

Economic impacts of Coronavirus

With facts on the ground changing by the day, it is not possible to predict how long the outbreak of Coronavirus (COVID-19) will last, or how fast or far it will spread. Consequently it is also not possible to give a credible estimate of its economic impact, except that by now it is obvious it will be nontrivial.

We can, however, try to assess how the Coronavirus will affect the economy in Europe, which will happen through a number of mechanisms:

a) Demand is reduced

Demand has been lowered in areas affected by the virus outbreak as:

- Towns or whole regions are cordoned off by authorities and people are told to stay indoors. Many people do not report for work either because they have contracted the virus, out of fear of doing so, or because their workplace has been shut down.
- Many workplaces thus come to a standstill or pursue work at reduced intensity, and many workers in China have reportedly seen pay be reduced or withheld during the outbreak¹, which leads to stymied demand.
- With workplaces closed down hiring comes to a halt, and investments or new projects are postponed in areas affected.
- Consumers opt to remain indoors to not catch the virus, leading to depressed sales in particular in retail and hospitality sectors.
- If the outbreak persists normally healthy companies may struggle to survive, and others will lose so much income that they need to cut down on investments and other non-vital economic activities while they recover.
- There will be second-order effects as regions and countries that are not affected by the Coronavirus, but have export sales to areas that are, will experience lower demand for their goods and services.
- More generally the outbreak and resulting economic turmoil will likely reduce consumer confidence for some time, resulting in a fall in spending.

While some of these effects are temporary, e.g. some household and firm spending is withheld but will bounce back later, some of the effects are also permanent in nature, in particular if the outbreak leads to massive losses of lives and lasts long enough to prompt large-scale company failures.

Looking at key facts, we have already seen significant interruptions that point to serious reductions in economic activity:

- Oil prices have dropped more than 20% since January reflecting lower demand²
- Global tourism already shows clear signs of being negatively affected, with France for example reporting a drop of around 30-40%³ as Chinese would-be tourists have had to stay at home.
- Stock markets have plummeted, with the US stock market having gone through the worst week since the Financial Crisis at the end of February, indicating that investors

¹ <https://fortune.com/2020/02/19/coronavirus-china-workers-businesses-pay-wages/>

² <https://www.ft.com/content/9854a72c-4694-11ea-aee2-9ddbdc86190d>

³ <https://www.cnn.com/2020/02/23/coronavirus-impact-france-sees-tourism-numbers-fall-by-30percent-to-40percent.html>

see significant trouble ahead and expect many industries to become significantly negatively affected.

- As a gauge of what impacts markets perceive the outbreak has had and will have, it is helpful to consider sectoral stock price movements⁴. The S&P 500 index has lost 9.8% of its valuation over the past month with the fall materializing broadly over its component sectors, with Energy (-18.1%), Finance (-12.1%) and Industry (-11.1%) suffering most⁵

b) Supply chains are disrupted

Supply chains have been disrupted as

- Many factories and other workplaces in China have been shut down
- Transportation links have been interrupted by authorities cordoning off affected areas and provinces, disrupting supply chain connectivity
- Even if companies are able to diversify by finding alternative suppliers that are not affected by the virus outbreak, this will often be more costly, and moreover this is not always possible especially for more advanced or tailored intermediate types of inputs.

It typically takes 4-6 weeks for a container to be shipped by sea from China to Europe, and in many cases interruptions in supply can be handled for a while by drawing on existing stockpiles and inventories. Consequently the effects of the Chinese shutdowns will be felt in Europe with considerable delay, and a much stronger impact is likely to manifest itself in March among European companies relying on Chinese suppliers. We have already seen that:

- Shipping has been strongly negatively affected with many reports of half-empty container ships, and the World Container Index showing a price drop of around 15%⁶
- A number of large global multinationals such as Apple⁷ predict sales to drop markedly as they are unable to guarantee sufficient supply for retailers due to plants in China having been shut down

c) Financial markets impacted

There is an effect through financial markets reacting to the situation as

- Risk aversion has increased in financial markets (with the US 10-year interest rate falling to a record low)⁸, which means less funding is available as financial intermediaries become more reluctant to give out credit and loans
- Consumer and business sentiment have soured due to the heightened risk, which is likely to depress spending and investment, whilst further leading to credit being

