Gavekal Intelligence Software

15 April 2020

COVID-19 Projections

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COVID-19 Cases' and Deaths' Projection Method

At the beginning, epidemic processes are exponential by nature, in other words, the number of cases of infection or death accelerates.

Making projections therefore requires to capture the derivative of the acceleration, named 'the jolt' by mathematicians. In the following 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. The thicker dotted red line is the shortest trend, i.e. calculated over the previous five days.

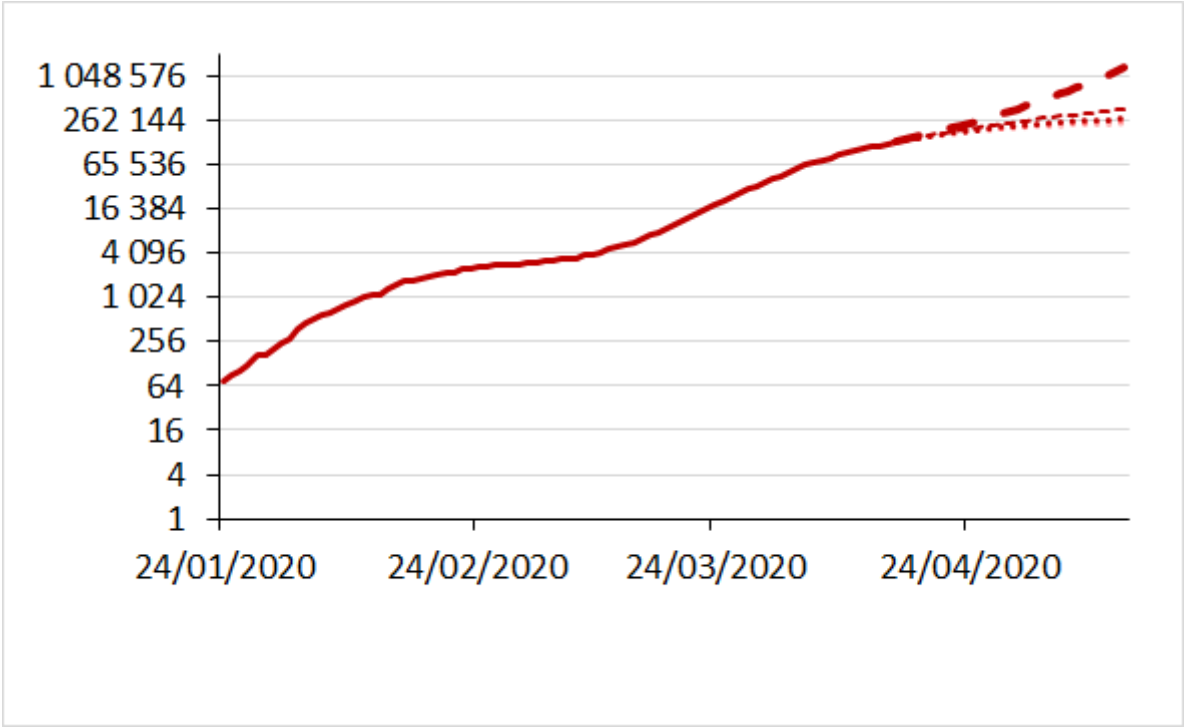
During the early days of an epidemic, projections can be extremely volatile, and it is therefore recommended not to draw black-and-white conclusions from a daily report, but to follow the evolution over many days.

DEATHS - PROJECTIONS

World

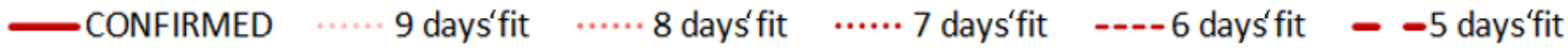
CONFIRMED 9 days'fit 8 days'fit 7 days'fit 6 days'fit 5 days'fit

Cumulated



Data: The Johns Hopkins University, Politolog.com

Austria



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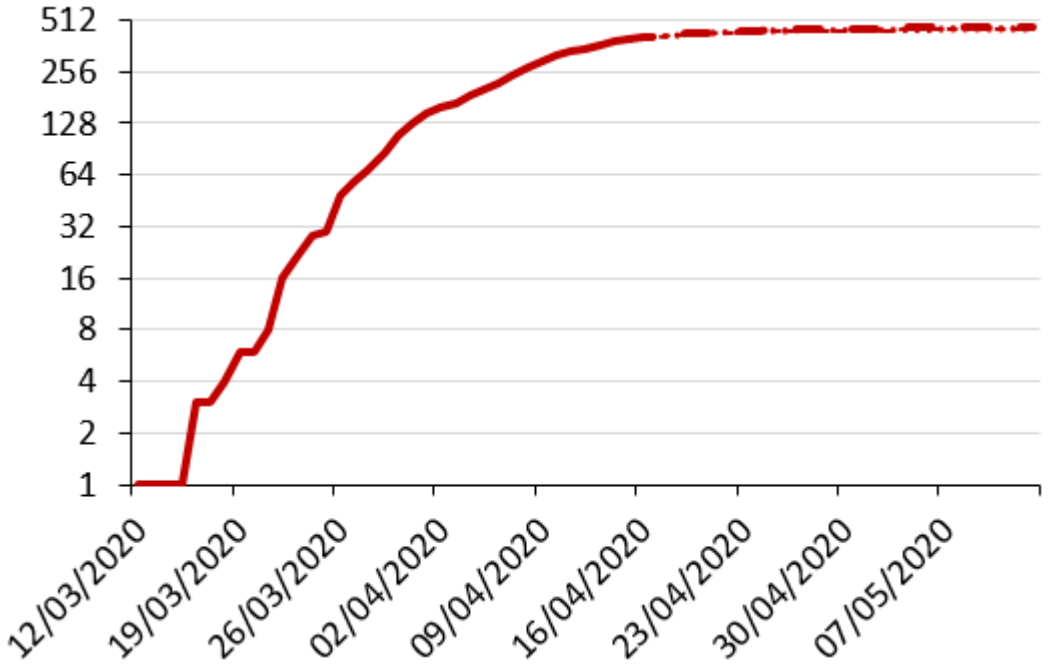

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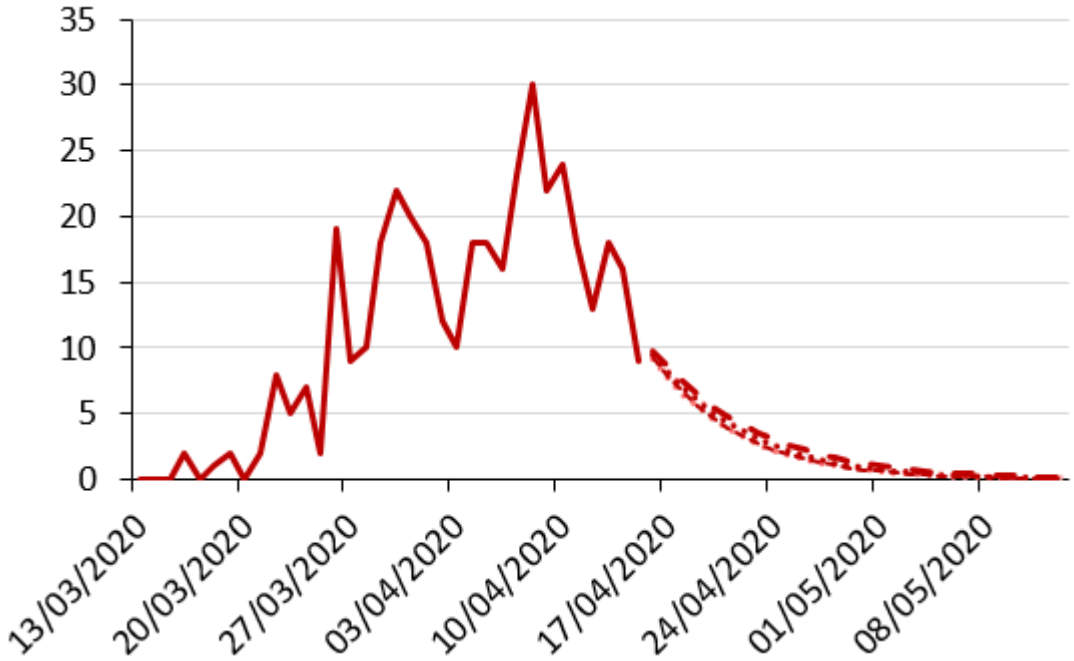
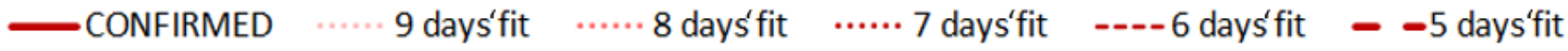


Data: The Johns Hopkins University, Politolog.com

Belgium



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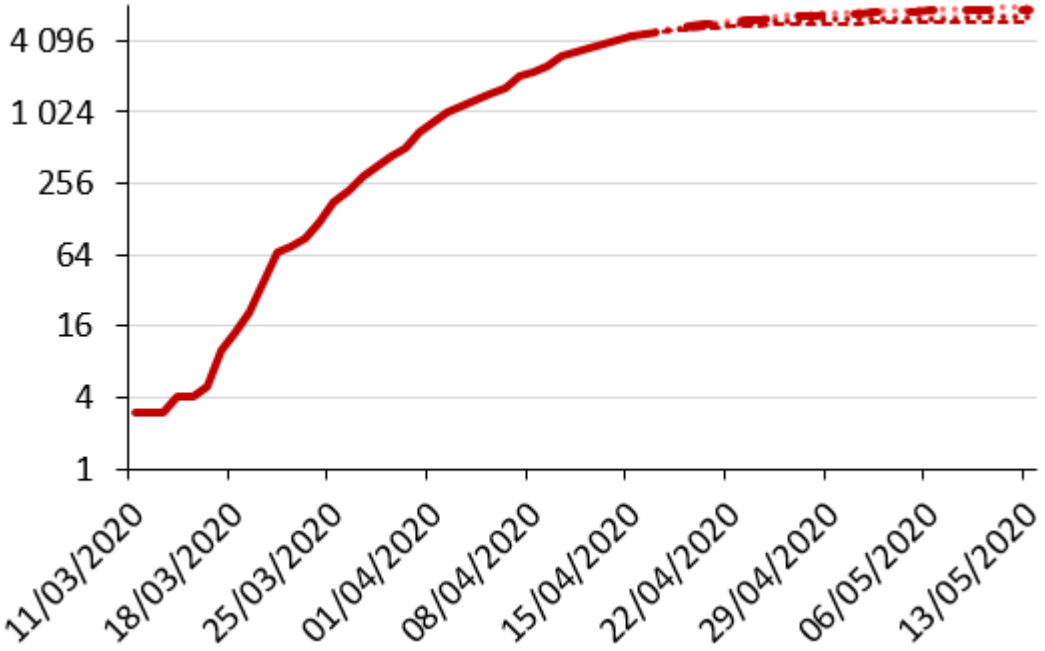

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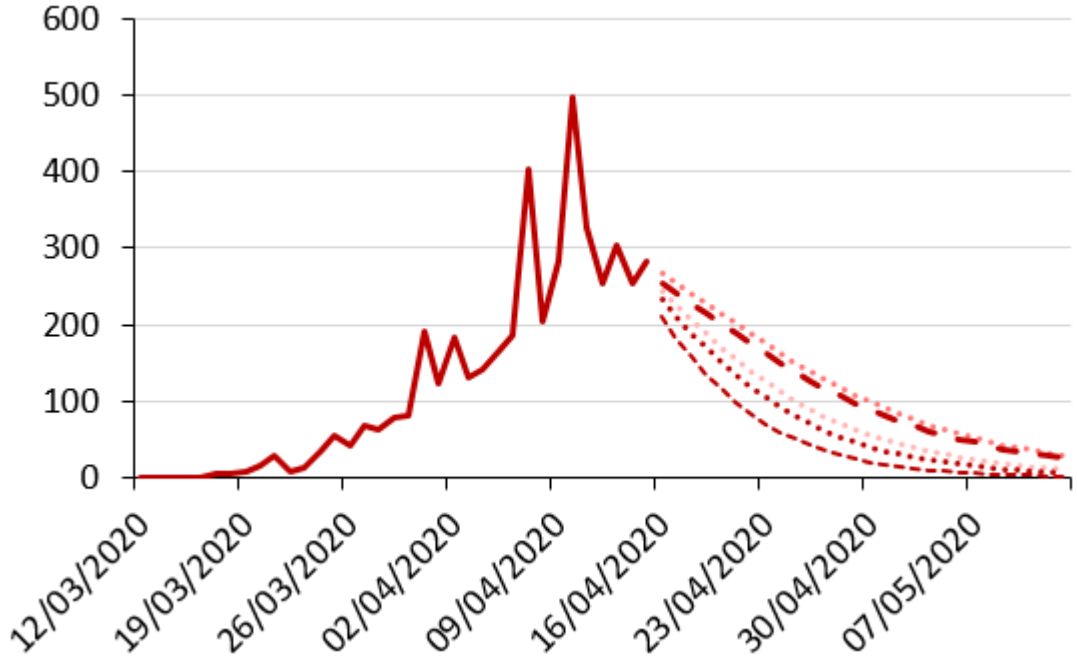
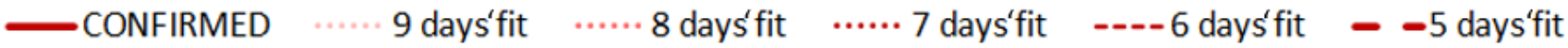


Data: The Johns Hopkins University, Politolog.com

Brazil



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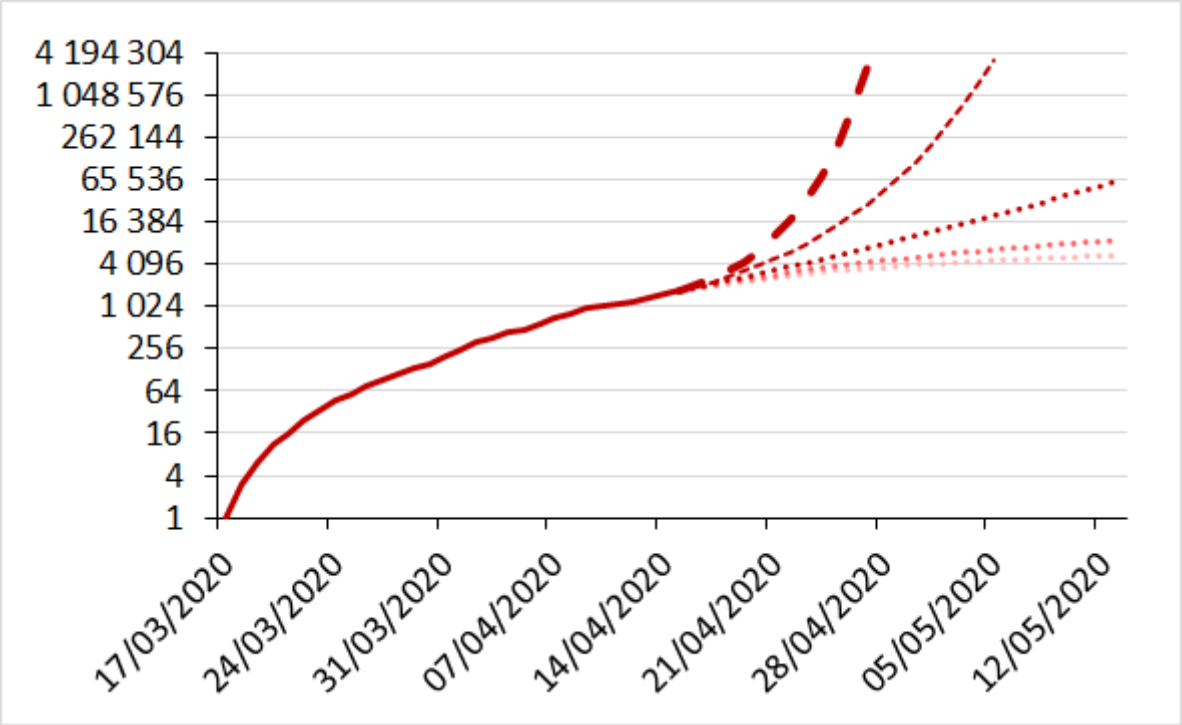

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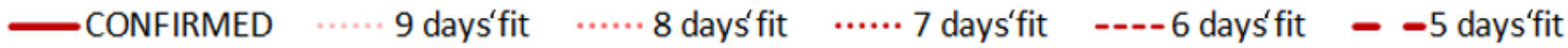

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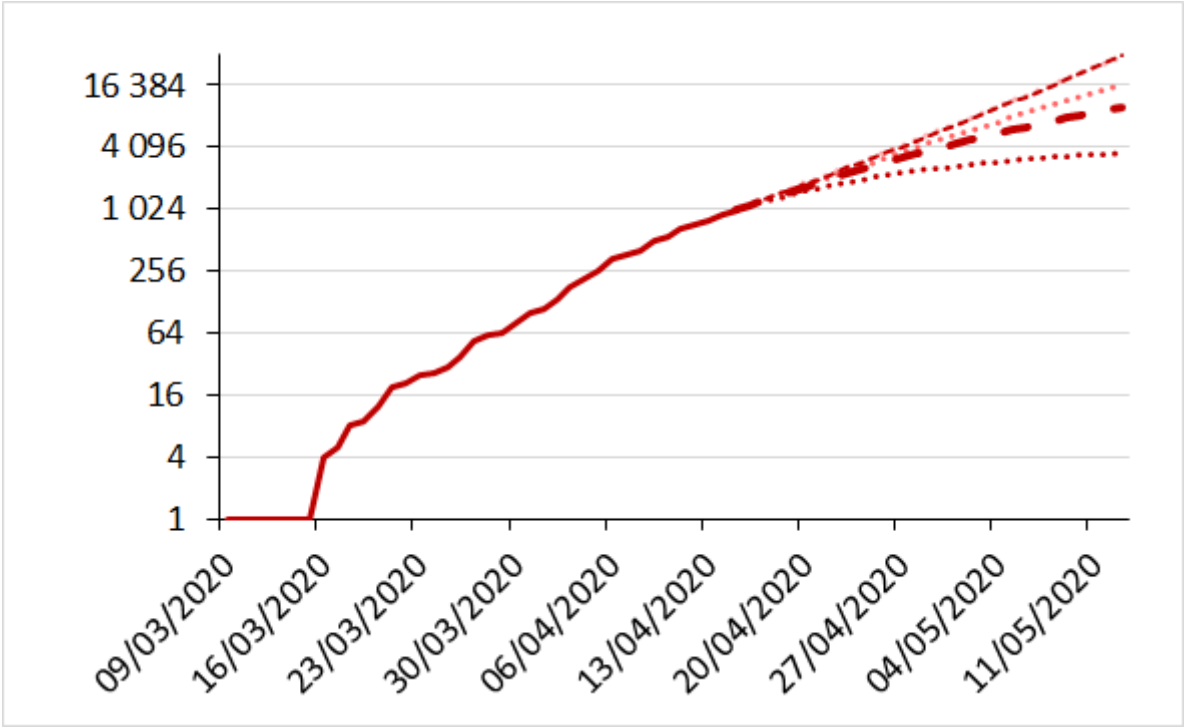
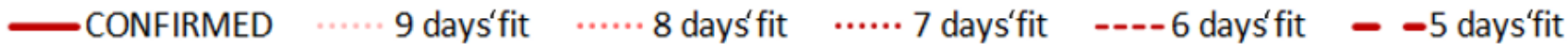


Data: The Johns Hopkins University, Politolog.com

China



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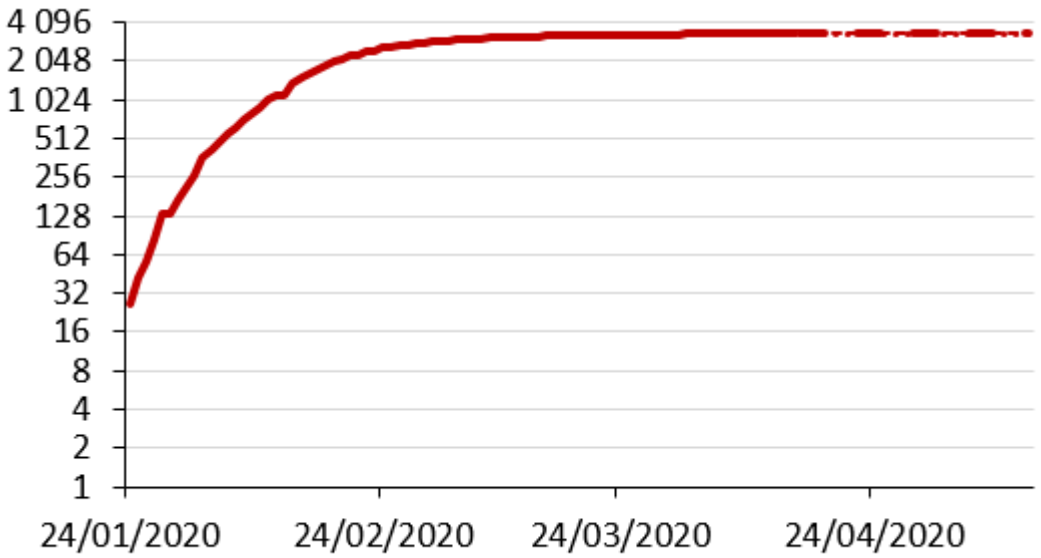

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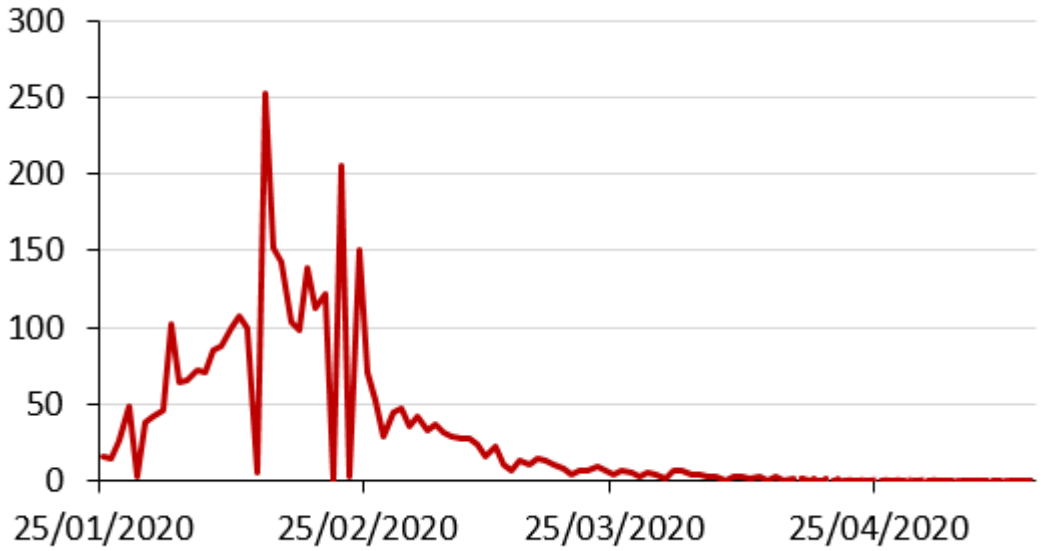

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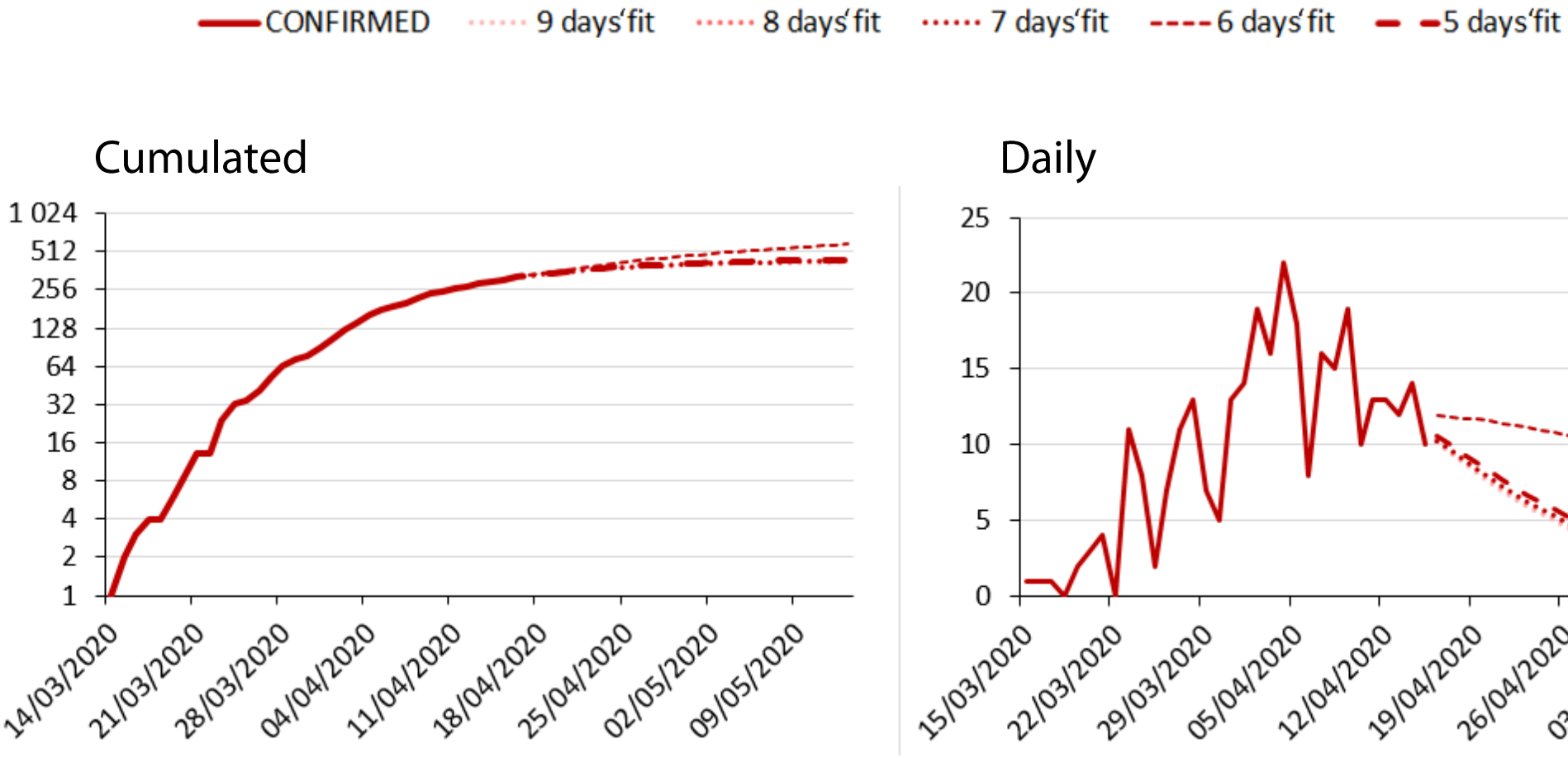
Denmark



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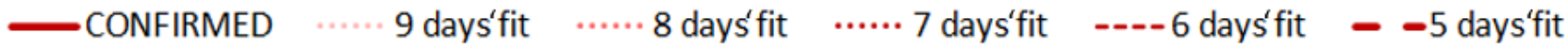
France



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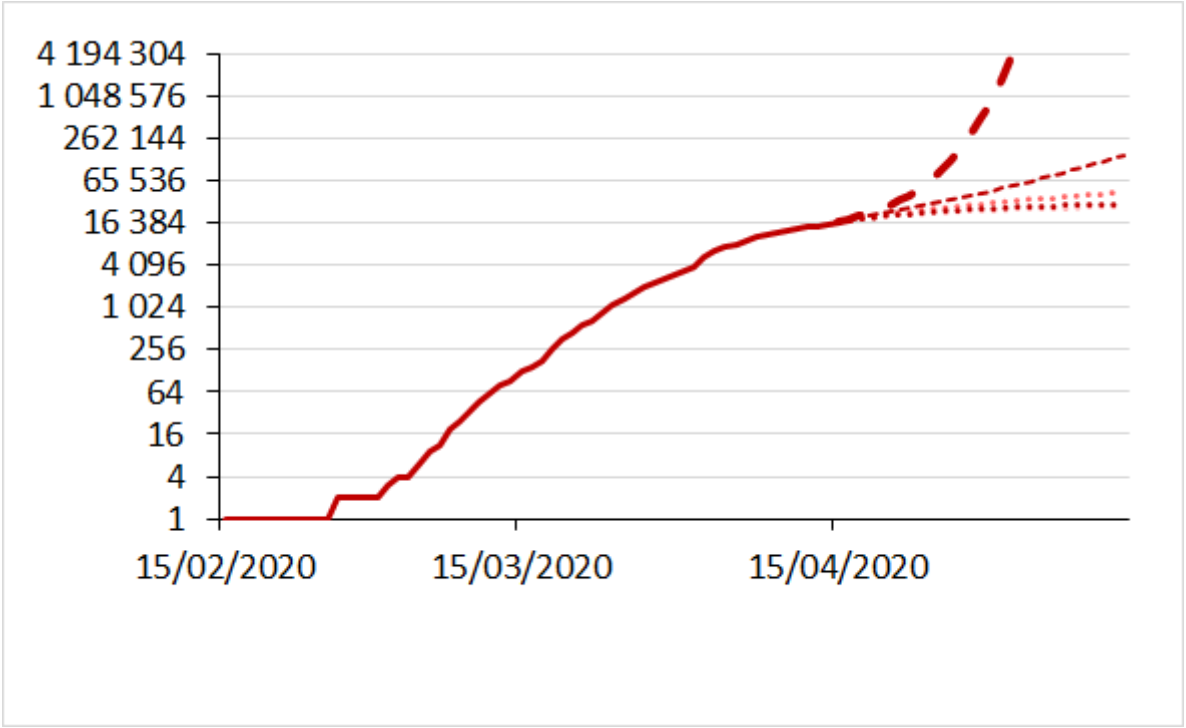

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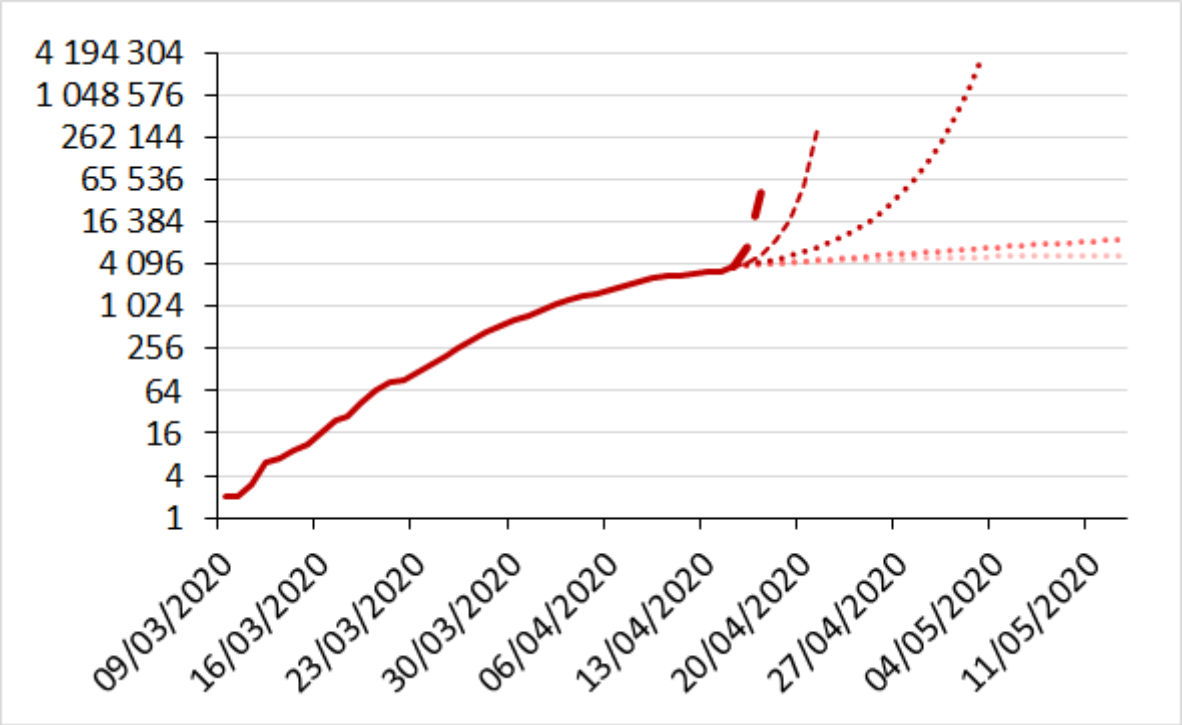
Germany

CONFIRMED 9 days'fit 8 days'fit 7 days'fit 6 days'fit 5 days'fit

Cumulated



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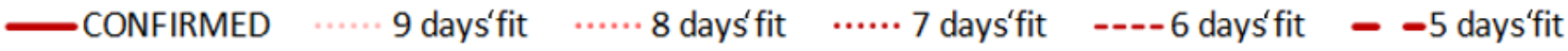
Iran



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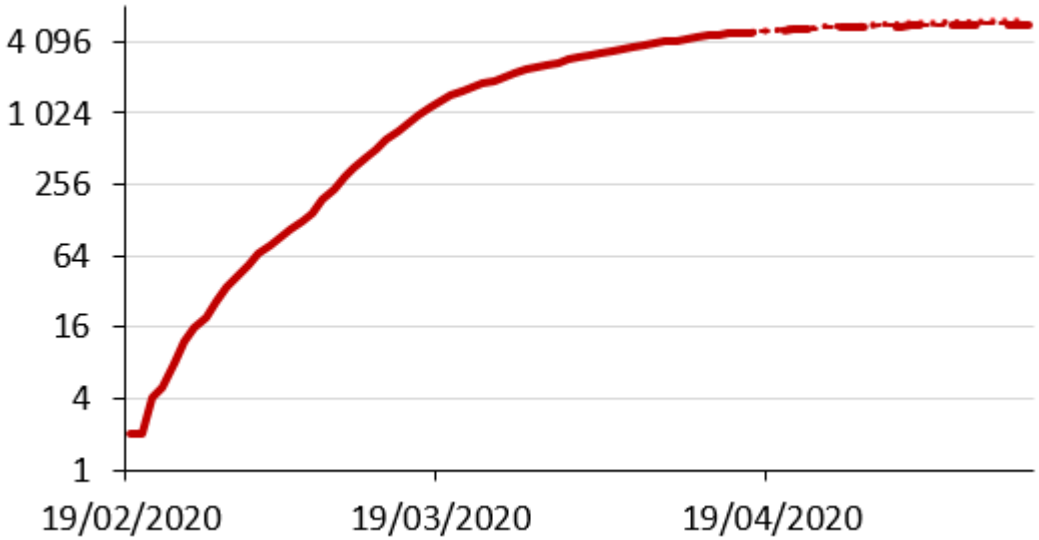

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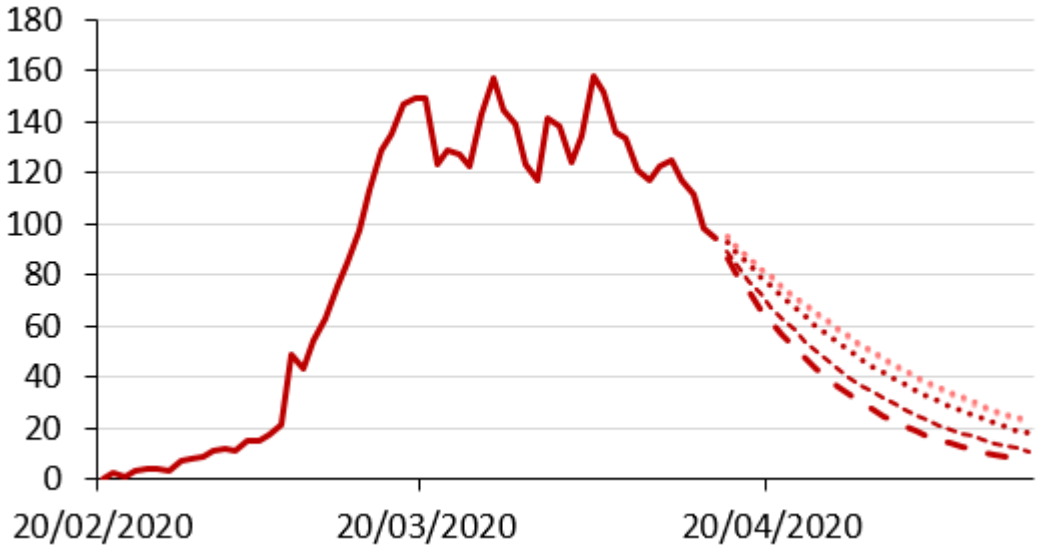
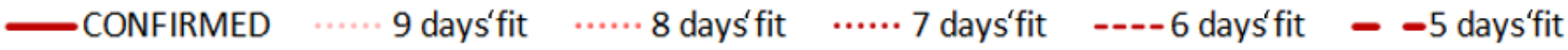


Data: The Johns Hopkins University, Politolog.com

Ireland



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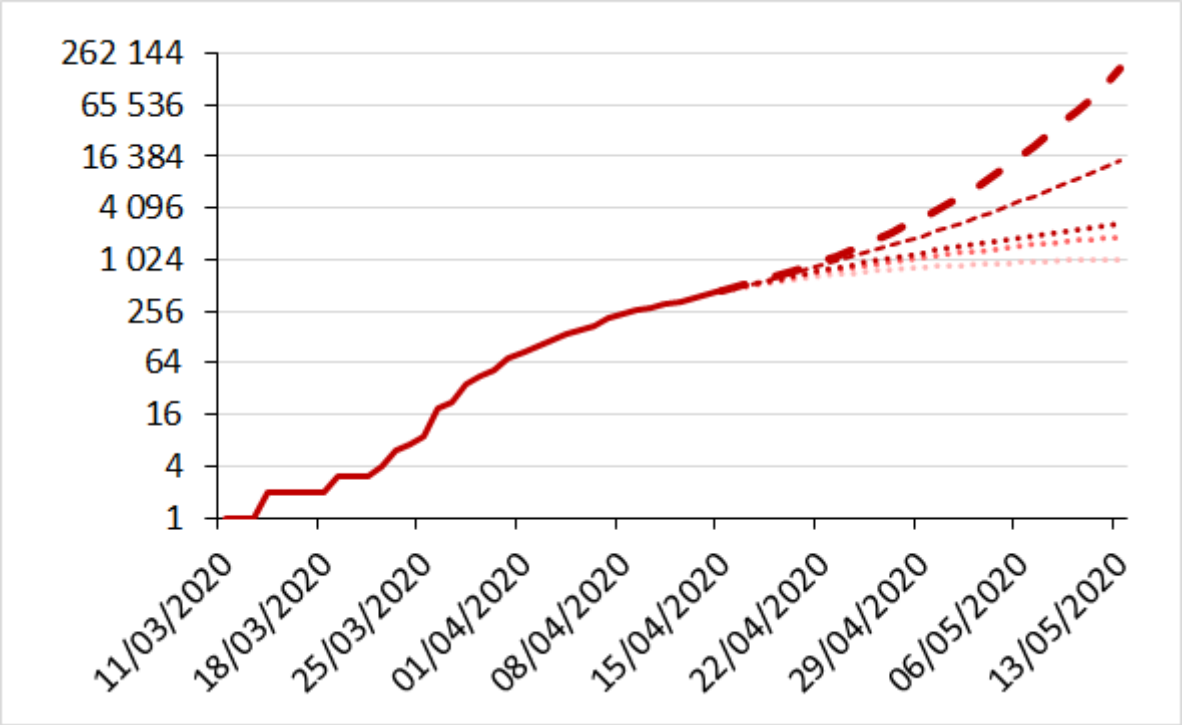

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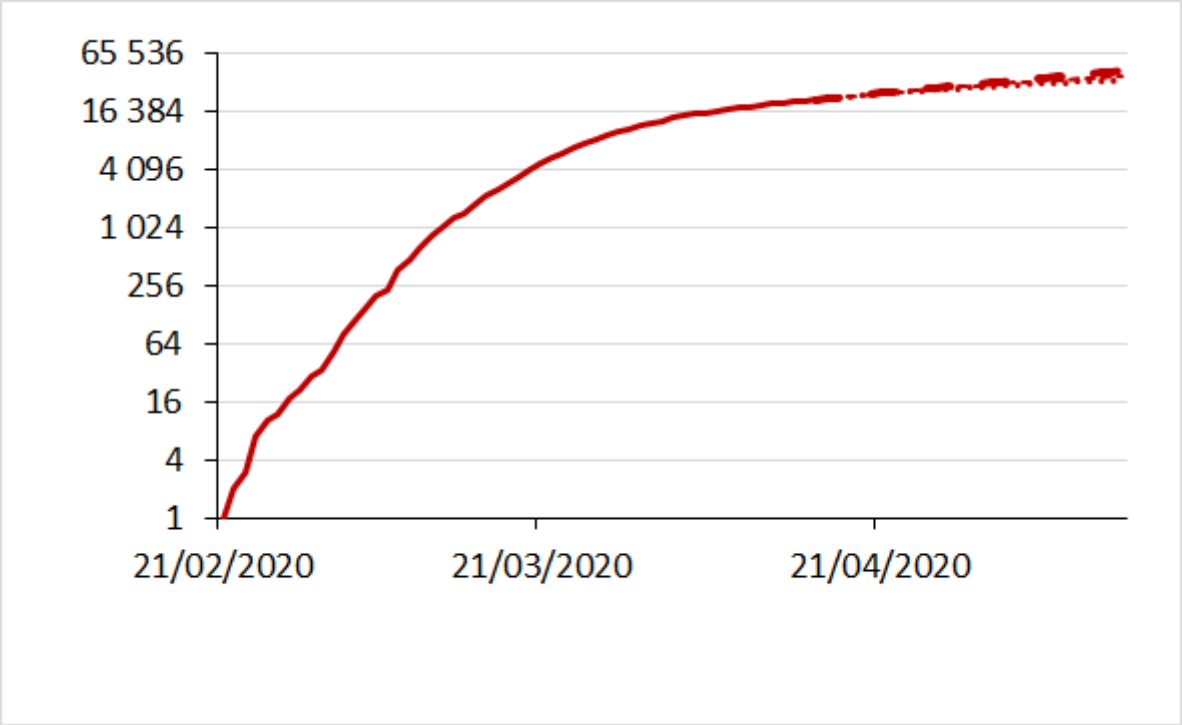
Italy

