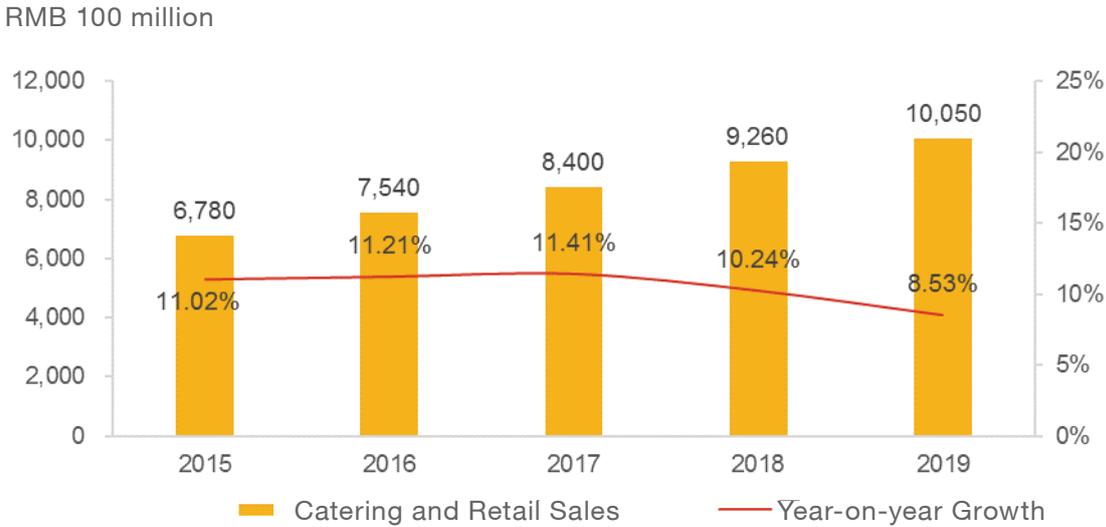
03

### Catering and retail

In this Spring Festival, a period when it would have been a big spending season, the government has called on the general public to stay at home and minimize venturing out to help control the outbreak. This measure is undeniably a heavy blow to the catering and retail industries. During the Spring Festival this year, revenues of many catering chains have plummeted. The revenues from 60 restaurants of Wangshunge, for example, amounted to a meagre total of RMB 4.55 million in the holiday, down 79% from RMB 21.57 million from 2019. Meizhou Dongpo, a popular brand, had 11,144 reservations cancelled in this holiday period, incurring a loss to the tune of RMB 17 million. Haidilao, a hot hotpot chain, has shut down business in more than 550 restaurants across the country for more than 10 days since January 26, incurring losses of more than RMB 700 million in revenues and labor costs. Xibei has had its revenues nearly all wiped out in the 2020 Spring Festival when it used to net about RMB 700 million in the same period in recent years. If the situation stands, according to Xibei's board chairman Jia Guolong when interviewed, its ready cash flows would not hold out for three months.

According to data from the Ministry of Commerce, the sales of catering and retail enterprises during the Spring Festival in 2019 exceeded RMB 1 trillion. We estimate that due to the outbreak, the revenues may well drop by 50% to 70%, a total loss in the range of RMB 500 billion to RMB 700 billion.

## Catering and Retail Sales in the Spring Festival in Recent Years



Source: Ministry of Commerce

The outbreak hits the catering and retail businesses not only in sales, as the costs associated with rents, human resources and inventories will continue to pile up on them. In the days to come, further attention needs to be paid to the liquidity and solvency of these retail businesses.

### 04 Transportation industry

The two months from January to February are usually the peak time of Chunyun, the Spring Festival travel season in China. This year, however, the rising number of cities adopting the “sealing up” measure, and the huge decline in the numbers of people who have chosen not to return to their hometowns or travel to other places, are having a telling impact on the transportation industry. According to the estimates of the Ministry of Transport, during the 10 days of the Spring Festival holiday in 2020 (January 24 to February 2), the passenger traffic on the railways, roads, waterways, and civil aviation amounted to 190 million, a huge number though it sounds, but a massive decrease of nearly 73% from the Spring Festival period in 2019. As of February 6, the passenger traffic in the first 27 days of the Spring Festival season (January 10 to February 6) fell by 35% from the same period in 2019.

## Nationwide Passenger Boardings in the Spring Festival in Recent Years



Source: Ministry of Transport

As the disease continues to spread, the transportation industry will continue to suffer. In the civil aviation industry, for example, the flight schedules show that in the first 24 days of the Spring Festival season in 2020, 470,000 domestic flights had been planned and more than 90,000 flights had been cancelled. Since the beginning of February, more than 10,000 flights have been cancelled daily, and many domestic airlines have canceled more than 50% of their flights. As for cross-border routes, there has been a rising number of foreign airlines that have cancelled all their flights to and from the Mainland China. We expect the transportation industry to be under tremendous pressure in the first quarter and even the first half of this year.

