



# Jumpstarting Recovery Amid the COVID-19 Epidemic

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The Coronavirus disease 2019 (COVID-19) epidemic has already had a major impact on China's economy and society in the past two months. This note reviews the recent developments in China's all-out efforts in containing the virus and achieving epidemic control, as well as the status of the country's job and economic recoveries. As the contagion has slowed its pace, especially outside Hubei Province, the issue of economic recovery has gained priority. We focus on the epidemic's impact on China's consumption and on micro, small and medium-sized enterprises (MSME).

## I. Recent Developments in Epidemic Control

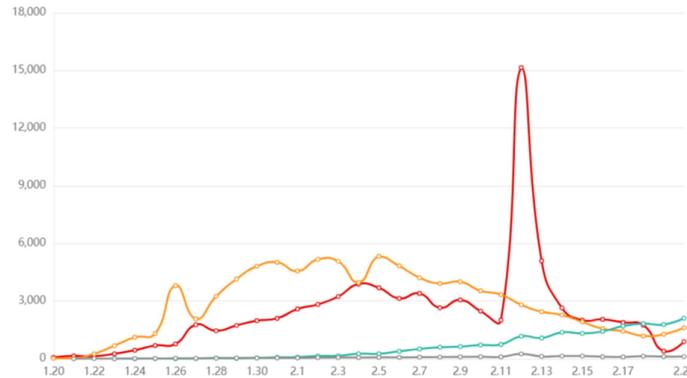
The pace of COVID-19 contagion has slowed significantly in China. In Hubei Province, the epicenter of the virus outbreak, the number of daily newly confirmed cases fell to 349 on February 19, the lowest daily tally recorded since January 22. Last week, the central government coordinated to have 16 provinces pairing up with various cities and prefectures in Hubei to provide medical resources and supports. Outside Hubei, the number of new cases has declined steadily since February 4 (see Figure 1),<sup>1</sup> confirming our earlier projection that the inflection point in the number of new infections would come in early February. Most provinces and municipalities had fewer than five new cases and six of them had zero. A clearly declining trend can now be observed in almost all provinces, with a few exceptions (e.g. Heilongjiang, Shandong and Zhejiang). Outside mainland China, the number of new cases remained low in Hong Kong (68), Macau (10) and Taiwan (24).

More patients have recovered, especially in the more developed eastern regions, where the recovery rate is generally above 1/3, even reaching about 50% in Shanghai. The number of patients who died from COVID-19 has remained stable at around 100 each day. As of 21 February, 2,239 people are now dead from the virus in China, with the total number of infected nationwide standing at over 75,568. The current case fatality rate is about 2.6% (3.0% in Hubei; 0.6% elsewhere). Approximately 80% of those who died were 60 years old or above and 75% had pre-existing health conditions such as cardiovascular diseases and diabetes, a pattern similar to that of SARS in 2003.

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<sup>1</sup> The latest tally shows a rise in new cases due to two separate, unexpected outbreaks in Shandong and Zhejiang.

Figure 1: Evolution of the COVID-19 Epidemic in China



**Notes:** The red, orange, green and yellow lines reflect the daily numbers of confirmed, cured, suspected COVID-19 cases and the deceased, respectively. The horizontal line lists the dates, and the vertical line lists the number of COVID-19 cases.

While the virus started with the exposure of a small population in Wuhan in December 2019, it has evolved into a major national epidemic since January 2020 due to a lack of early control and adequate medical resources in Hubei. Many affected patients had to wait an average of ten days before being hospitalized, resulting in the rapid spread across the country. The last few days saw intensive efforts by the local governments to make sure that all those who were possible carriers were sent to hospitals to receive testing and medical attention. These actions have played an essential role in reducing infection rates and curtailing transmission.

The recent evolution of COVID-19 has largely confirmed our projections highlighted in the last report:

1. First, given the existing disease control measures, we expected the number of newly confirmed COVID-19 infection cases to flatten out by the end of February or early March. The number of newly confirmed cases has fell consecutively over the last 16 days, from 890 on February 3 to 45 on February 19. We still expect the number of cumulative confirmed cases to reach its peak by early March.
2. We considered the 2-4 weeks after February 9 to be critical for the epidemic control. Indeed, in the past week, the population in Hubei Province, and especially in Wuhan, has gone through extensive screening for possible cases of infection, with a significant spike of confirmed cases on February 12 and 13, a result of the admission of many existing cases into medical care. Elsewhere, the number of recovered patients went above the number of confirmed cases for the first time on February 18. The fatality rate has also fallen as the number of the deceased kept on falling.