CONFIRMED 9 days'fit 8 days'fit 7 days'fit 6 days'fit 5 days'fit

Cumulated



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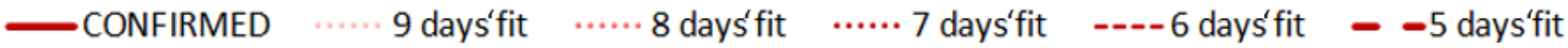
Netherlands



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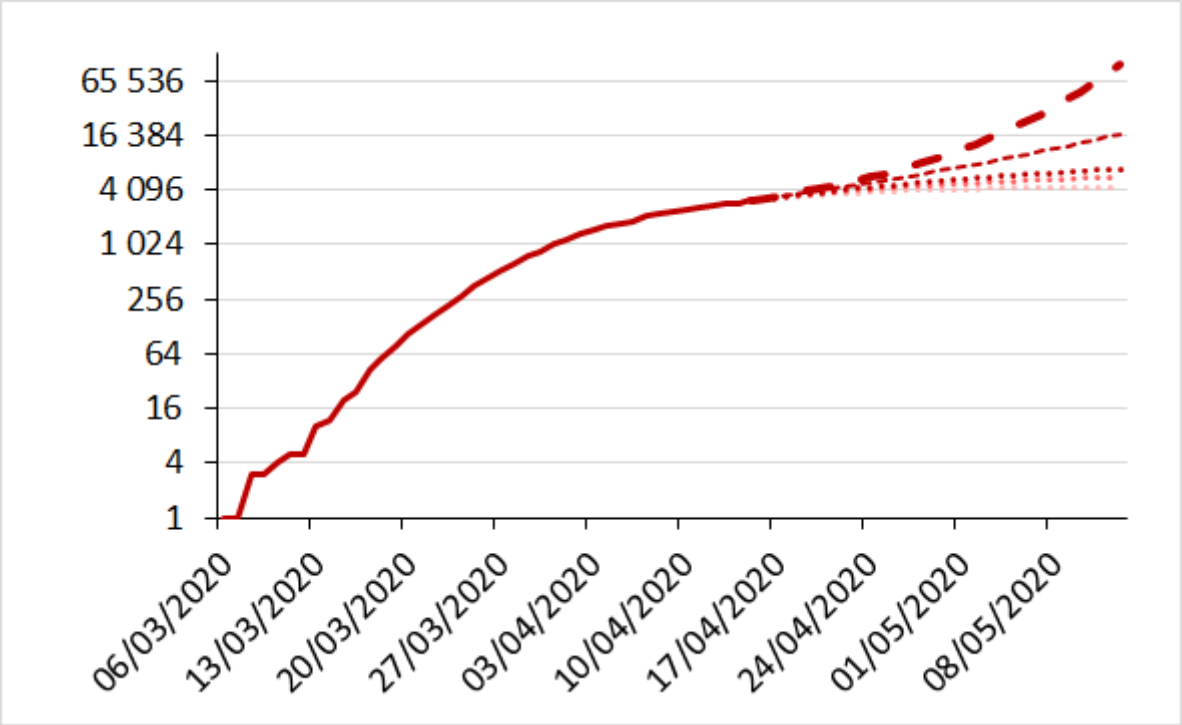

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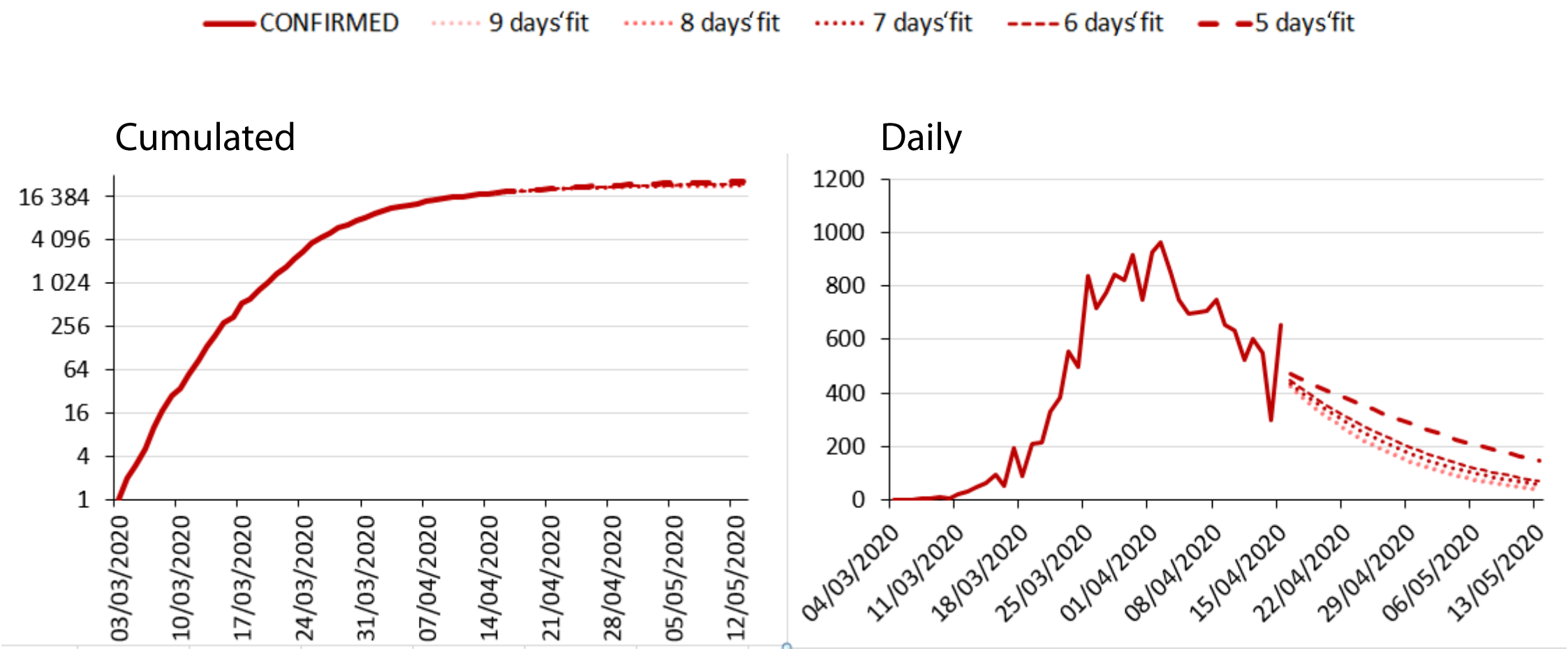
Spain



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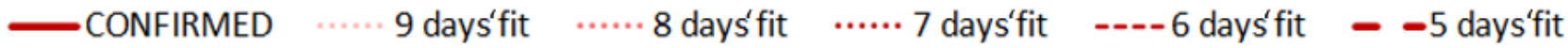
Sweden



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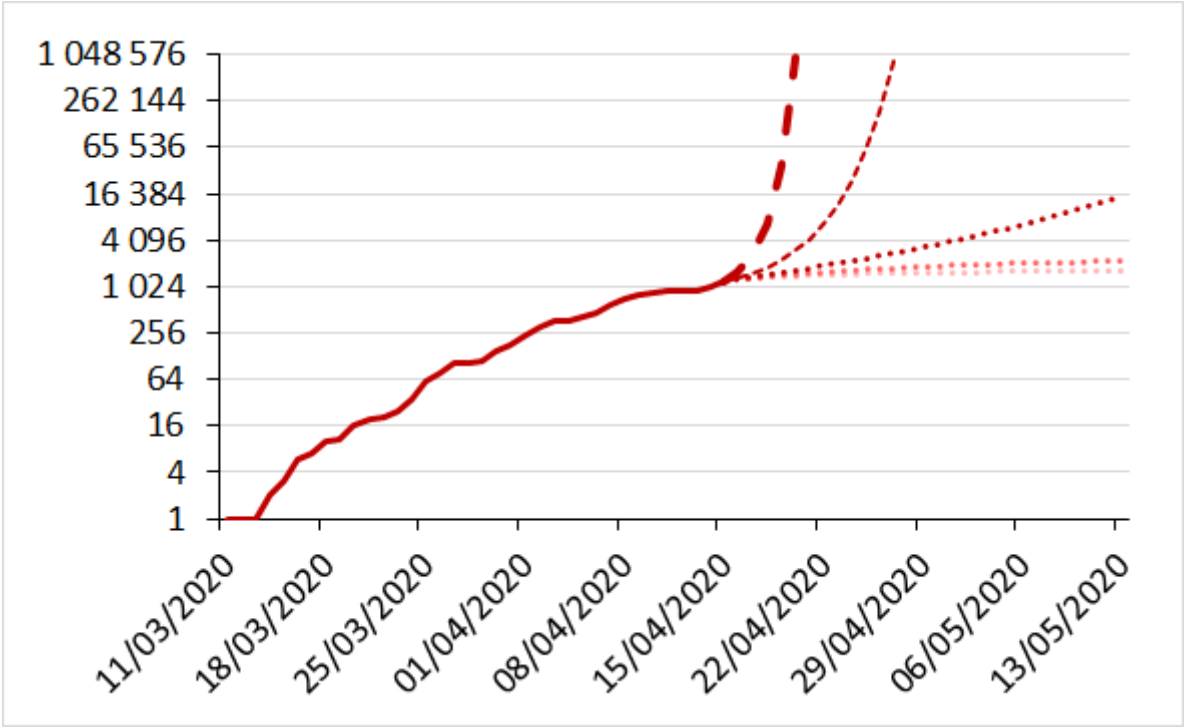

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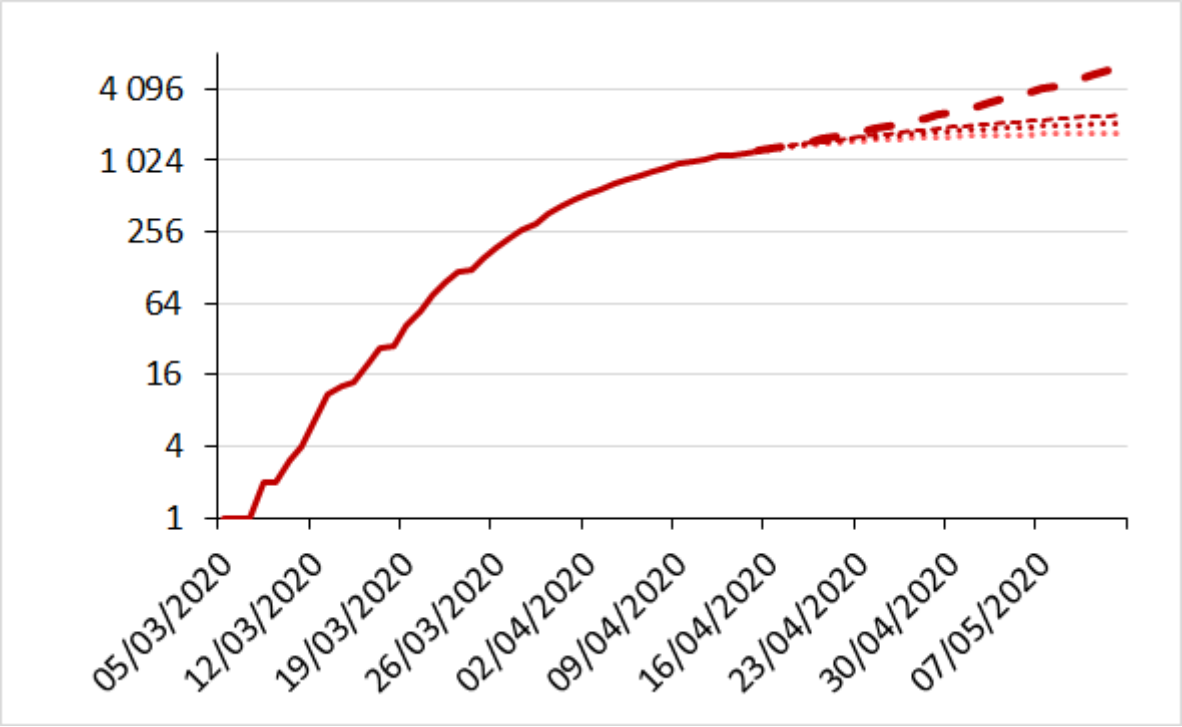
Switzerland

CONFIRMED 9 days'fit 8 days'fit 7 days'fit 6 days'fit 5 days'fit

Cumulated



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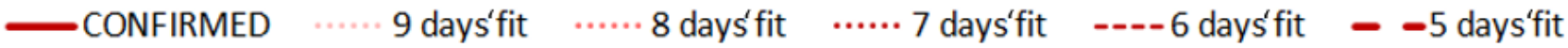
Turkey



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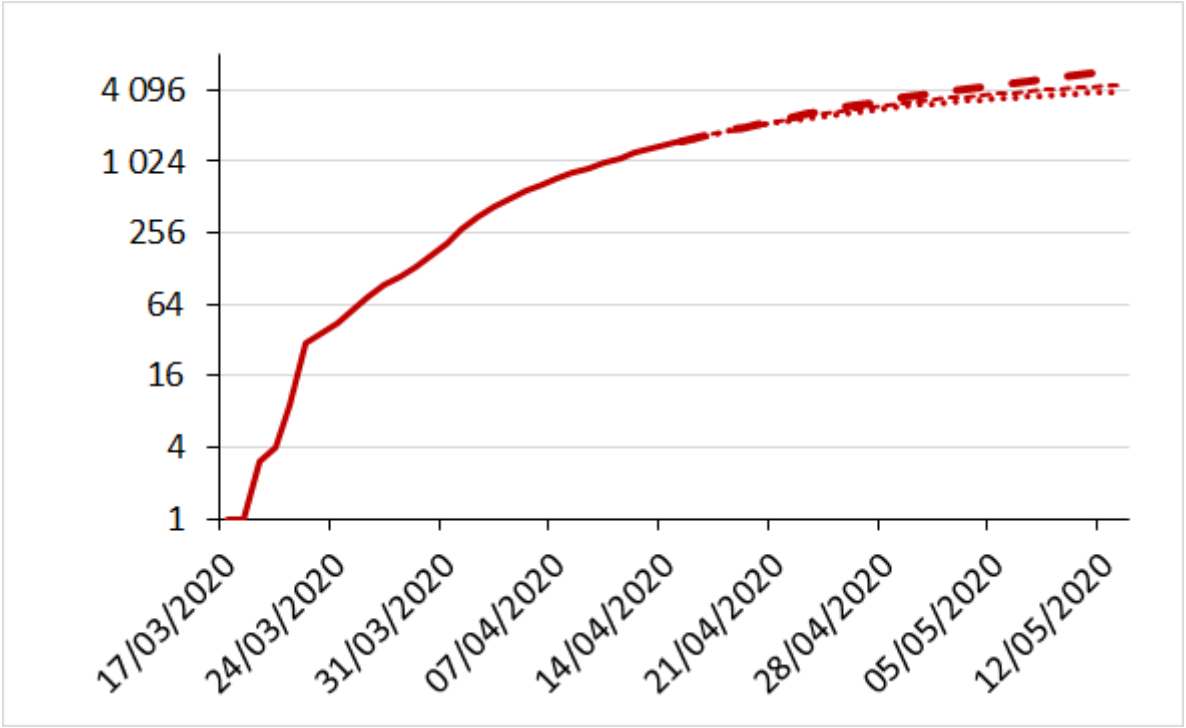

Data: The Johns Hopkins University, Politolog.com

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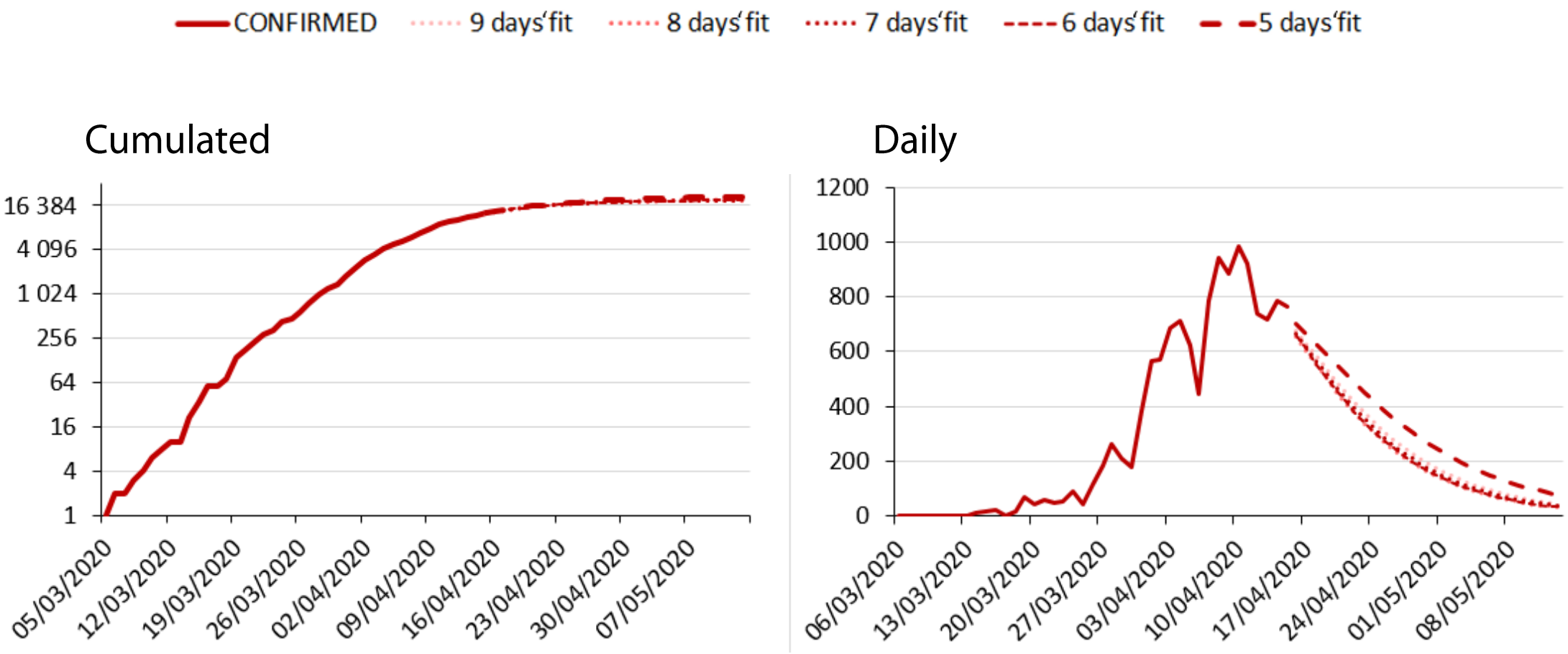

Data: The Johns Hopkins University, Politolog.com

USA

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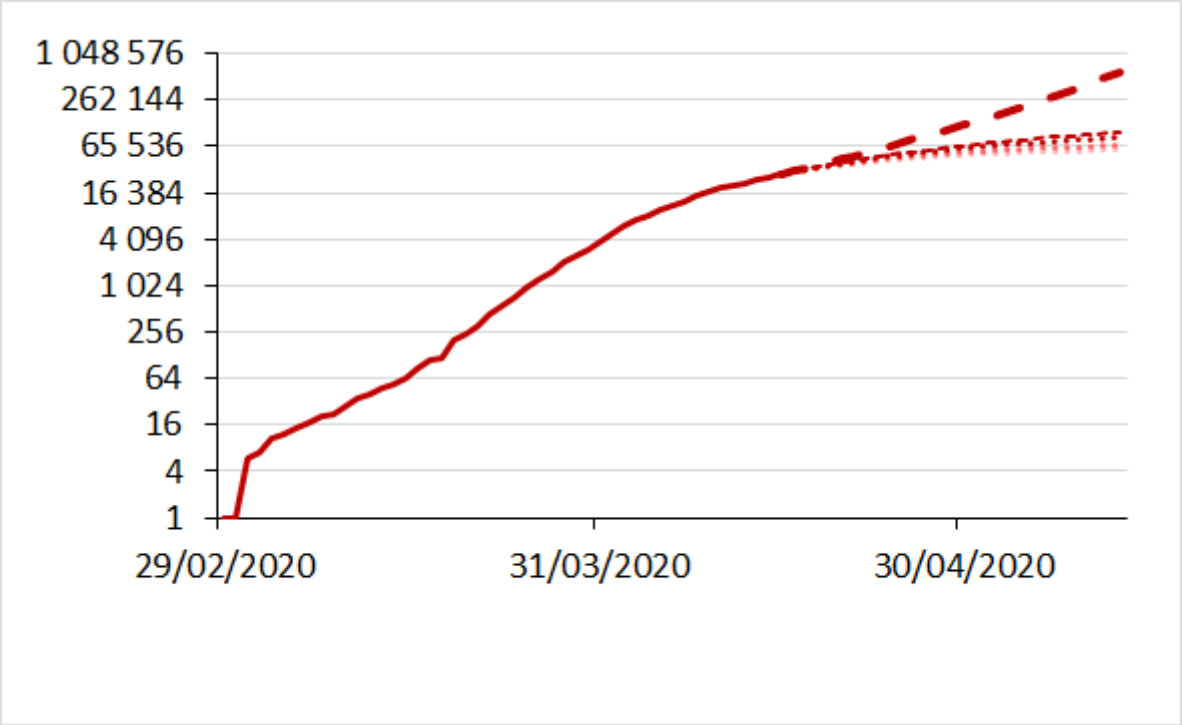
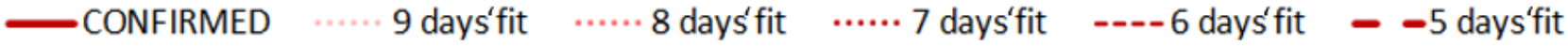


Data: The Johns Hopkins University, Politolog.com

CUMULATED CASES - PROJECTIONS

World



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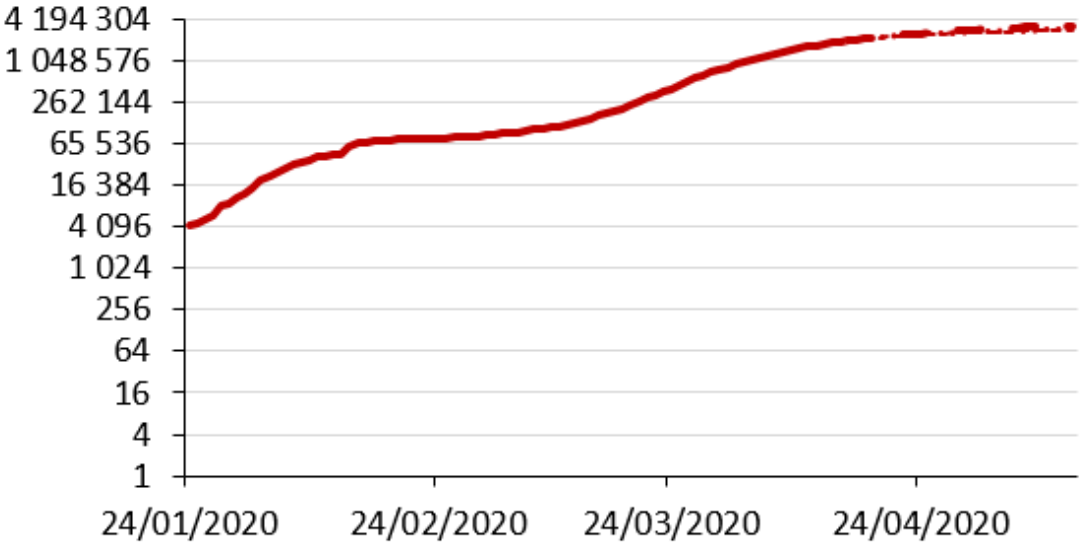

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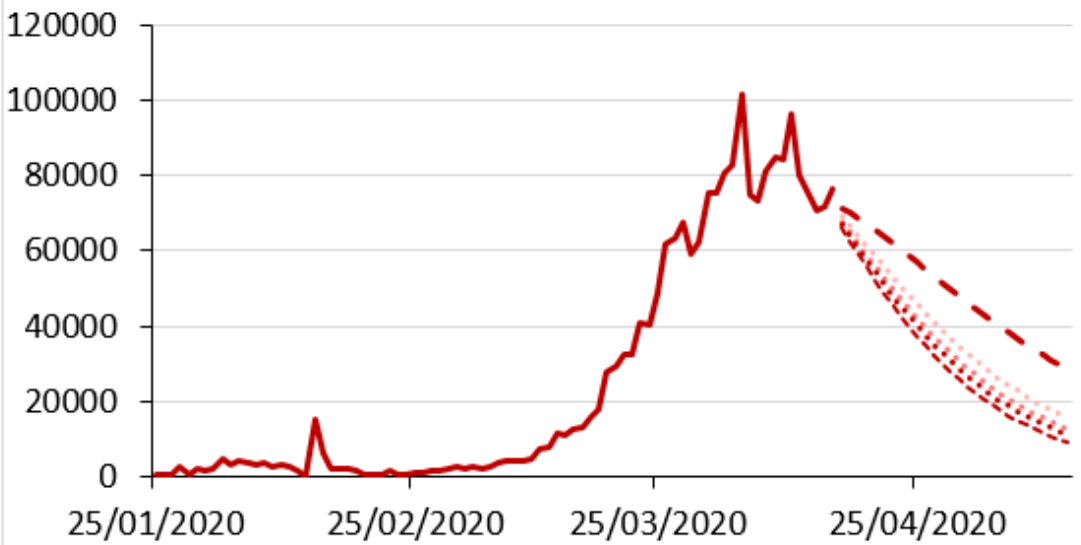
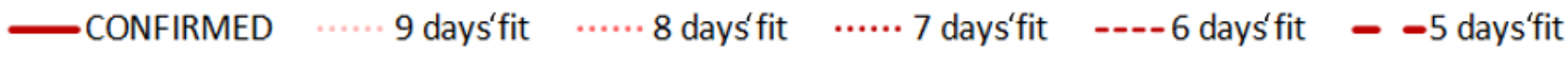


Data: The Johns Hopkins University, Politolog.com

Algeria



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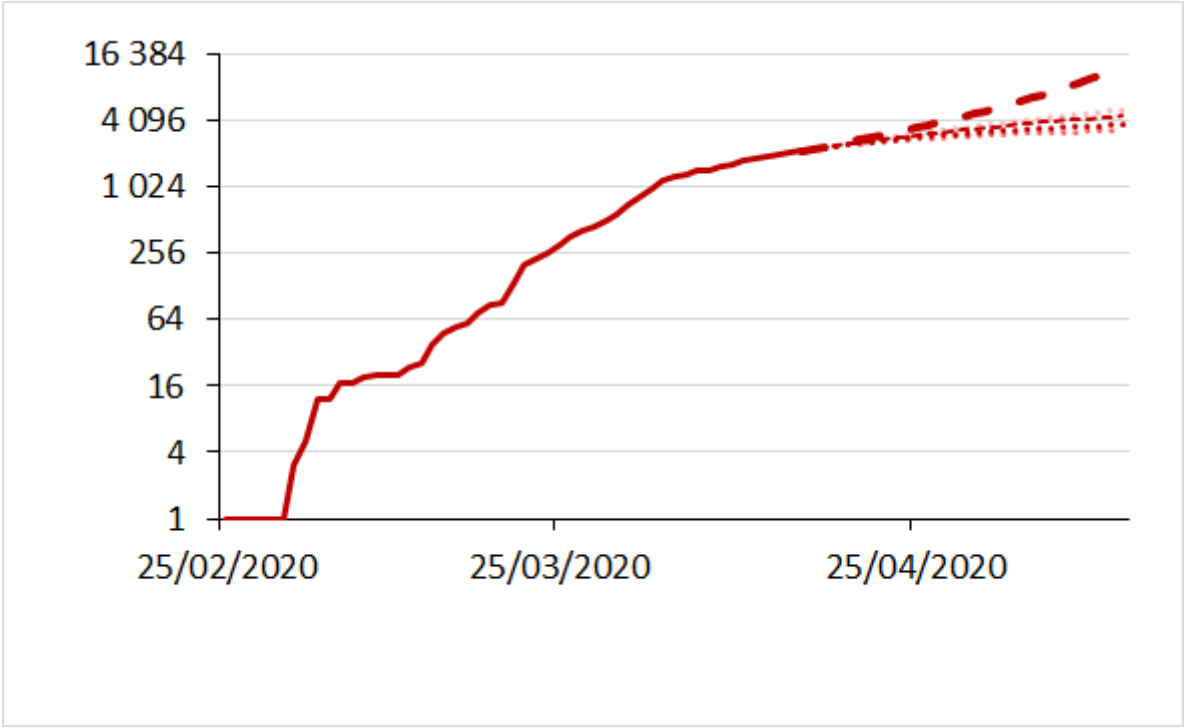

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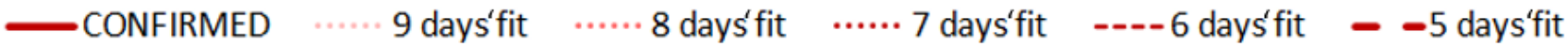
Armenia



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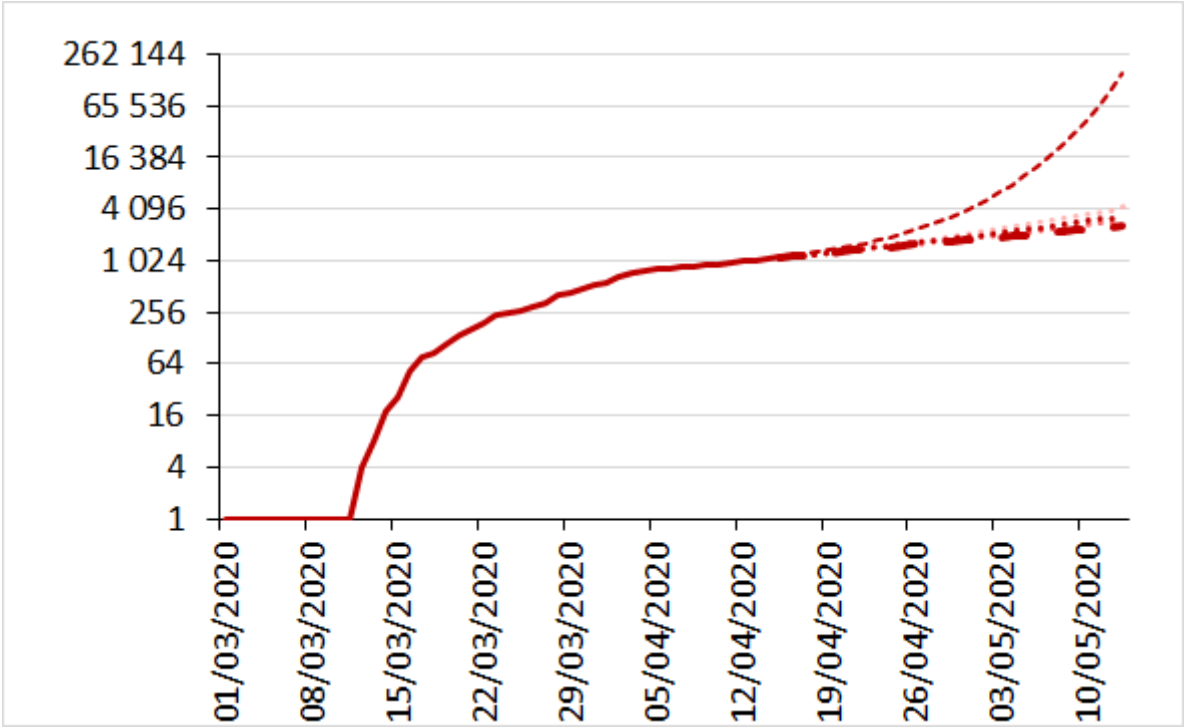
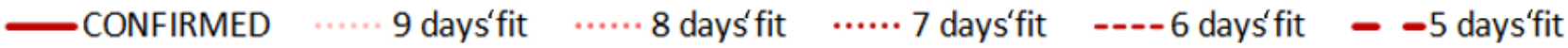


Data: The Johns Hopkins University, Politolog.com

Argentina



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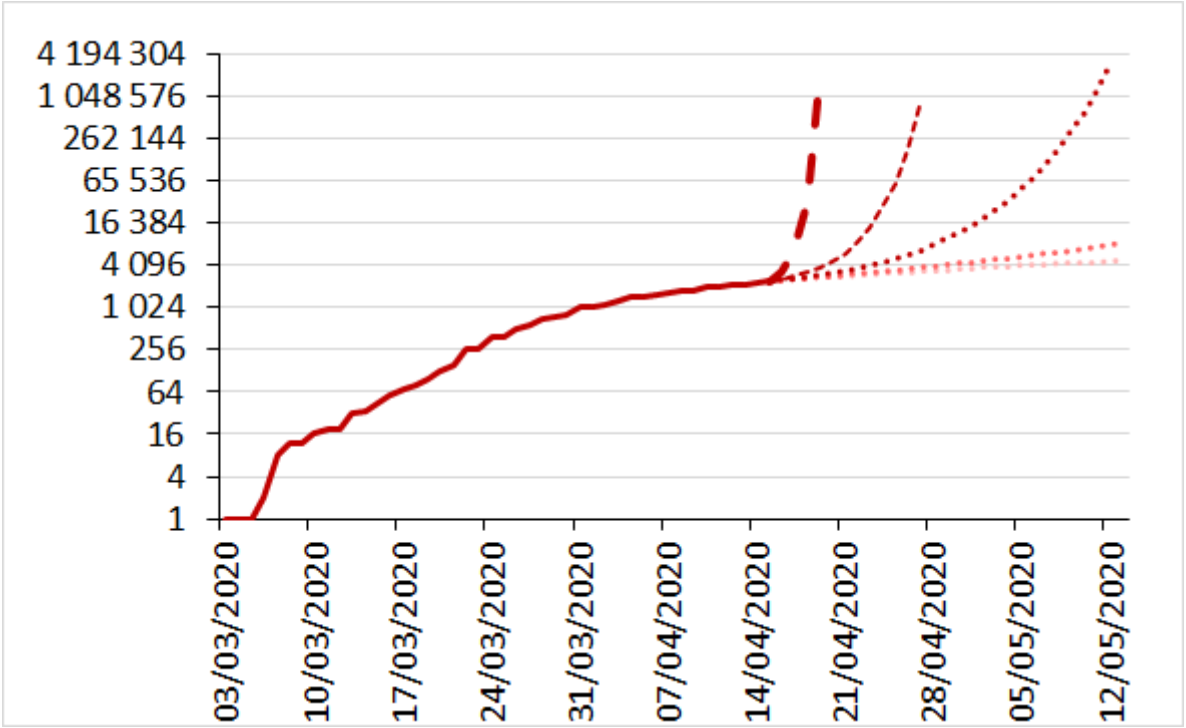
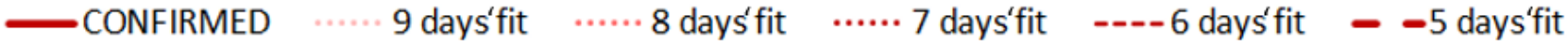


Data: The Johns Hopkins University, Politolog.com

Austria



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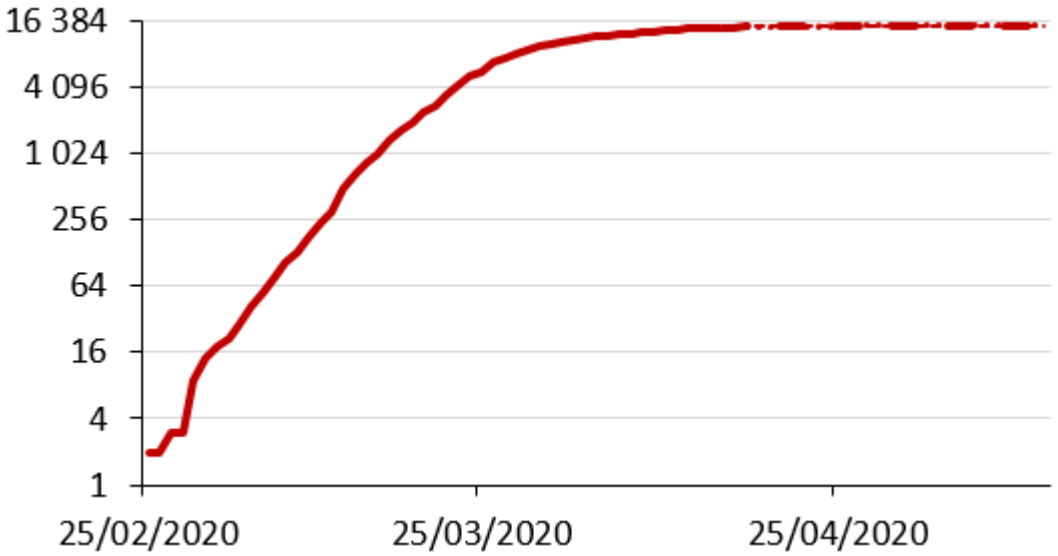
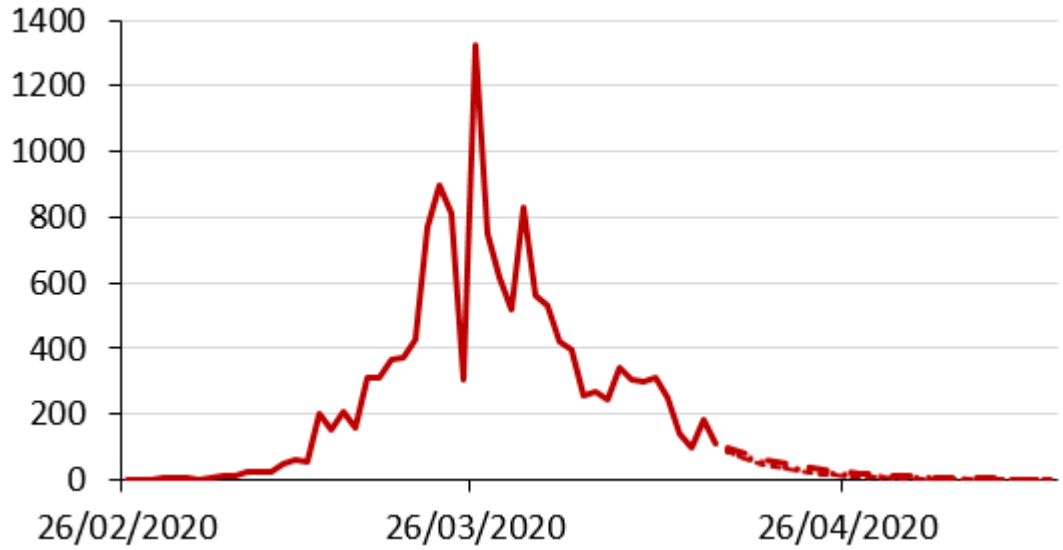
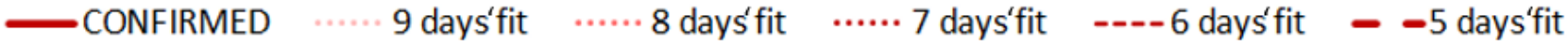


Daily



Data: The Johns Hopkins University, Politolog.com

Australia



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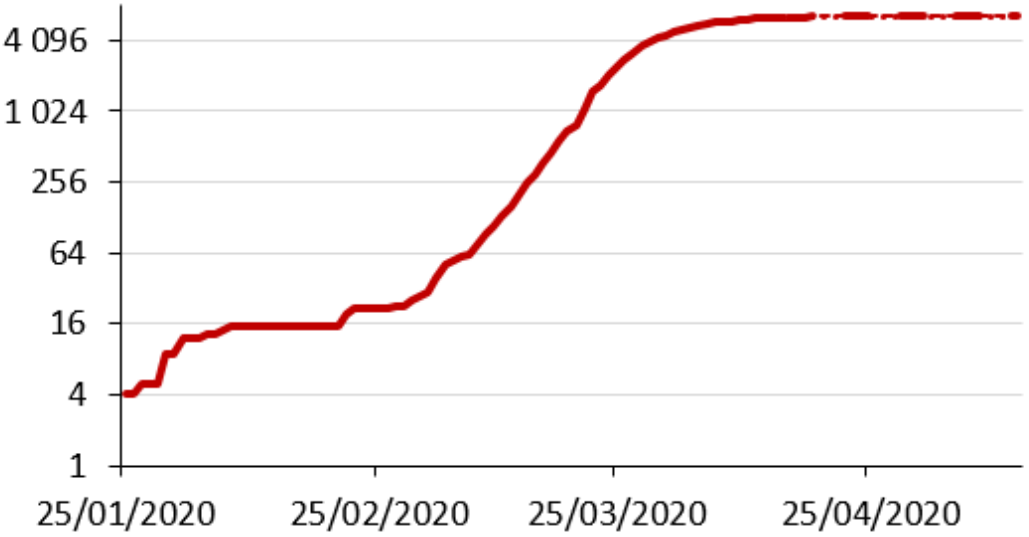

