

COVID-19 Projections

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Gavekal Intelligence Software now provides daily projections of the diffusion of COVID-19 for every country counting a cumulated number of cases above a few hundreds.

You can access the daily updates on our website:

www.gavekal-intelligence-software.com

Main Comments on 17 March 2020 Data

The most recent developments in most Western European countries indicate the beginning of a fading of the epidemic. The number of cases shall still grow quickly, but the acceleration is declining.

North America is lagging, with no sign yet of any fading process.

Method for the Projections

As detailed in our first publication about China's epidemic on the 1st of February, the fact that the number of cases is accelerating can be misleading.

At the beginning, epidemic processes are exponential by nature. In other words, the number of cases of infection accelerates. Making projections therefore requires measuring the derivative of the acceleration, named 'the jolt' by mathematicians.

In our projections, we fit the accelerating or fading nature of the jolt, and project its dynamics over the subsequent four weeks. The jolt is fitted with an exponential function over, respectively, the previous 5, 6, 7, 8 and 9 days. Large numbers are truncated to facilitate the reading of the charts.

Fitting over various windows provides an information on the most recent dynamics of the COVID-19 diffusion.

During the early days of an epidemic, projections can be extremely volatile, and it is therefore recommended not to draw black-and-white conclusions from a daily report, but to follow the evolution over many days.

Furthermore, volatility in projections can be informative as well, if only to better time when projections are beginning to stabilize.