While the situation is stabilizing in China, the COVID-19 epidemic's global reach has caused growing concerns. According to WHO Coronavirus Disease 2019 Situation Report on February 20, outside mainland China, there were so far 1073 confirmed cases (and 149 new cases) in 26 countries, resulting in 8 deaths. The largest cluster was the Diamond Princess cruise ship in Japan, followed by Korea and Singapore. The Diamond Princess cruise ship carried 3,700 people in total, with at least 621 people already testing positive for the virus.

Moving forward, preventing the pandemic from further spreading remains a priority. A recent study shows that the  $R_0$ , the basic reproduction rate, of the COVID-19 is 3.77, significantly higher than the consensus a week ago at 2-2.5 (compared to that of SARS at about 2-3),<sup>2</sup> indicating that COVID-19 can spread among humans at a faster rate than what was believed ten days ago. Considering that the virus has a high degree of infectiousness and asymptomatic characteristics, there are considerable risks of further outbreaks in some parts of the world, and the WHO still rates China at very high risk level, and regional and global risk levels are rated as "high."

To some extent, COVID-19 is the first true social-media "infodemic" in the digital age, the perceived risks are likely to be much higher than real risks. As some experts suggested, eventually, the virus might evolve into a seasonal flu, with a rather low mortality rate but potentially infecting billions of people. Yet, the unprecedented epidemic control measures implemented so far, and the negative effects of COVID-19 on consumer and investor confidence could have a sizeable impact on real activity.

## **II. Rising Costs of COVID-19 Amid a Slow Initial Recovery**

The COVID-19 epidemic has hit the Chinese economy hard at a time of continued slowdown and ongoing trade frictions. While much progress has been made in terms of epidemic control, the much-needed job recovery has yet to begin in earnest, and the prospect for a strong economic recovery remains uncertain. The key elements to the current recovery are the continued success in epidemic control; the rebuilding of consumer confidence and a revival of consumption, now the main driver of the Chinese economy; and, more fundamentally, a quick resumption of work to improve the capacity utilization rate and reduce economic slack.

### *Large Impact on Consumption*

The epidemic has posed significant challenges on consumption in the first quarter of 2020, despite some signs of resilience. The COVID-19 outbreak coincided with the

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<sup>2</sup> Yang, Y., Lu, Q., Liu, M., Wang, Y., Zhang, A., Jalali, N., Dean, N., Longini, I., Halloran, M.E., Xu, B. and Zhang, X. (2020): "Epidemiological and clinical features of the 2019 novel coronavirus outbreak in China," working paper, medRxiv.

Spring Festival consumption peak season, and its impact turned out to be far larger than that of SARS period.

**Stringent epidemic control measures, including large-scale quarantines, have significantly reduced the mobility of consumers and workers alike.** The delayed return to work due to the control measures and the extended New Year holidays have heavily affected transportation and logistics and other services, cutting off the supply chain for economic, leisure, and recreational activities. Catering, tourism, cinemas, and other recreational industries were hard hit. The catering industry was heavily regulated during the epidemic: as of February 4, a total of 305 cities suspended offline catering operations, and 104 cities suspended online catering operations. During the period between January 24 and February 6, the restaurant operating rate fell to around 20%, and restaurants in operation mainly relied on delivery (accounting for 60% to 70% of turnover compared to the standard rate of 10 - 15%), which were severely limited by the shortage of couriers (less than 30% of employees available).

Nevertheless, the purchasing power of a large proportion of the population has not been severely affected yet. Consumption is expected to recover strongly once the epidemic is over. Most importantly, **the new, digital economy has played a stabilizing role in fighting the epidemic and avoiding a collapse of retail sales.**

It should be noted that household consumption remains resilient. As consumers stayed at home, the outbreak led to a significant increase in the demand for grain, oil, food, and medicine. The consumption of cereals, oil, and food rose by 20% compared with the same period one year ago, and that of medicine rose by 25%. Gaming, livestreaming, and short videos soared, as delays in school re-openings led teachers and students to move to online learning platforms. The short video industry, including television, short videos, and online videos, increased by at least 60%. **Certain online services are ushering in a new period of growth with new opportunities.** According to the National Bureau of Statistics, e-commerce in China already accounted for over 20% of total retail sales. It is expected that the penetration rate of e-commerce in third- and fourth-tier cities to increase, which would help reduce the negative impact of the epidemic.