⁴ <https://www.barchart.com/stocks/sectors/rankings?timeFrame=1m>

⁵ As Europe does not operate an integrated and comprehensive stock market the S&P is seen as a better indicator to market reactions to the Coronavirus outbreak, particularly as the US and EU have both been strong economic ties to China and have been indirectly affected, but have not yet seen a large-scale domestic outbreak. Consumer stocks have been somewhat less affected but would no doubt have fared much worse if there had been a large outbreak which would affect companies such as retailers and hospitality directly

⁶ https://www.wsj.com/articles/coronavirus-toll-on-shipping-reaches-350-million-a-week-11581366671?mod=article_inline
<https://www.wsj.com/articles/chinas-shipping-nears-a-standstill-amid-coronavirus-disruption-11581699854>
<https://www.drewry.co.uk/supply-chain-advisors/supply-chain-expertise/world-container-index-assessed-by-drewry>

⁷ <https://www.ft.com/content/ab59aac6-51ce-11ea-8841-482eed0038b1>

⁸ See <https://www.oecd-ilibrary.org/docserver/7969896b-en.pdf?expires=1583163377&id=id&accname=guest&checksum=33157A8C73577A2E56BA3EC1B9AFB78E> in particular p. 2

restricted as lenders perceive less opportunity due to the adverse economic environment

Economic forecasts in light of the outbreak

While economic forecasts will be highly uncertain in the context of the Coronavirus outbreak and depend very much on when they were released, it is helpful to consider what ramifications central actors foresee for the EU economies.

DG ECFIN released its latest Winter Economic Outlook on 13 February and maintained its growth forecast for the EU in 2020 of 1.4% GDP growth, but also noted that “the baseline assumption is that the outbreak peaks in the first quarter, with relatively limited global spillovers”. However, with clear signs of spread into South Korea, Japan, Iran, Italy and other countries, this underlying assumption looks optimistic.

Oxford Economics has estimated that a scenario with a global pandemic would thrust the eurozone into a technical recession in the first half of 2020⁹ (see appendix).

Many analysts have compared the current outbreak with SARS virus in 2003, which is estimated to have led to a 2 percentage point drop in quarterly growth in the economy affected, i.e. in China. While there may be a partial bounce-back later, countries severely affected will see growth fall. It seems very probable that Italy, which already experienced negative growth in the fourth quarter of 2019, will now enter a recession following a serious outbreak in its Lombardy region.

Background: Coronavirus and current state of affairs

According to the John Hopkins University Coronavirus COVID-19 tracker¹⁰, there have been a total of 80,234 confirmed cases of Coronavirus, of which 2,701 have resulted in fatalities (with many people still currently undergoing treatment/suffering from the virus).

The outbreak has been very much centred around China with 77,660 of confirmed cases, but has spread to South Korea (977 confirmed cases), Italy (229 cases), Japan (160 cases), Singapore (90 cases) and other South East Asian countries. Also, travellers returning from China have carried the virus, leading to confirmed cases in a large number of countries including Germany (16), Belgium (1), the US (53) and the UK (13).

A study from Chinese health officials based on 44,000 cases recently suggested a mortality rate of 2.3%, with sick and elderly reportedly being more vulnerable¹¹. In comparison SARS had a mortality rate of around 10%, but spread considerably slower¹². The incubation period of Coronavirus has been estimated by Chinese health researchers to be up to 24 days¹³, making it difficult to prevent spread.

⁹ <https://www.oxfordeconomics.com/coronavirus>

¹⁰ <https://gisanddata.maps.arcgis.com/apps/opsdashboard/index.html#/bda7594740fd40299423467b48e9ecf6>

¹¹ <https://www.bbc.com/news/world-asia-china-51540981>

¹² <https://www.ft.com/content/ed3fb63e-41ce-11ea-bdb5-169ba7be433d>

¹³ <https://www.medrxiv.org/content/10.1101/2020.02.06.20020974v1>

Appendix: Oxford Economics model estimates of impact of global pandemic**Figure 4: Global pandemic would see growth hit hard in the advanced economies in 2020****World: GDP growth in global pandemic**