Daily

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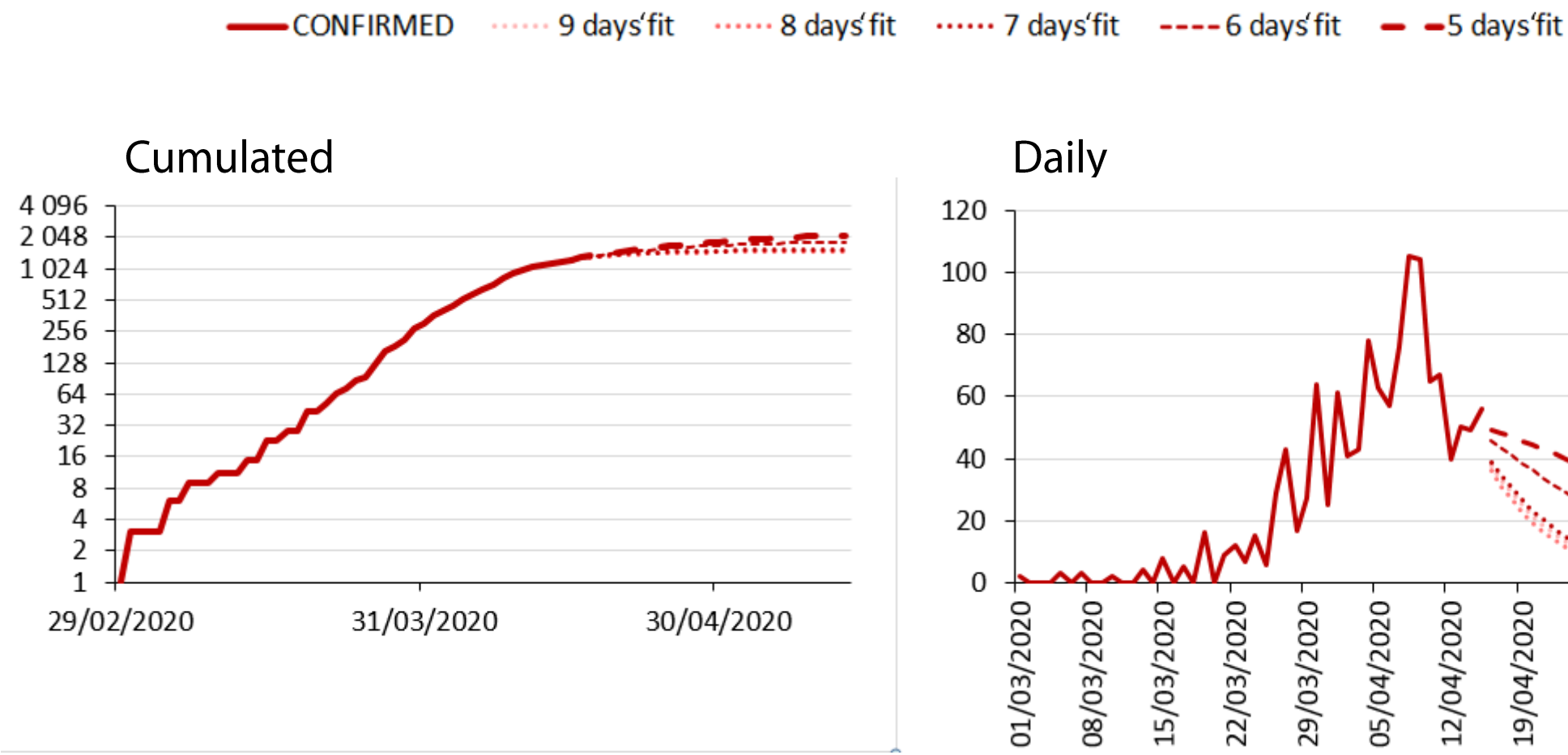
Azerbaijan



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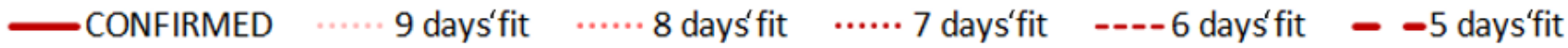
Bahrain



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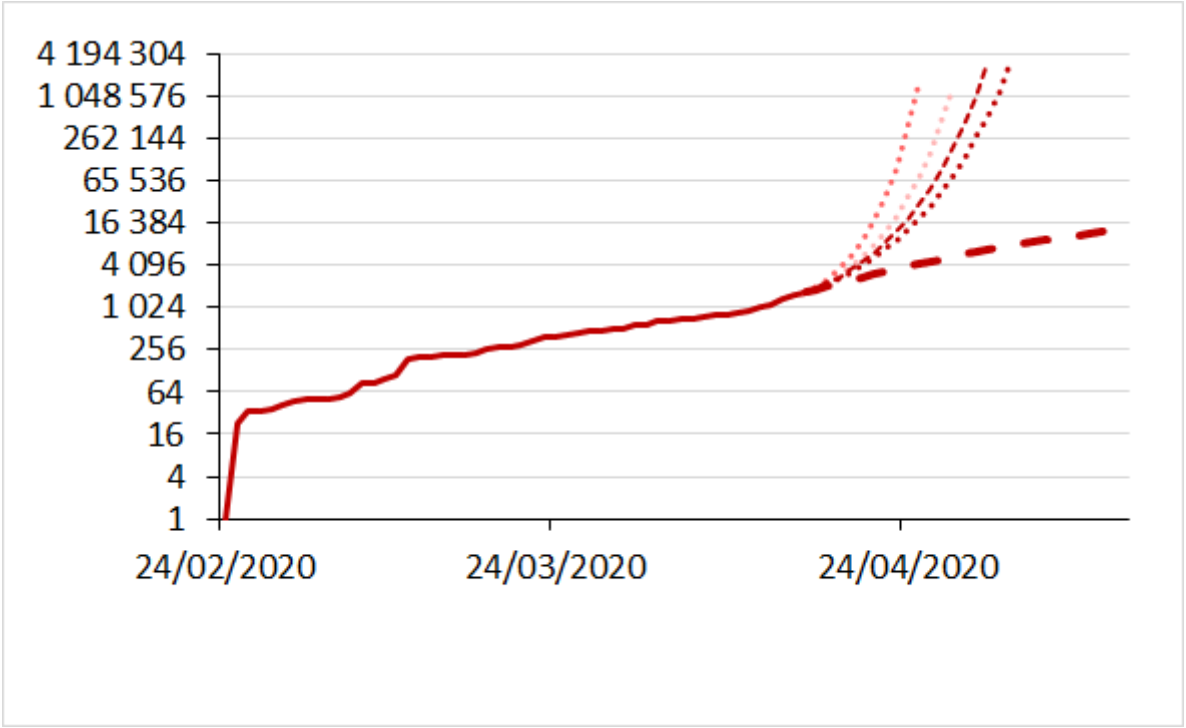
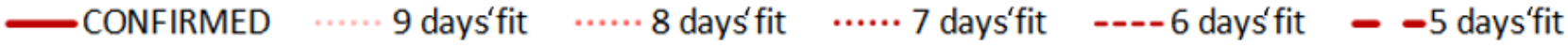


Data: The Johns Hopkins University, Politolog.com

Belgium



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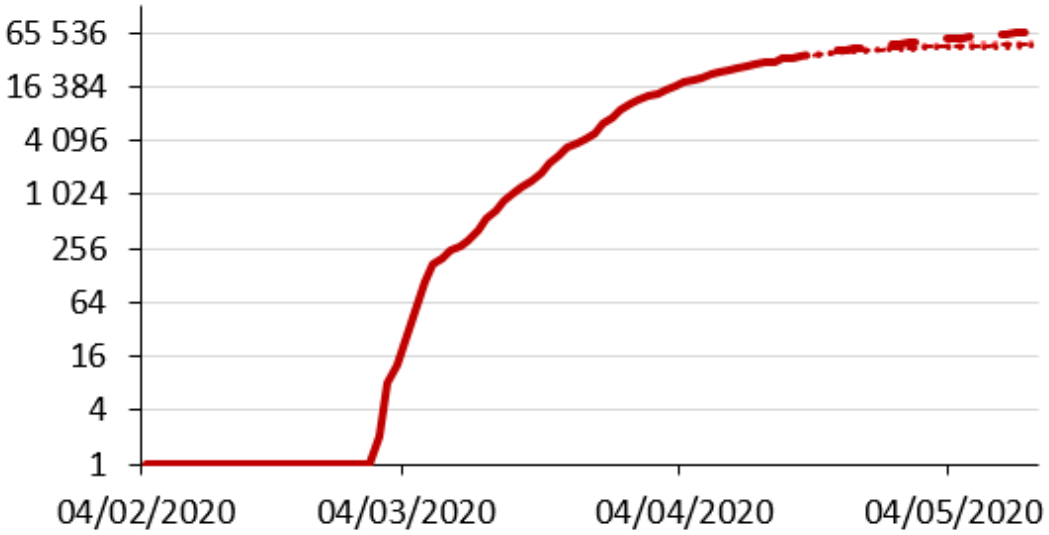

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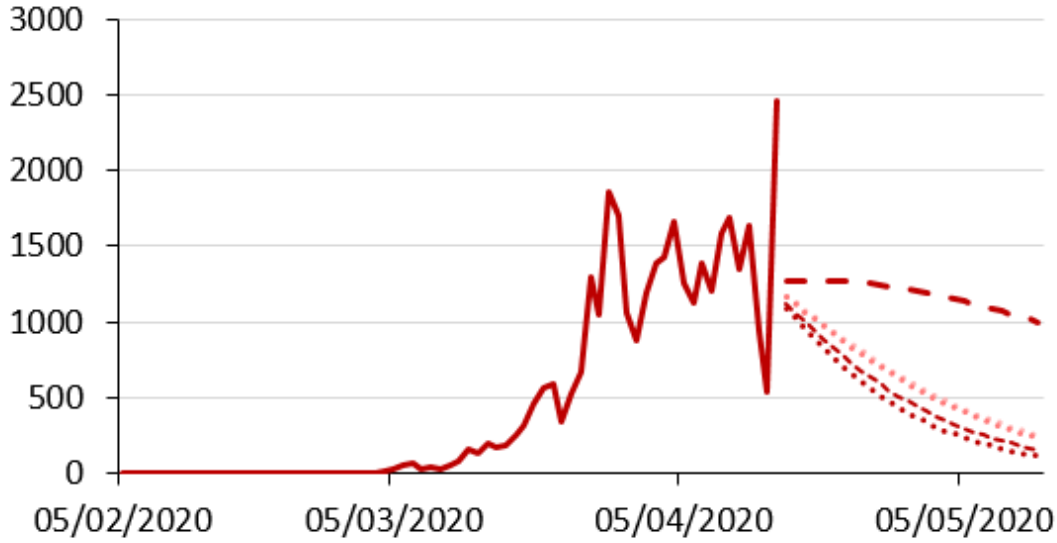

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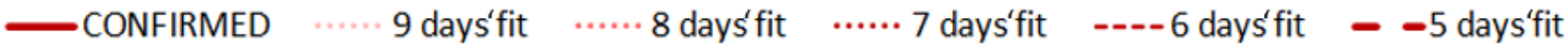
Bosnia and Herzegovina



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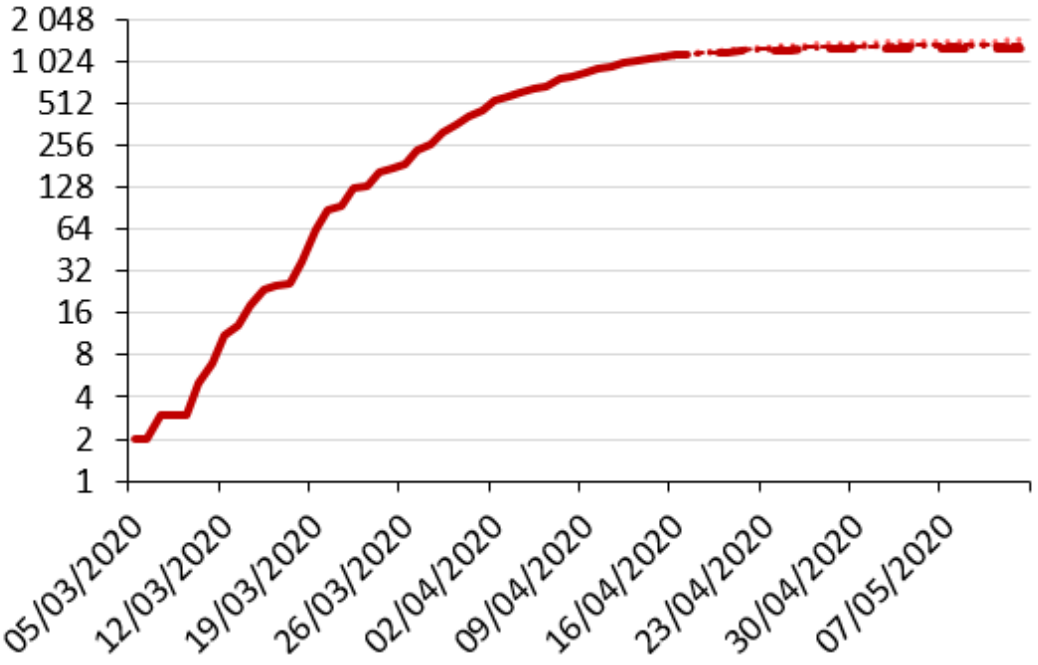

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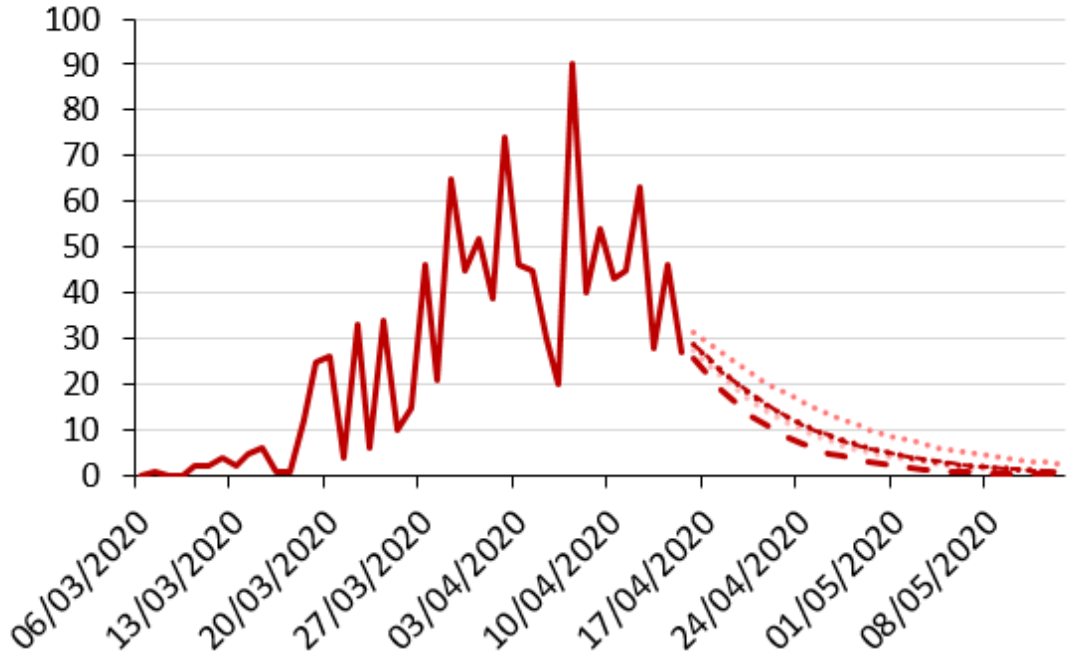

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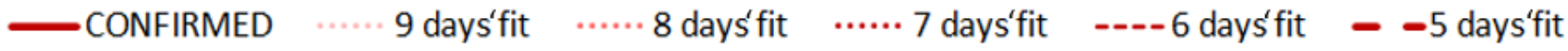

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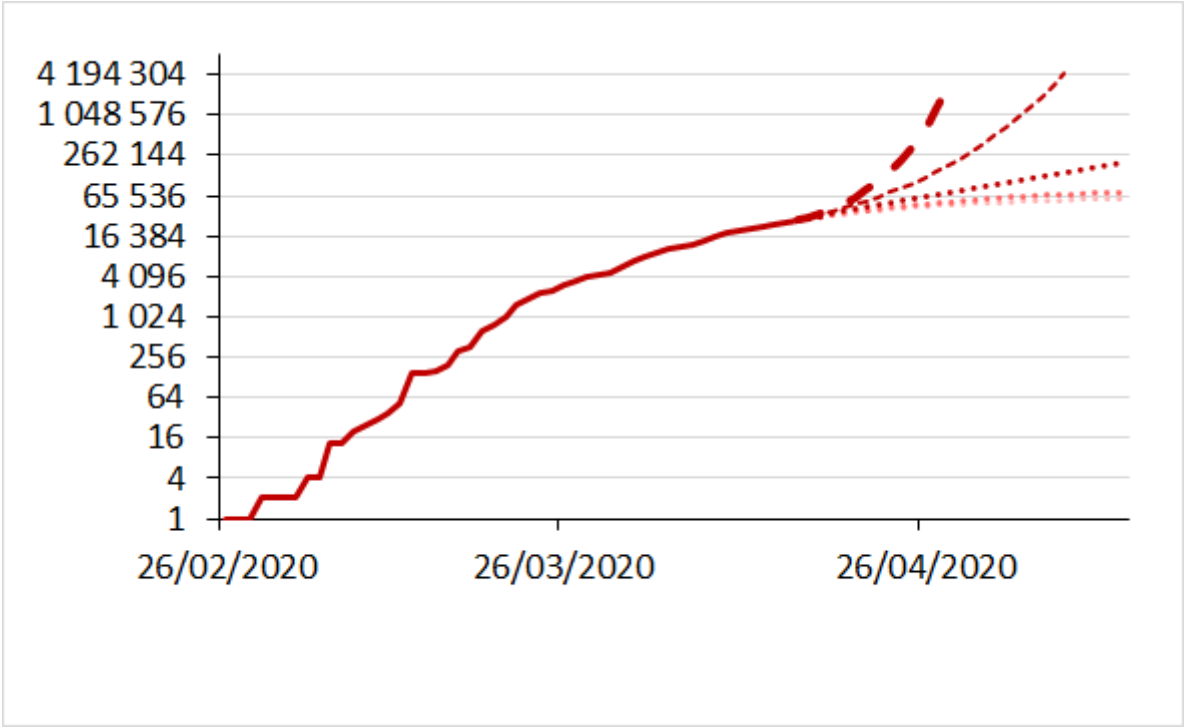

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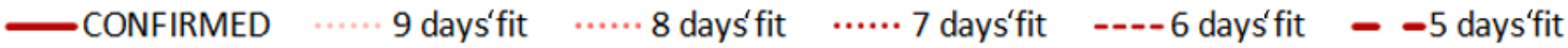
Bulgaria



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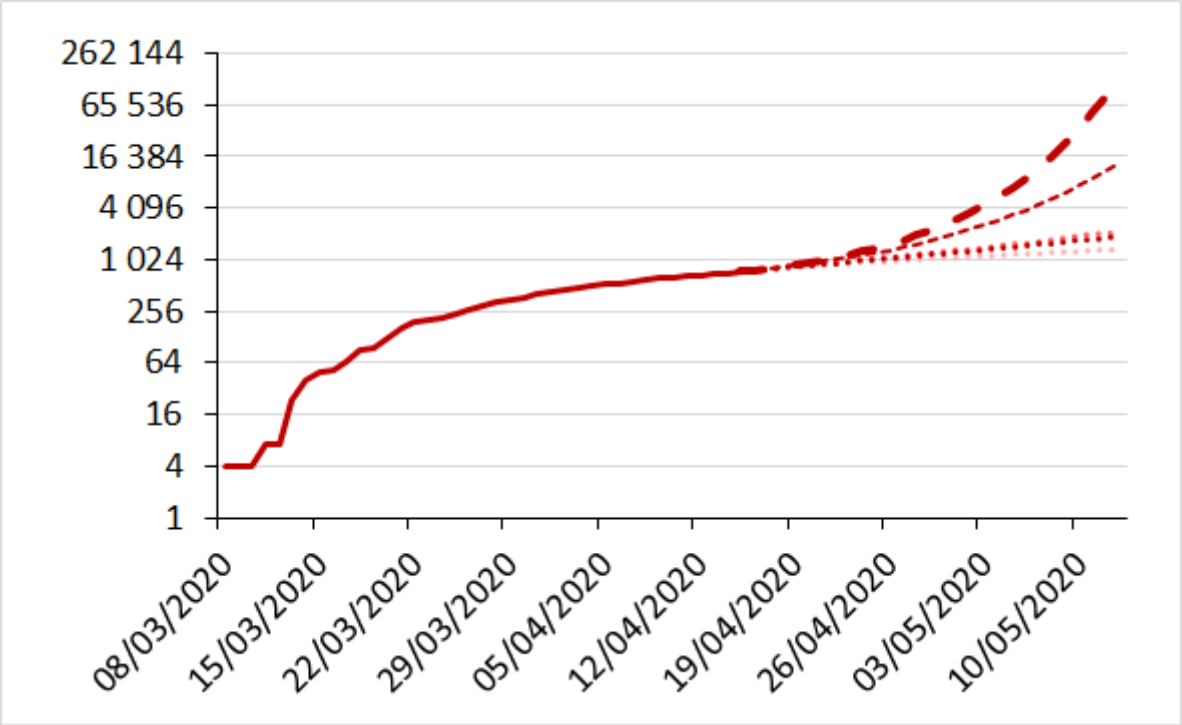

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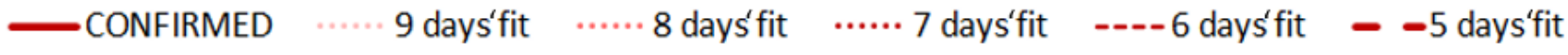
Canada



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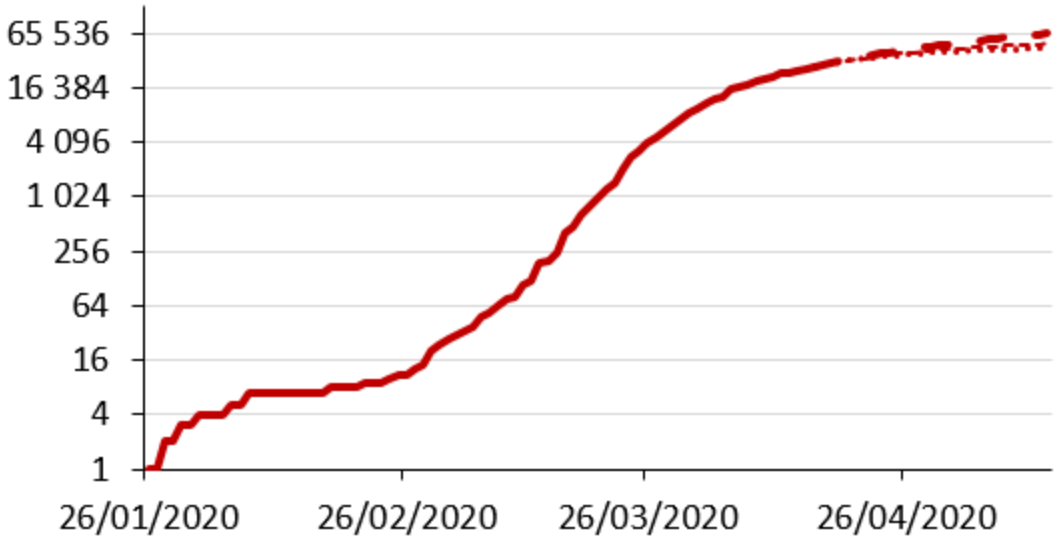

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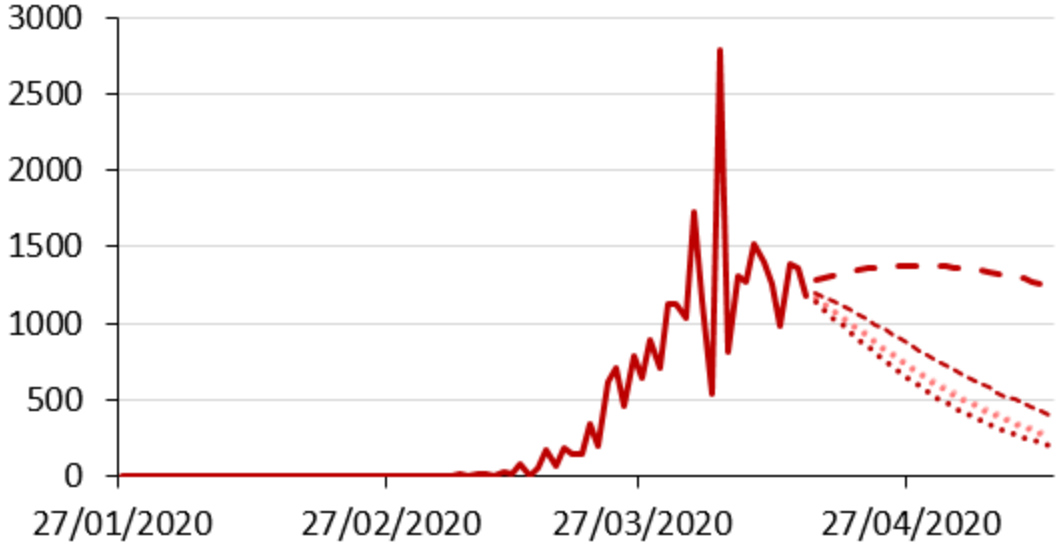

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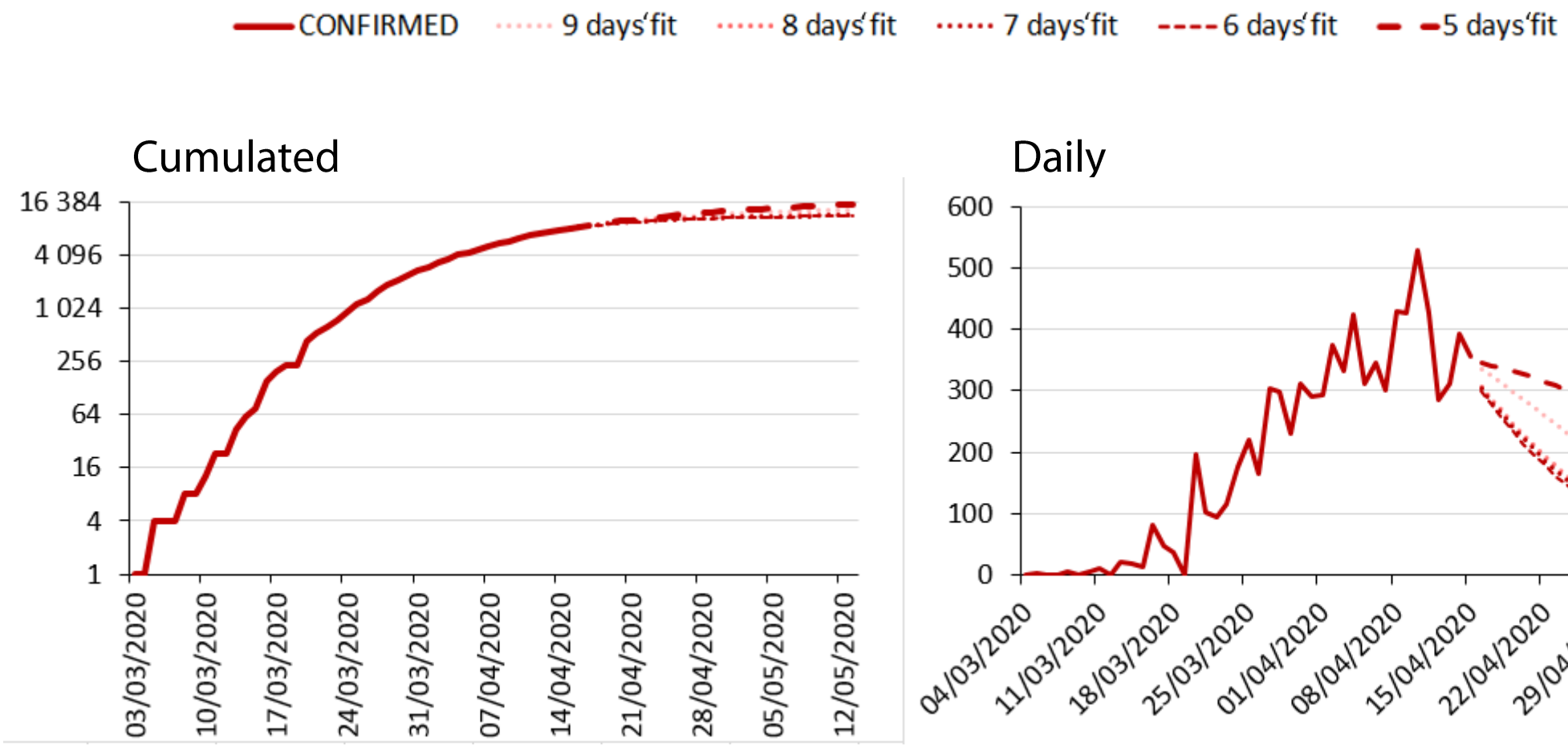
Chile



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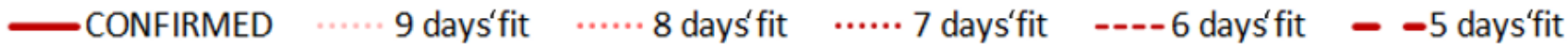

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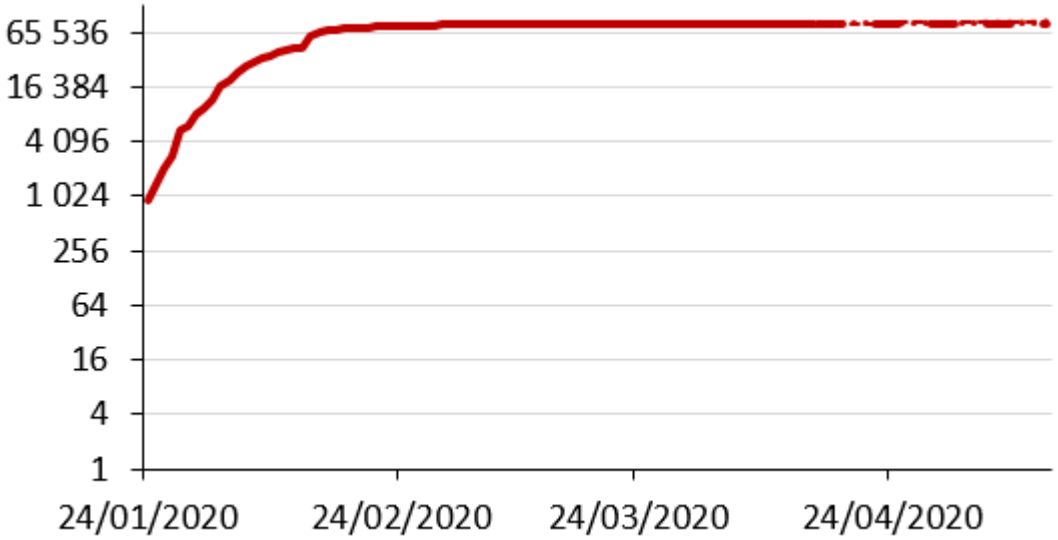

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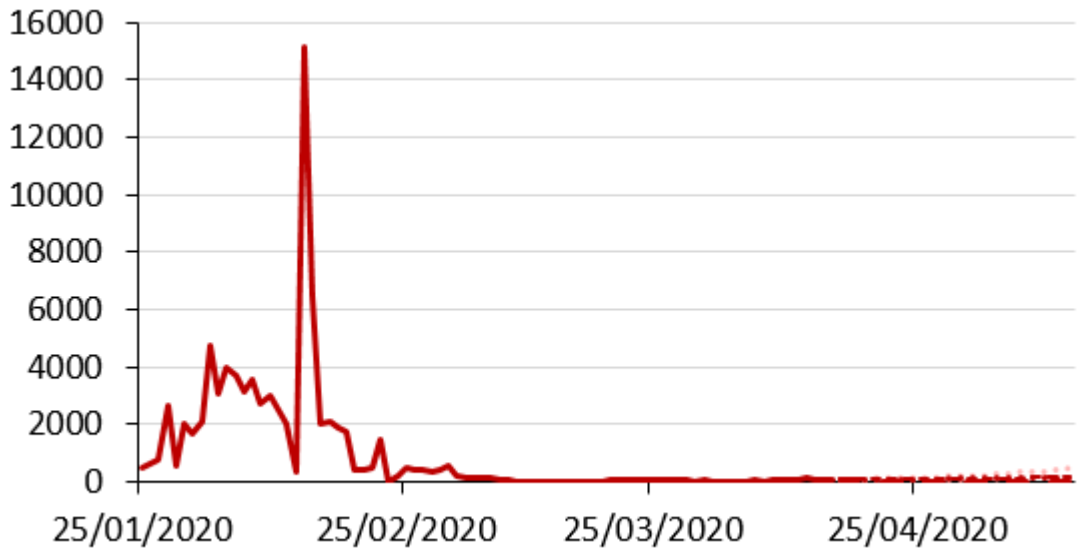

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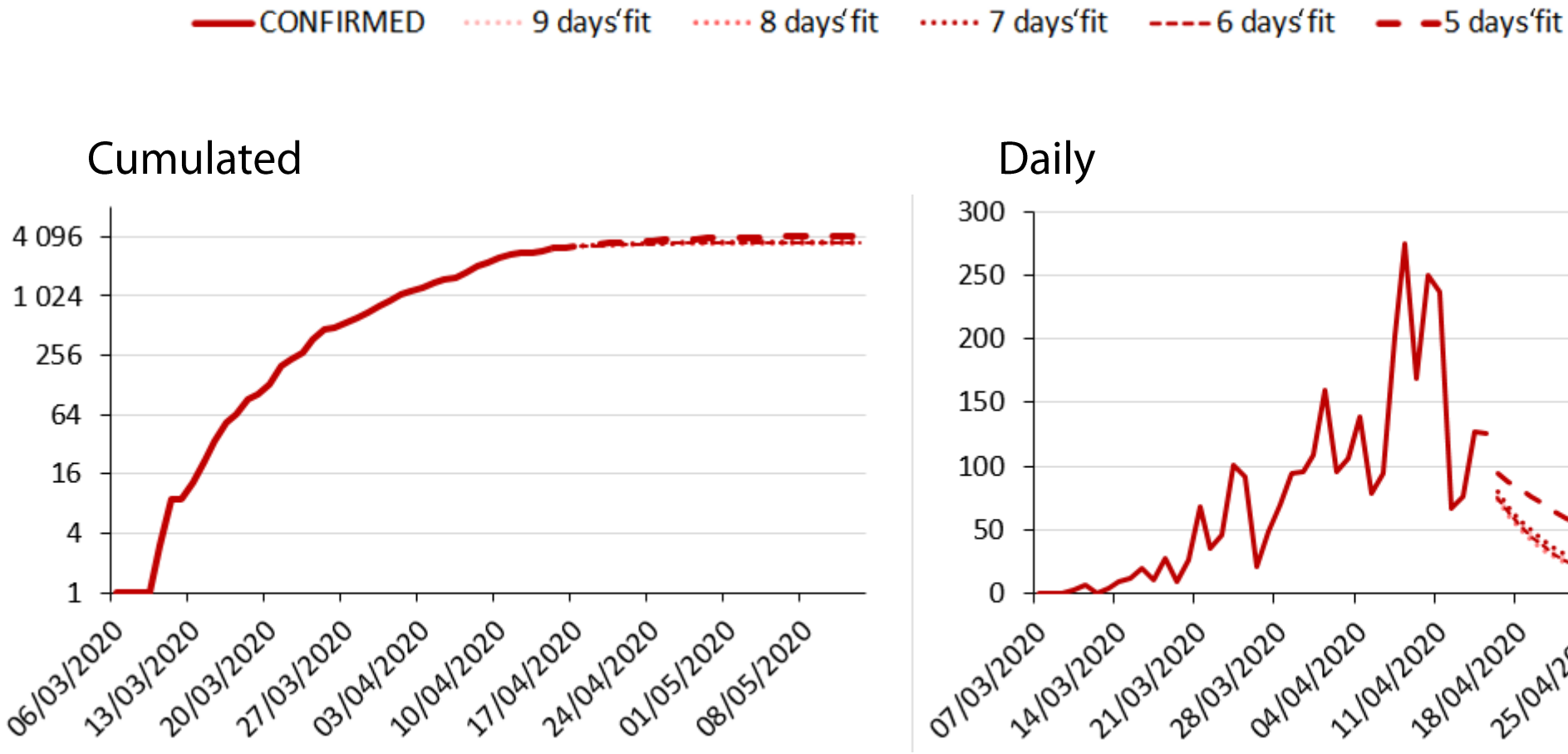
Colombia



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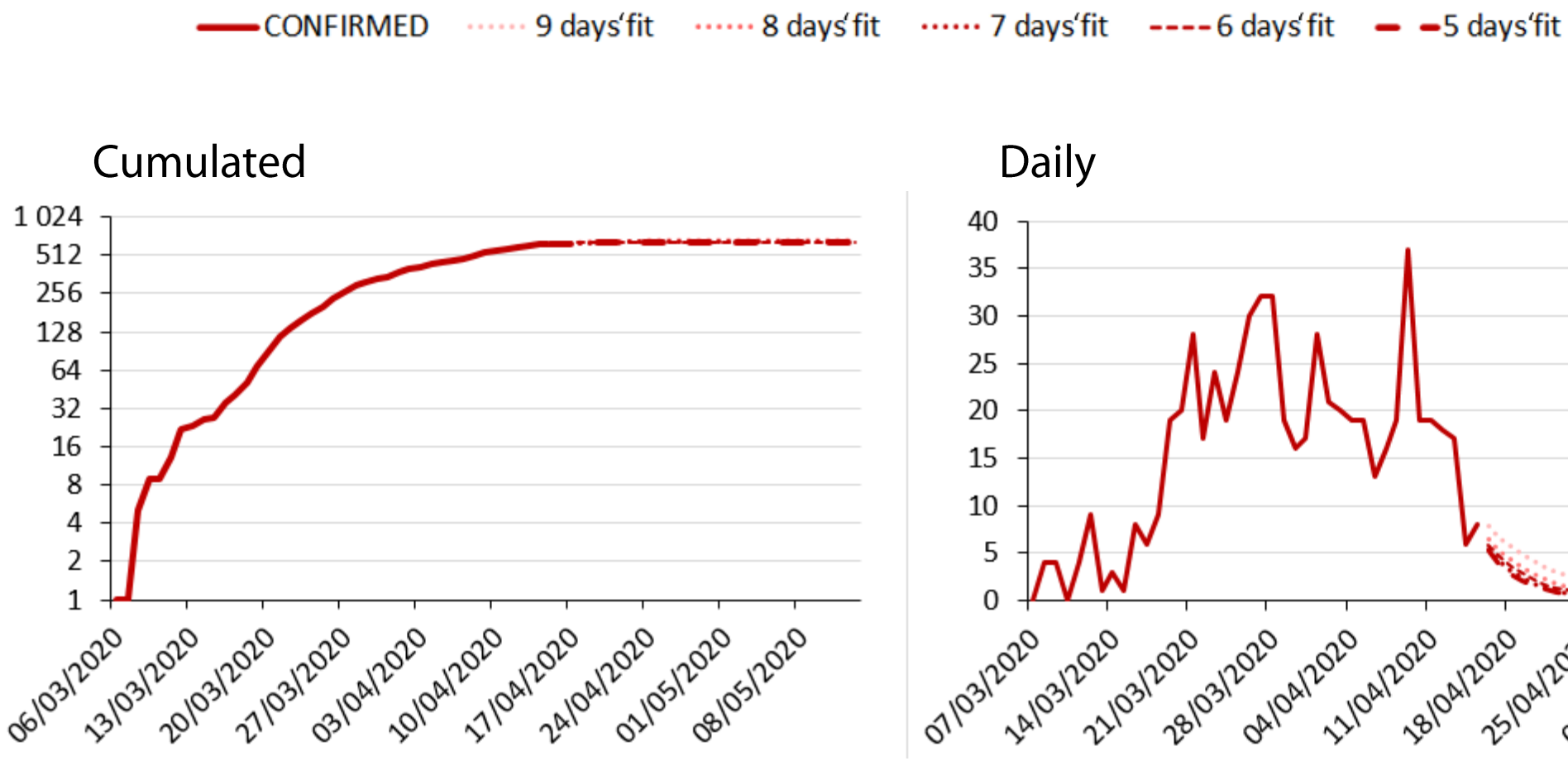

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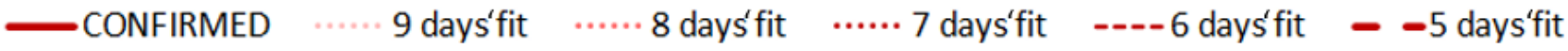
Croatia



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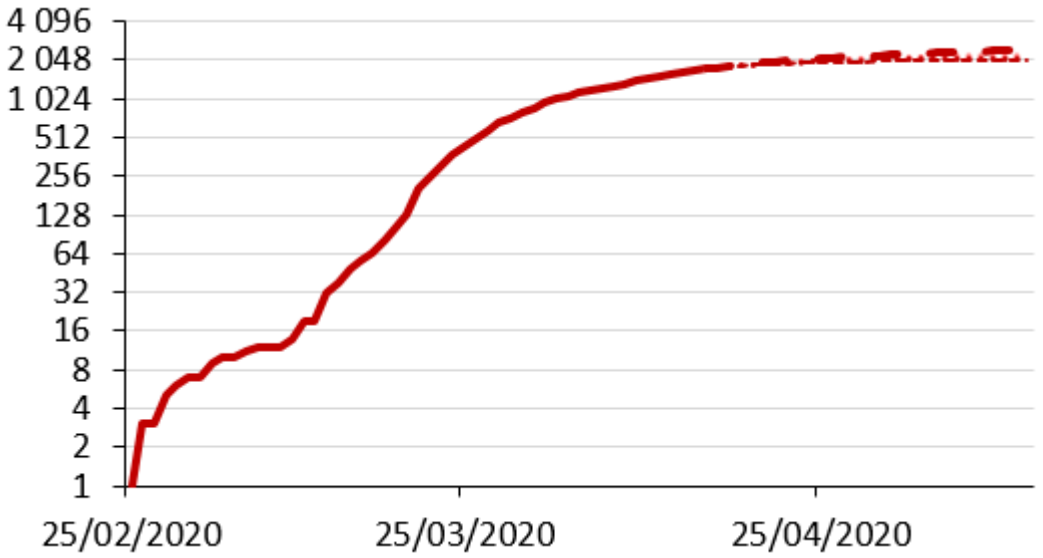

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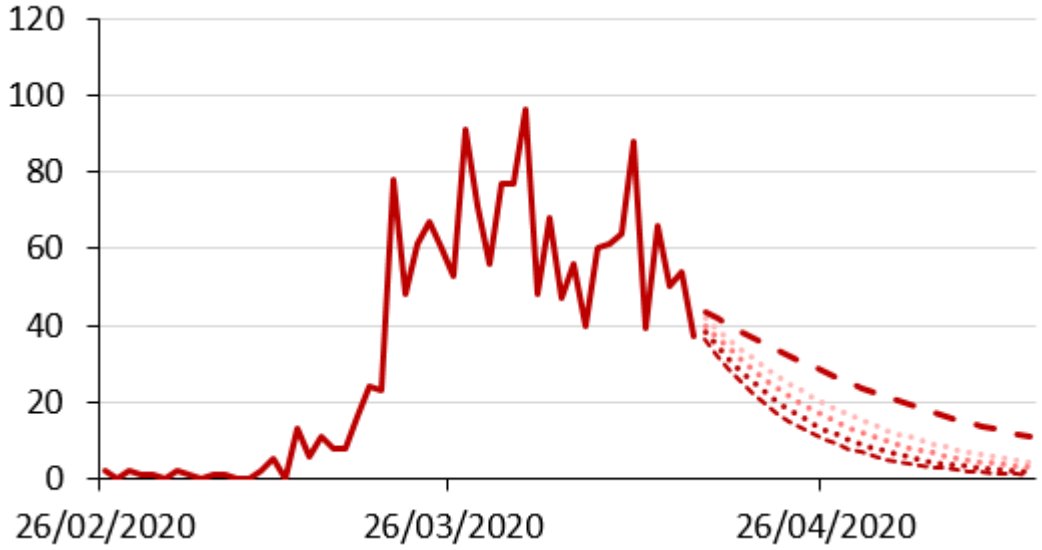

