

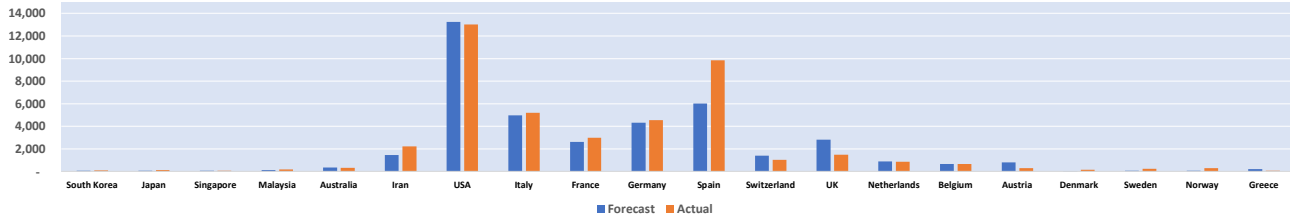
1. Daily update on case numbers

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 growing rapidly in USA as expected
- 2 Significant jump in Spain - conversely UK case numbers still coming in lower than anticipated
- 3 New case numbers stabilising in countries that implemented lockdowns last week.

Forecast v actual: total cases



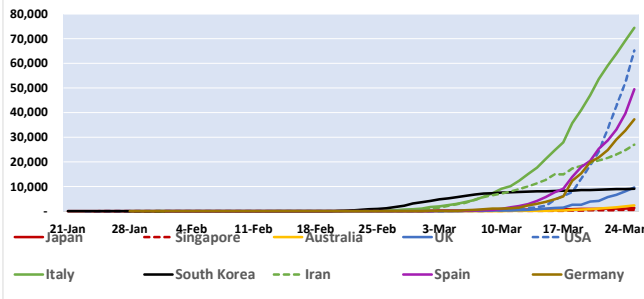
2. Global comparison of growth in case numbers

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historic data from WHO situation reports, other than for US where we are using John Hopkins figures as WHO/CDC data is out of date.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.

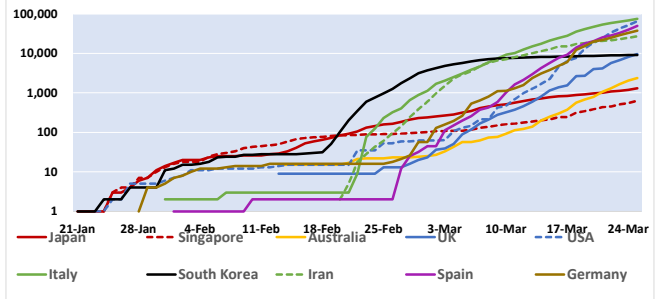
Key points

- 1 US tracking rapidly towards 100k cases
- 2 Growth slowing in Italy - early signs of slowing growth in Spain and Germany too
- 3 Exponential growth (straight line on log chart on right below) continues in UK, Australia

Comparison of case numbers - selected countries



Comparison of case numbers - selected countries



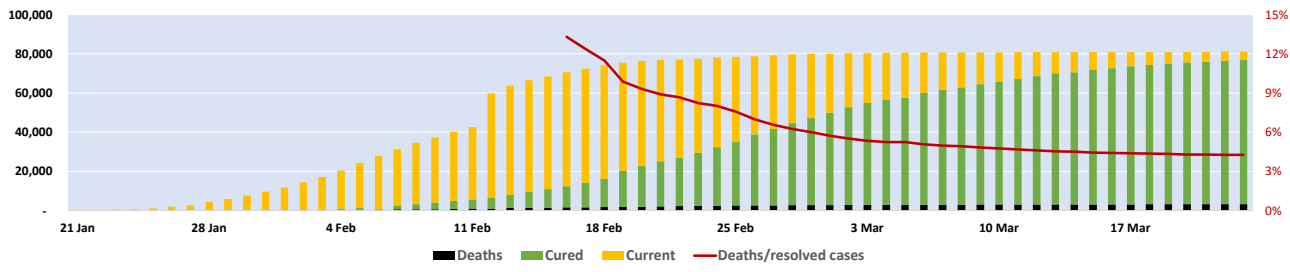
3. China

The figures below are historic figures from WHO (total cases and deaths) and China's CDC (for number of cured cases). Awaiting China data for 25 March

Key points

- 1 China set to re-open Wuhan province in early April
- 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% - 95% 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