### *Online Survey Evidence*

**Micro, small and medium-sized enterprises (MSME) were among the hardest hit during the current crisis.** To gauge the effects of the COVID-19 epidemic on MSMEs, on February 5, Ali Research Institute and the China Household Finance Survey and Research Center of Southwestern University of Finance jointly conducted an online survey with sellers on Alibaba's Taobao and Tmall platforms. By February 7, 23,715, valid responses were collected. Of the respondents, 53% had annual sales below CNY 1 million, 34% had sales between CNY 1 million and 5 million, and 13% had sales above

CNY 5 million. 60% of the respondents had only online operations, while the rest operated both online and offline.

**Declining orders and the loss of customers, order cancellations due to delays in delivery, and tight cash flows** were the main consequences of a delay in operations. Among the surveyed MSMEs, 82.2% cited reduced orders and loss of customers; 54.7% pointed to the risks of order cancellations caused by delayed delivery, and 53.8% complained about tight cash flows. 96.4% of sellers expected losses from the outbreak. 44.6% expected the loss to account for 10%-30% of last year's operating income, 21.3% expected it to go between 30% and 50%; 18.2% expected a loss above 50%, 12.2% expected the losses to be below 10%, and 3.6% did not expect any significant losses. During the epidemic, **the most substantial burden came from rent, labor costs, and interest payments on loans**, besides the backlog of raw materials, default costs, logistics costs, and increased costs to prevent the epidemic.

Overall, **the sentiment about the short-term impact was discouraging**. The survey results indicate that 64% of the respondents would not be able to open for business before February 10, and the most important single factor was disrupted logistics and distribution channels. A whopping 96.4% of the sellers said that they expected to suffer losses from the epidemic in the future. **Tight control over the movement of people and merchandise** was singled out as the leading cause of delay in seller operations. Therefore their strongest wish was a smooth resumption of logistics and goods and labor flows as soon as possible, besides more accessible financing, reduce taxes and fees, and more flexible labor supply.

However, **entrepreneurial spirit remained energetic and upbeat**. While the respondents were overwhelmed by the epidemic, **99% had no intention of giving up**. But 51.6% of the sellers were confused and passive, not knowing what measures to take. 17.2% of sellers apply for loans, but the pressure on cash flows was expected to rise as the return to work got further delayed. Only 35.6% of the sellers resorted to remote or online work modes, leaving **plenty of room for further expansion of digital work arrangements**. In terms of plans, nearly 90% of sellers stated that they would not cut jobs in 2020. 68.8% of the sellers would keep the employment at the current level, while 18.4% would increase the number of employees, only 12.8% of the sellers planned to reduce staff in 2020.

**The vast majority of sellers still had confidence in maintaining business operations in 2020**; only 1.4% of respondents said that they would close up shop. 66.6% of the sellers remained optimistic about future activity in 2020, among them, 14.4% expected rapid growth in scale or profits; 11.3% expected little changes from the previous year; 40.9% considered it difficult to operate but could keep going. Among the surveyed, only 11.7% were pessimistic and expected significant losses or even bankruptcy, and 21.7% were unsure.

On **China's macroeconomic outlook in 2020**, 38.6% of the sellers were optimistic, of which 6.6% were very optimistic and 31.9% cautiously optimistic. 26.4% of respondents expressed pessimism, of which 21.7% were pessimistic, and 4.7% were very pessimistic. About 35.1% were not sure. Naturally, sellers in Hubei were more pessimistic (35.9%).

The survey was revealing:

1. The MSMEs suffered significant losses during the epidemic, and the losses were widespread. Many firms faced significant difficulties with declining orders, order cancellations and tight cash flows. Some firms were more flexible in finding solutions to deal with mounting challenges.
2. While the firms were rightly worried about the short-term impact from the outbreak and the stringent measures implemented to contain the epidemic, they were optimistic about China's economic prospects in 2020 and they remained confident in the business environment and in their ability to turn their businesses around.
3. The immediate resumption of logistics and distribution would be critical to the survival of the firms by restoring the normal flows of personnel and goods and services. It is also essential to alleviate the MSMEs' cost burdens and equip them with the new technological infrastructure to cope with the challenging situation.