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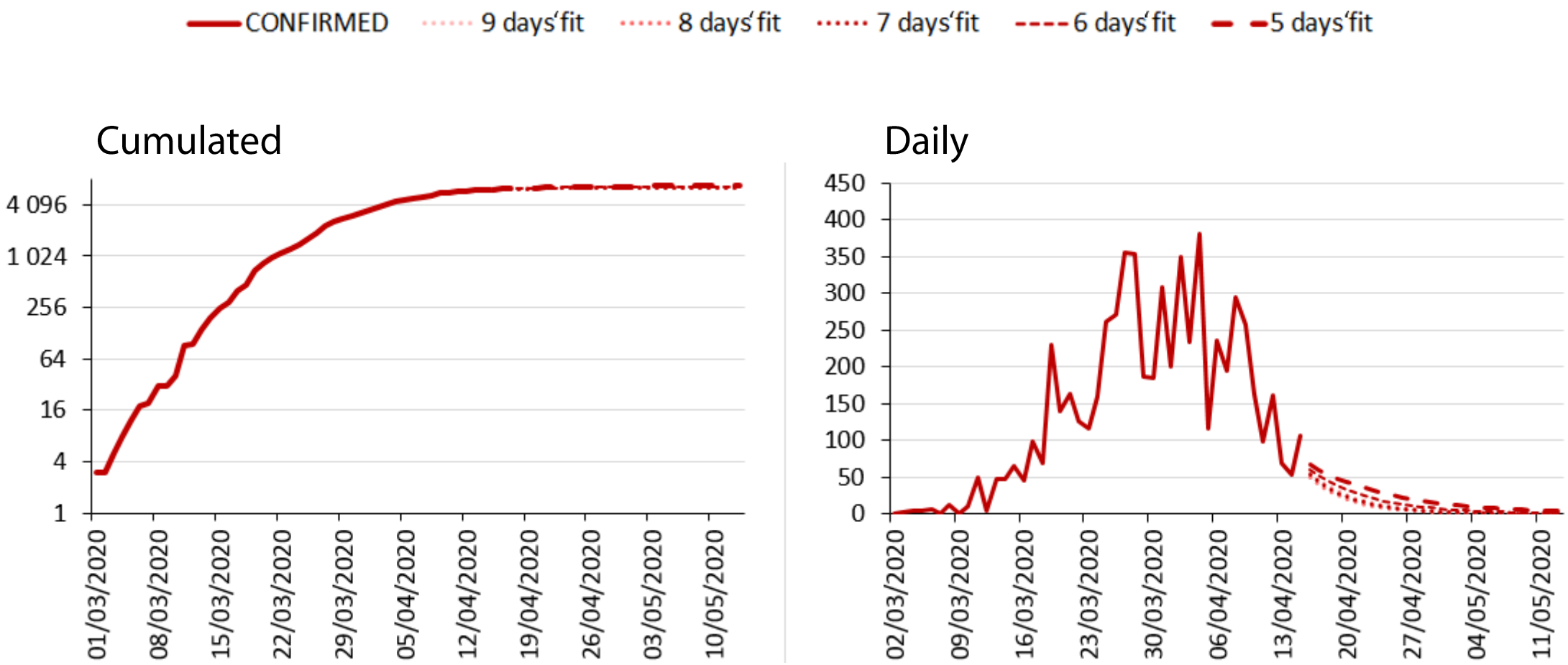
Czech Republic



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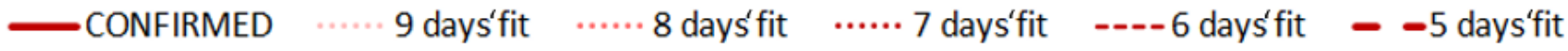
Denmark



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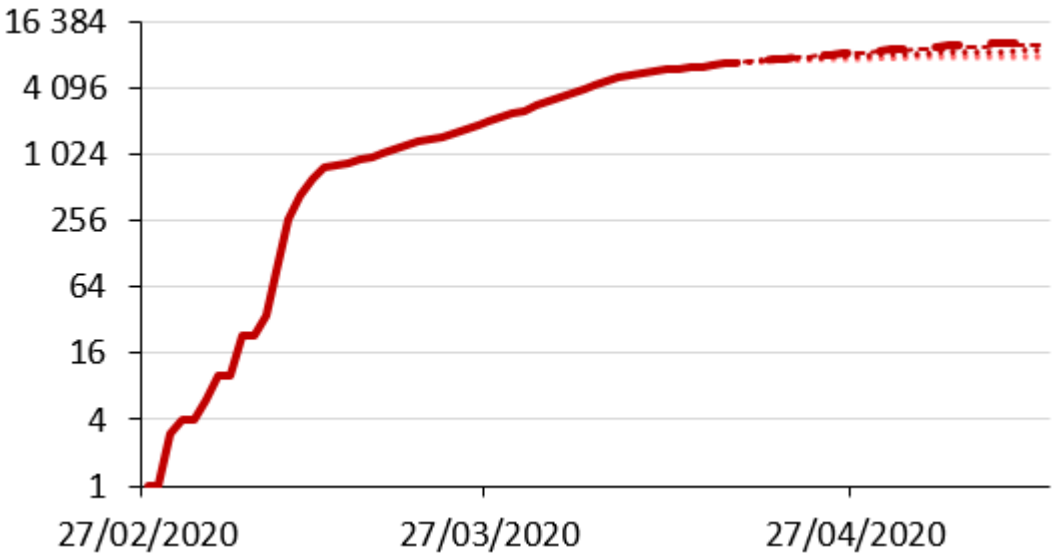

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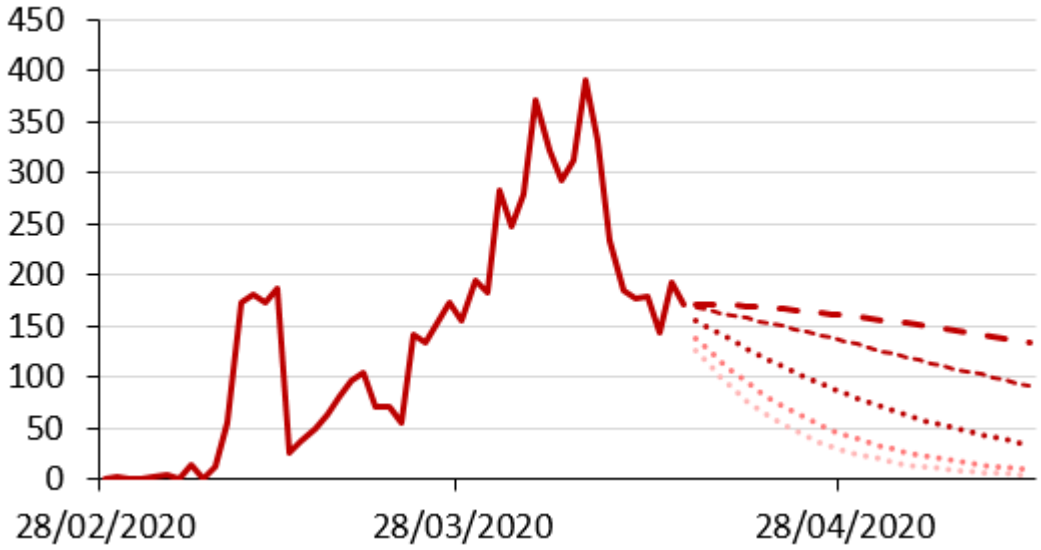

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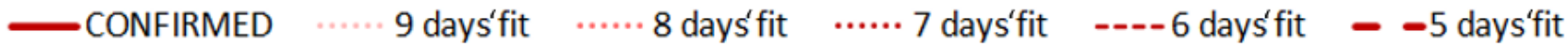
Dominican Republic



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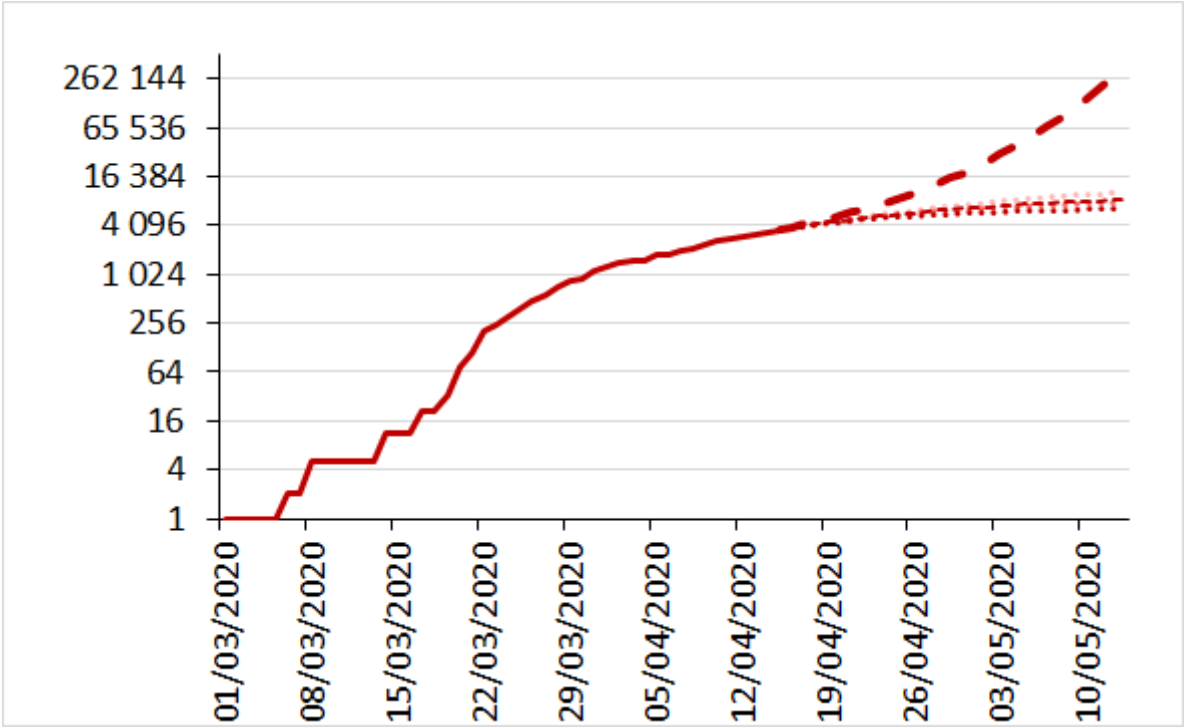

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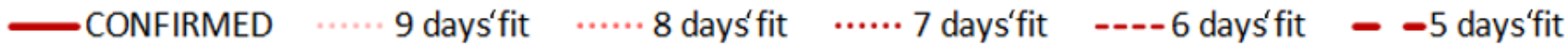
Ecuador



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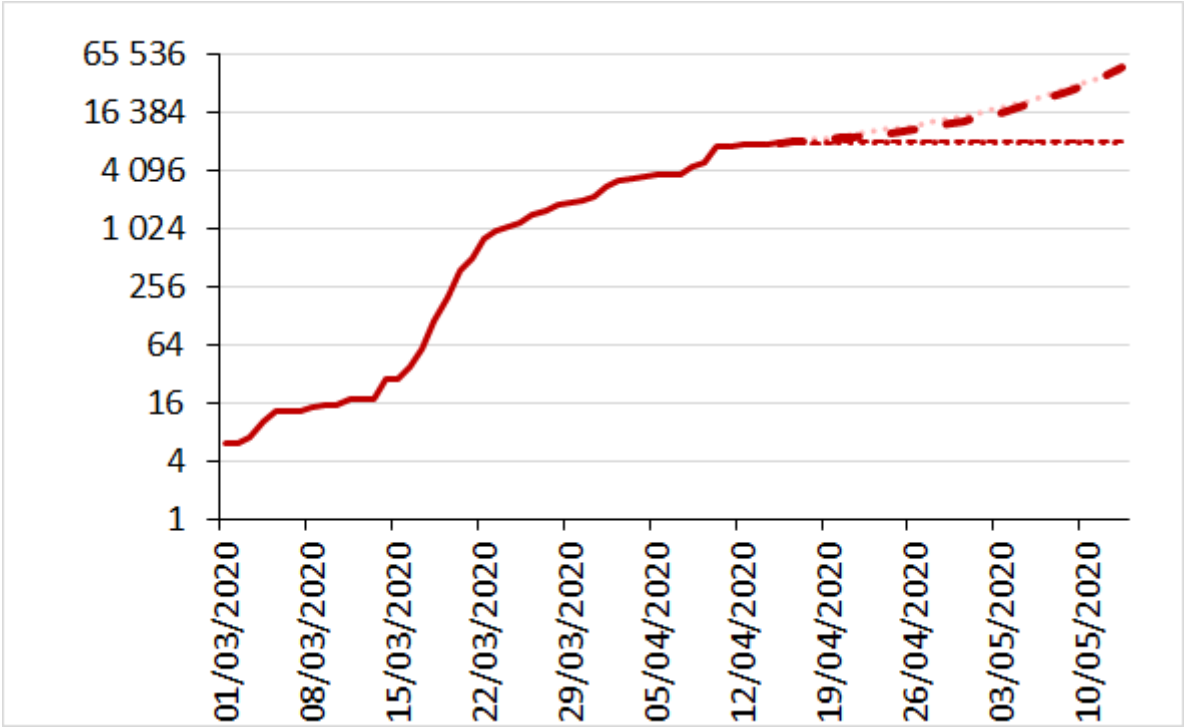

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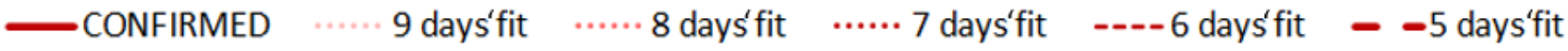

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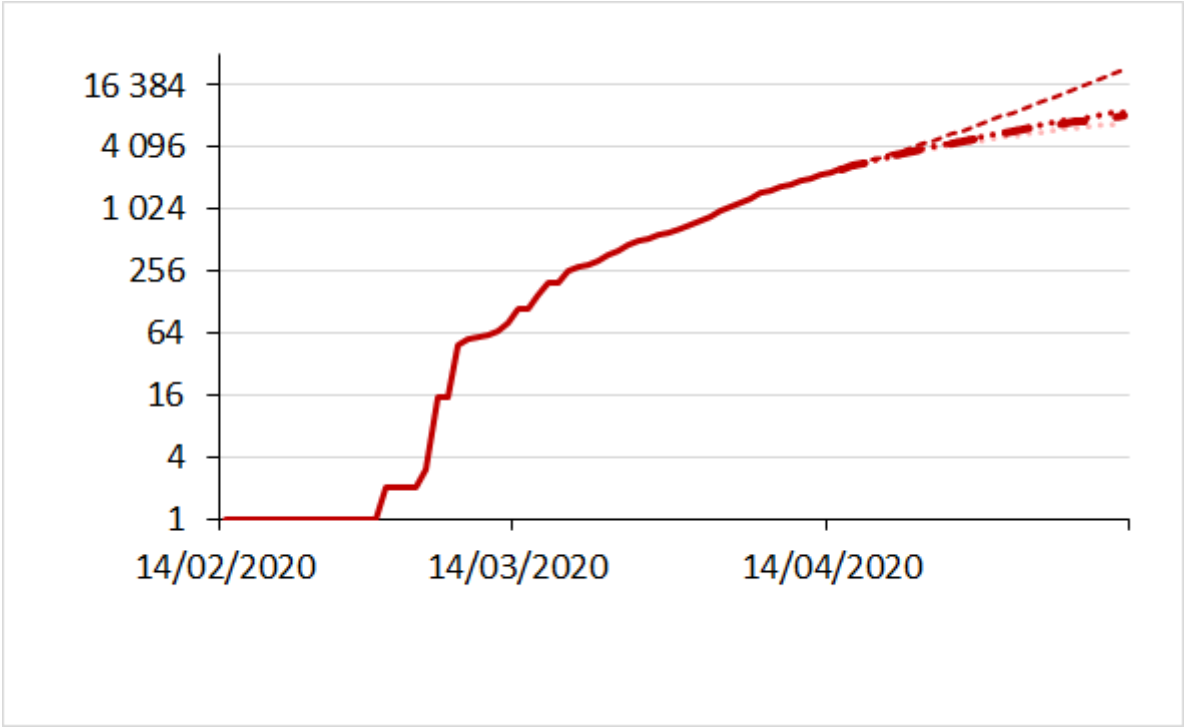

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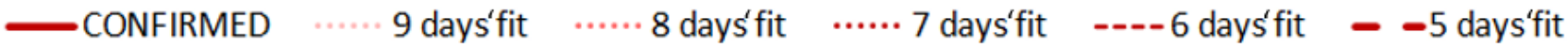

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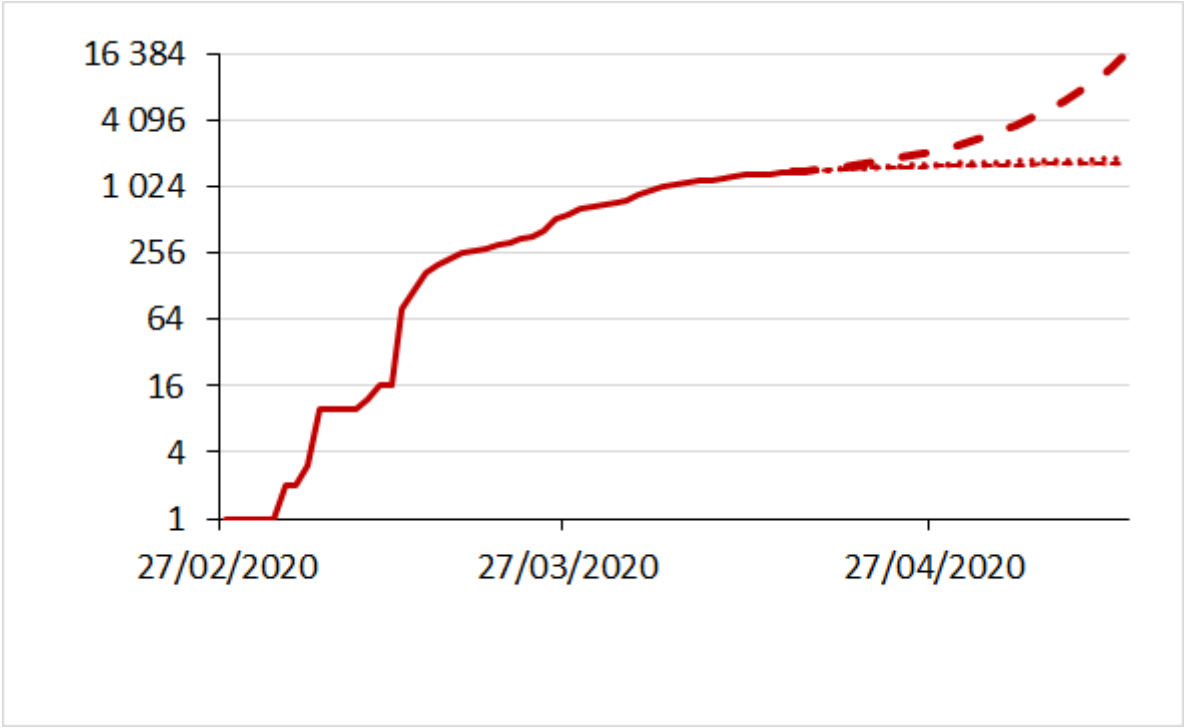

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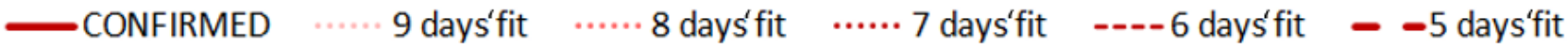
Finland



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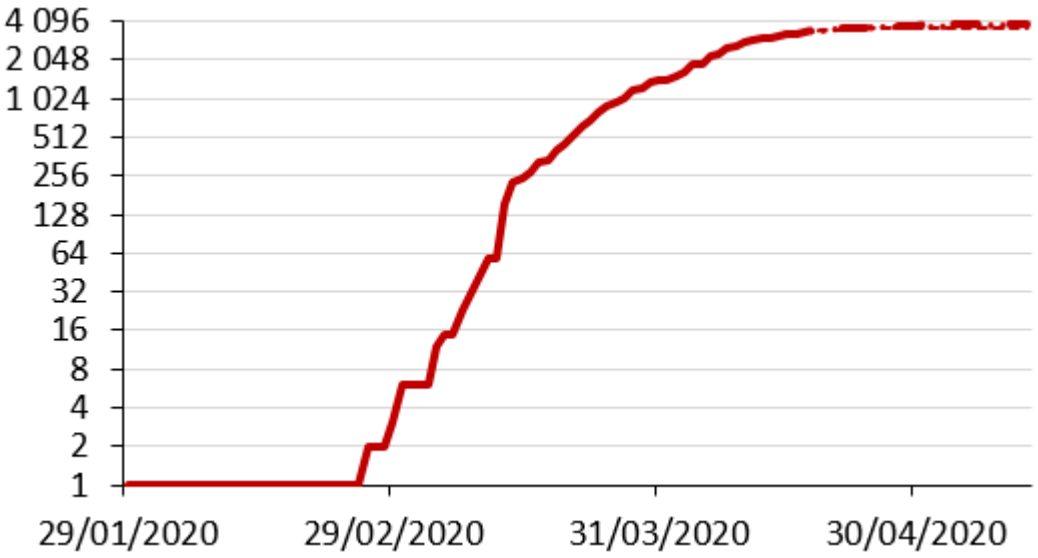
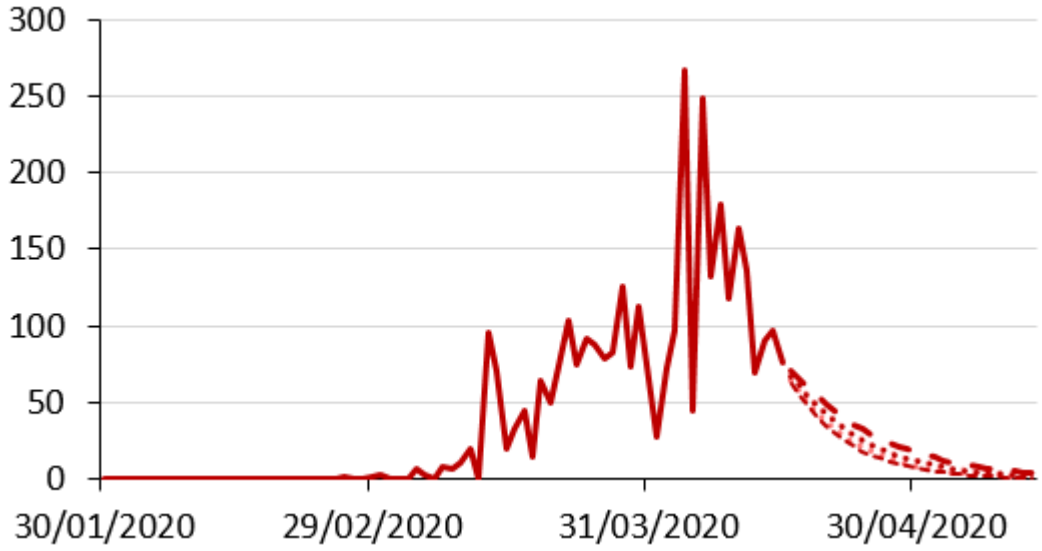


Daily



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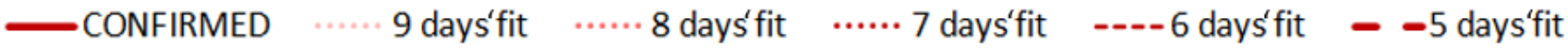
France



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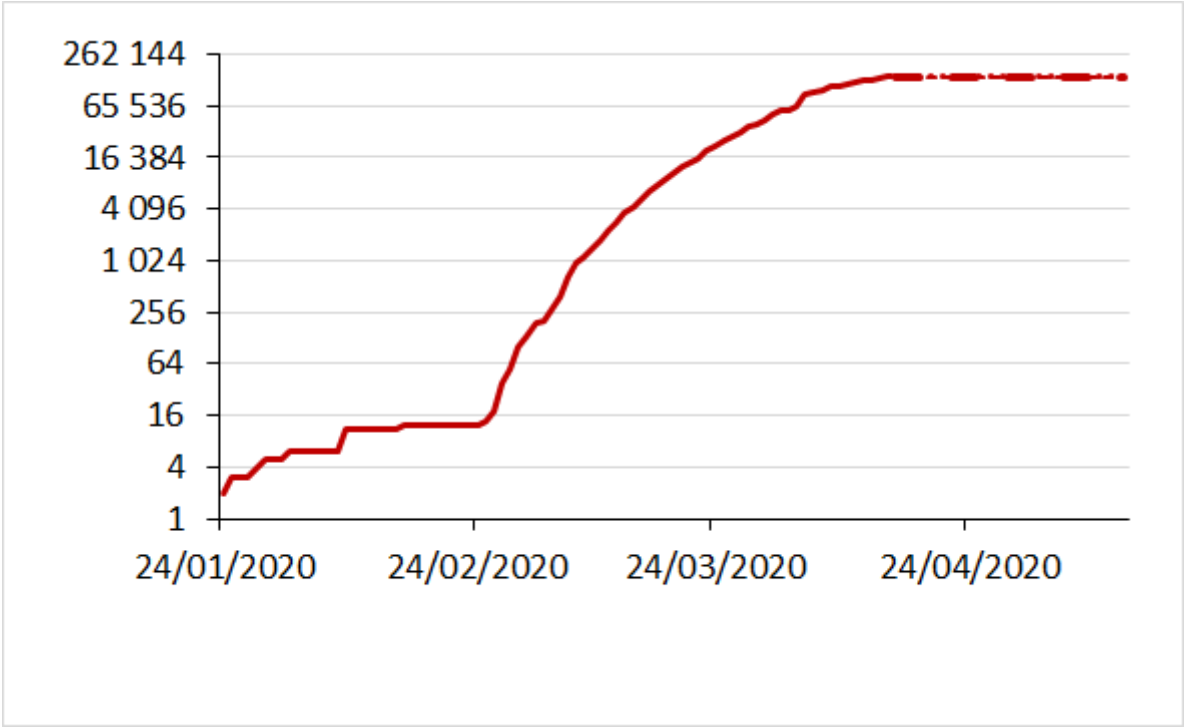

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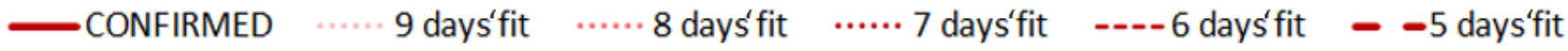
Germany



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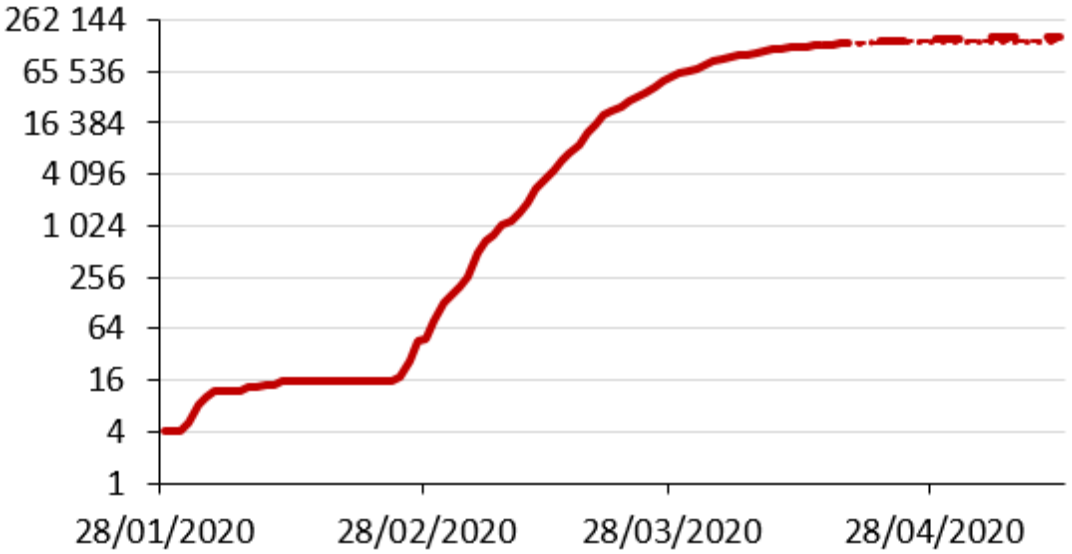

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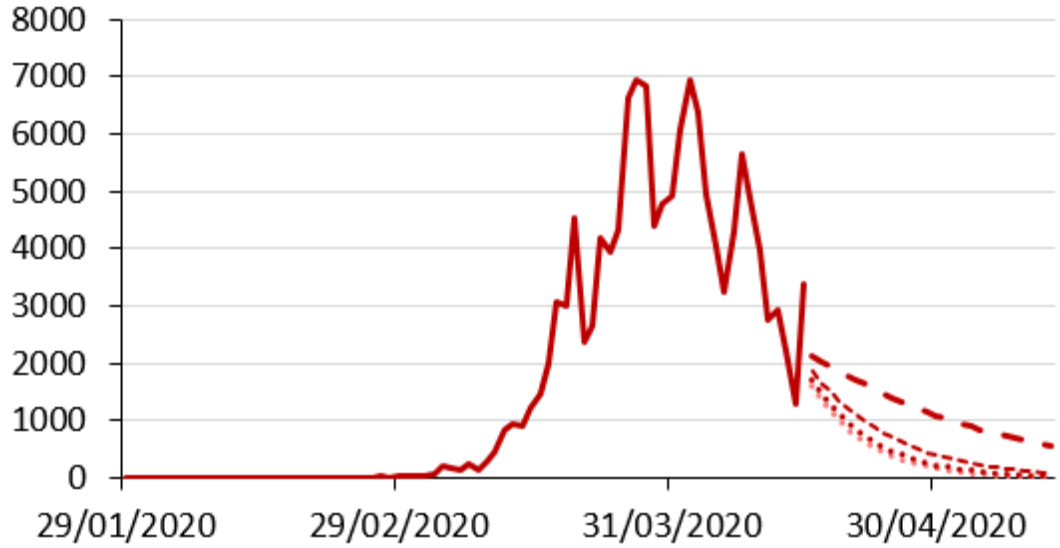

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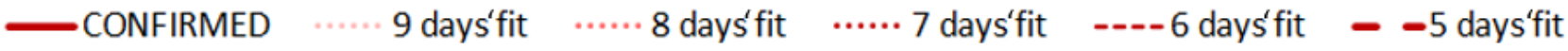
Greece



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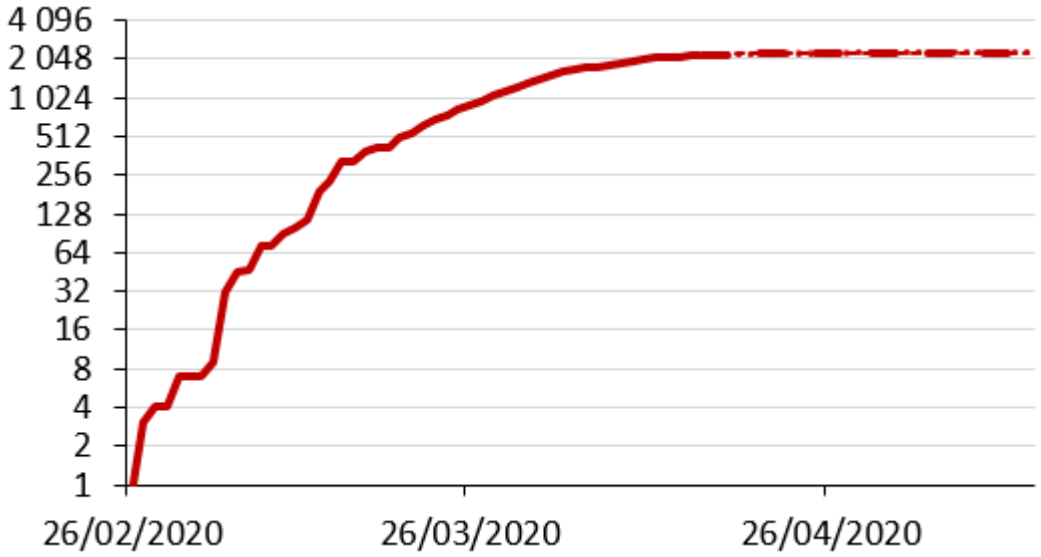

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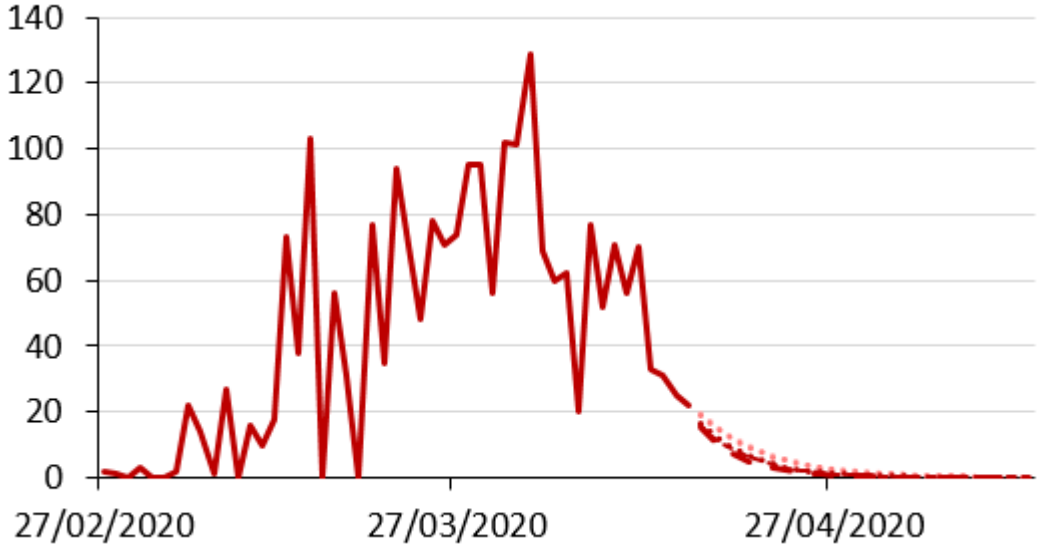

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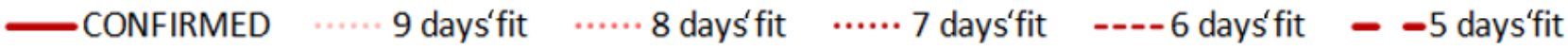
Hong Kong



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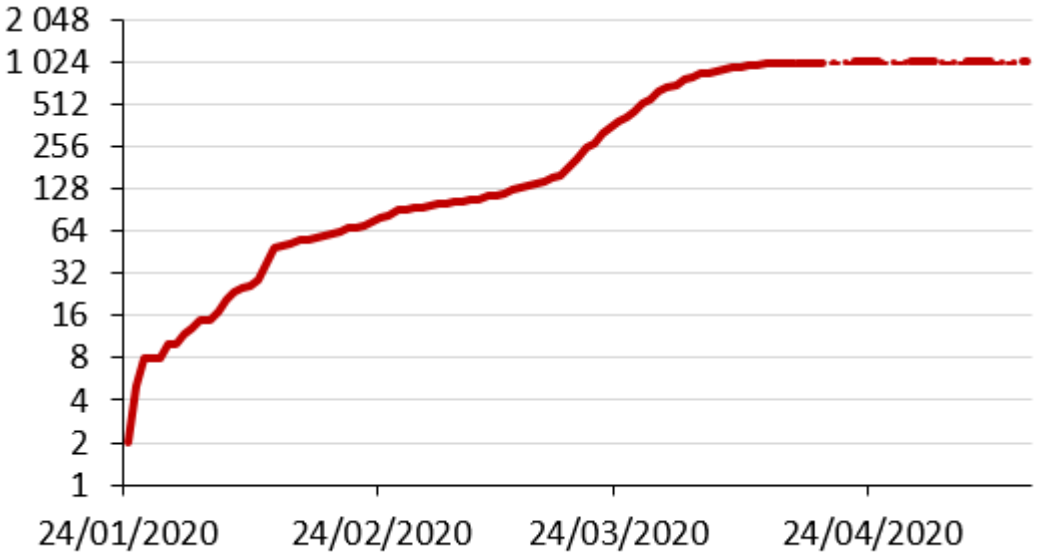

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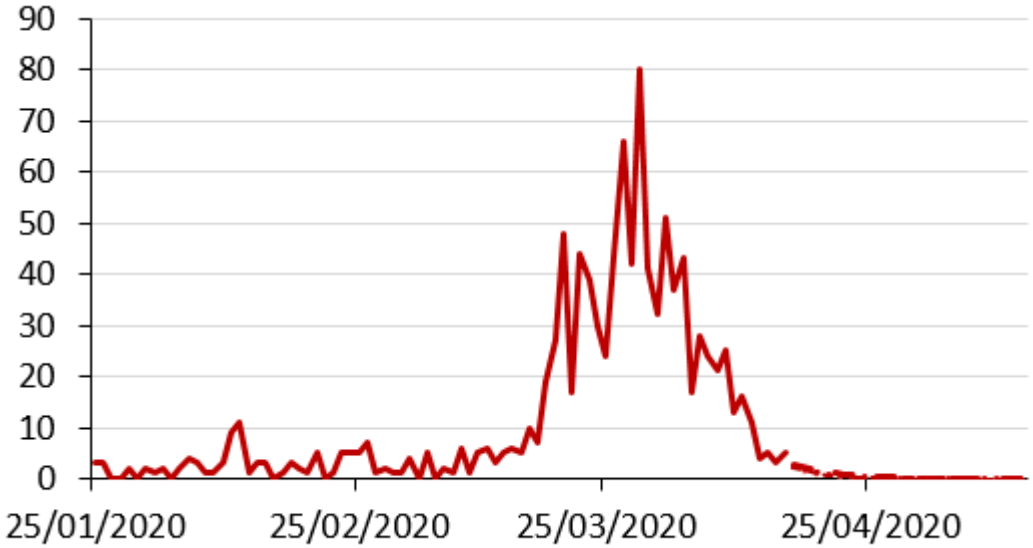
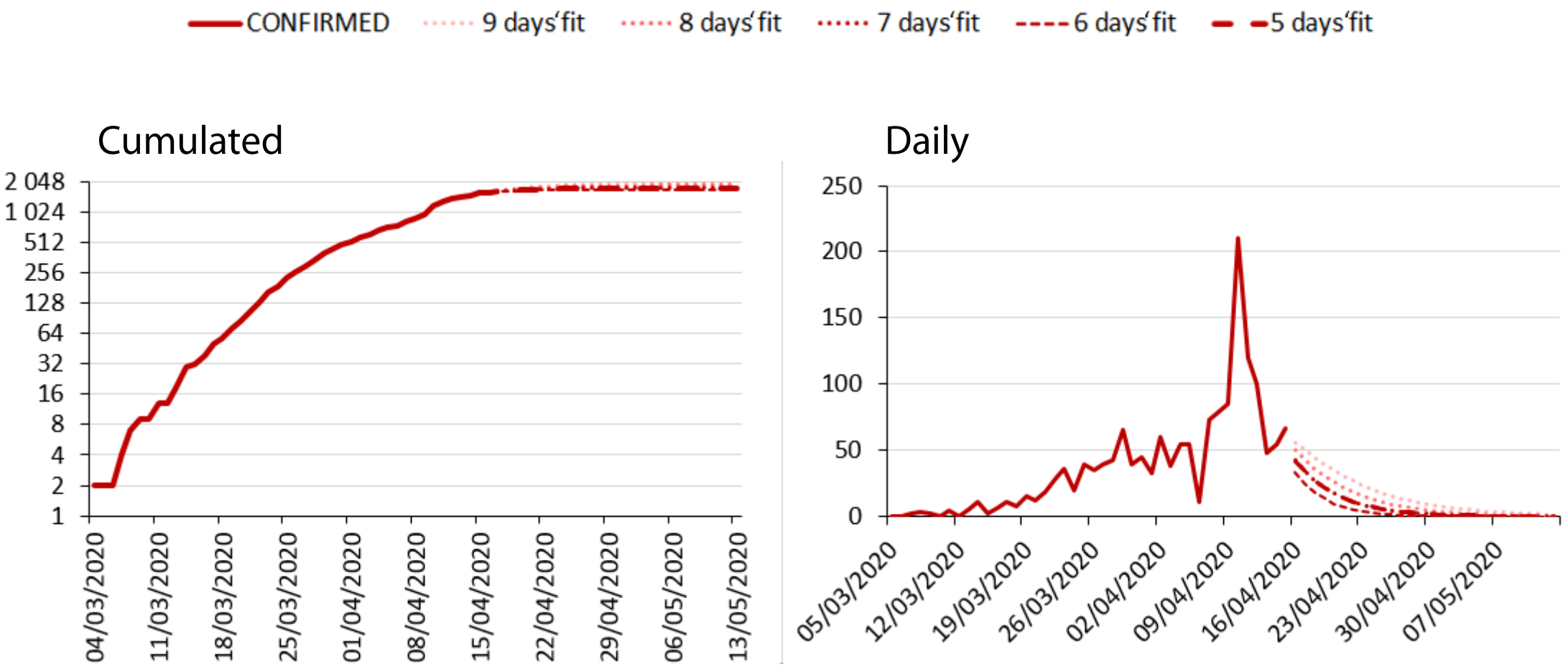


Data: The Johns Hopkins University, Politolog.com

Hungary



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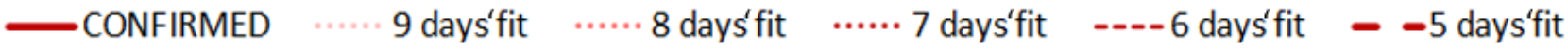
Iceland



