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Coronavirus poses a problem for the Chinese economy

China's GDP growth will be lower than predicted due to the spread of the disease

The spread of the 2019-nCoV coronavirus, which originated in China, has not reached the scale of a pandemic because currently there are less than 7,000 confirmed cases of infection in 15 countries. Despite this, the macroeconomic consequences of the fight against this disease may be sizeable for China. ACRA believes that the net effect of reduced business activity on the Chinese economy in 2020 may range from 0.4% to 1.1% of GDP. This assessment takes into account effects that compensate for direct economic losses (see *page 2*), but not possible stimulus measures carried out by the state.

Statistics on the largest epidemics of the 21st century show that an insignificant part of the working population (usually less than 0.5%) is effected by outbreaks of lethal diseases, however measures to prevent the spread of these viruses may impact the economic activity of more than a third of a country's population. ACRA predicts that China will see a significant decline in volumes of internal tourism, provision of educational services (due to closures of educational institutions), public transport services, and visits to recreational and entertainment venues in 2020.

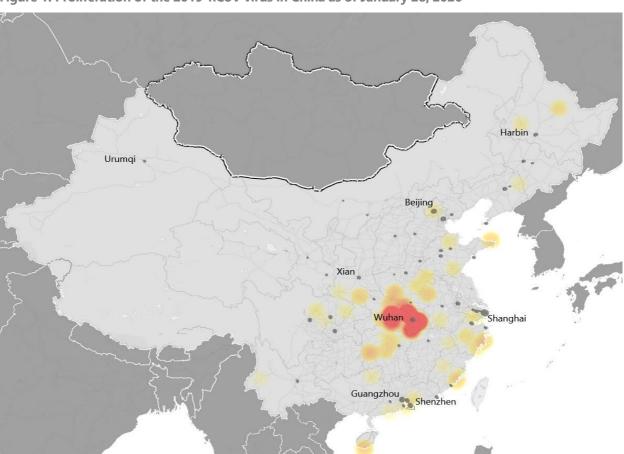


Figure 1. Proliferation of the 2019-nCoV virus in China as of January 28, 2020*

Sources: World Health Organization, National Bureau of Statistics of China, ACRA

^{*} Yellow indicates regions where outbreaks of the disease have been recorded; red indicates areas with the most cases of infection (statistics for 200 cities). The share of those infected does not exceed 0.1% in any of the cities indicated. The gray circles mark the 50 largest Chinese cities in terms of population.

ACRA has assessed the economic effect of the spread of the coronavirus taking into account the assumptions listed below (the largest major epidemics of the 21st century are taken into account, see *Table 1*):

- 1. The epidemic will not be confined to China, but the majority of cases will be recorded in three or four countries, including China.
- 2. The number of confirmed cases in China will continue to grow rapidly until late February or early March 2020, while the active campaign against the virus will continue until late April 2020.
- 3. The mortality rate (ratio of confirmed deaths caused by virus to the number of confirmed infections) will range from 5% to 25%.
- 4. Internal tourism will decline by 50% and external tourism will decline by 75% in the affected areas during the active campaign against the virus.

Assessment components

- 1. The value of tourism services provided in China in 2020 may fall by 10–30%. Over the past ten years, internal and external tourism has become a significant part of China's economy. During this period, China's annual revenue from the tourism sector as a whole has grown from 3.7% to 6.7–7% of GDP (out of which internal tourism has accounted for 5.8–6%). ACRA assesses that transportation services related to the tourism sector account for 7–10% of the total value of transportation services. The total value of non-provided transport services in the tourism sector may reach 0.5–1.1% of GDP in 2020.
- 2. **The volume of educational services provided in 2020 may fall by 3–7%.** Educational institutions are being closed down in the cities where the largest numbers of coronavirus infections have been recorded. These enforced vacations may last for up to a month. Impact: 0.1–0.2% of GDP.
- 3. The value of public transport services that are not related to tourism may fall by 2–3%. Limits are currently in place on urban and intercity transport in at least ten Chinese cities. It is likely that such restrictions will be imposed in more areas. Impact: up to 0.1% of GDP.
- 4. **Effects mitigating the slowdown in GDP growth:** (a) growth in the volume of healthcare services; (b) growth in demand for food and entertainment due to a reduction of external tourism; (c) growth in demand for services provided by online retailers and online entertainment providers. These mitigating effects are assessed at 0.3–0.7% of GDP. The Chinese government will continue to apply stimulative fiscal and monetary measures.

Table 1. Statistics of major 21st century epidemics (only confirmed cases of infection)

| Virus | 2019-nCoV* | H7N9 | Zika | Ebola | MERS | H1N1/09 | H5N1 | SARS |
|--|------------|---------|------------------|-------------|--------------|----------|-----------------|---------|
| Period of major outbreaks | 2020 | 2017 | 2015–2016 | 2014–2016 | 2012 | 2009 | 2005-2007 | 2003 |
| Most cases | China | China | Latin America | West Africa | Saudi Arabia | Global | South Africa | China |
| Number of countries affected | 15 | 3 | >100 | 10 | 27 | >100 | 17 | 26 |
| out of which were heavily affected | 1 | 1 | 5 | 3 | 1 | 7 | 3 | 1 |
| Number infected | 6,014 | 1,568 | >150,000 | 28,646 | 2,494 | >200,000 | 861 | 8,096 |
| Deaths | 132 | 616 | 18 | 11,323 | 858 | 1,906 | 455 | 774 |
| Mortality rate, % | 5–25 | 35–40 | no data** | 40–50 | 35–40 | <1 | 50-60 | 9–10 |
| Average duration of outbreak, months | 2–4 | 3–4 | no data | 4–5 | 2–3 | 3-4 | 2–3 | 1–2 |
| Decline in internal tourism, % per year | 15–20 | no data | no data | no data | no data | no data | no data | no data |
| Decline in external tourism, % per year | 30–40 | 0–5 | 15 | no data | 12 | 23 | 25 | no data |

^{*} Data as of January 29, 2020. There is no data available for the cells shaded gray; these figures are assumptions needed to calculate the economic effect of the epidemic.

^{**} The Zika virus leads to children being born with developmental diseases and an increased risk of neurological disorders. Sources: World Health Organization, national statistics agencies, ACRA

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