### *A High-Frequency Indicator of Economy Activity*

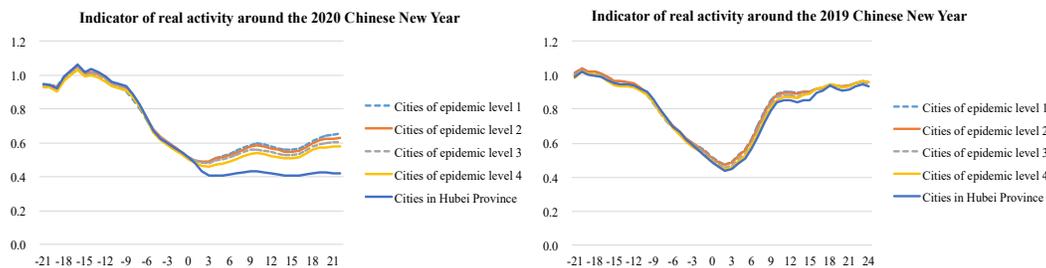
The outbreak of COVID-19, on top of the traditional Chinese New Year holidays, has had a significant impact on many aspects of the people's life in China, and obviously on the Chinese economy. As detailed in the previous survey, it is crucial for policymakers and businesses alike to understand, in real-time, the true level of real activity during the COVID-19 epidemic in comparison to a recent period that can be considered normal. We use high-frequency data to construct a proxy indicator to gauge the level of real activity in more than 300 cities and surrounding areas around the period of the outbreak of COVID-19 in 2020. We compare the indicator to that of 2019 to assess the impact of the epidemic. Given that the epidemic coincided with a trough of economic activity during the traditional Chinese New Year holidays, the comparison is made around the New Year's Eve.

We built a daily proxy indicator of economic activity of 2020 relative to the same (Lunar Calendar) period in 2019 for 328 cities and surrounding areas across the country. In 2018, these areas accounted for over 95% of China's GDP. The indicator is based on measures of the number of economically active urban entities on an average, "normal" day before the Spring Festival each year (100%). It consists three dimensions: merchants, consumers, and population flow. The indicator takes into account long-

term trends and focuses on the degree of recovery of real activity after the Spring Festival compared with the previous year’s benchmark. The index is not comparable with traditional GDP measures but can provide a glimpse of economic activity.

The indicator shows that **economic recovery remained weak around February 15**, i.e. two weeks after the Chinese New Year. Regional differences were sizeable: the level of real activity ranged between 28% and 72%, and most (60%) of cities were operating at 48% to 59% of the respective “normal” level. The cities with higher levels of activity were located mainly in remote areas where the epidemic was less severe. Compared to 2019, we find that the average level of activity is still low across the country. As of February 15 (January 22 of the Lunar Calendar), the level of activity was only 53% of the pre-New Year normal, far below the level in 2019 (98.7%). This could be attributed to extended holidays due to the COVID-19 epidemic, stringent controls of population flows, and the delay of people returning to work.

*Figure 2: Comparison of Levels of Real Activity in Cities between 2020 and 2019*



**Note:** T=0 represents the day of Chinese New Year’s Eve.

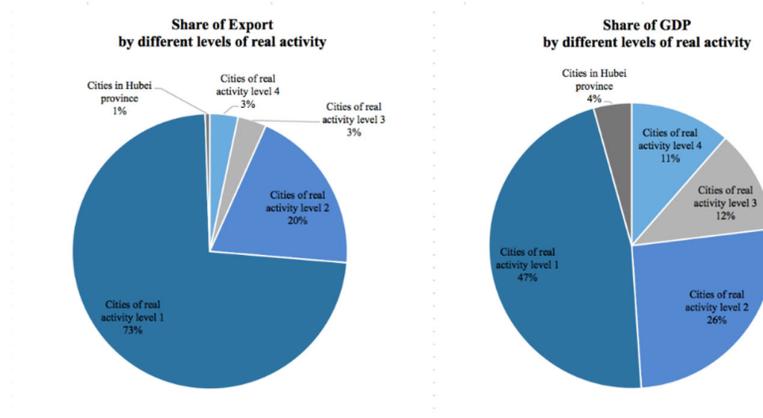
Cities outside Hubei Province are divided into four groups based on the severity of the epidemic. Level 4 groups of cities most severely affected by the epidemic, while level 1 groups those least affected.