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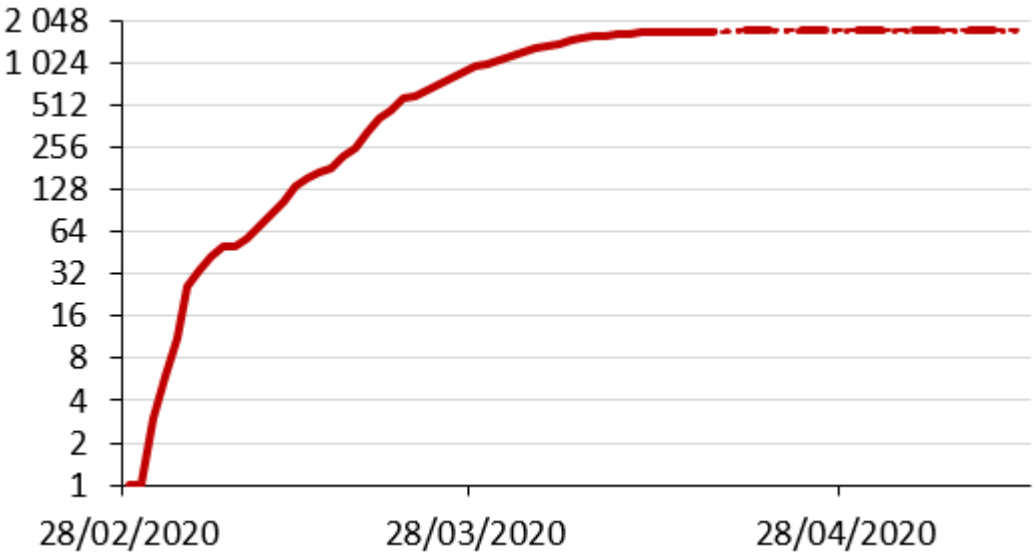

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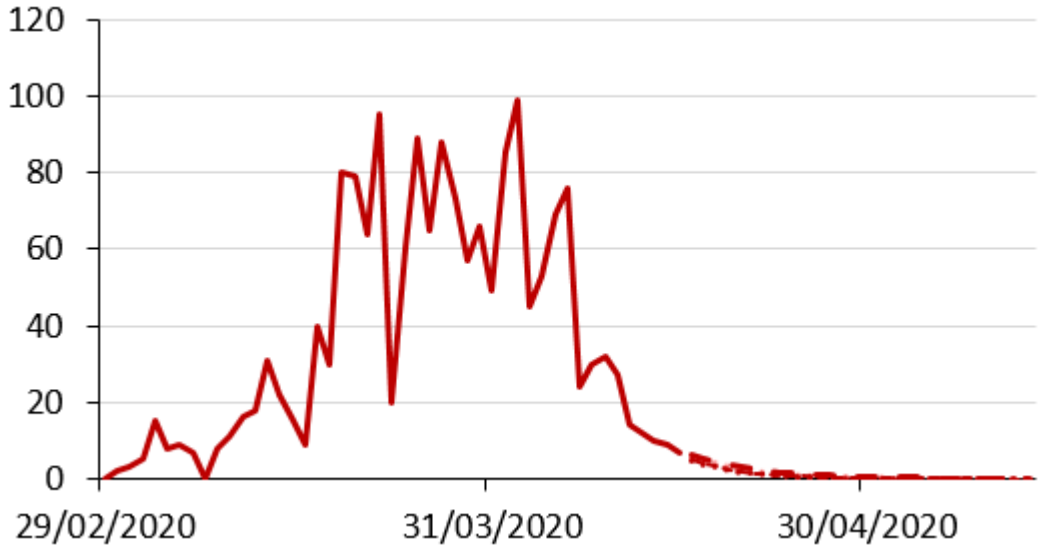

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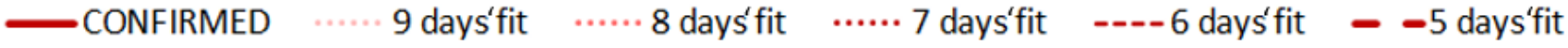
India



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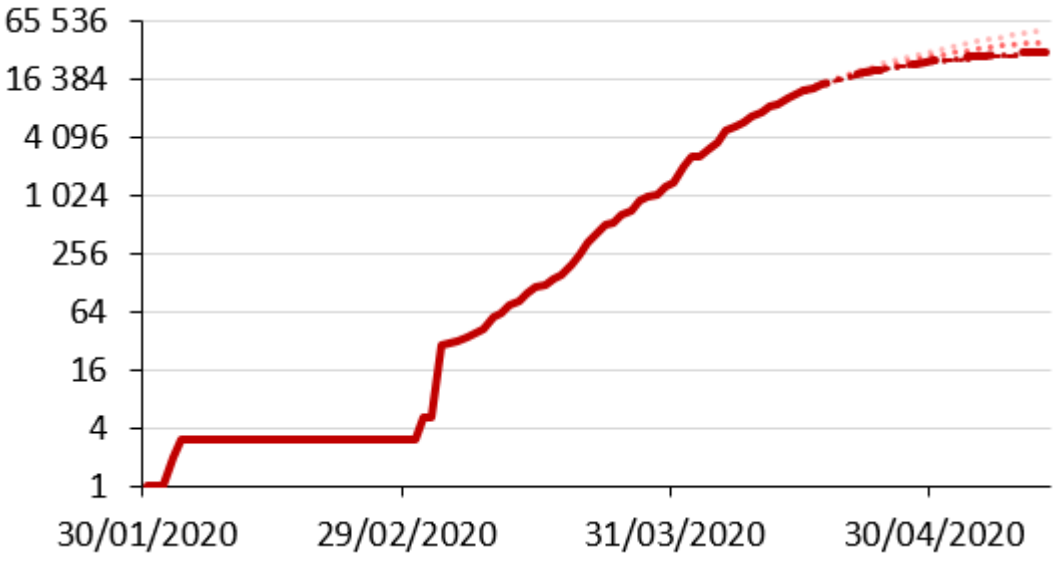

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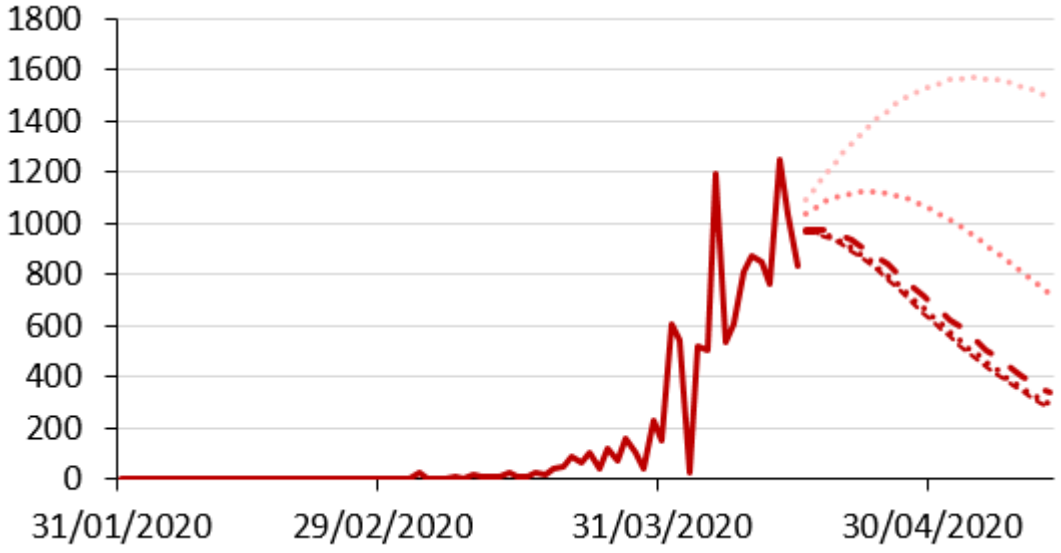

Data: The Johns Hopkins University, Politolog.com

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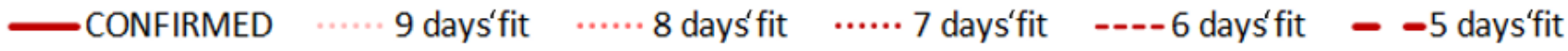

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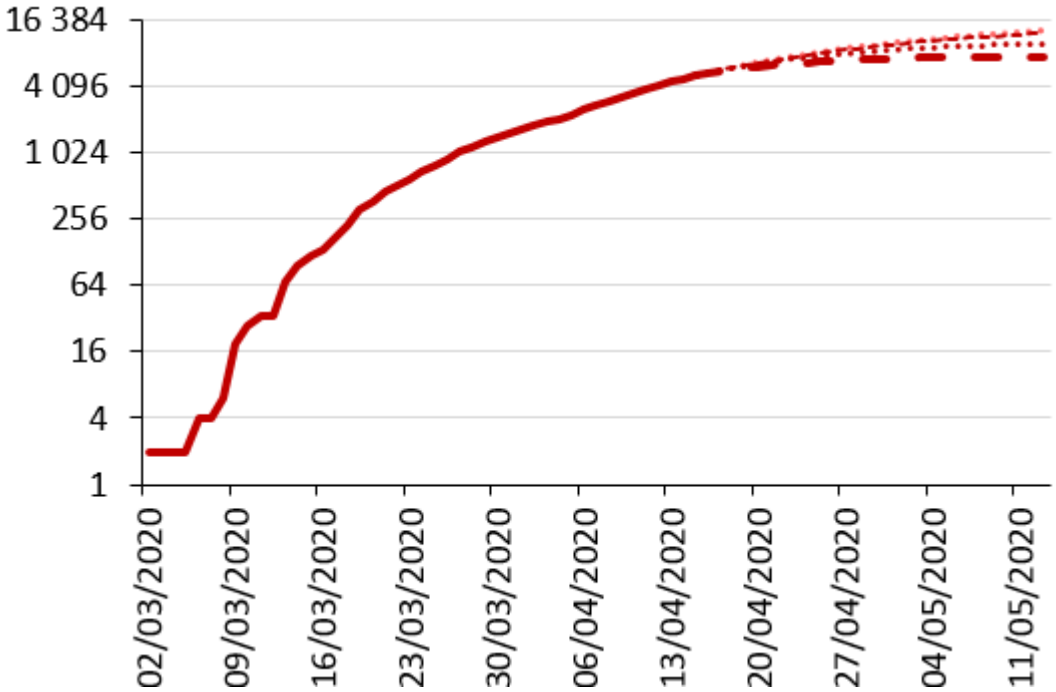

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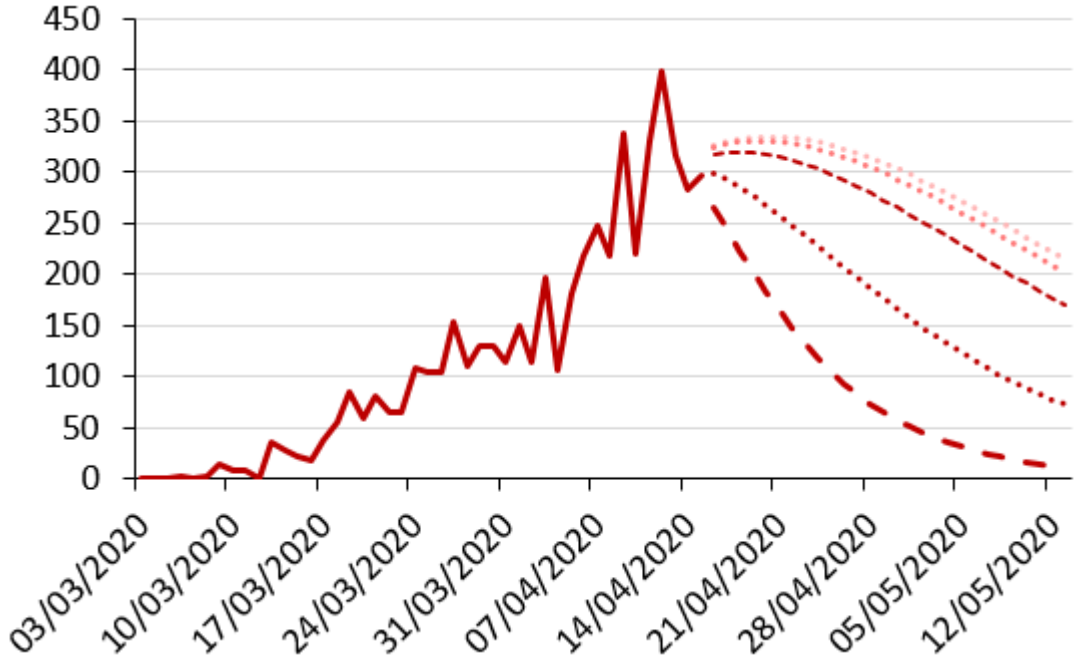

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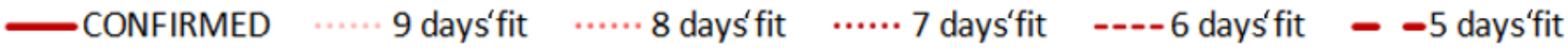
Iran



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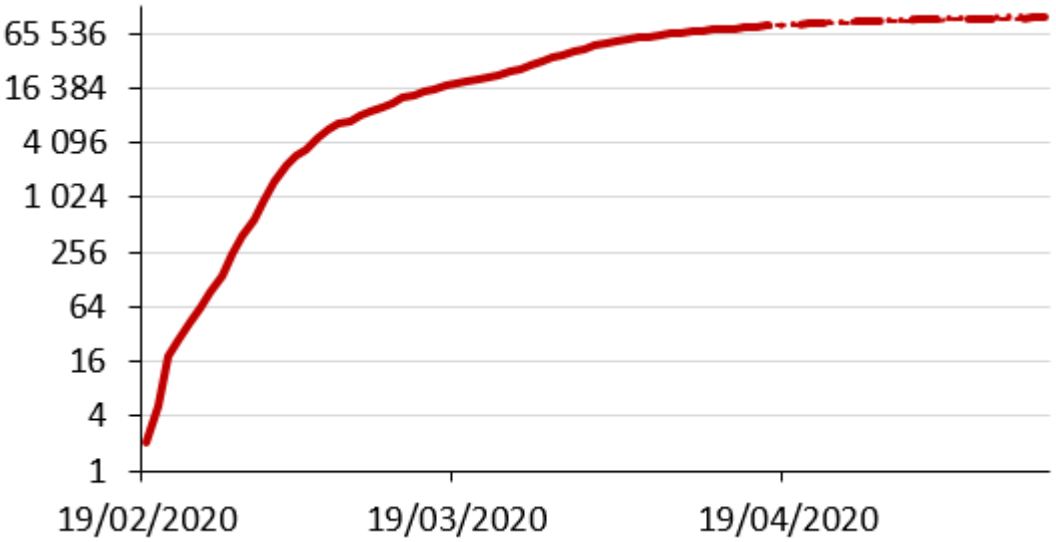

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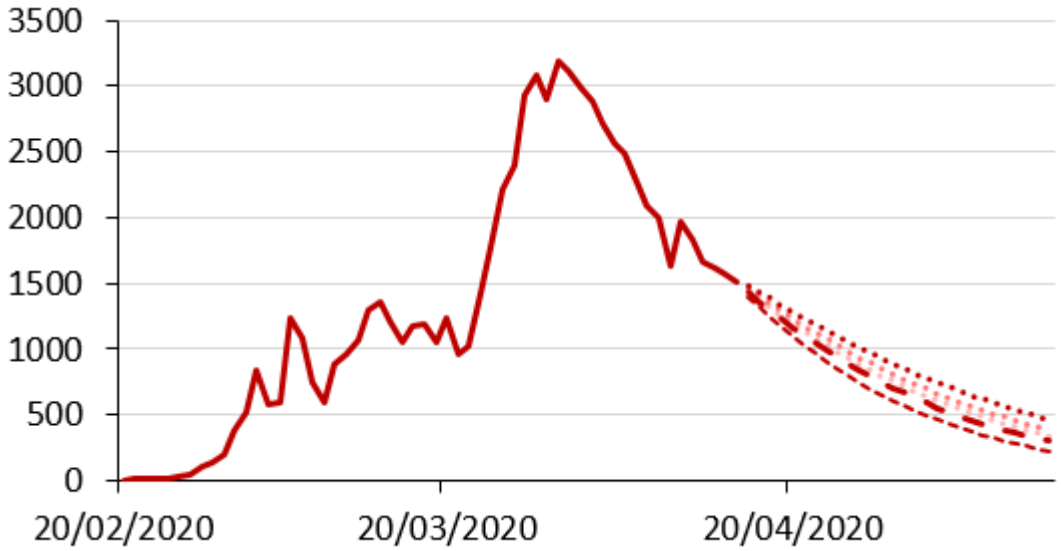

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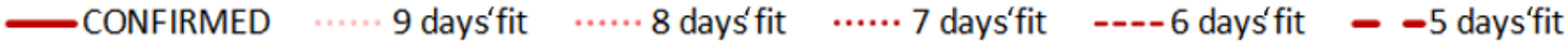
Iraq



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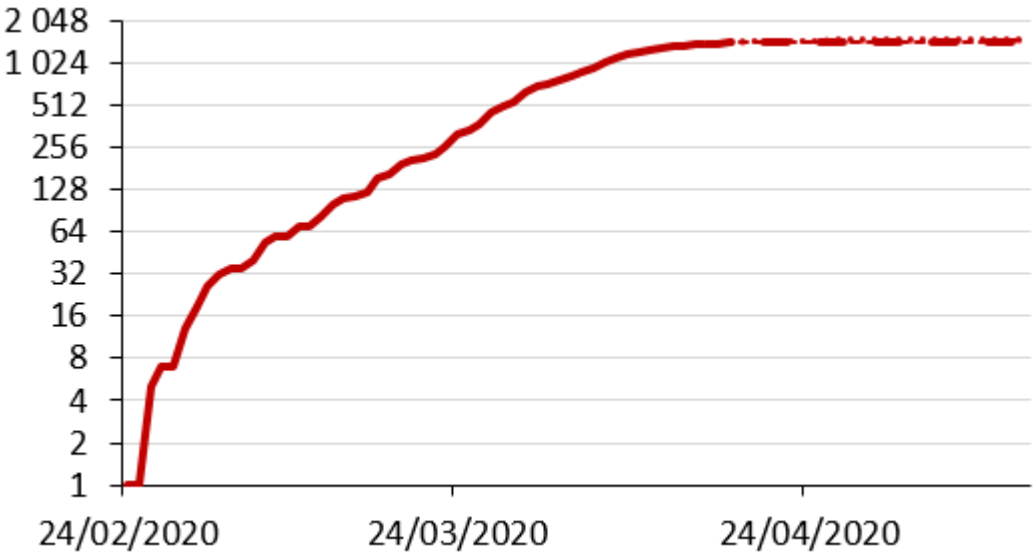

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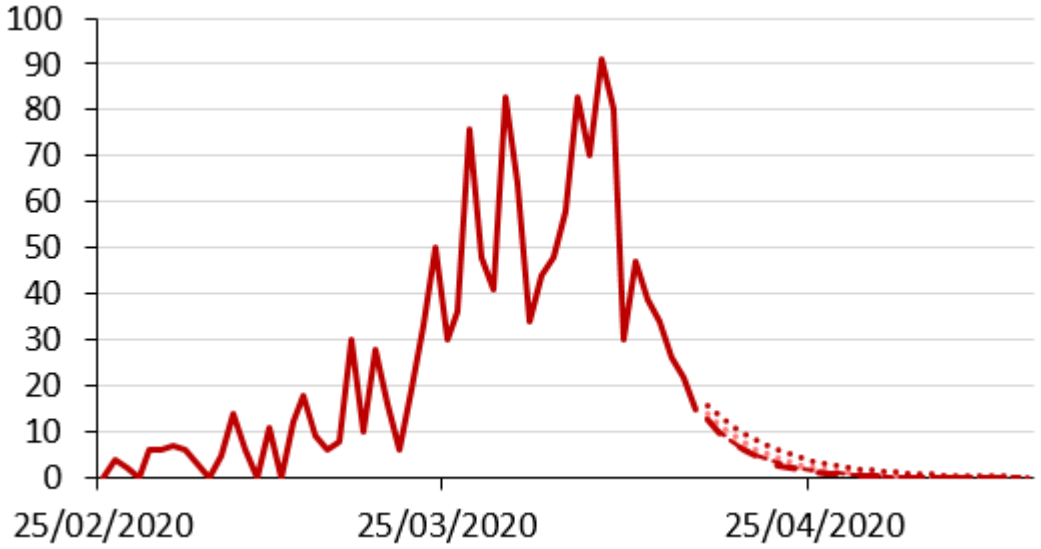

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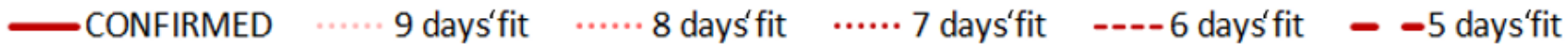
Ireland



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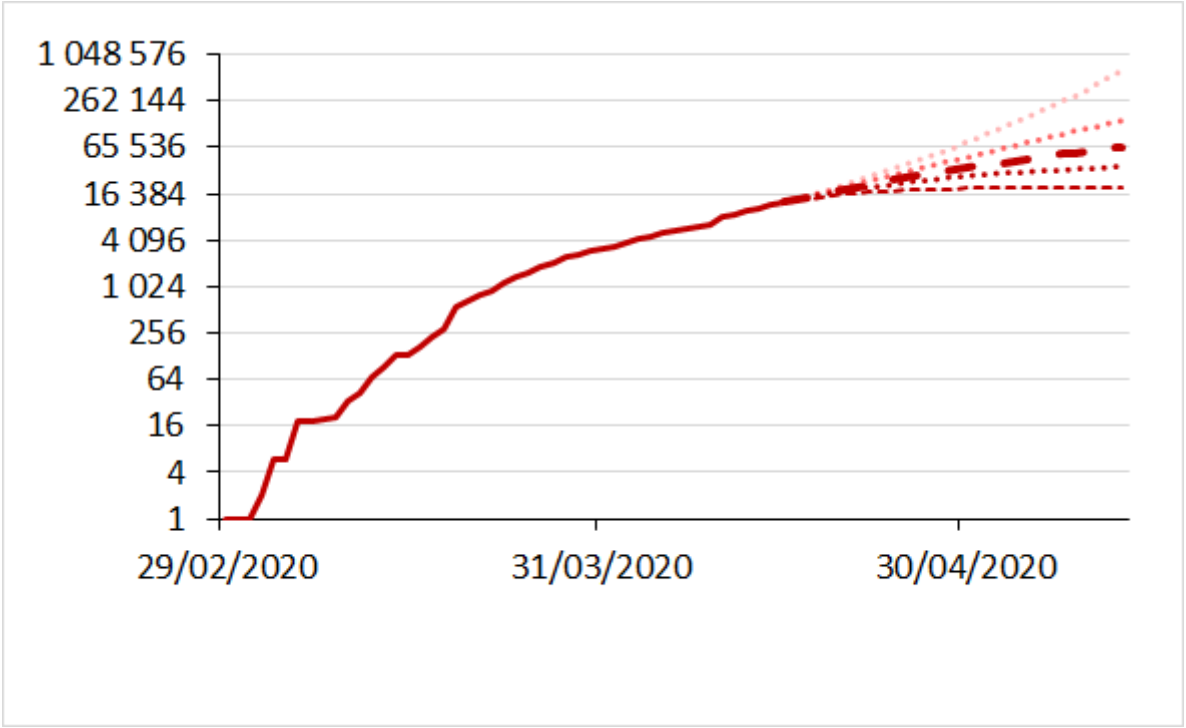

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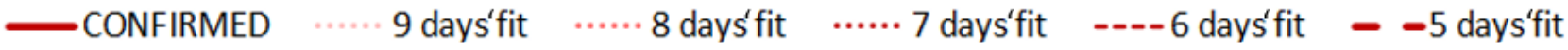

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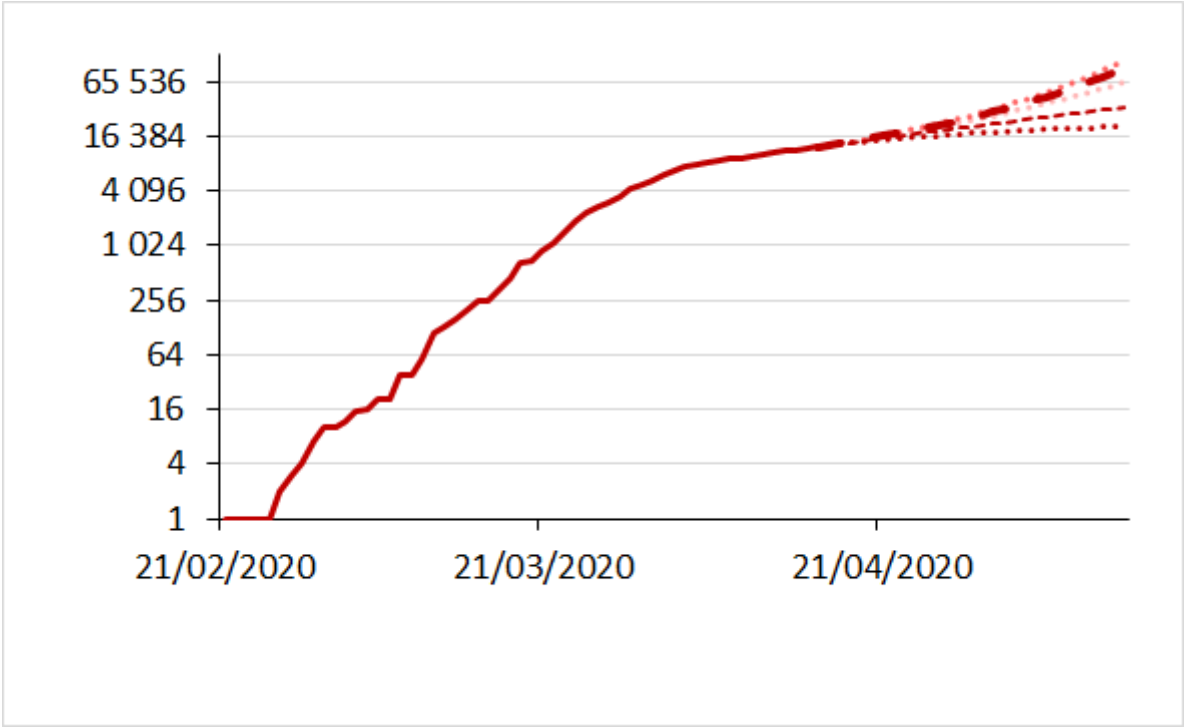

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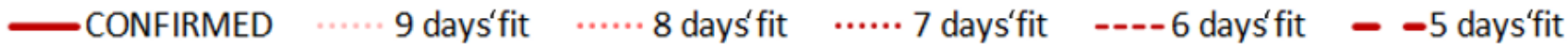

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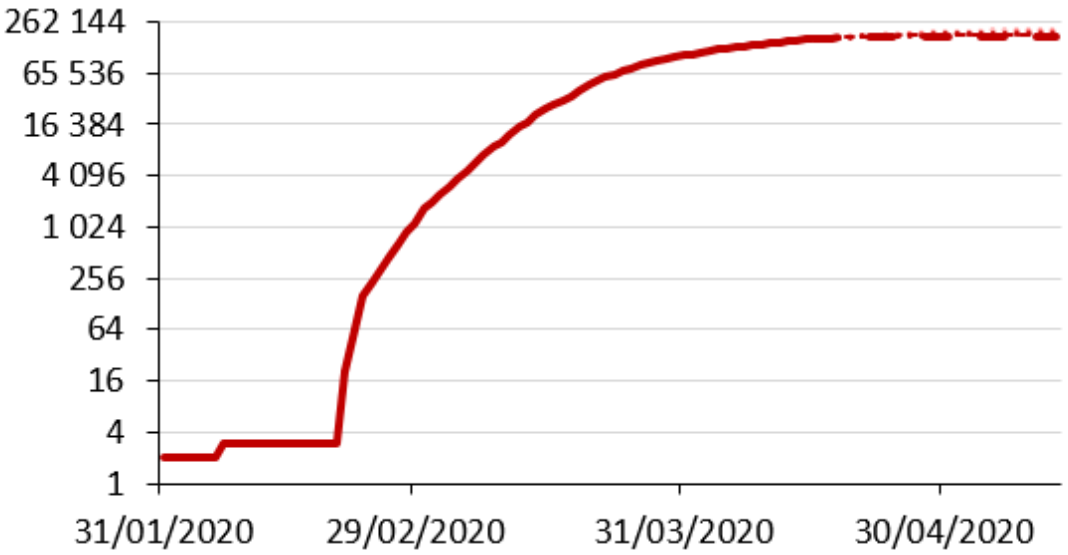
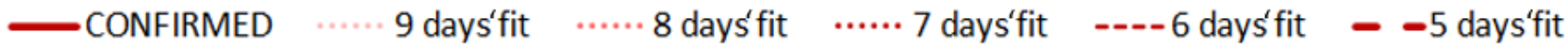


Daily

Data: The Johns Hopkins University, Politolog.com

Japan



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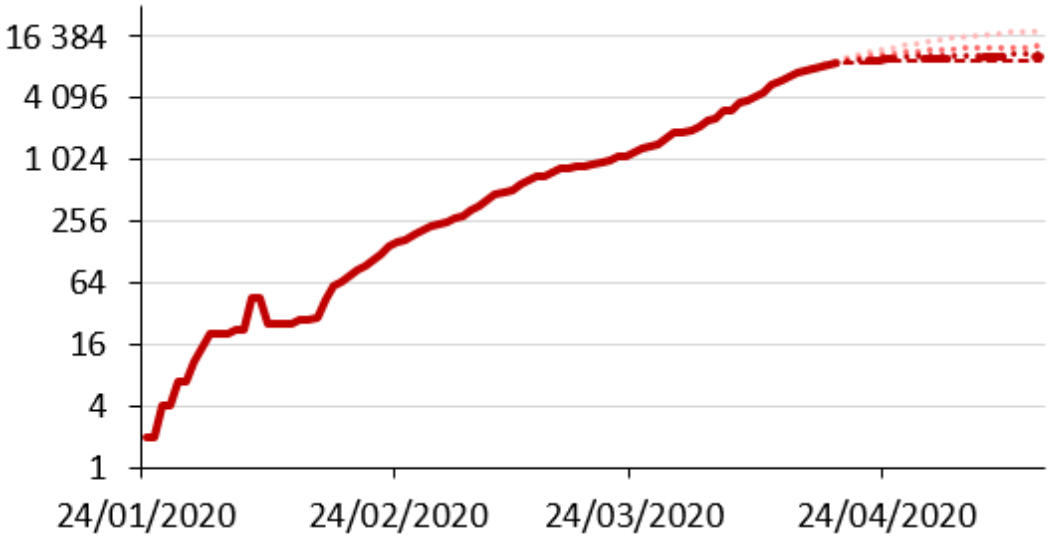
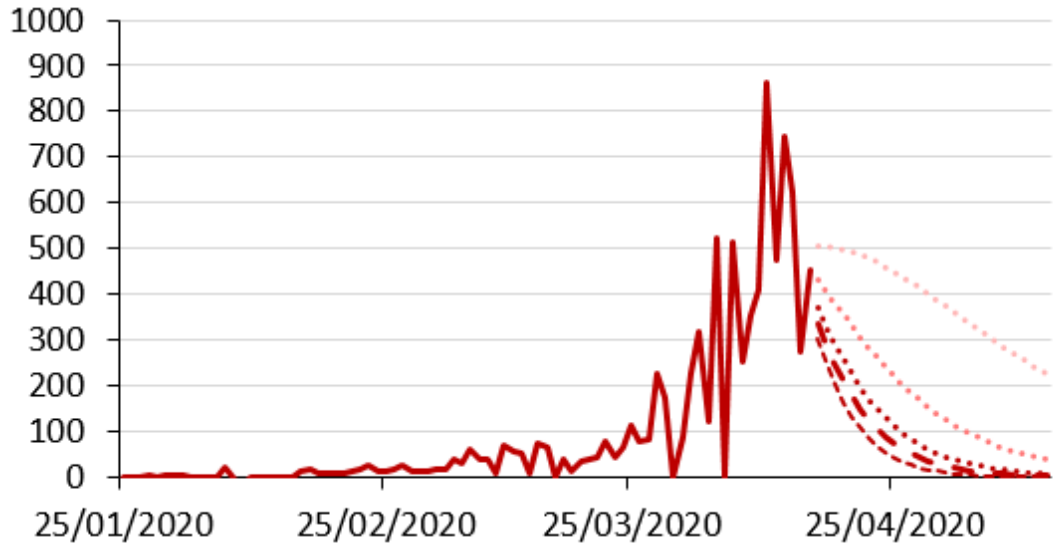


Daily



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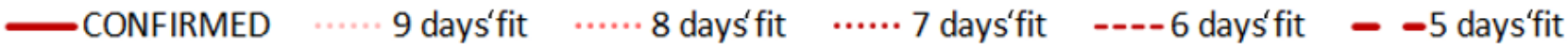
Kuwait



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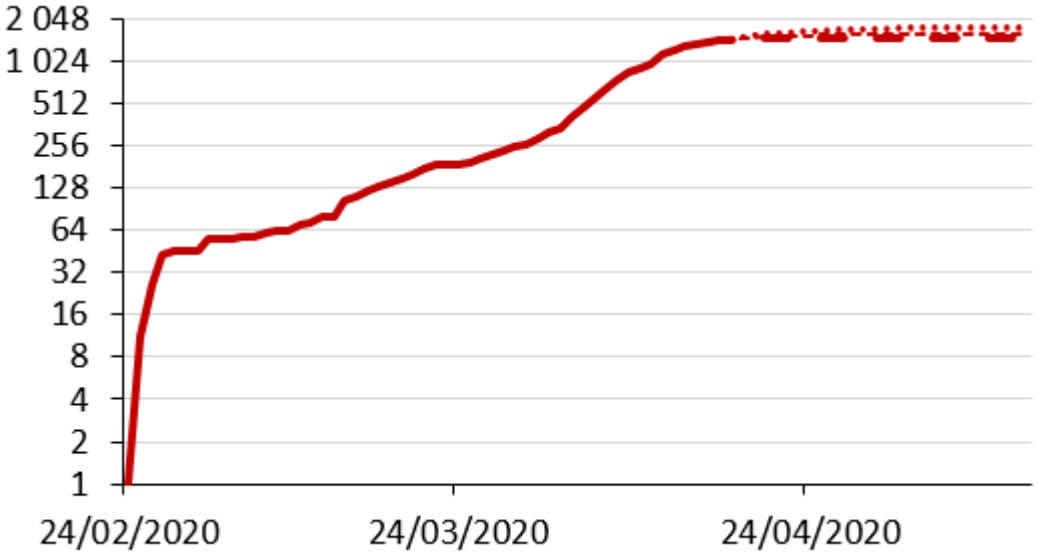

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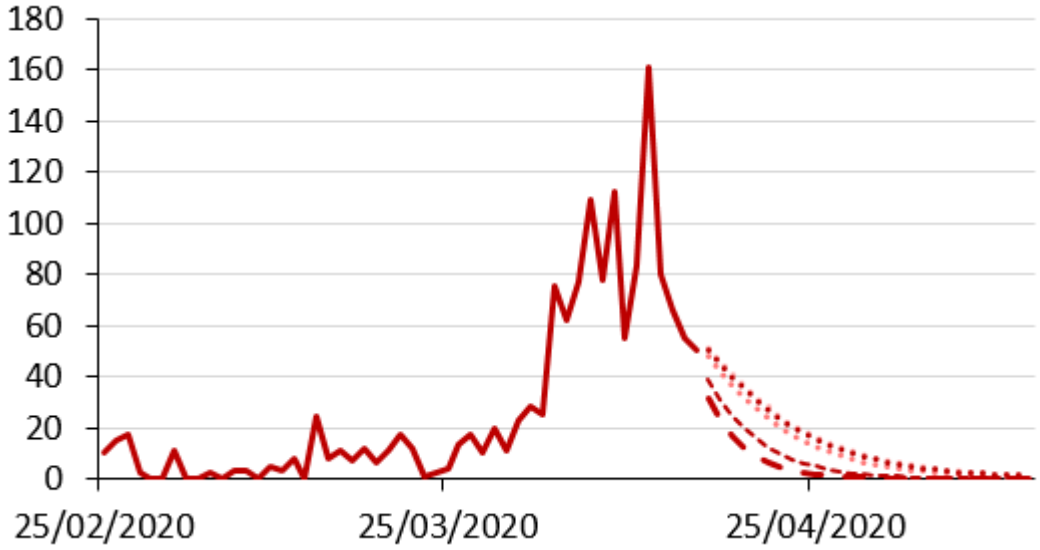

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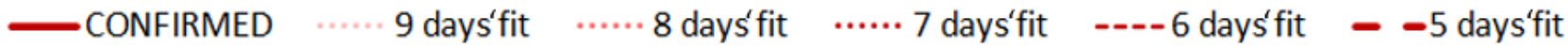

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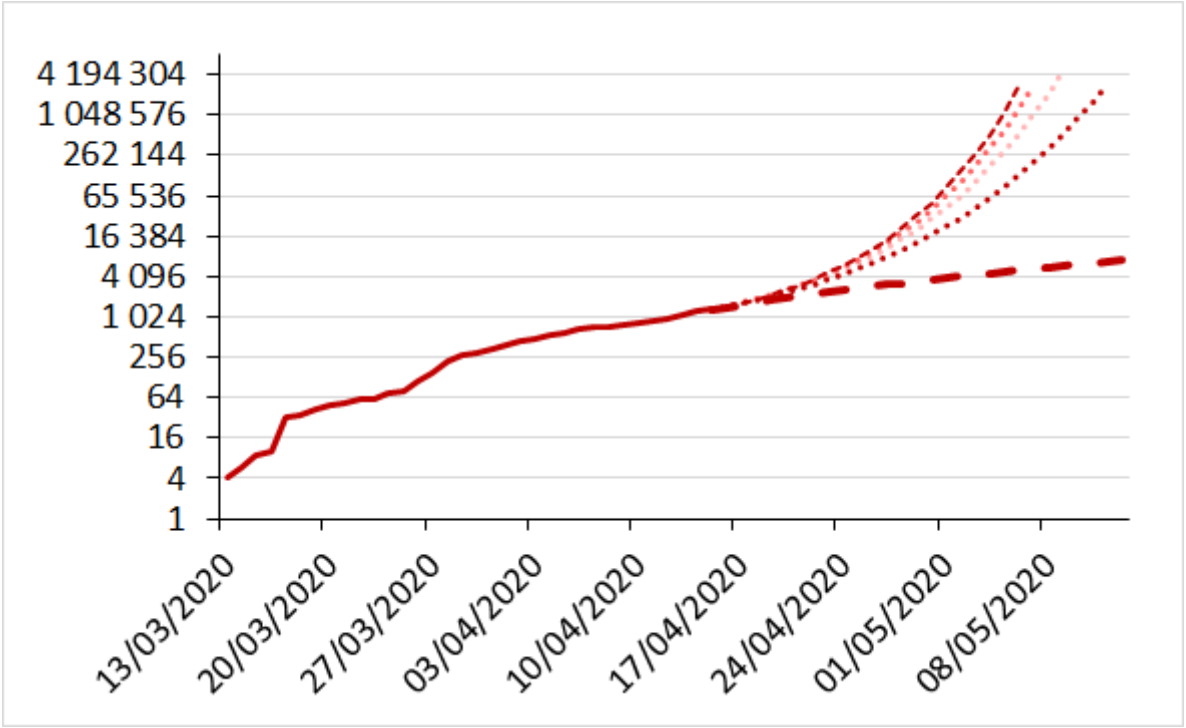

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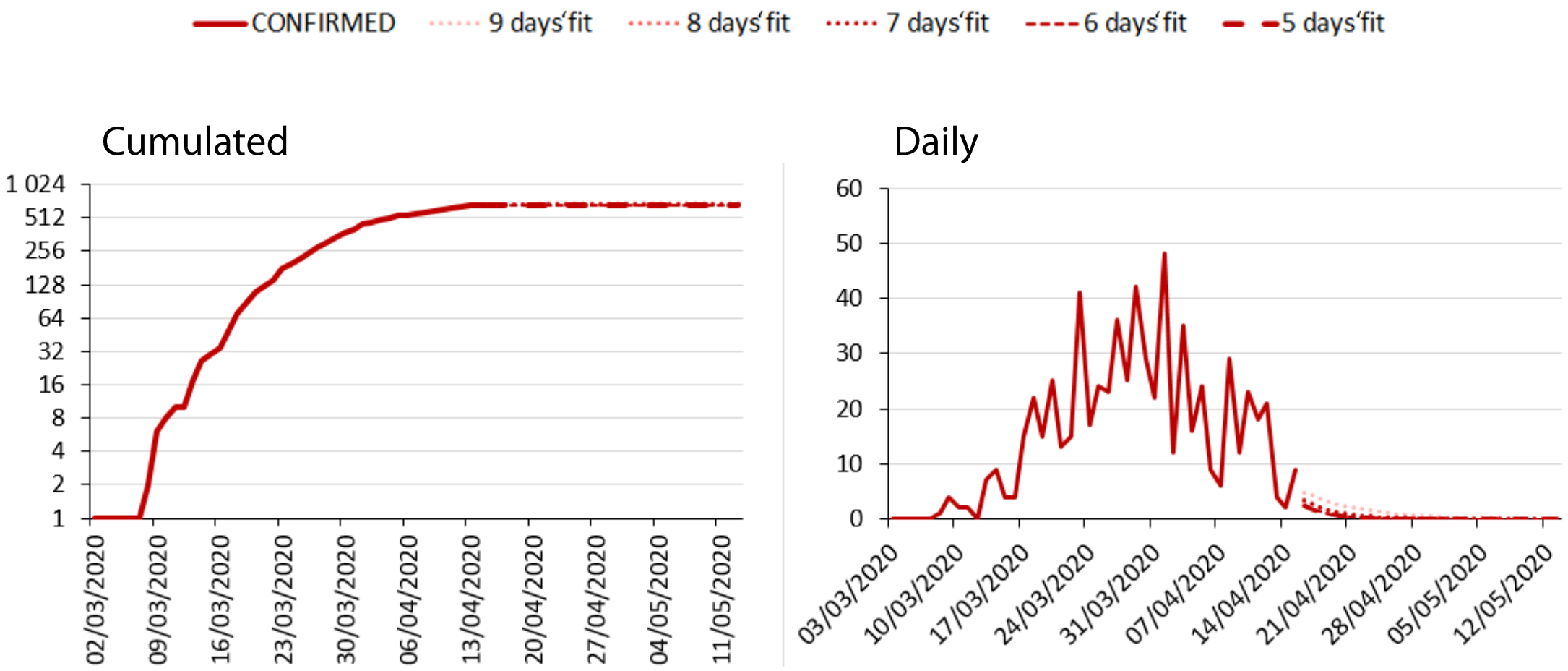
Latvia



