

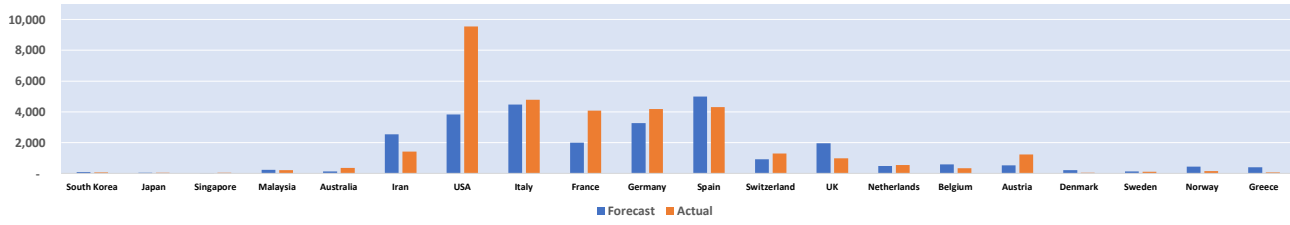
1. Daily update on case numbers

Our short run forecast model assumes Western nations match the reduction in transmission rates achieved in Korea or Italy. From 19th March, we have begun taking data from the Johns Hopkins dashboard, causing a material jump in some countries case numbers that date.

Key points

- 1 Case numbers in Italy, Germany, Spain and Nordic region tracking much as expected
- 2 Big jump in US case numbers - came through one day faster than anticipated
- 3 Prepare for new spikes over the next week in countries that have not implemented full lockdowns

Forecast v actual: total cases



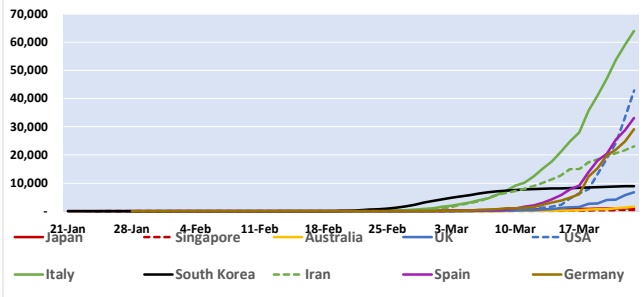
2. Global comparison of growth in case numbers

The figures below are historic data from WHO situation reports, other than for US where we are using John Hopkins figures as WHO/CDC data is out of date. The left hand chart uses a normal axis and the right hand chart shows identical figures on a log axis.

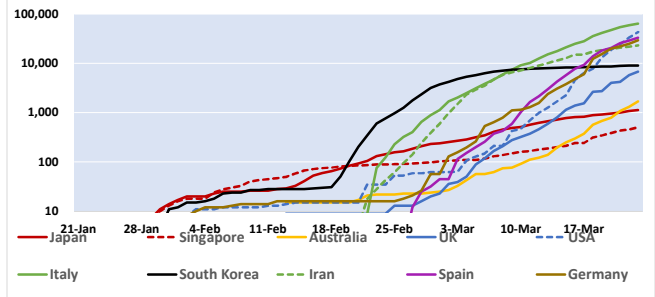
Key points

- 1 Chart adjusted to start from 10 cases
- 2 Growth slowing in Italy - early signs of slowing growth in Spain and Germany too
- 3 US, UK continue to grow (low figures from UK reflect low testing?). Australia a concern

Comparison of case numbers - selected countries



Comparison of case numbers - selected countries



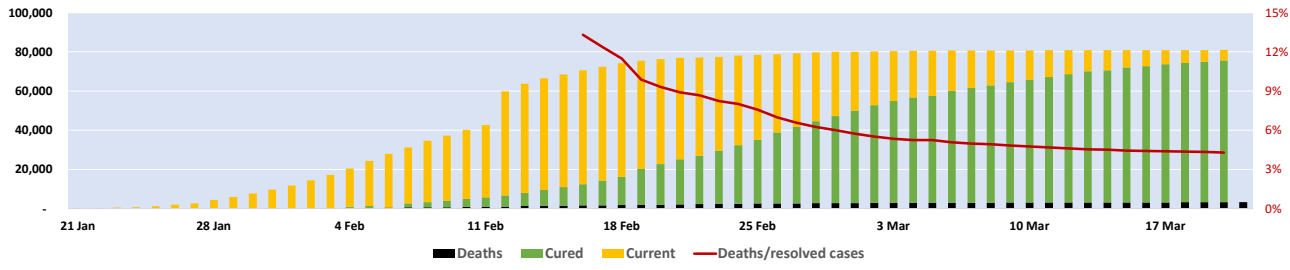
3. China

The figures below are historic figures from WHO (total cases and deaths) and China's CDC (for number of cured cases).

Key points

- 1 Awaiting data on China
- 2 Domestic cases now at ZERO - imported cases still running at around 30 to 40 per day
- 3 Mortality rate on resolved cases now 4.3% - 93% of all cases now cured

Corona virus outcomes - China



4. Comparison of early stages of outbreaks

The bars below show absolute case numbers, starting from the first day that the country reported approximately 200 cases. This allows comparison of the early stages of the outbreak against China (black line), South Korea (black dotted line) and Japan (grey line).

Key points

- 1 US outbreak tracking substantially ahead of China
- 2 Spain tracking very close to China
- 3 Germany expanding rapidly (latter in part reflects high testing rates)

Comparison of early growth in case numbers in Europe v China, Korea and Japan