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### Manufacturing

As people take their Spring Festival holidays, the period from January to February is usually the “downtime” for the labor-intensive enterprises of the manufacturing industry. However, this year is different due to the outbreak, as the forced “holidays” of many factories drag on to stretch the downtime to March or even longer. This year is also different in that the Spring Festival came earlier than the previous years, so the travel home began in early January for many people. As such, the outbreak will affect at least the first-quarter production schedules of these labor-intensive enterprises, which will go on to hamper the production and sales of the whole year.

The impact does not stop there, though. Due to China's critical role as the "world's factory", elongated outbreak will cause the domestic manufacturing industry to go into stagnation, and the stagnation will spill over in a major way to affect the procurement needs of upper-stream businesses in the international industrial chains as well as the supplies of downstream business enterprises. Wuhan, for example, a major manufacturing center, has suspended the production of LCD panels and LED panels, and the ensuing decrease in their supplies in the international markets will inevitably drive up the costs of manufacturers who require these panels for computer displays, televisions and other products. The scope and scale of the impact such as the above example require more time and further follow-up to ascertain.

06

## Real estate

As part of the nationwide efforts to control the spread of the disease, on January 26, the China Real Estate Industry Association issued the proposal to the real estate development enterprises to suspend their onsite promotion activities until the outbreak is over. At the same time, similar measures have also been taken by many housing and urban-rural construction authorities across the country. As of now, the onsite sales have been shut down in most cities in China, and some cities have even shut down their online housing trade platform. In addition, work has basically come to a halt at the construction sites, while land auctions have been suspended, and real estate agents have also stopped their operations.

According to statistics from the Central Plains Real Estate Research Center, beginning from late January 2020, the transaction volumes of most developers have plummeted by 95% compared to the previous Spring Festival. According to CRIC, a leading real estate big data service provider who closely monitors the market in China, the data on real estate sales in the week before and the week after the Spring Festival are little more than zero. As the outbreak continues, investments in real estate development, sales, resumption of construction and completion of construction work in the first quarter will all be seriously affected.

## First-Quarter Real Estate Development Investments and Housing Sales in Recent Years



Source: National Bureau of Statistics

### Industries likely to get breaks and boosts

While the outbreak means a blow to some industries, it has brought some good news to others.

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#### Medical supplies and pharmaceuticals

One of the biggest issues laid bare in this outbreak is the inability to supply of medical goods as needed, such as masks, protective clothing, and goggles. As the outbreak continues, factories nationwide have been cranking out these needed goods day and night. In order to tackle the “mask shortage” and other issues, the National Development and Reform Commission states clearly that as long as relevant standards are met, enterprises can operate at full capacity without worrying about over production after the outbreak, as the surplus will be taken care of by the governments. It is foreseeable that medical equipment and goods manufacturing enterprises will get a boom thanks to the outbreak.

In addition, following the intensified researches for treatment of the COVID-19, clinical trials of various Chinese and Western medicines are in full swing. Many medical institutions, for example, are conducting clinical trials on Redecive to study the safety and effectiveness of the drug. It is safe to say that when the outbreak is over, there will be a huge space for the development of the pharmaceutical industry, thanks to the heightened awareness of the people with regards to the needs for better medical capabilities and public health protections as well as the continued improvement of the state's medical and health policies.

## E-commerce

02

In this outbreak, the majority of the people stay at home most of the time without

stepping outdoors unnecessarily. This way of living has driven and will continue to drive up the demands for online shopping and online ordering, among others. According to the data of the National Bureau of Statistics, online retail sales in the first quarter of 2019 amounted to RMB 2.24 trillion, with a growth rate of less than 16%, but the compound growth rate in the past five years was 33%, and online retail sales contributed 23% to the total retail sales of consumer goods in 2020, nearly a quarter.

### First-Quarter Online Sales in Recent Years



Source: National Bureau of Statistics

We expect that the additional demands stoked by the outbreak will cause the growth of online retail sales to rebound to about 30% year-on-year in the first quarter of 2020, and increase their contribution to the total retail sales of to 30% in the same period.

03

### Online entertainment and online education

The “homestay economy” imposed by the outbreak, other than online shopping, also encompasses other Internet-based leisure and entertainment activities, including videos and audios, live webcasts, and online games.

In addition, as schools postpone their new term, the offline programmes of social training and education institutions become impractical, and commuters now can save their commuting time working from home, the growing demands for online services will enable the fee-based online education and information service providers to generate greater business income.