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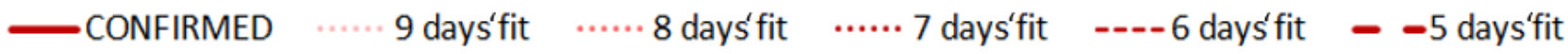
Lebanon



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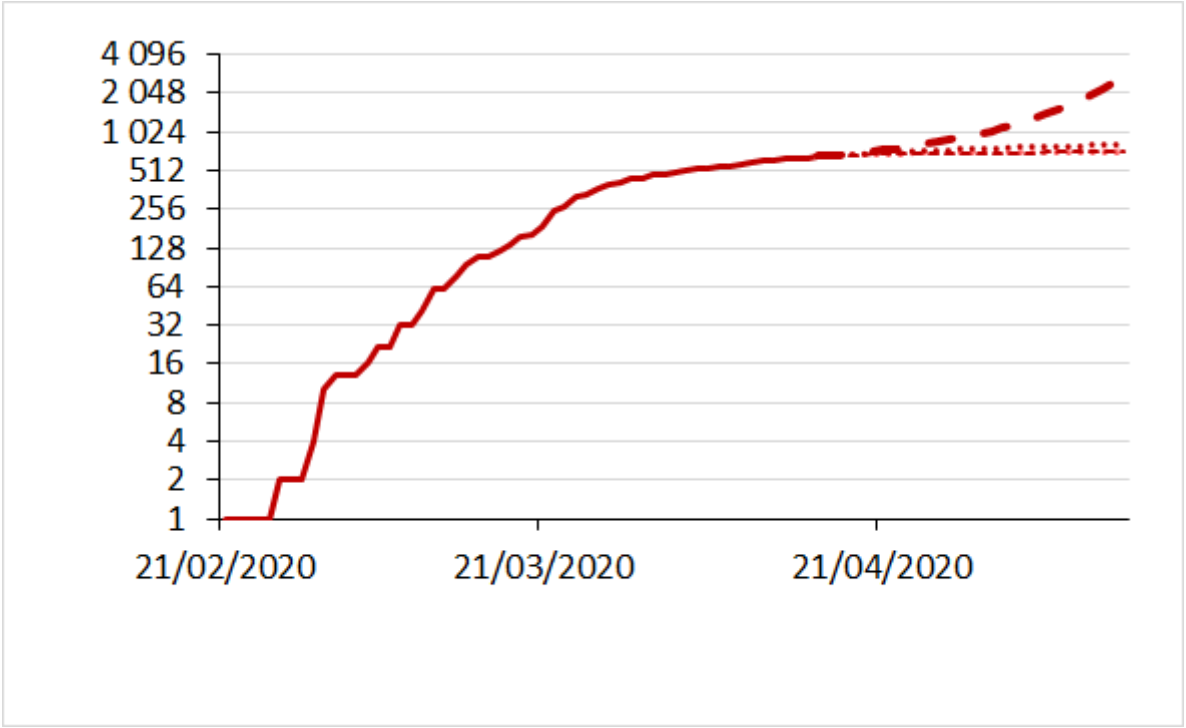

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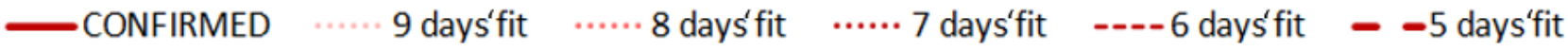
Lithuania



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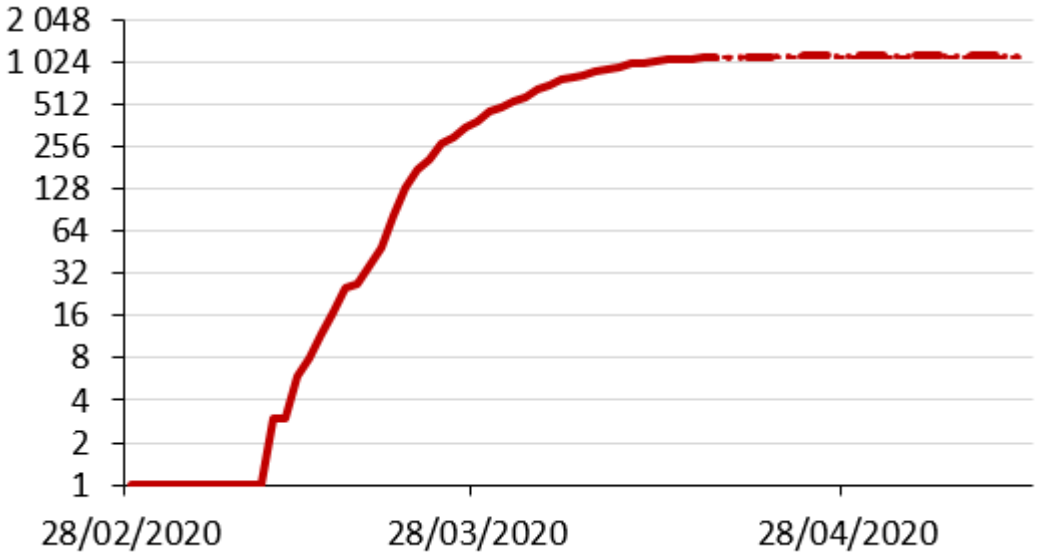

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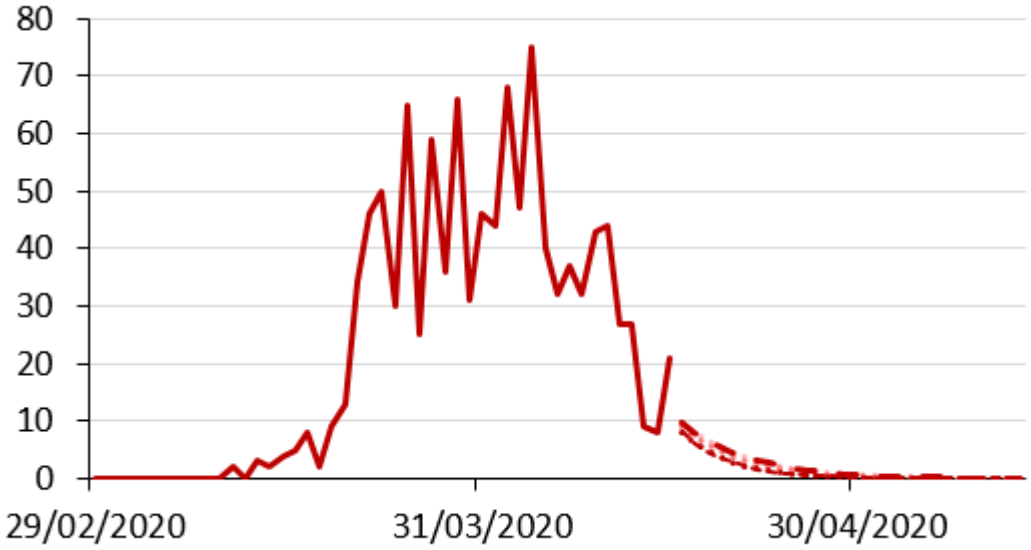

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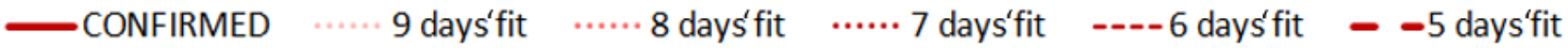
Luxembourg



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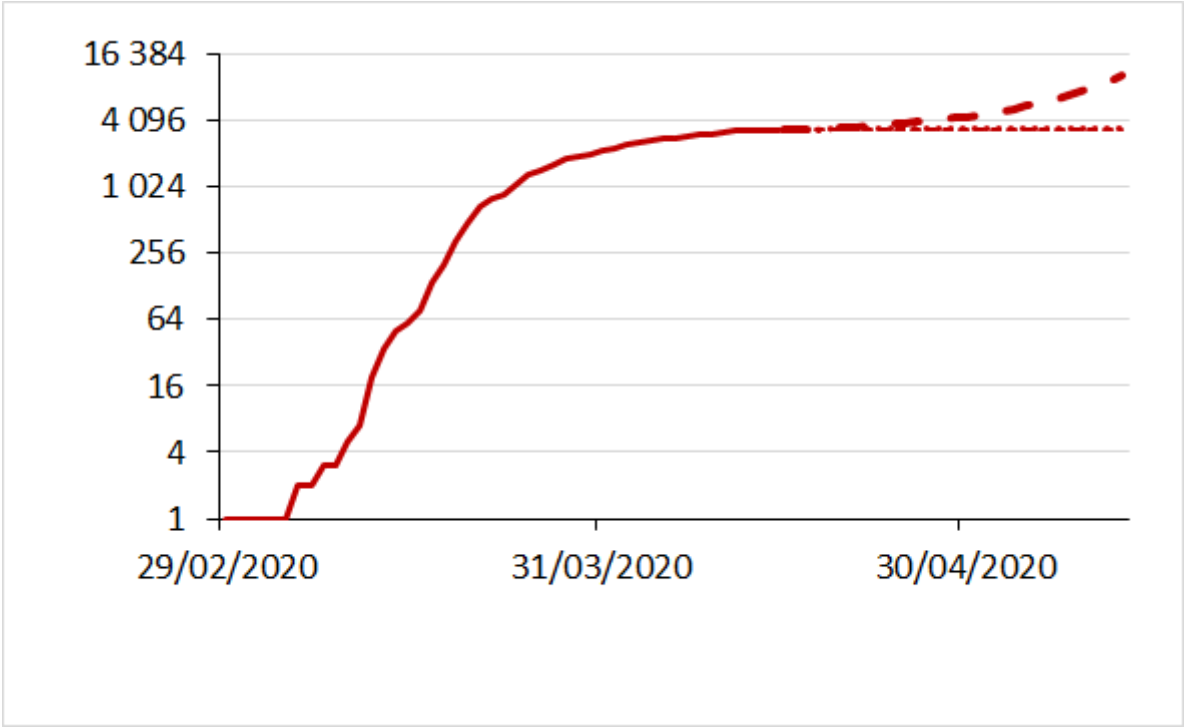

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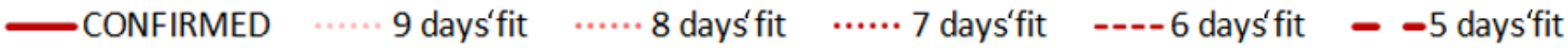

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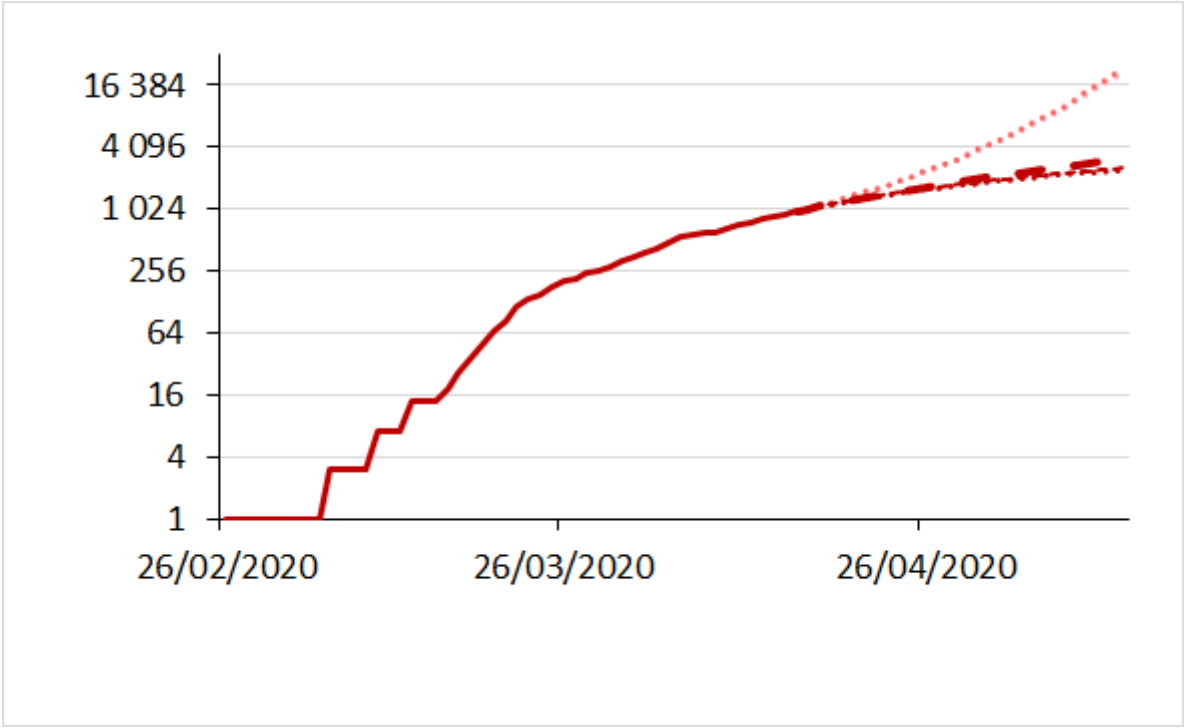
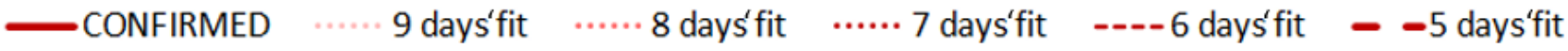


Data: The Johns Hopkins University, Politolog.com

Malaysia



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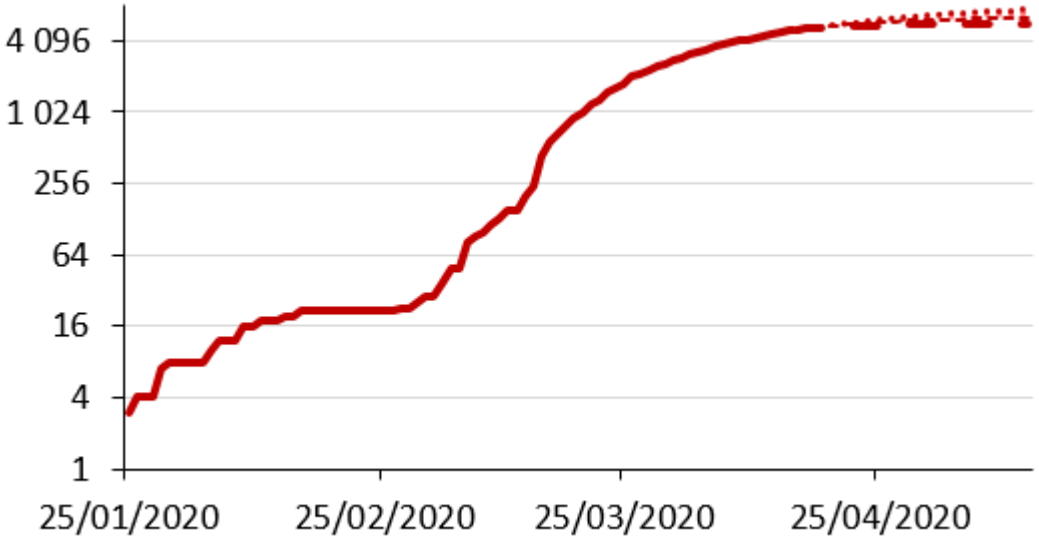

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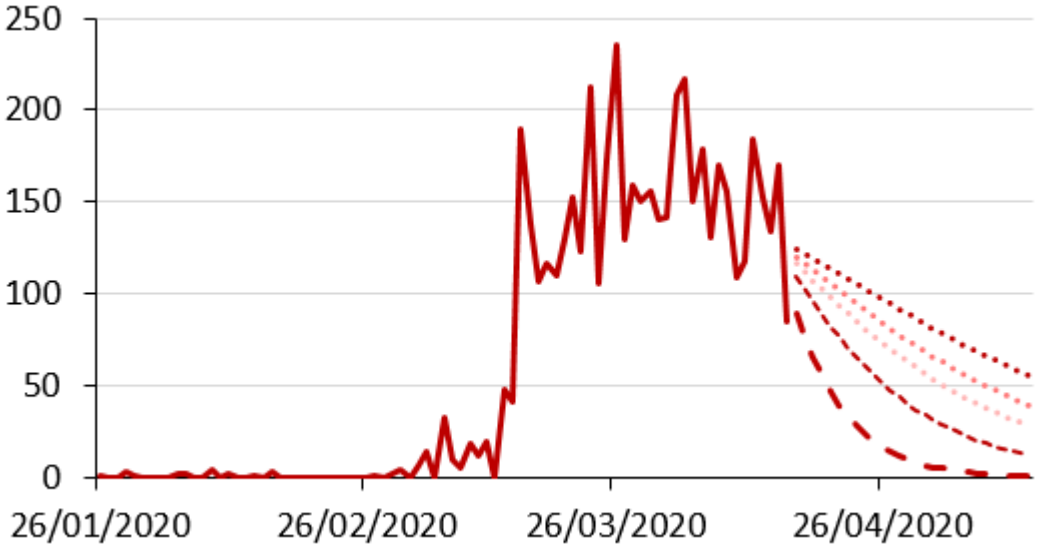

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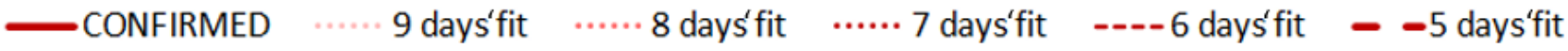
Mexico



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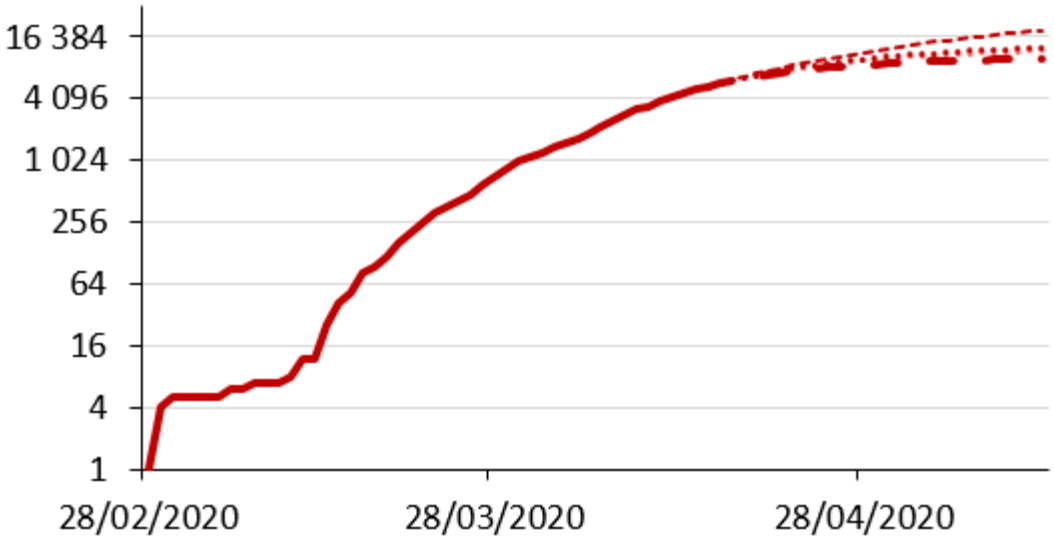

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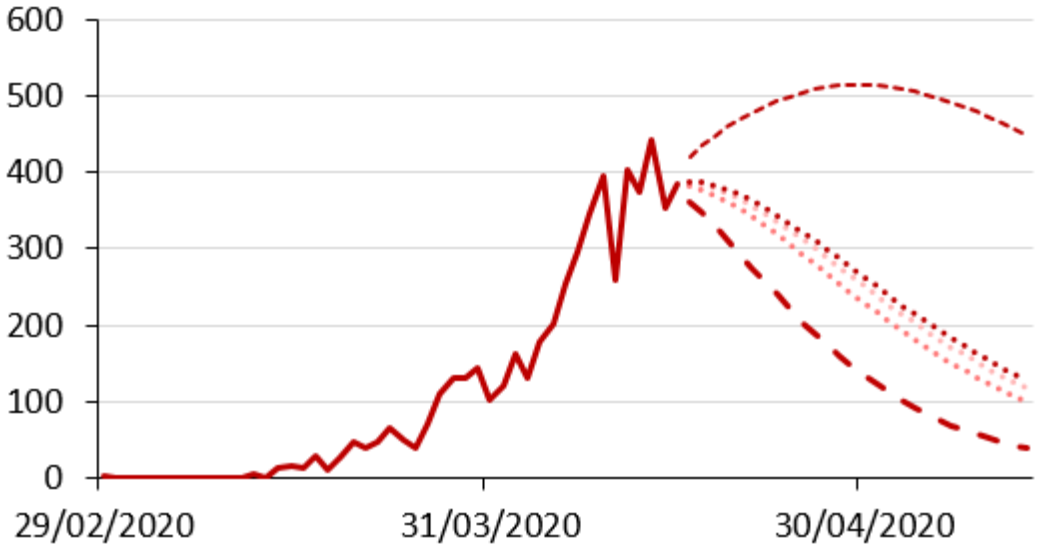

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Moldova

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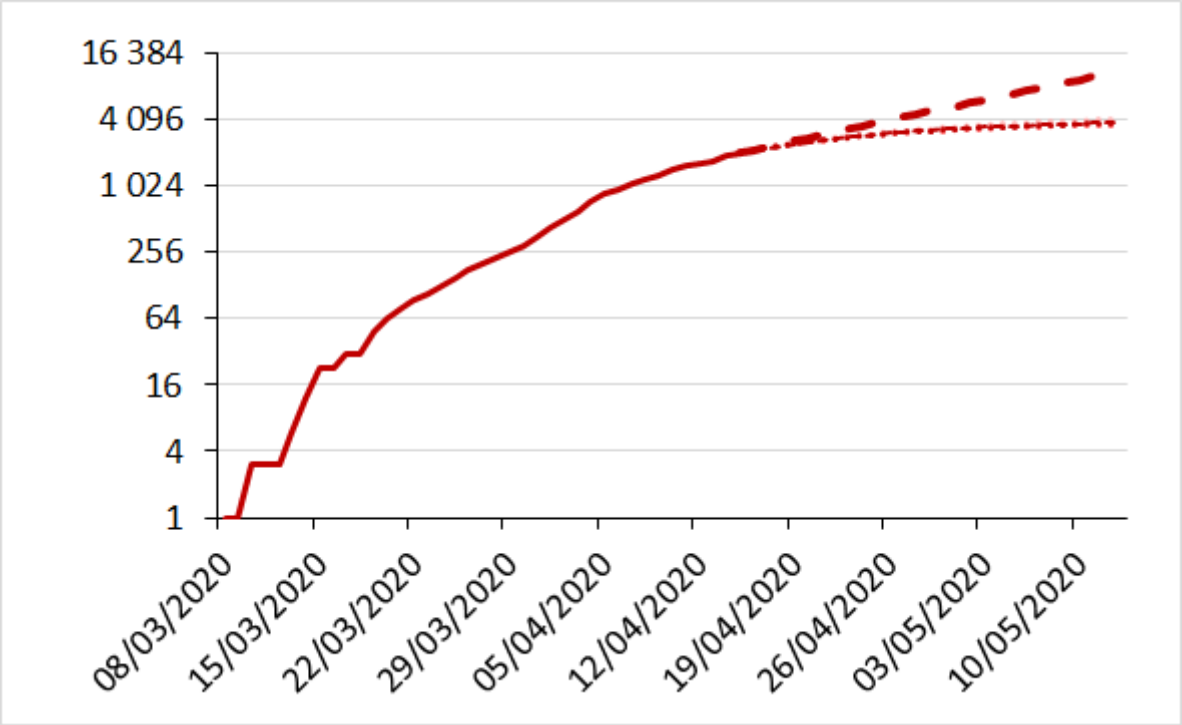

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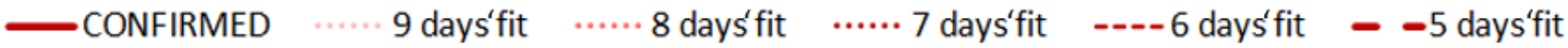
Morocco



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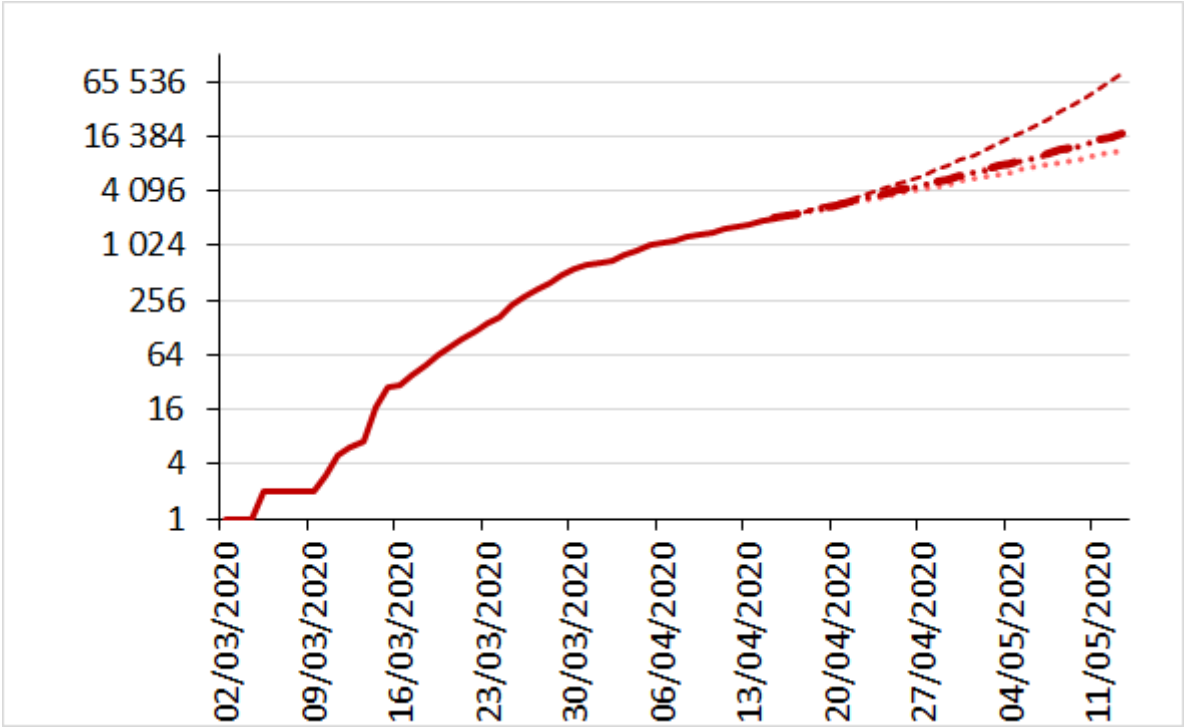

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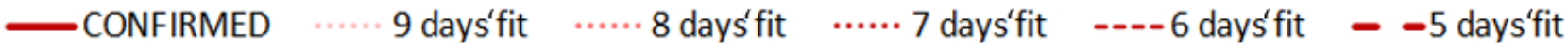
Netherlands



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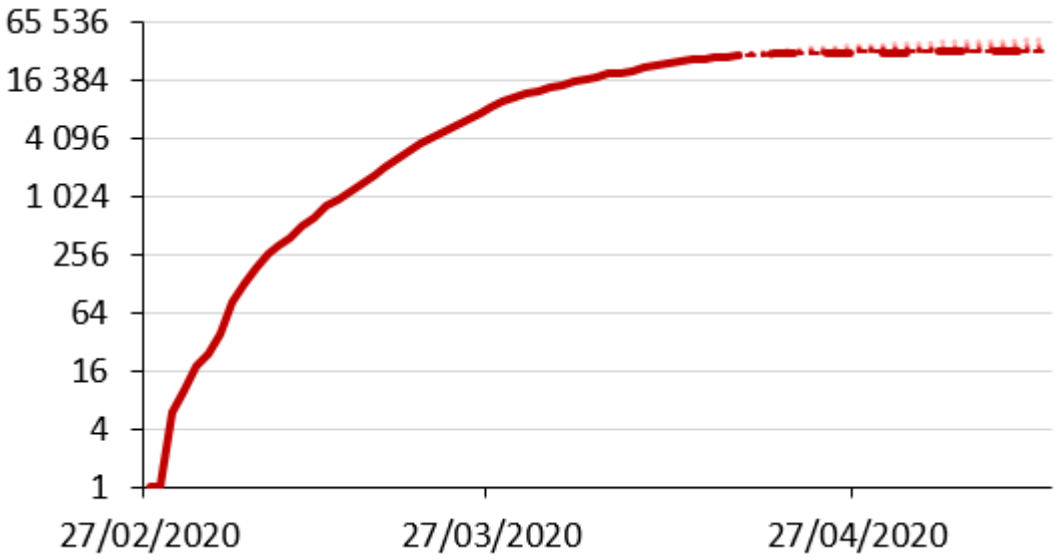

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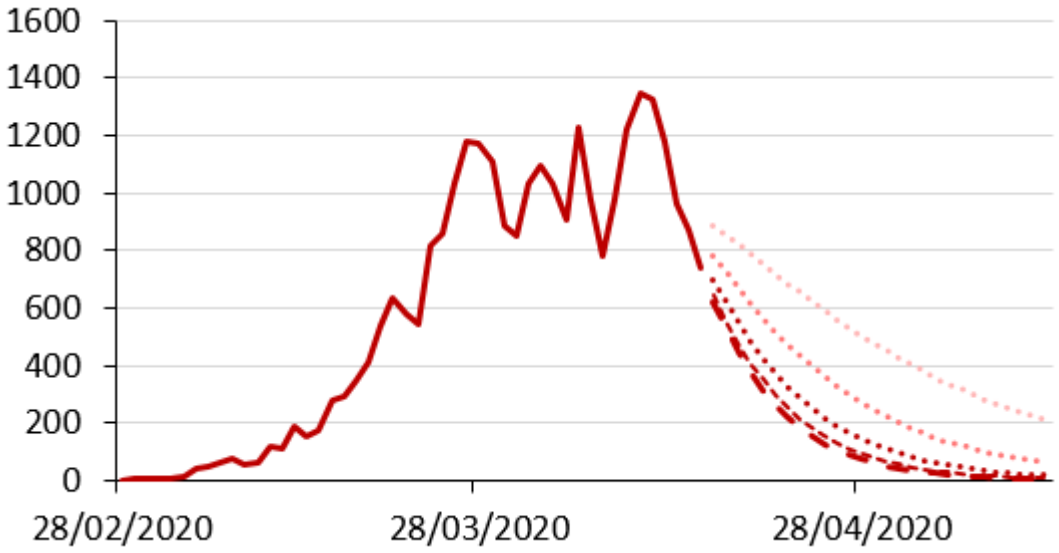

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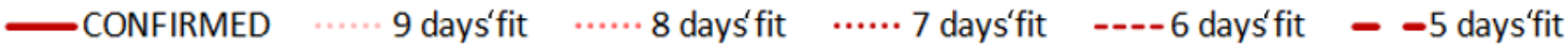

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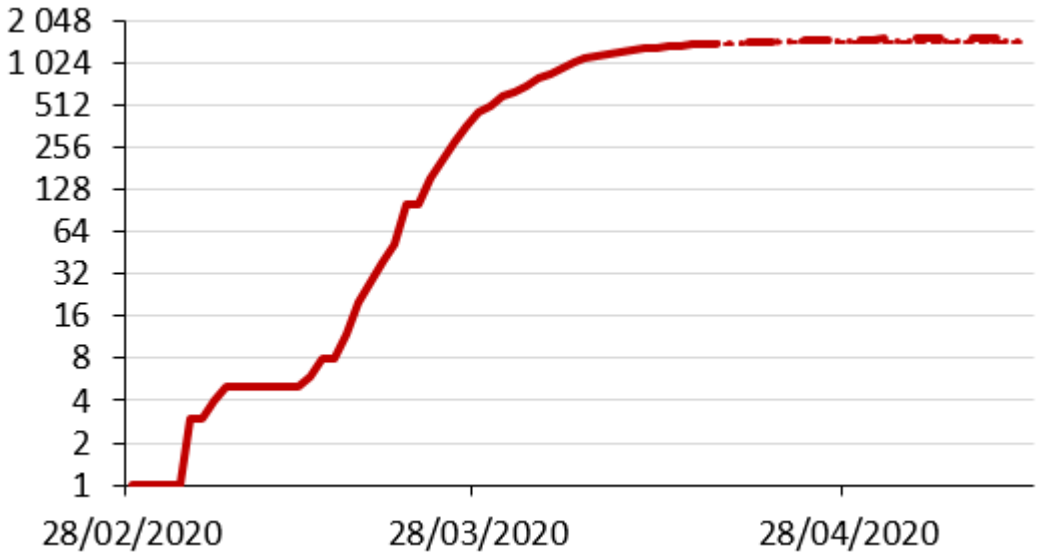
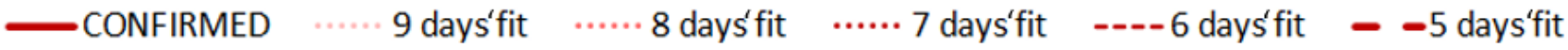


Daily

Data: The Johns Hopkins University, Politolog.com

Norway



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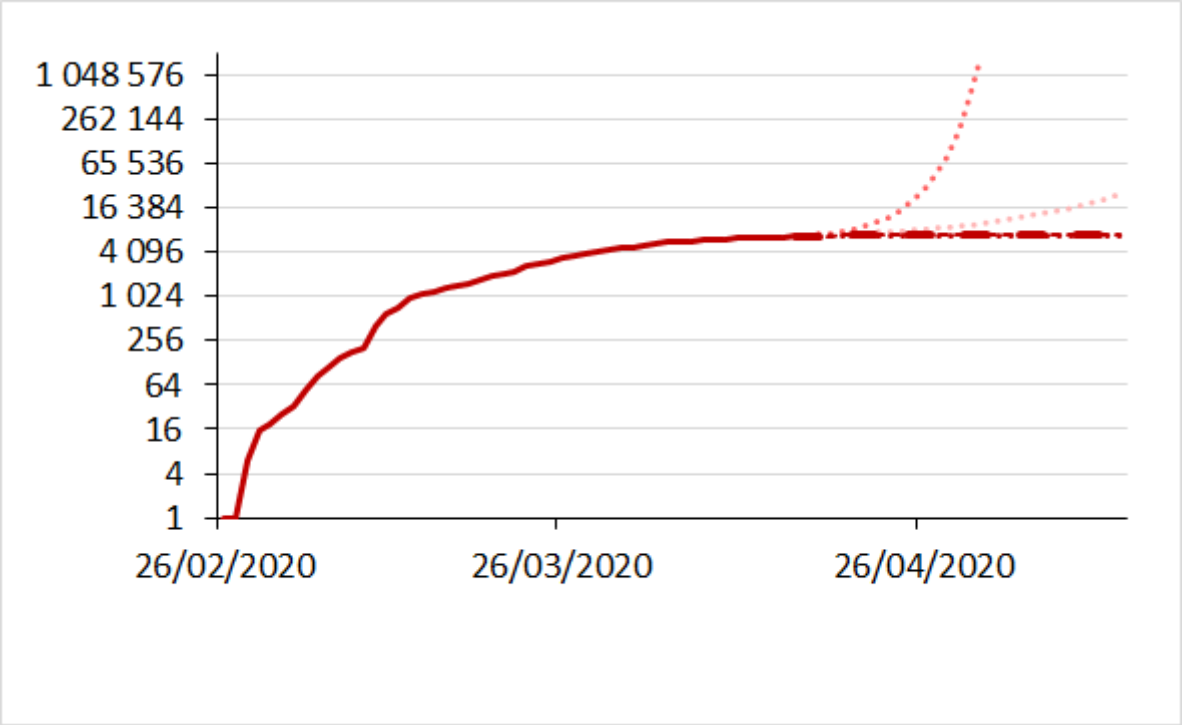

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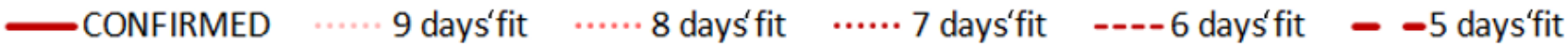
Pakistan



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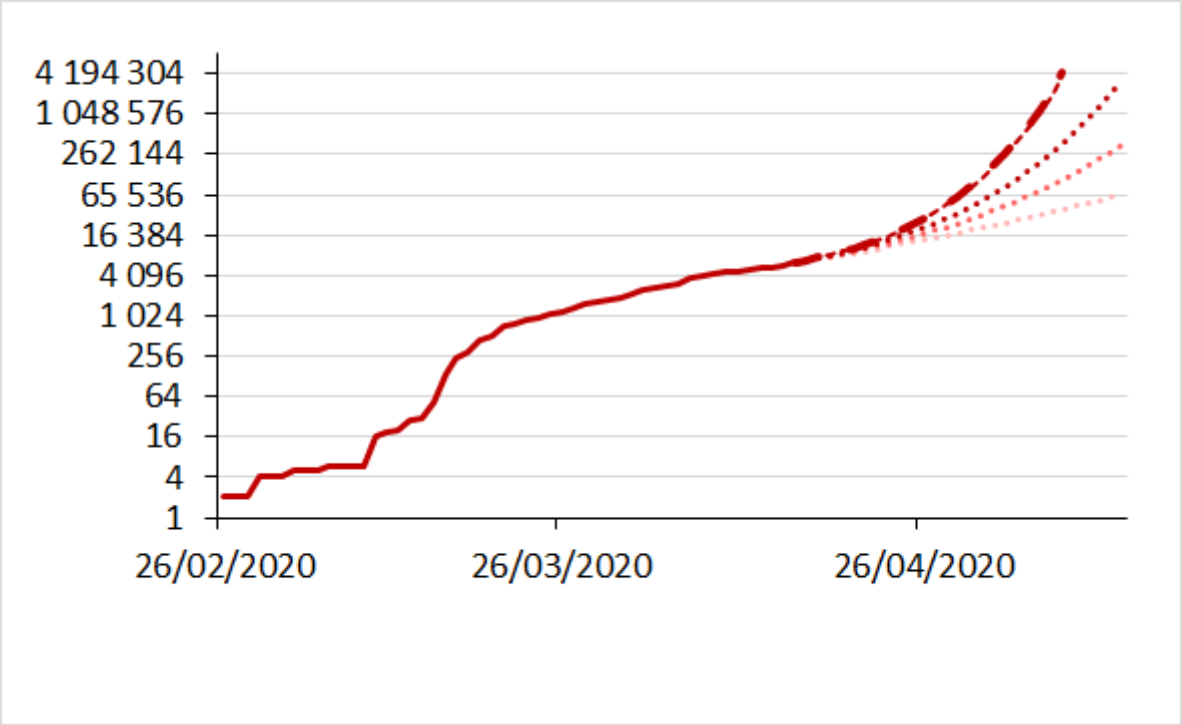

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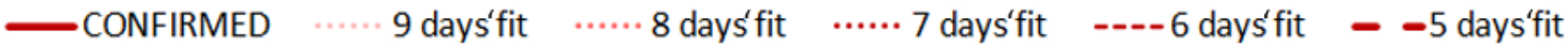
Panama



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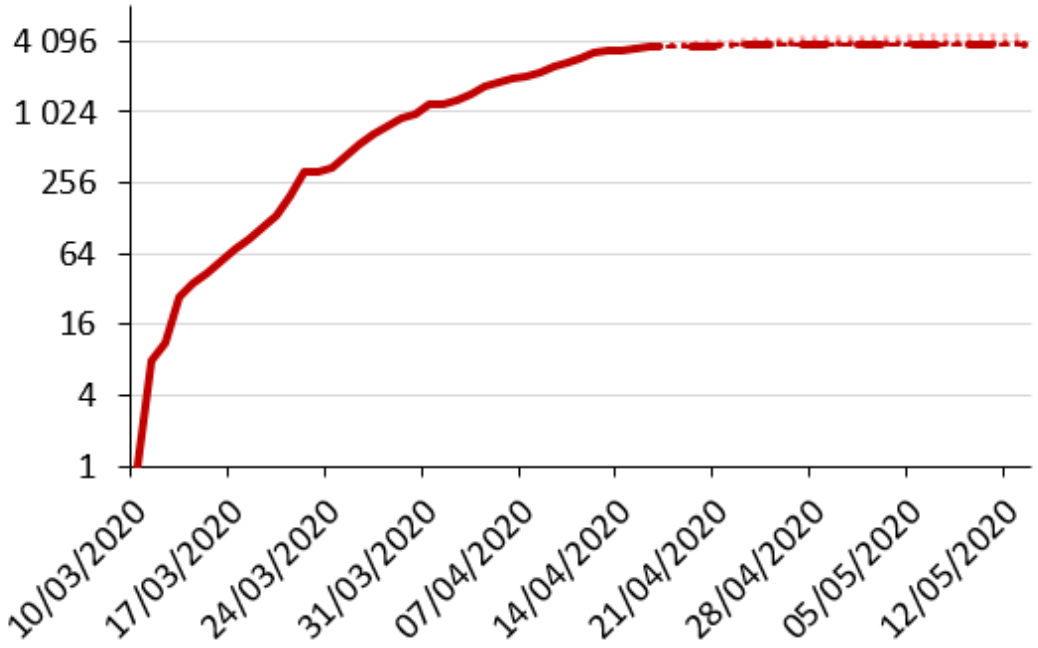
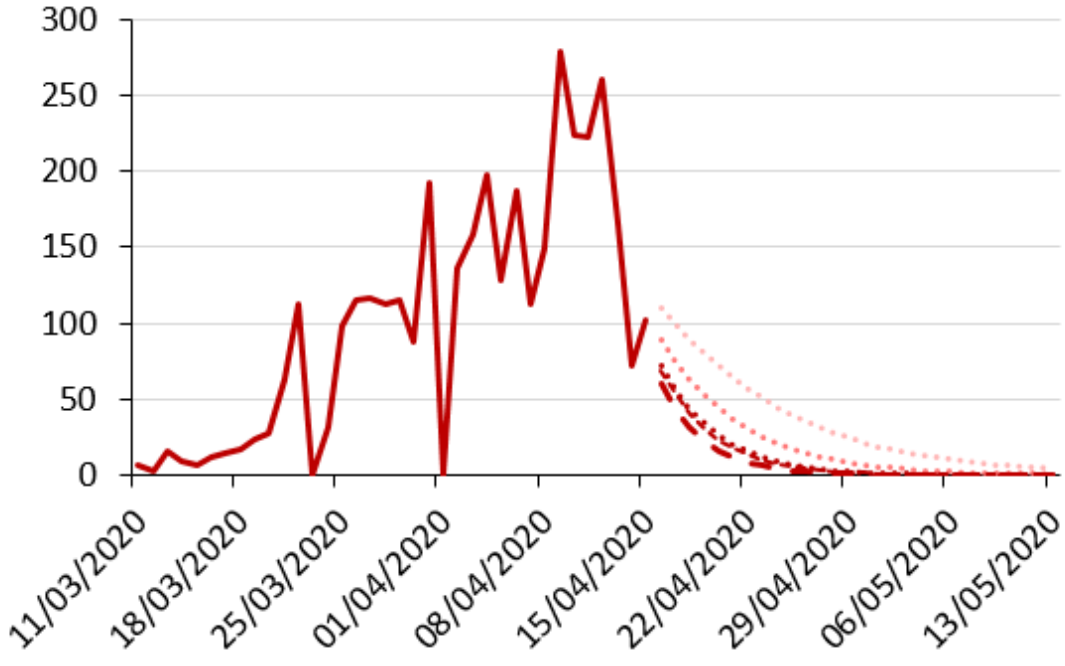