In general, **the level of economic activity remained rather low following the outbreak of COVID-19**. Even in areas with the mildest epidemic measured by the number of confirmed cases, there is still a large gap between the levels of activity during the outbreak and in normal times of work, especially compared to 2019. In a typical year like 2019, the relative real activity indicator rose rapidly from less than 50% to about 90% ten days after the New Year’s Eve (see Figure 2). Yet this year, 22 days after New Year’s Eve, the indicator for cities outside Hubei only reached 33% of the level seen in 2019.

Second, **economic activity in the more developed regions and major export hubs was less encouraging**, and this might have an impact on the national economy. Cities with lower levels of activity had higher shares in export and national GDP (see Figure 3). The cities (outside Hubei) with the lowest levels of activity and Hubei together accounted for 51% of the country’s GDP, while the cities highest levels of activity amounted to only 11% of GDP. In terms of exports, the lowest-activity group accounted

for 73%. The uneven revival of real activity could have a significant impact on China's exports and economic growth.

*Figure 3: Shares of Cities in China's Exports and GDP according to Activity Levels*



**Note:** The cities outside Hubei Province are divided into four groups based on the level of their real activity compared to that of the same period one year ago. Level 4 groups the cities with the highest value of the indicator of relative real activity, while level 1 groups the cities with the lowest value.

Third, **the uneven revival of real activity was closely related to the return of migrant workers to their posts.** In cities with relatively low levels of activity, the proportion of migrants tended to be higher. Excluding Hubei, the 69 cities with the lowest level of activity had a migrant population of about 59 million. Clearly, a swift return of migrant workers, assuming safe flows, would benefit China's economic growth. Already, the central and local governments are rolling out concrete measures to support population flow and economic recovery, while many MSMEs still suffer from an insufficient workforce pool.

Existing data suggest that **regional differences in the values of the indicator of real activity is far less than those in epidemic indicators,** and the speed of recovery in some provinces was significantly slower than the recovery from the epidemic. The more severe the epidemic was, the weaker the recovery, but the differences across regions were relatively small. Given that the fight against virus is still ongoing, a lot of regions have taken a cautious approach.

To sum up, at the current conjuncture, **returning the workers safely back to posts** has become a task of paramount importance to the authorities, firms and workers alike, and it is crucial to the recovery. It is still a long way to go before growth is restored to its full speed. Efforts need to be made to ensure that **logistics and distribution** can run smoothly and workers can return to posts in a safe and timely manner. It is also necessary to strengthen the coordination of policies and economic activities in various industries and regions.

### III. Moving Toward a Solid Recovery

The COVID-19 epidemic has severely impacted the Chinese economy. Efforts need to be made to firmly contain the epidemic and quickly revive the economy. **Policies should be introduced to boost the confidence of consumers, investors, business owners and employees, and provide a safe environment for work and for consumption.** Special efforts need to be made to assist MSMEs to overcome financial difficulties and to offer special subsidies or tax reliefs and avoid putting all the burden of adjustment on the shoulders of the entrepreneurs.

The evolution of the Chinese economy in the past ten days has been somewhat consistent with our forecasts and judgments made on February 9. As we expected, the regions outside Hubei have gradually resumed work after February 10, but the economic recovery remains slow. **A major uncertainty is the ongoing tides of workers returning from the extended Lunar New Year holidays,** including about 170 million migrant workers, a significant challenge to the epidemic control efforts. During the recovery, the speed at which workers can return to posts and resume work will have a significant impact on the overall economy. With the virus increasingly under control, we expect that economic recovery will pick up more rapidly than before.

The impact of COVID-19 epidemic on the Chinese economy and the global economy turns out to be broader and more profound compared to the effects of SARS. The disruptions to industrial production, global trade flows and global logistics networks could be severe due to prolonged production delays. Certain industries, e.g. transportation, tourism and education in some countries and regions, may face heightened uncertainties or suffer major setbacks in the short to medium terms. A true pandemic has no borders, and **a substantial and sustained global growth depends on the joint efforts and mutual assistance of the international community.**