04

### Teleworking industries

After the extended Spring Festival holiday, some businesses in Beijing and many major cities across the country have begun to resume business activities from February 3, and more businesses in Shanghai and other cities will resume business activities from February 10. However, it is reported that most of these businesses now conduct their business activities mainly through working at home. As a measure of necessity in response to the outbreak, teleworking has quickly become a popular way of doing business, and may be well on its way to become routine in some areas. However, the experience in the past first week showed that teleworking had not measured up to expectations for many businesses, and many tools failed to deliver in time of need. Many users of DingTalk, for example, a smart mobile office platform designed to assist business communications and work coordination, had experienced delays in the update of message status or jarring video conferences; the corporate version of Wechat also experienced crashes.

These incidents indicate that the current teleworking tools are not yet capable of handling the enormous loads when a whole industry or the whole society go online at the same time. This is a serious challenge but also a huge opportunity. In the coming weeks, the situation is very likely to remain dangerous, and most

businesses will continue to resort to teleworking as the major solution. Even when the outbreak is over, businesses may well reconsider their resource allocation and adopt teleworking as a routine practice to improve their business resilience. It is quite obvious that this trend will be very beneficial for the development of industries offering services and products in connection with mobile or home office solutions, including web phones, web-based video conferences, multi-person collaboration platforms, digital businesses and finance systems.

05

## Insurance

In recent years, the Chinese people have heightened their awareness with respect to insurance. As of 2019, the insurance coverage had increased to more than RMB 3,000 per person, and the insurance market penetration had increased to 4.30%. It is so sad that in the early stage of the outbreak, some unconfirmed and confirmed patients chose to give up their treatment or missed the best time for treatment because they could not afford the medical expenses, and there were cases where confirmed patients refused to receive treatment or even concealed their conditions, indirectly exposing more people to the virus.

As the outbreak continues, many governments have committed to covering all medical expenses of the infected patients, and major domestic insurance companies have also offered relevant new health insurance products. After this outbreak, we expect the sharpened focus of the people on life and health and their heightened awareness of self-protection against unexpected illnesses will help stimulate the demands for life insurance and health insurance products, and boost the development of the insurance industry.

## Part 4

### China's policy responses and PwC's macro policy recommendations

Since the disease broke out in Wuhan, Hubei has blocked the outbound human traffic by “sealing up” the city, and taken many measures to restrain the human flows, including the suspension of inter-city bus lines and the close-door management of residential compounds. Other provinces and cities outside Hubei have also further upgraded their traffic and personnel controls. To support the

efforts in treating the patients, the central government has sent medical teams from around the country to Hubei. The capacity for receiving and treating patients has been increasingly improve since Huoshenshan and Leishenshan Hospitals became operational. The construction of Fangcang Hospital and the requisition of schools and hotels for hospitalizing patients with milder symptoms, among other methods, will further improve the availability of beds. All these measures critical in controlling the spread of the disease and minimizing mortality.

In the past two weeks, the central and local governments have successively introduced a series of measures to support the production and supply of disease prevention and control materials, and begun to gradually introduce more macroeconomic policies to bolster the economy and support enterprises. On February 6th, the Central Leading Group on the COVID-19 decided to “facilitate the resumption of normal production in an orderly manner while continuing the solid efforts on virus prevention and control “, and sent out a clear signal that on the basis of disease prevention and control, the government will move on to gradually restore the economic and social orders to normal.

PwC statistics show that as of February 7th, the People’s Bank of China, the Ministry of Finance, the Banking and Insurance Regulatory Commission, the Securities Regulatory Commission, the National Development and Reform Commission, the Ministry of Commerce and other economic authorities have issued more than 20 policy papers in support of the collective efforts of the government, the business enterprises and the people to fight the disease. From February 3rd to 4th, the central bank invested a total of RMB 1.7 trillion in the market, as part of the efforts to ensure stability of the market in the special period. The central bank will commit RMB 300 billion in special loans to support enterprises critical in disease prevention and control.

In aid of the virus-afflicted small- and medium-sized enterprises, many places have issued favorable local policies. As of February 6, more than 15 provincial governments have issued relevant guidelines to set out clear rules and requirements for corporate financing, housing rents, import and export, and employment and work stability and specify the level of support, limitation of time and the responsible government agencies. The Decisions of the Zhejiang Provincial Leading Group on the COVID-19 Prevention and Control on Supporting the Small and Micro Enterprises to Overcome the Difficult Time clearly set out many preferential policies designed for the small- and medium-sized enterprises affected by the outbreak, including 10% reduction in the prices of water and natural gas for industrial uses, reduction and exemption of rents and deferred payment of relevant fees and taxes, and reduction and exemption of real estate taxes and urban land use taxes, among others.

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The announcement and implementation of the above policies and measures are vital for disease control as well as alleviating the blows and adverse effects the outbreak, and positive results are beginning to show. Looking ahead, more countermeasures are expected to be rolled out one after another. As part of our efforts to assist the fight against the virus, PwC has a number of macro policy recommendations to share with the relevant decision-making authorities.