Daily



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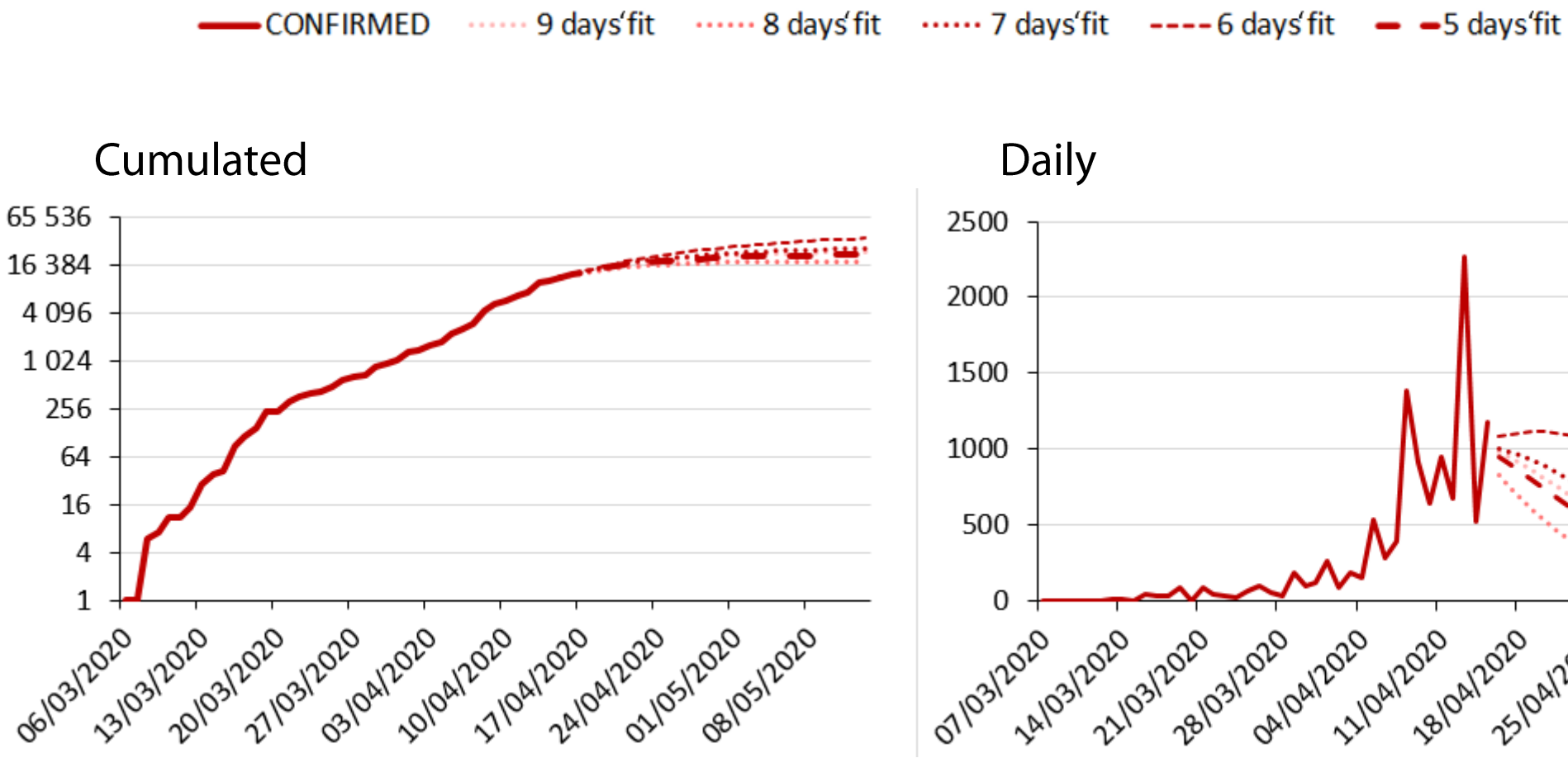

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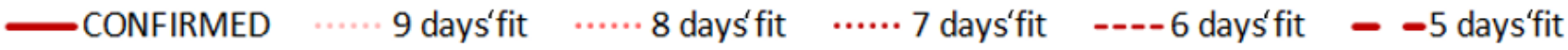

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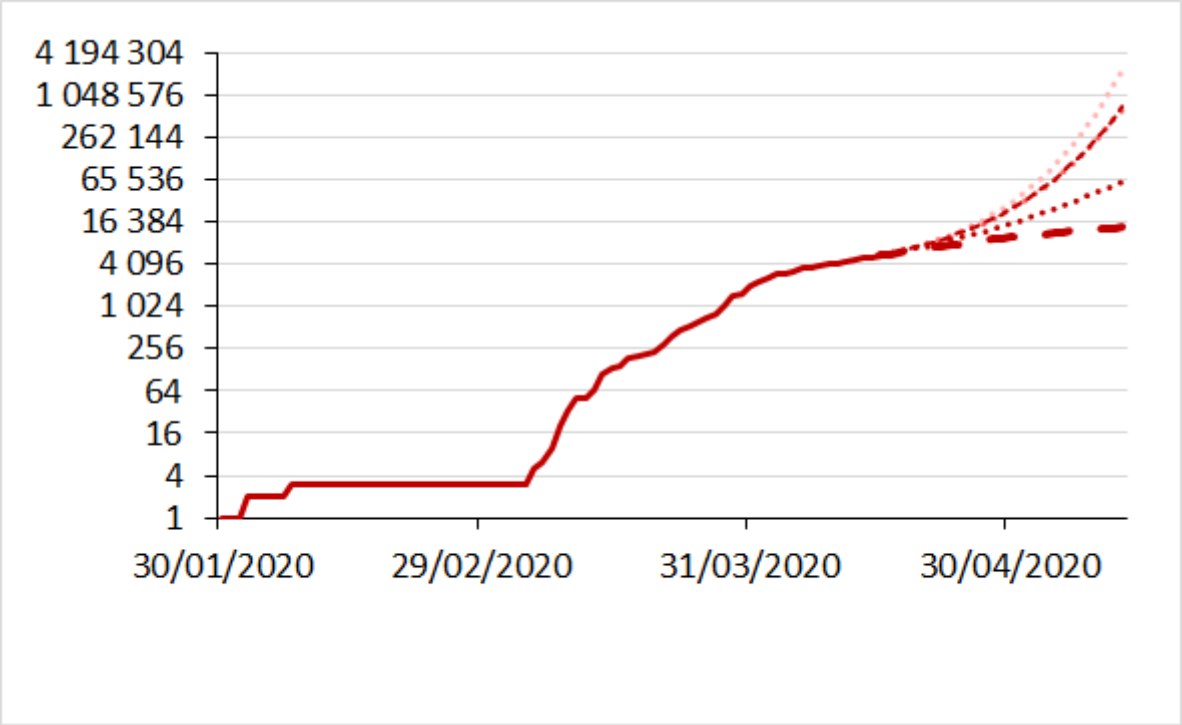

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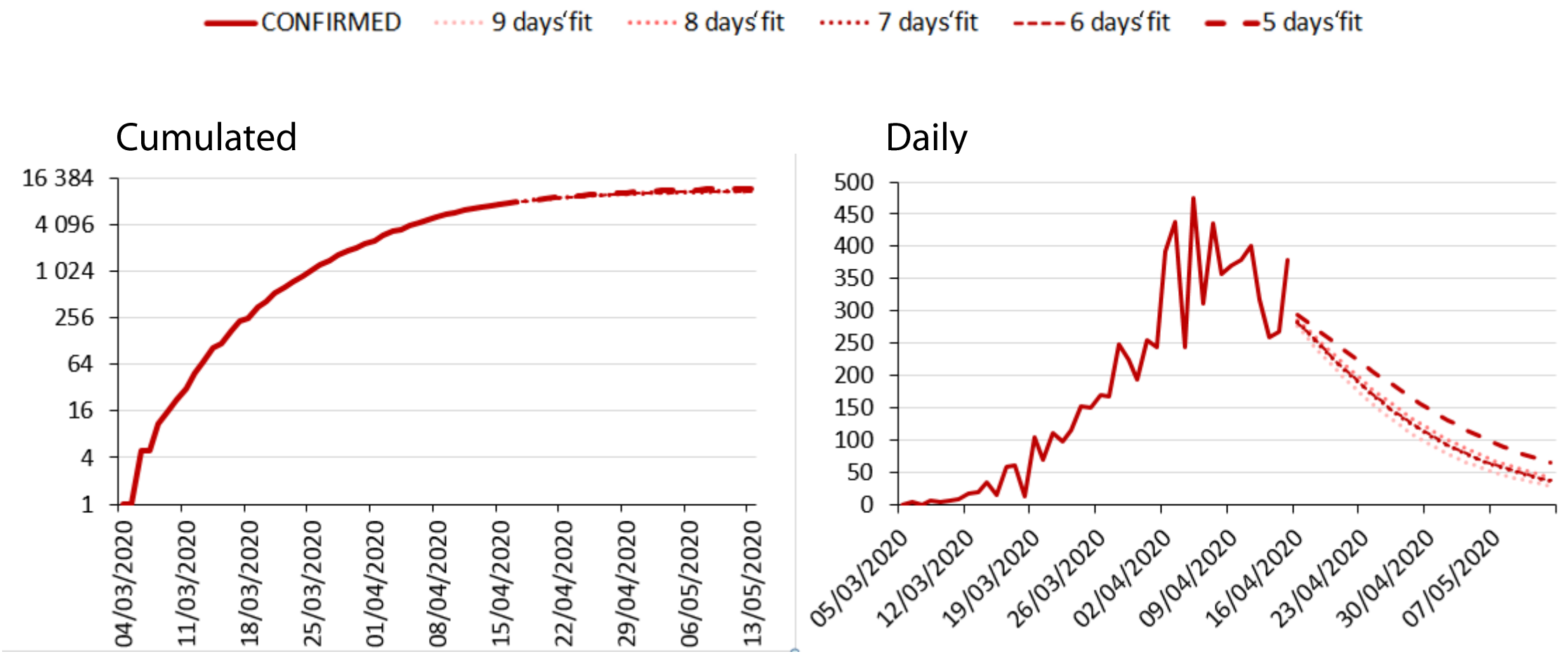
Poland



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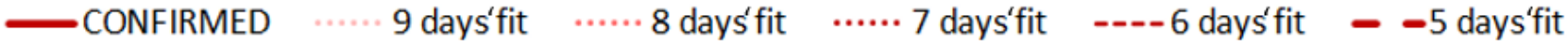

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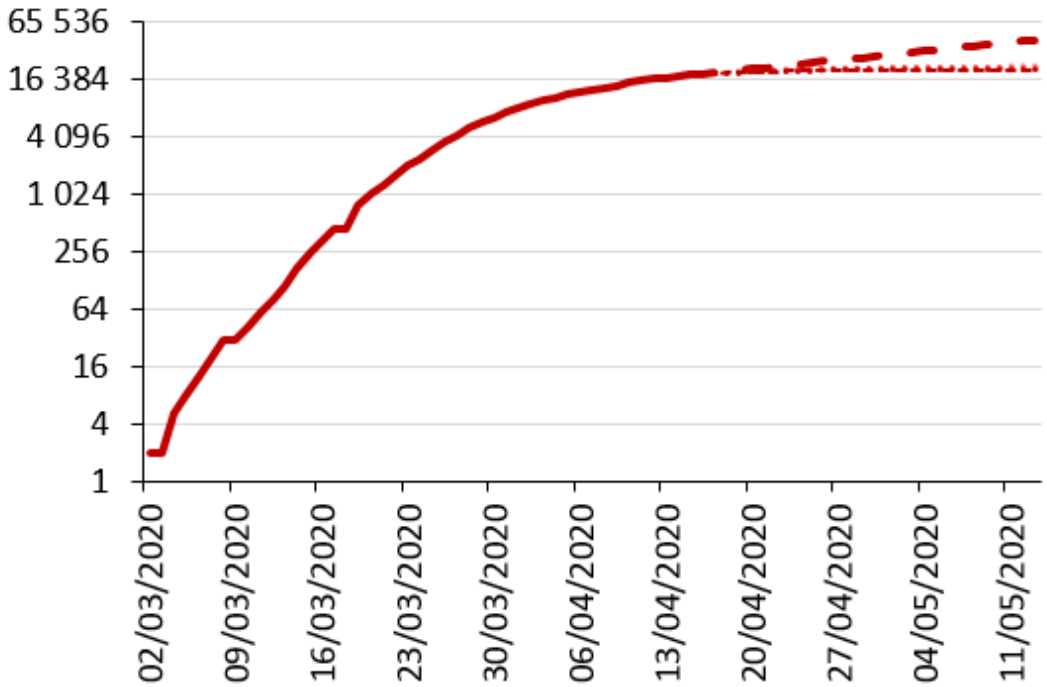

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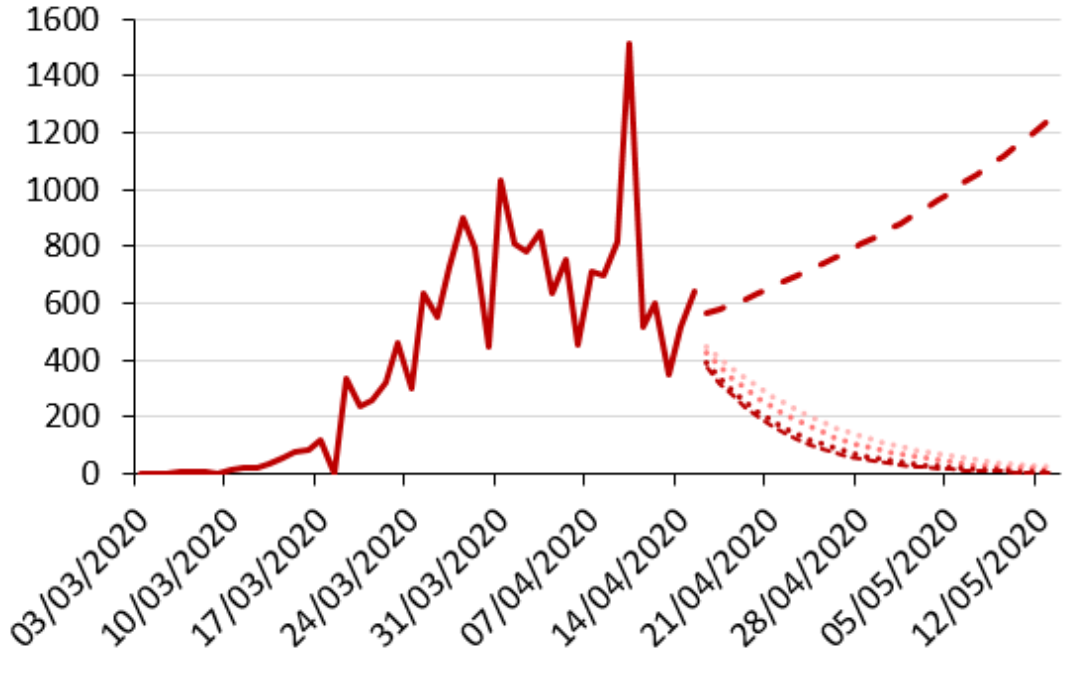

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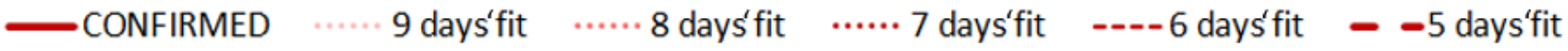

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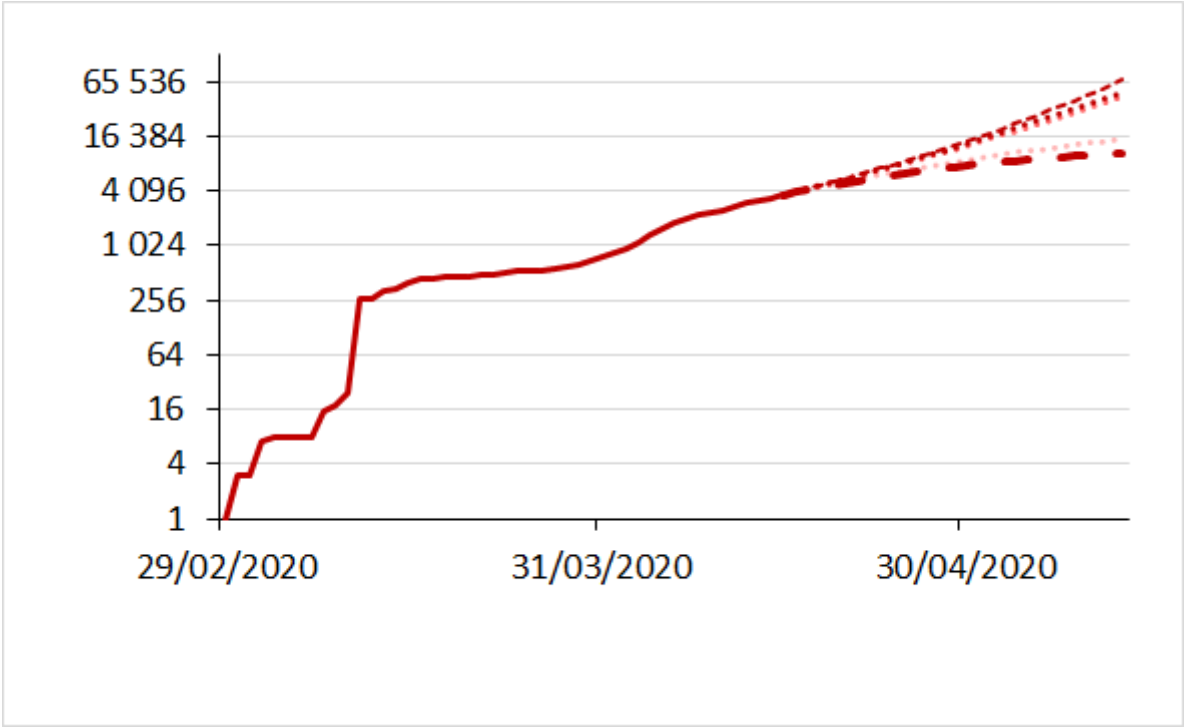

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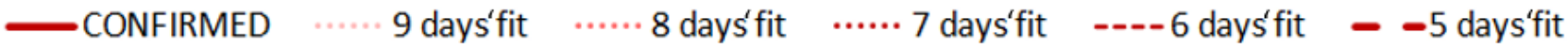
Romania



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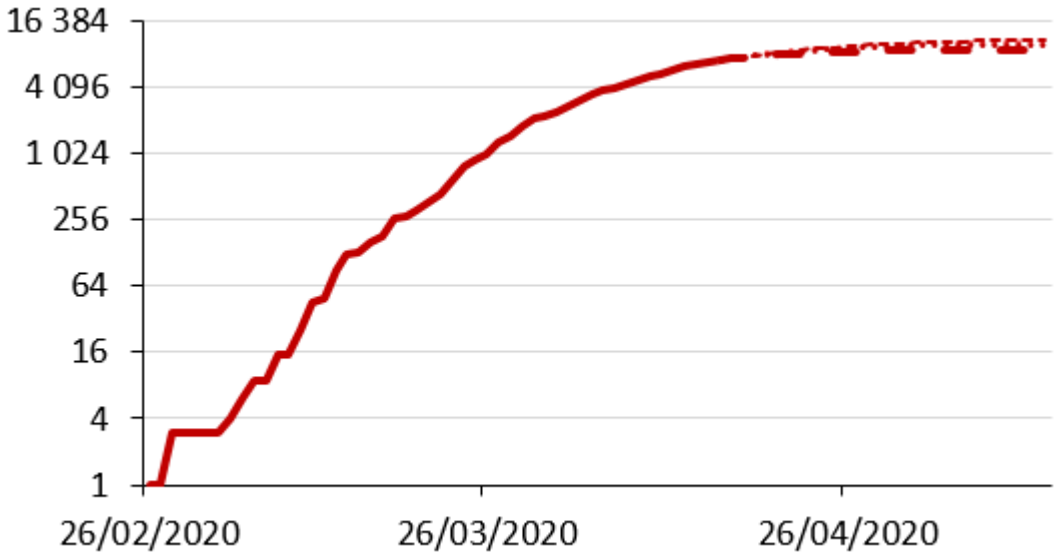

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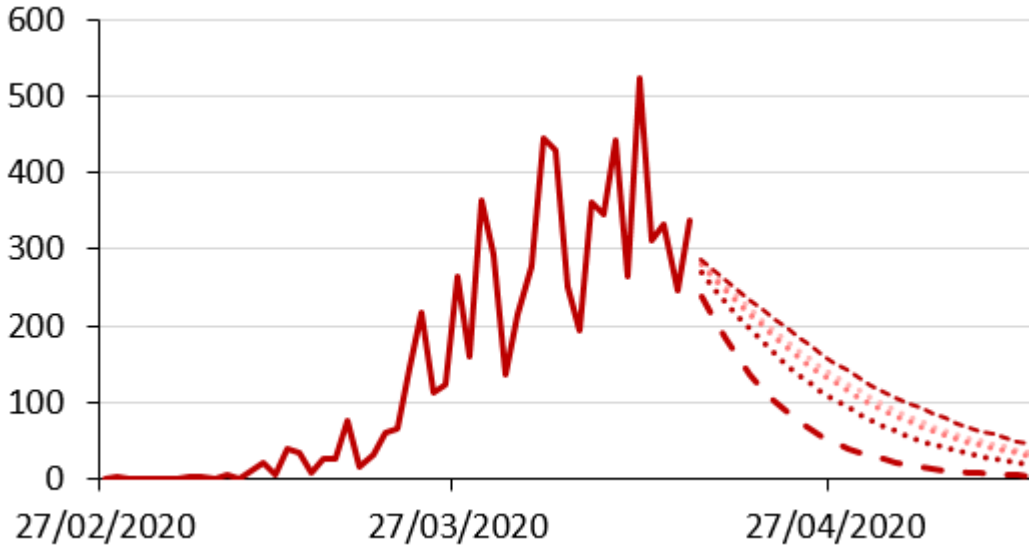

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Russia

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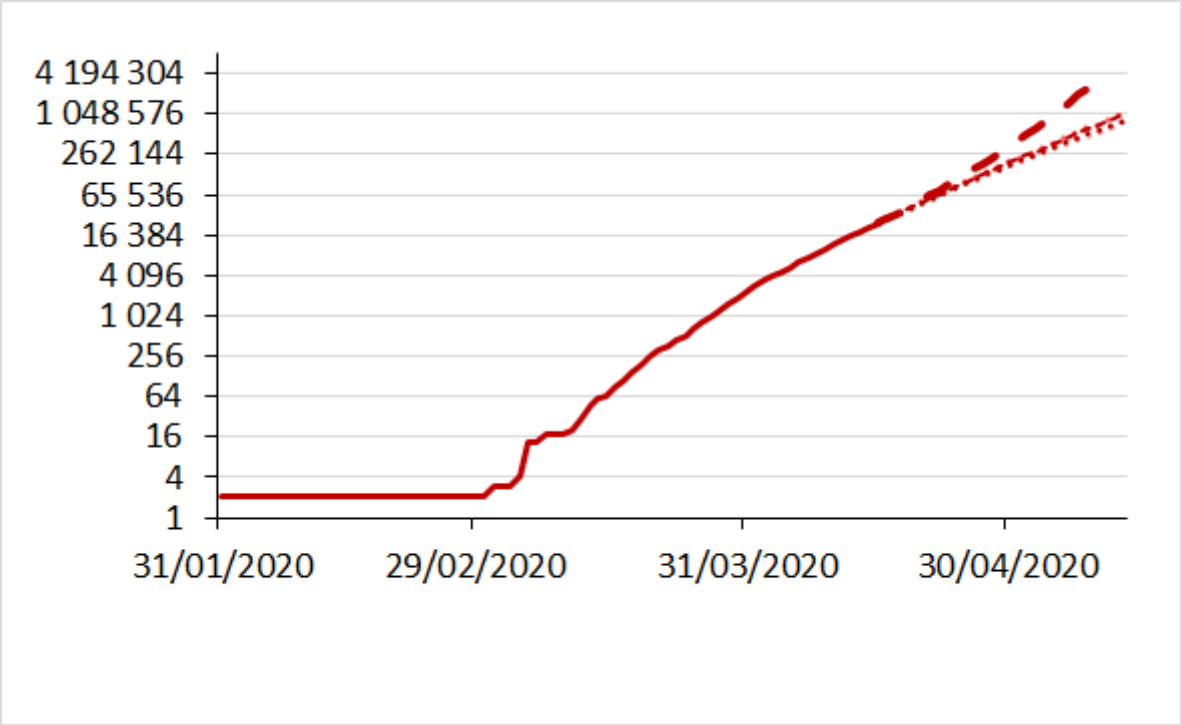

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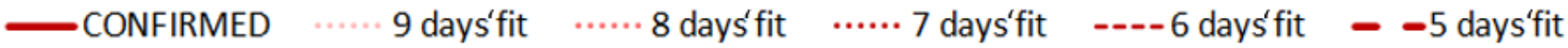
Saudi Arabia



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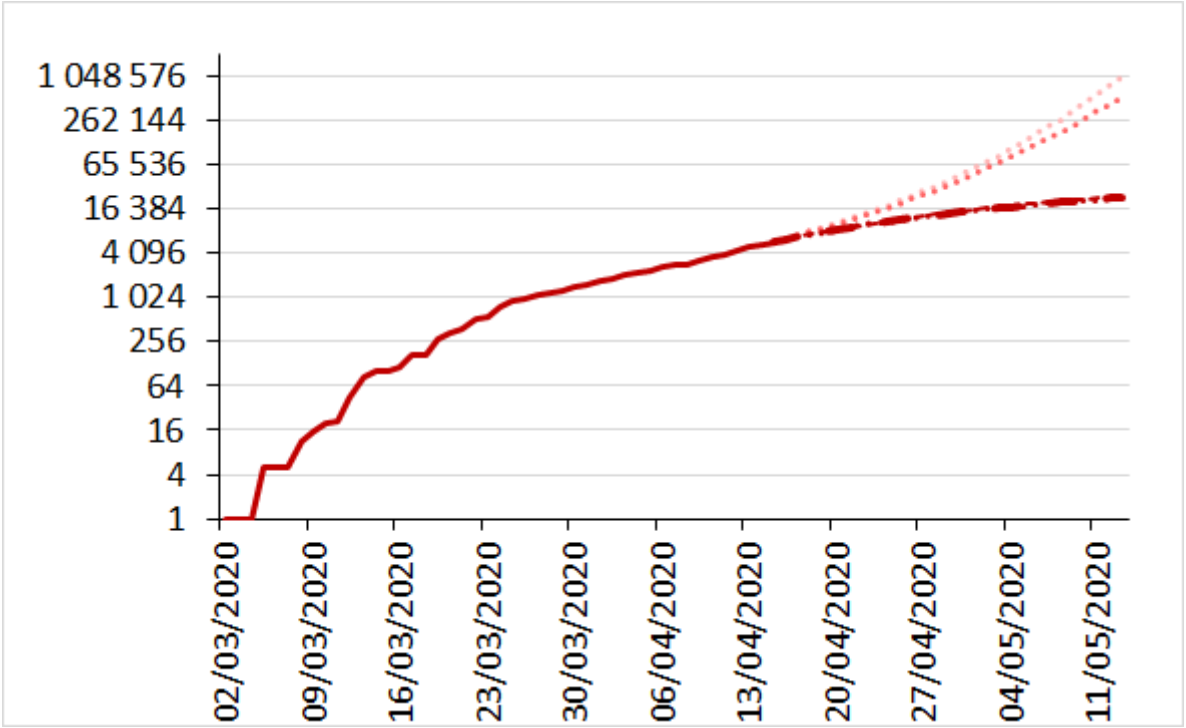

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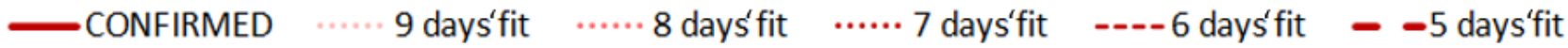
Serbia



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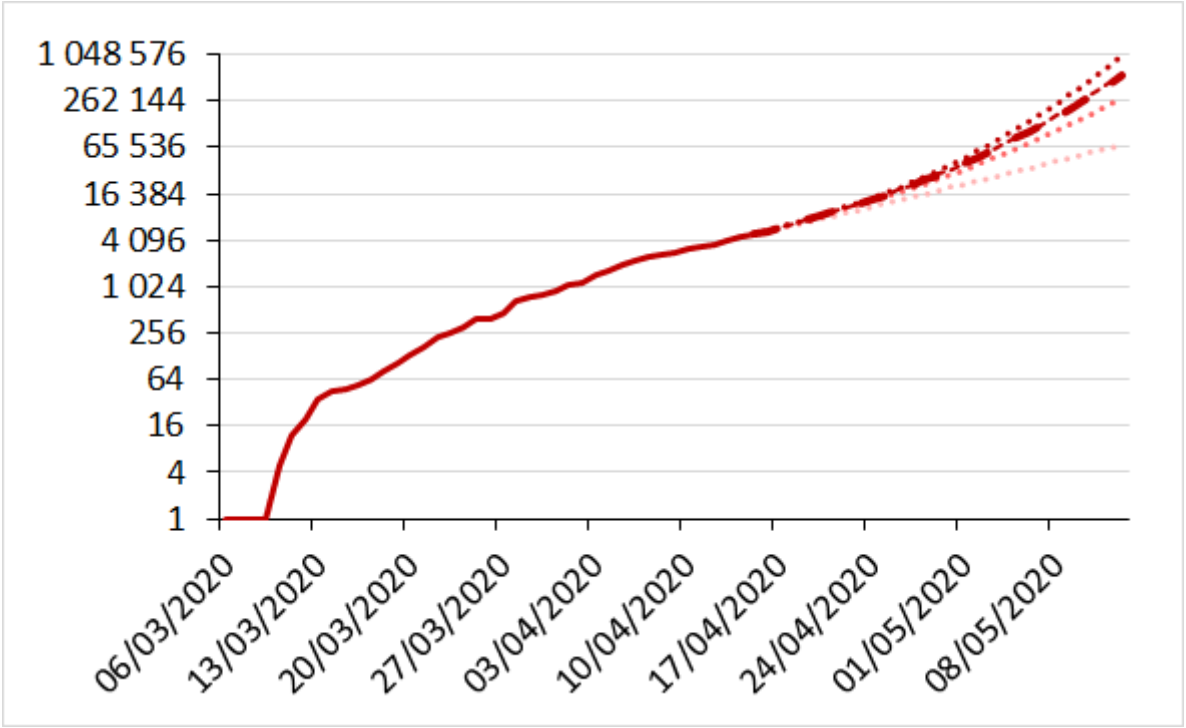

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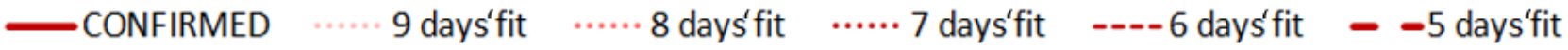

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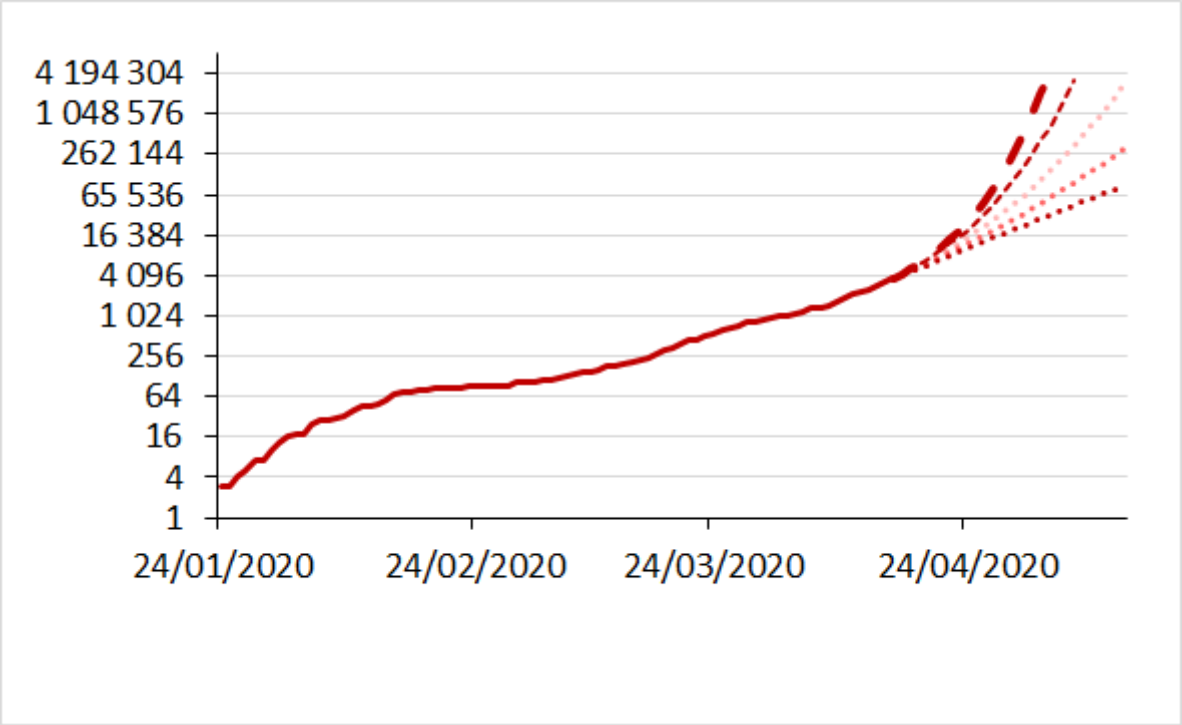

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Slovakia

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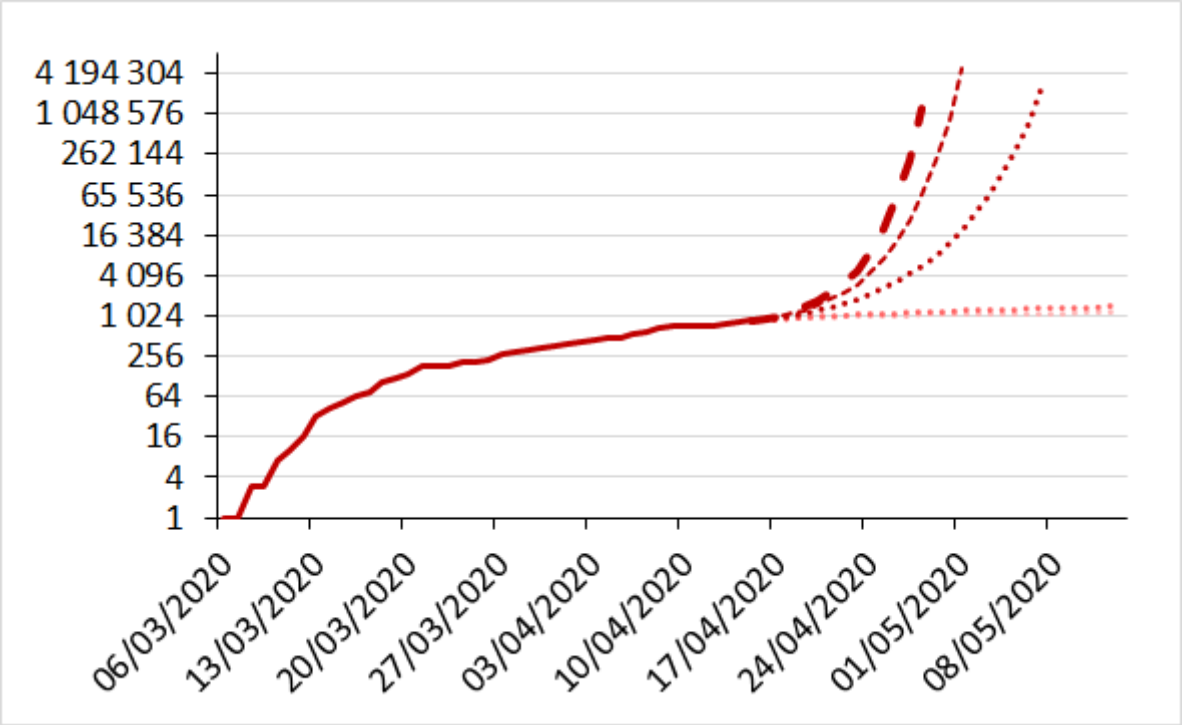

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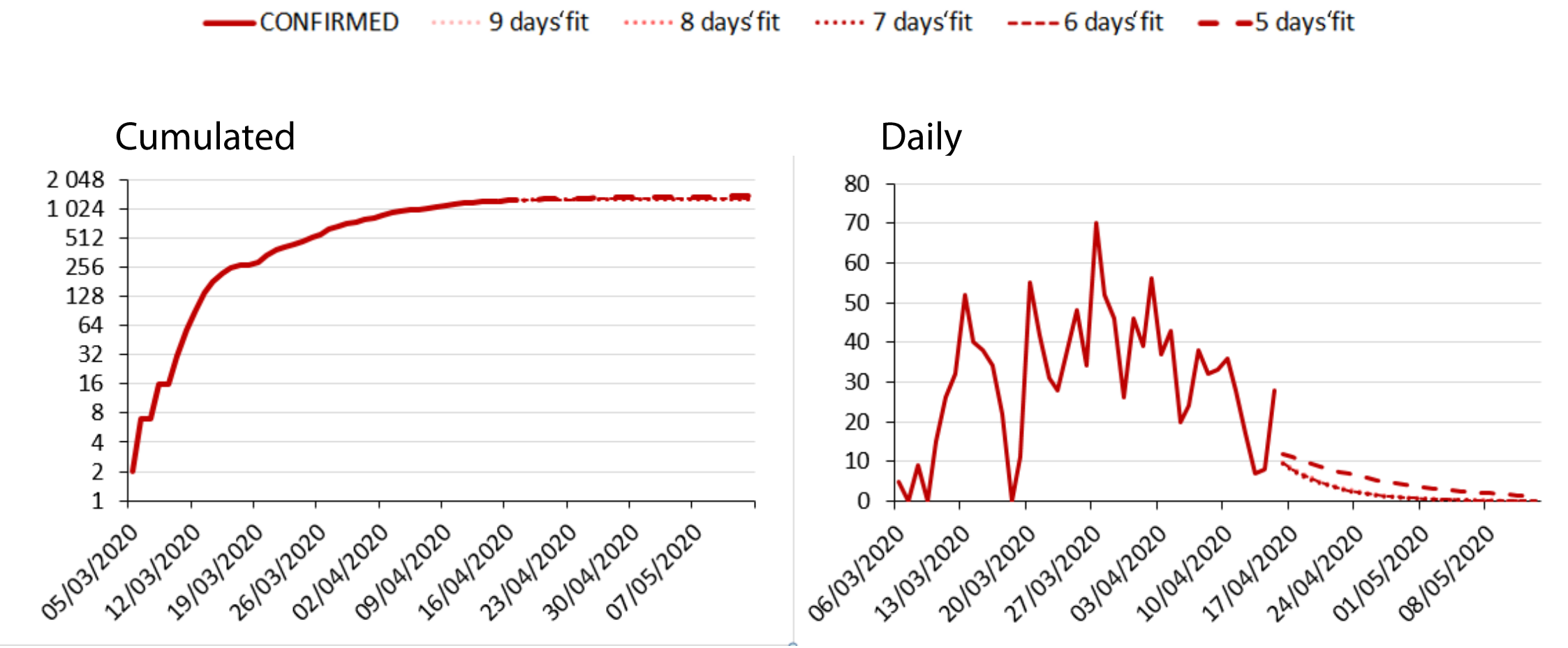
Slovenia



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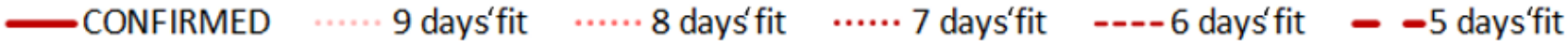
South Korea



