

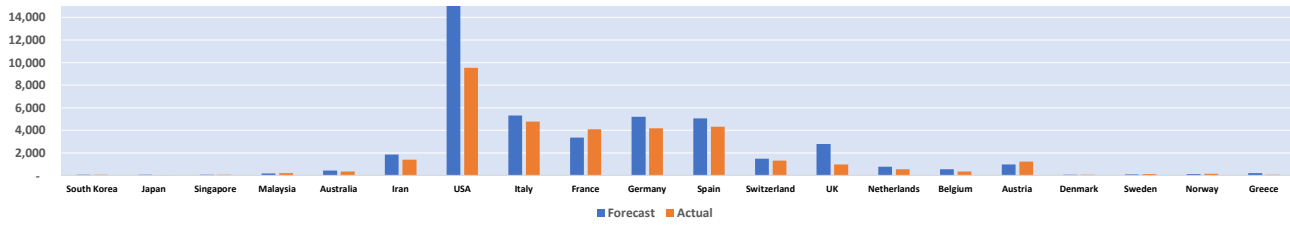
1. Daily update on case numbers

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 Case numbers high in USA and will increase further - UK figure looks surprisingly low
- 3 More lockdowns being enforced, including Australia, though nature varies

Forecast v actual: total cases



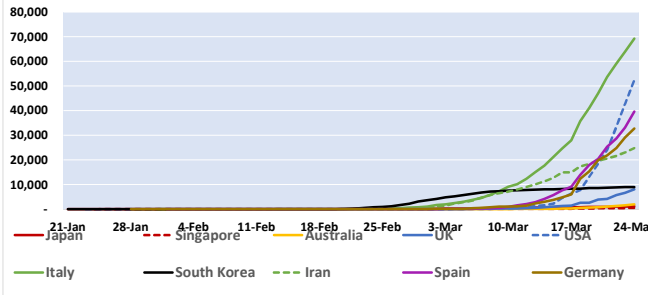
2. Global comparison of growth in case numbers

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historic data from WHO situation reports, other than for US where we are using John Hopkins figures as WHO/CDC data is out of date.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

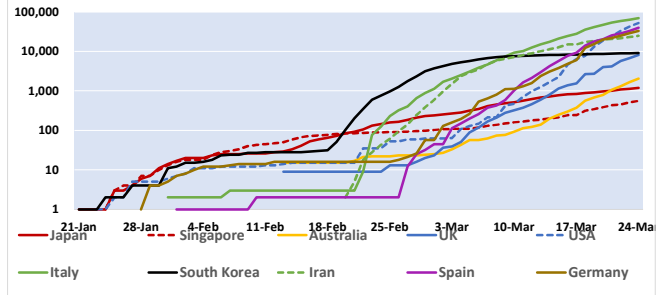
Key points

- 1 Severity of US outbreak now clearly apparent - acceleration of spread in Australia 10 days ago apparent
- 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?).

Comparison of case numbers - selected countries



Comparison of case numbers - selected countries



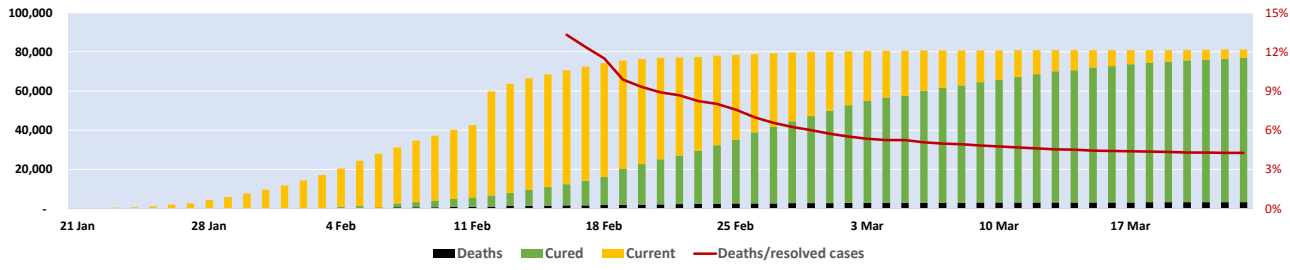
3. China

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

Key points

- 1 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