■ **Firstly, the relationship between disease control and resumption of production must be handled carefully and effectively.** Presently, although there are indications that the overall situation is stabilizing, the turning point is yet to come, and there is still a high level of daily increase of confirmed cases that demands continued high alertness. In the next a few days, as we have pointed out earlier, the risk of further spread of the virus remains high as we approach the peak time for the large-scale return of migrant workers. In particular, there must be no underestimation of the risk of a second round of surge in the spread of the virus in major cities other than Wuhan, such as Beijing, Shanghai, Shenzhen, and Chongqing.

It is undeniable that it is very tricky to manage the conflict between disease control and restoration of production. We believe, however, **in a situation where the turning point of the outbreak is yet to come and there is still considerable risk that the virus may spread wider, the control of the outbreak is still the number one priority, and production and services may resume in areas where the risk is well under control, because, should the outbreak not be effectively controlled, there would be greater uncertainties facing the overall economic growth and the ensuing costs would be so much the higher. It would be advisable for the decision-makers to moderately lower the target for this year's GDP growth, for example, to 5-5.5%, in the upcoming National People's Congress of the People's Republic of China and the Chinese People's Political Consultative Conference.**

Of course, as long as the outbreak can be effectively controlled, it is also imperative to minimize the impact of the outbreak on the economic and social orders. As we approach the dates of large-scale resumption of work and production nationwide, different places may adopt policies to facilitate a differentiated and staggered process of return to normal based on the local outbreak status as well as the different characteristics of enterprises and industries and also the business models, and should maintain flexibility in these policies.

- **Secondly, adopt more proactive fiscal policies to effectively support the needs to fight the disease.** On the one hand, measures may be taken to further reduce the tax burdens of small- and medium-sized enterprises, and provide subsidies directly to severely afflicted enterprises critical to the national economy and people's livelihood. **Considerations should be given to raising the personal income tax threshold to increase the spending power of the people. On the other hand, major efforts should be made to increase investments in infrastructure projects in cultural, education and medical/health sectors to increase the overall level of demand, as well as facilitate high-quality economic development.** There is still considerable elbowroom for the policies, given that China's fiscal deficit, at about 3% of the GDP, is lower than the level of many developed and developing countries. In a major outbreak such as this, there is a lot that fiscal policies can do.
  
- **Thirdly, adopt moderately relaxed monetary policies to maintain reasonable and sufficient liquidity, and ensure the stability of financial markets.** In this unprecedented outbreak, measures, including further lowering the deposit reserve ratios and benchmark interest rates and continued increase of liquidity, may be considered to reduce the financing costs and help small- and medium-sized enterprises to survive this crisis. At the same time, actions should be taken to maintain stability in the capital market. On February 3, China's stock market and foreign exchange market opened as scheduled, a demonstration of the government's confidence as well as its determination to maintain market rules and orders. This move has proved to be right on the money. Although A shares fell sharply on the opening day, they quickly rebounded and stabilized in the next few trading days. Regulators should follow up with more efforts to restore rationality in the market and help the investors settle down with their expectations.
  
- **Fourthly, accelerate the supply-side structural reform and increase the total-factor productivity.** To cope with the pressure of slowing economic growth, it may be practical to resort to expansionary fiscal and monetary policies in the short term. The room for expansion, however, be it fiscal or monetary policies, is limited, and the long-term consequences of these economic policies must be fully considered. **In fact, there are other major ways of dealing with the slowing down of the economy, and they have more lasting positive effects, including the stepping up of market-oriented supply-side structural reform, improving the total-factor productivity, making full use of the decisive role of the market in resource allocation, fully motivating the private enterprises, and providing substantial assurance on their confidence in investments.**

- **Fifthly, make major efforts in increasing the fiscal funding for the public health sector, and easing the supply shortages in medical and health resources.** The outbreak has laid bare China's insufficient investments in the medical and health sectors, including disease prevention, medical care resources and capabilities, and hospital establishments. In 2018, China's total health expenditure accounted for 6.6% of its GDP, as opposed to more than 10% in developed countries in Europe and the Americas. The per capita health spending, considering China's huge population, is far lower than the developed countries. **A successful transformation in this regard should be included as one of the key targets in China's pursuit of high-quality economic development and a comprehensive well-off society.**
- **Sixthly, take serious actions to explore options and establish sound mechanisms for emergency response.** This outbreak, a major emergency event far-reaching in impact and long in duration, has presented huge challenges to the existing social governance model, but at the same time, also offered a great opportunity to reflect, learn, improve and change how best to respond to and manage such a situation. In formulating policies and mechanisms, the policy-makers and decision-makers may study and draw on the best practices and useful experience of other countries, and fully seek input from those specializing in relevant fields to put in place early warning and response mechanisms that are more timely and more efficient.