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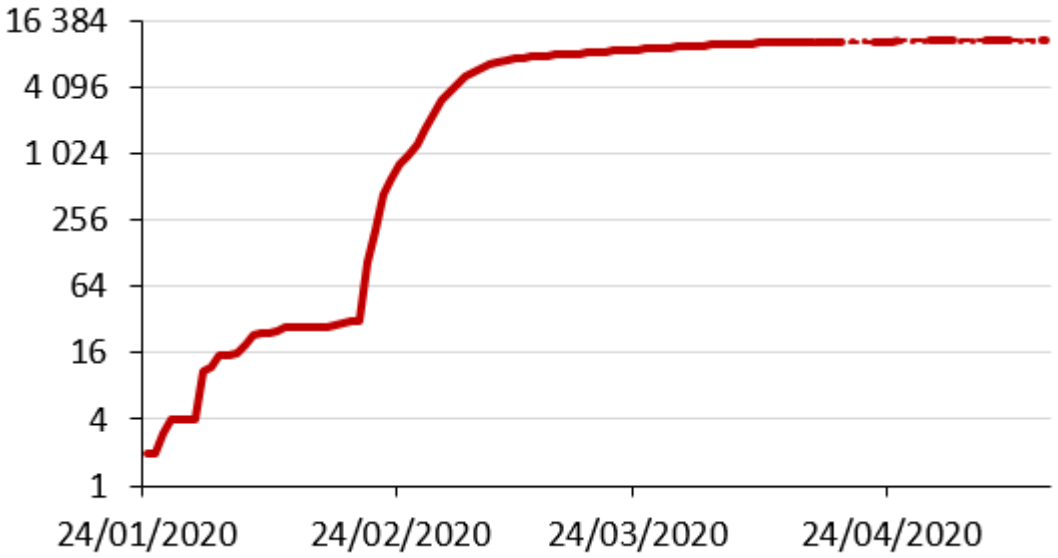
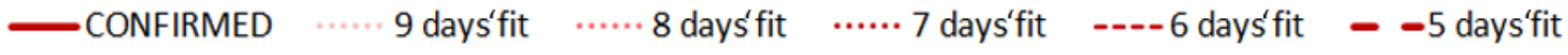


Daily

Data: The Johns Hopkins University, Politolog.com

Spain



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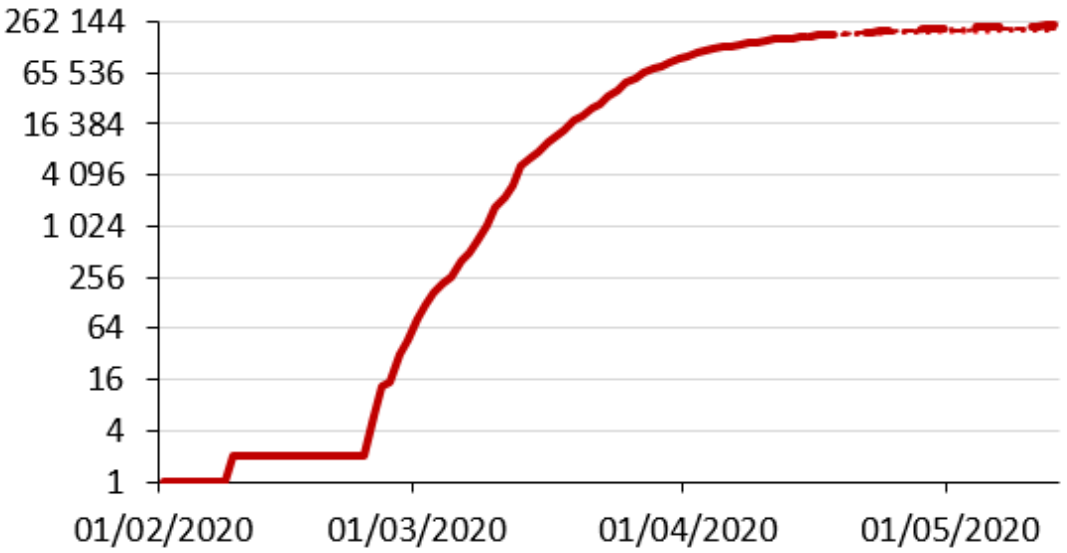

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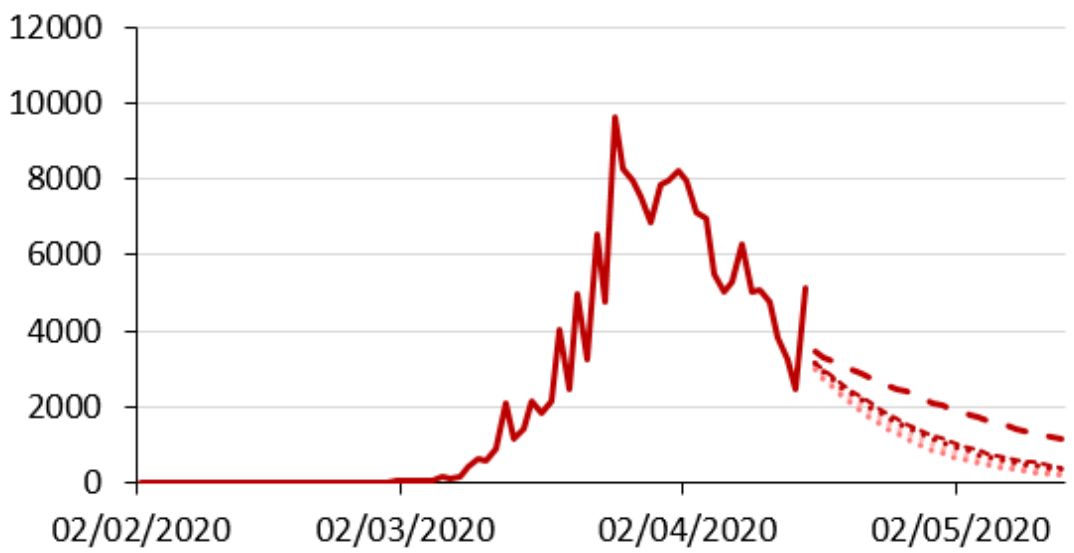

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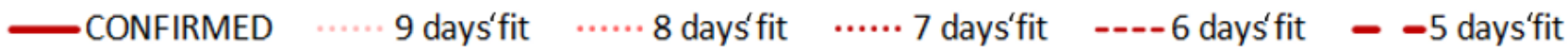

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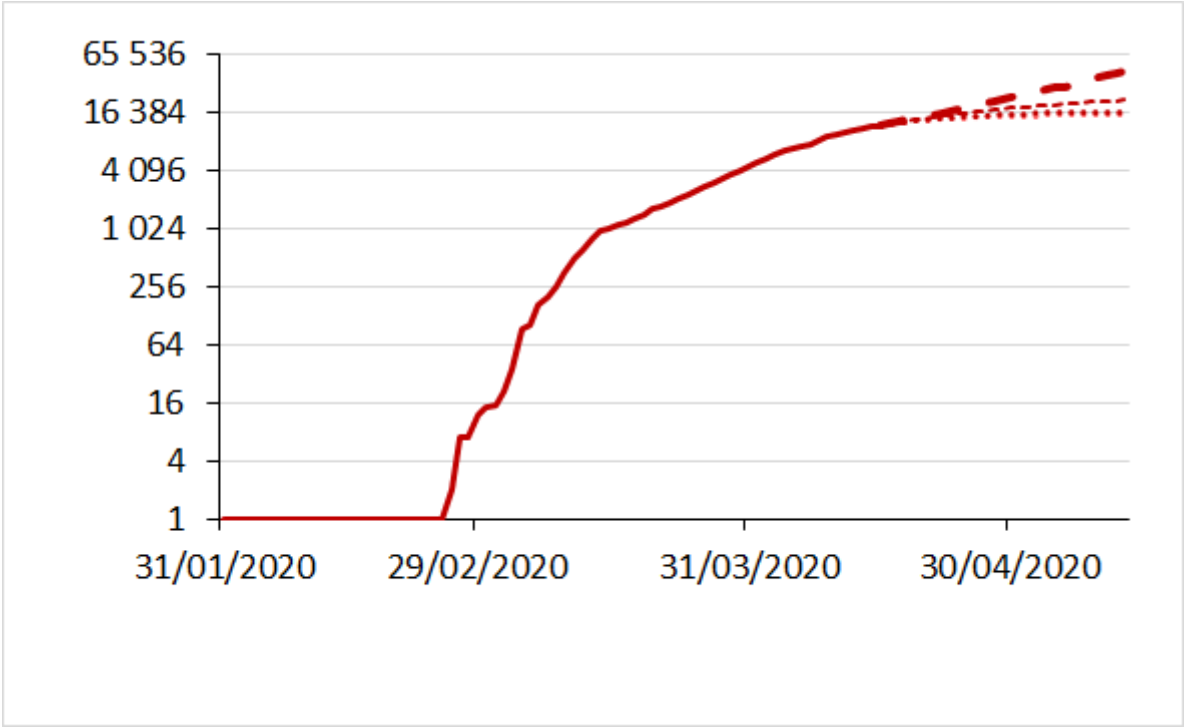

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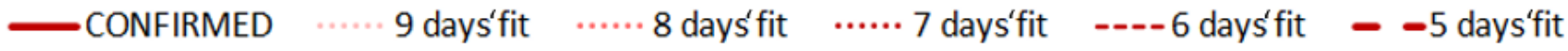

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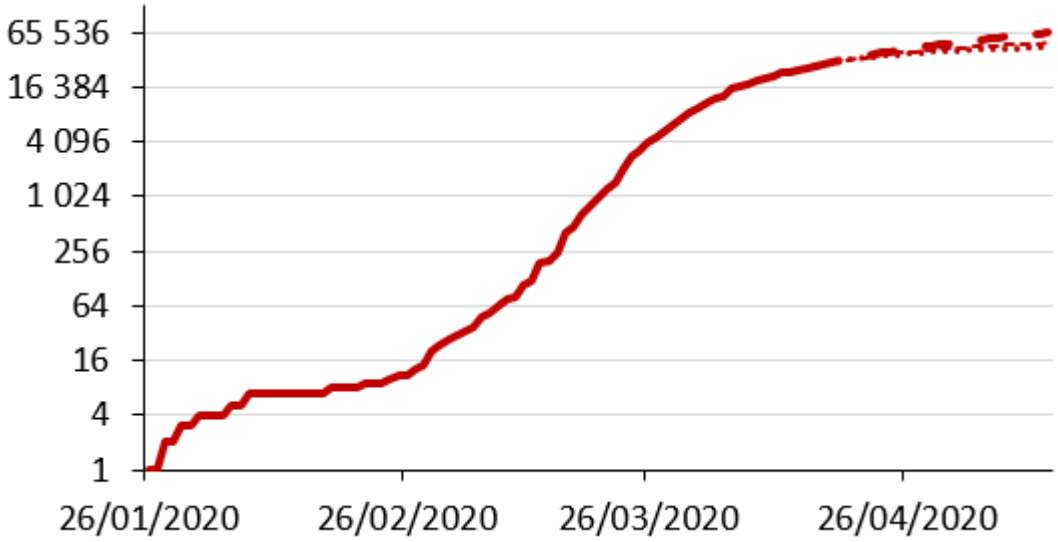

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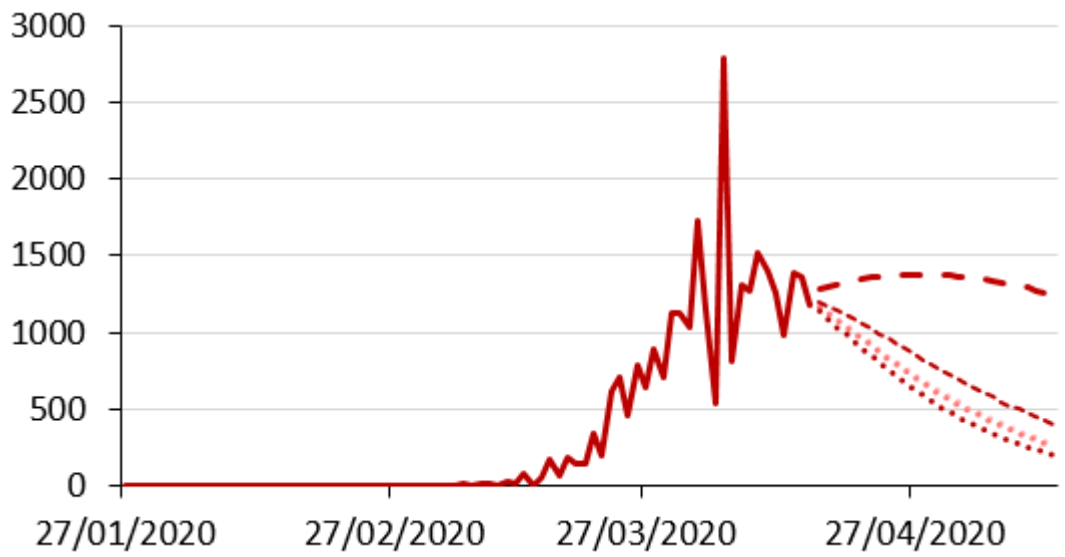

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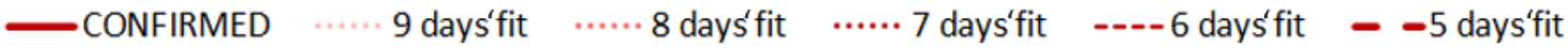
Thailand



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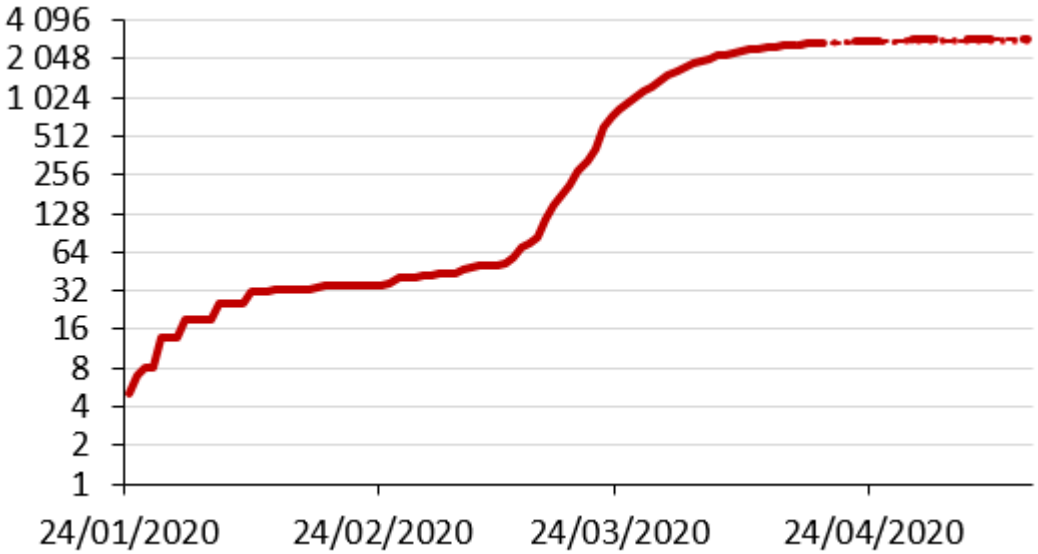

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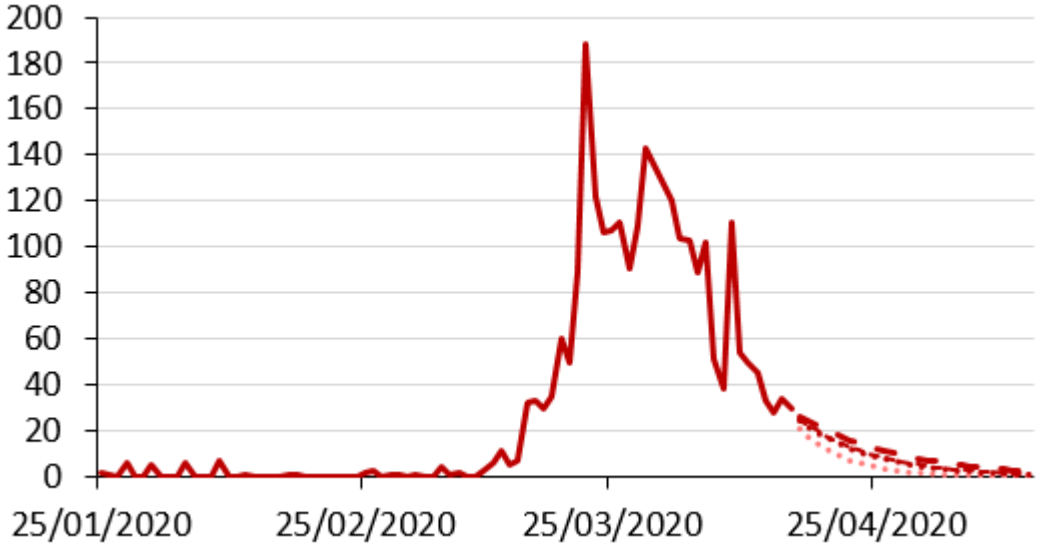

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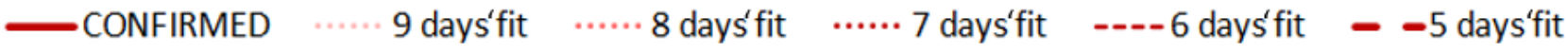

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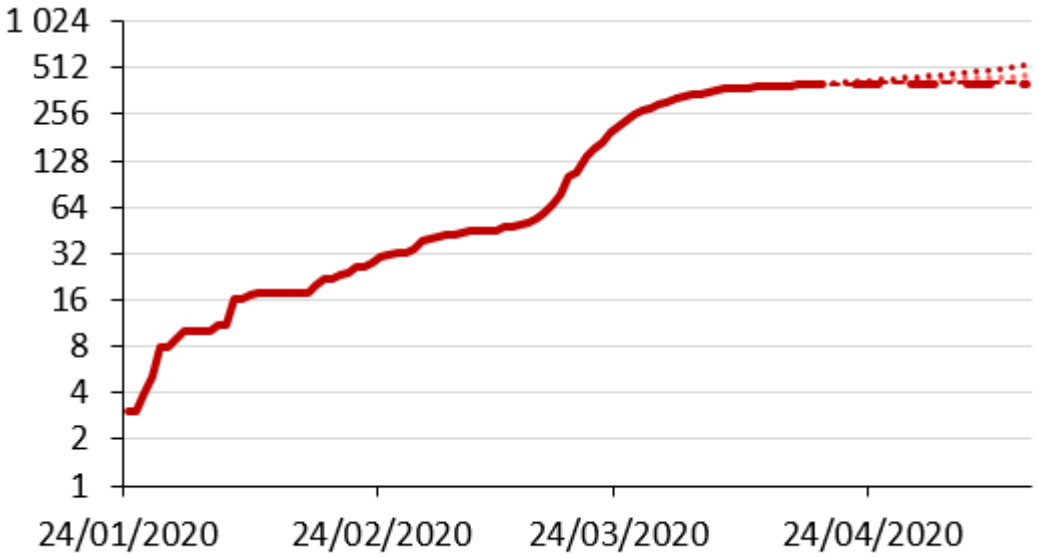

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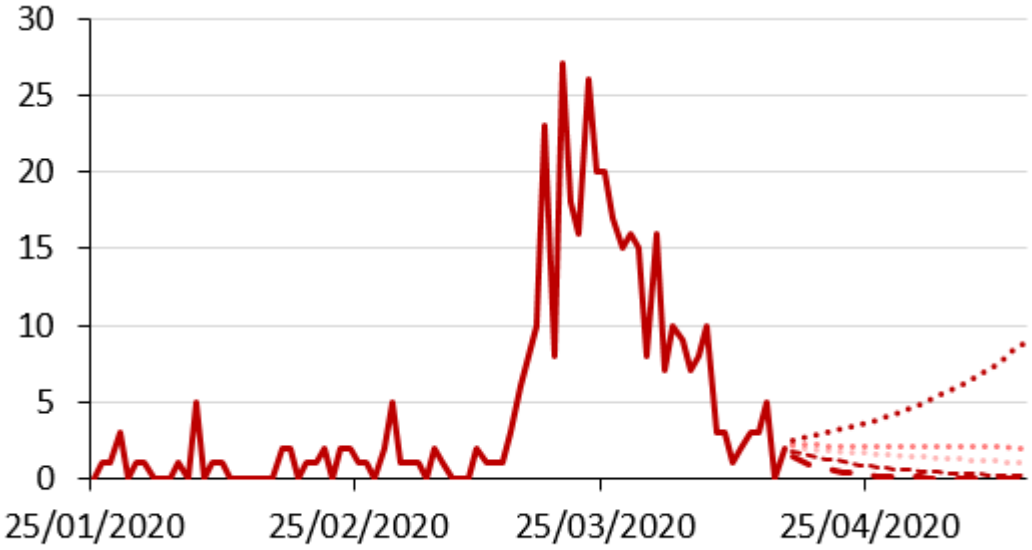

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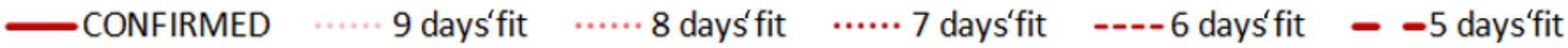

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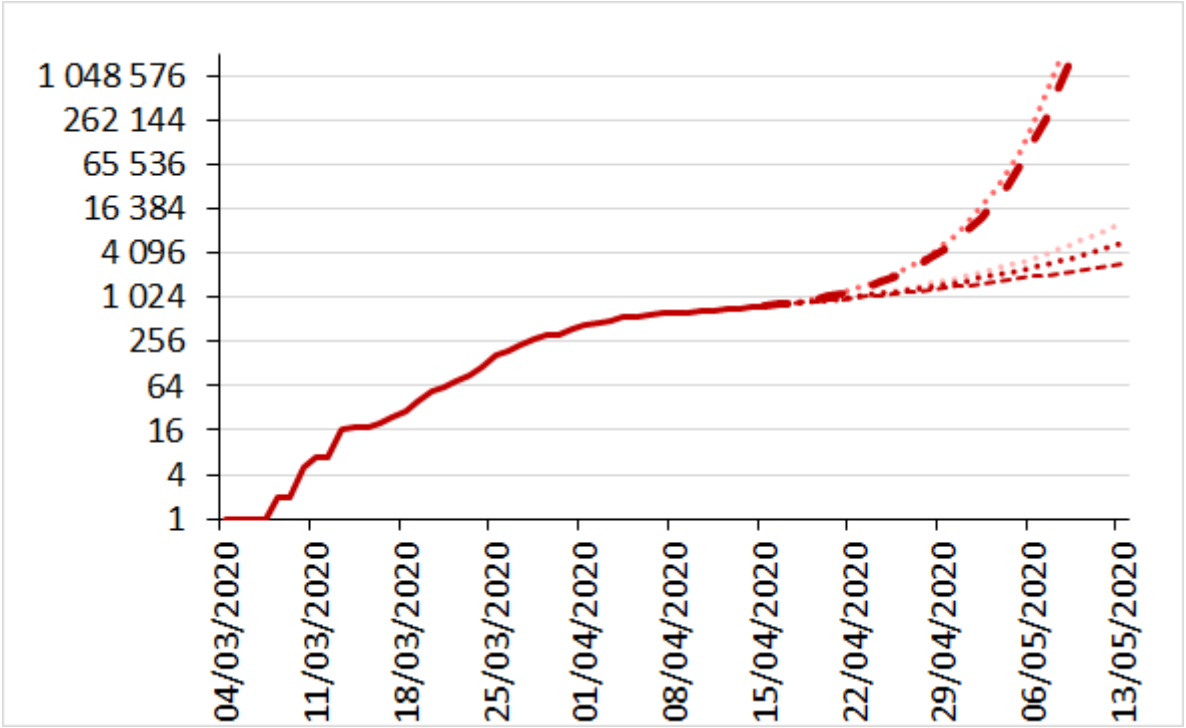

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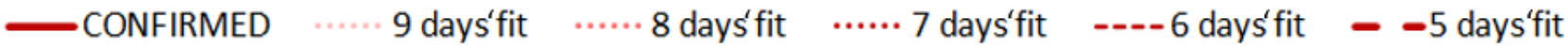
Turkey



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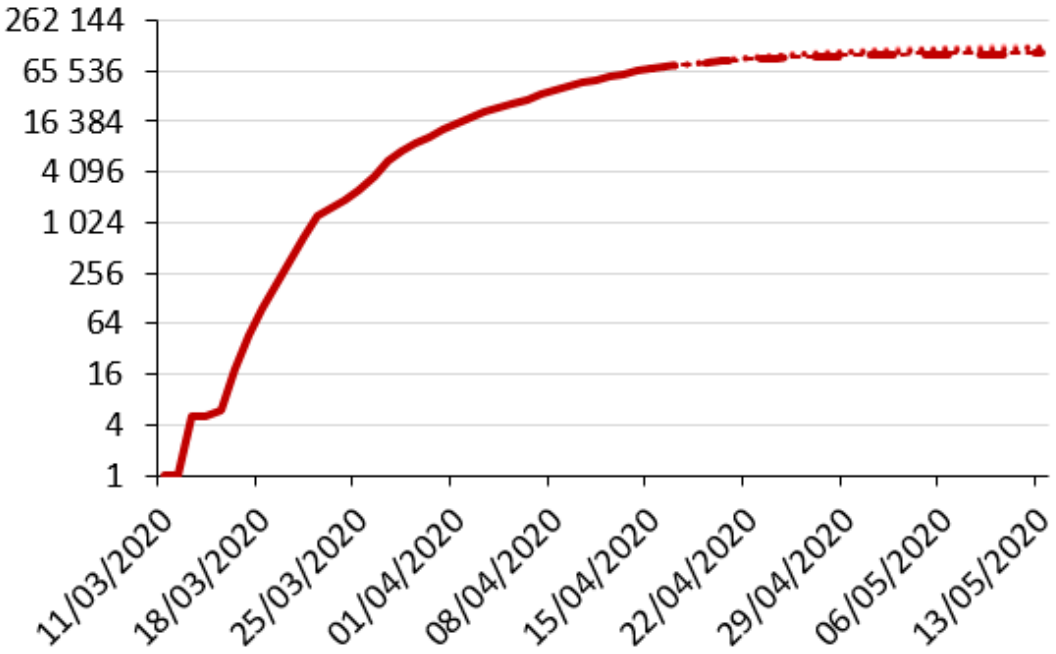
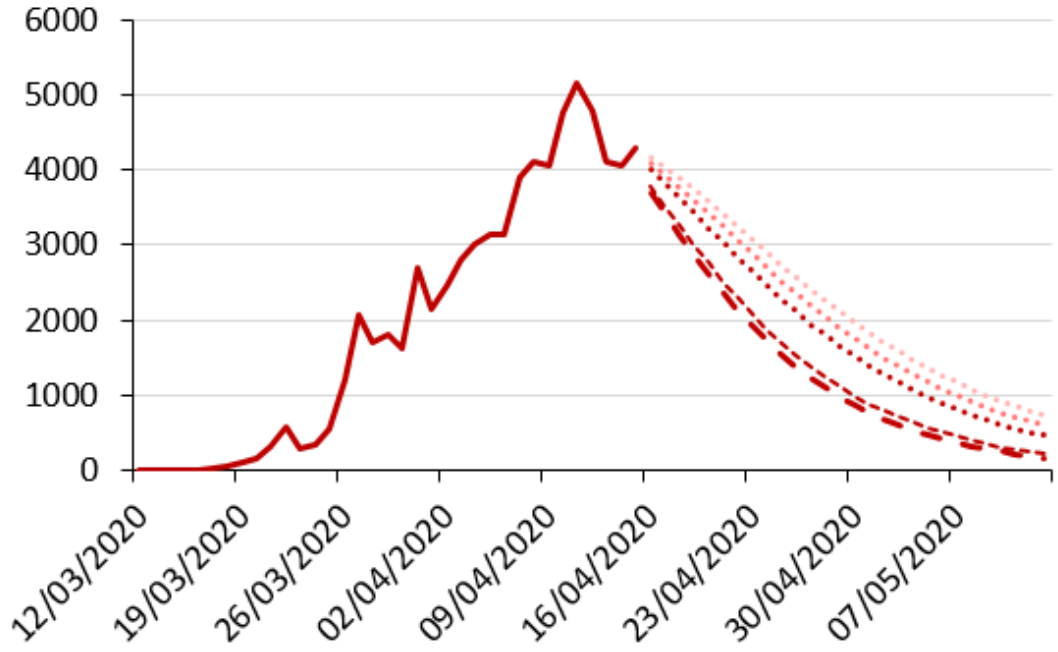


Daily



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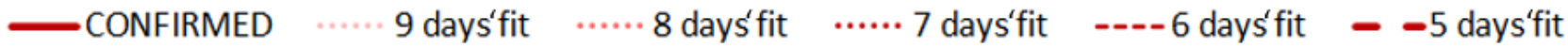
Ukraine



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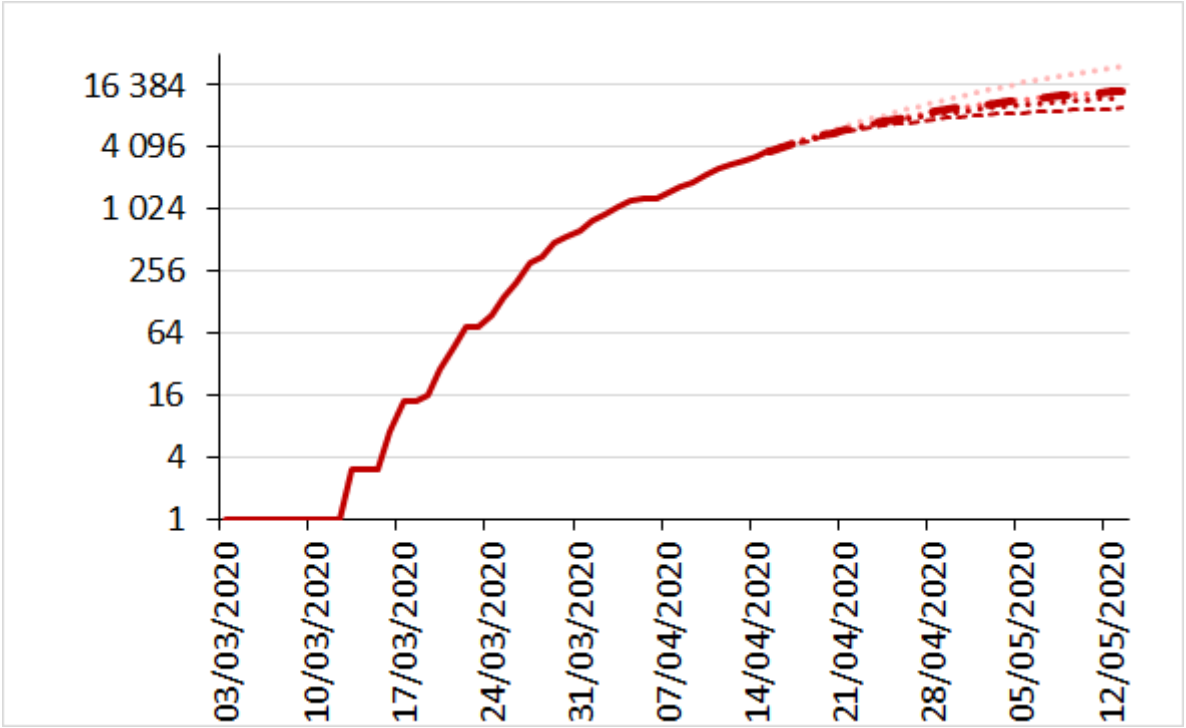

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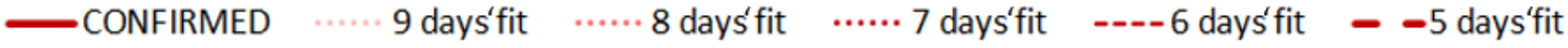
United Arab Emirates



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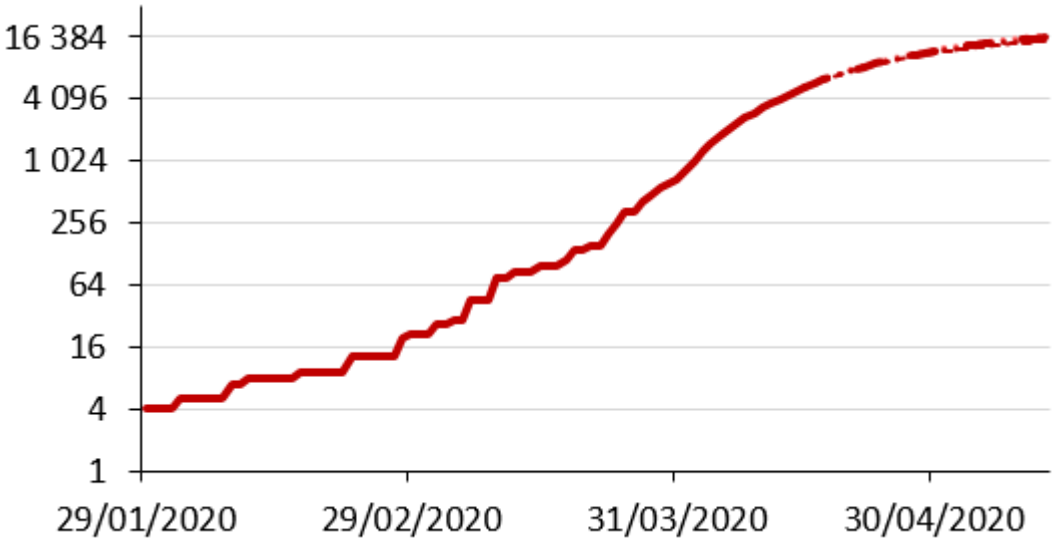

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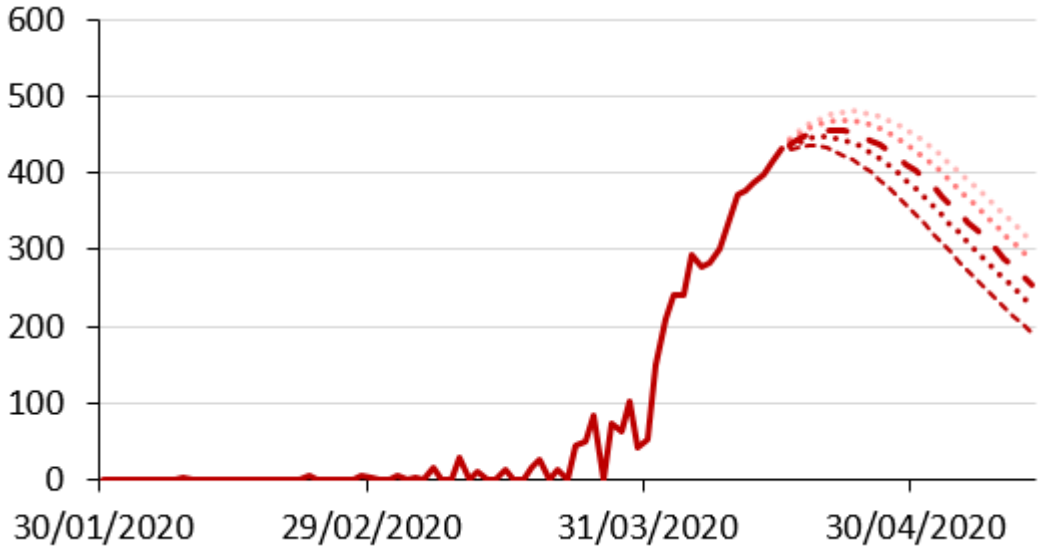

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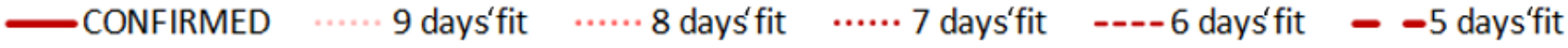
United Kingdom



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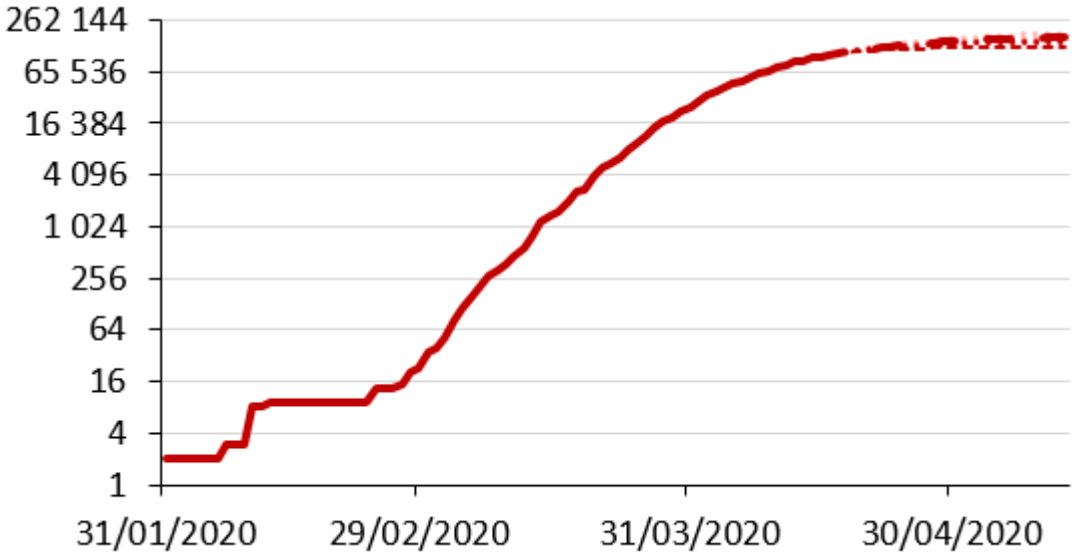

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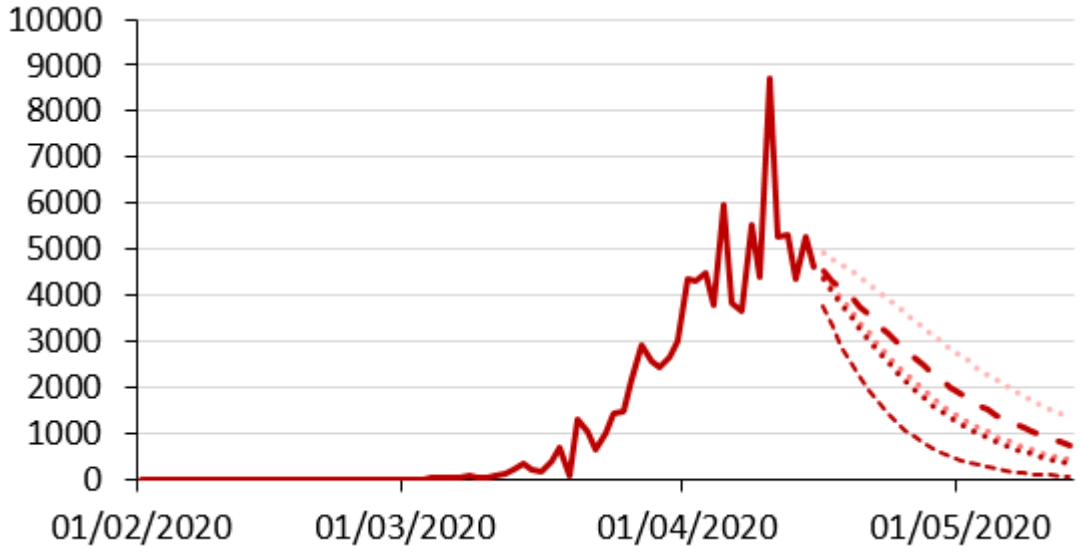

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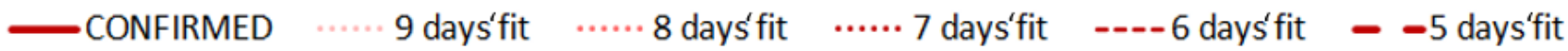
Uruguay



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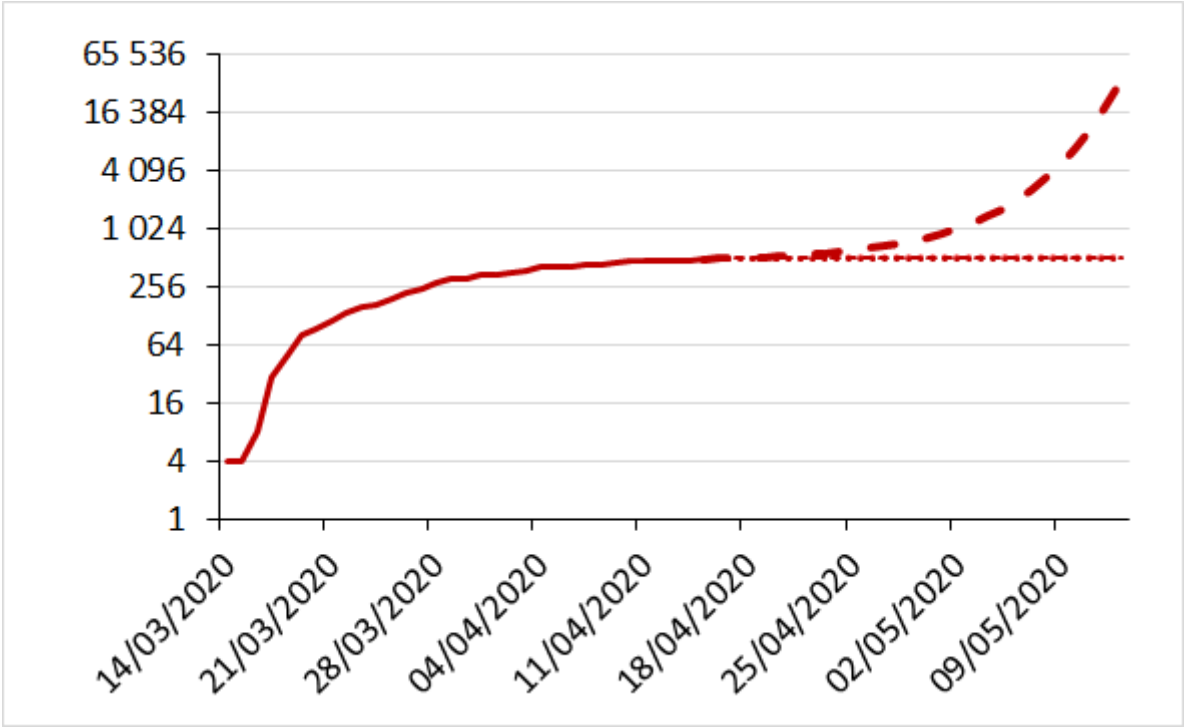
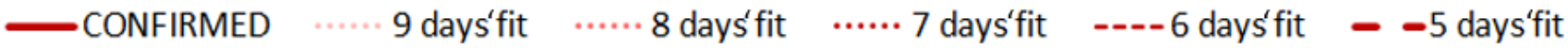


Data: The Johns Hopkins University, Politolog.com

USA



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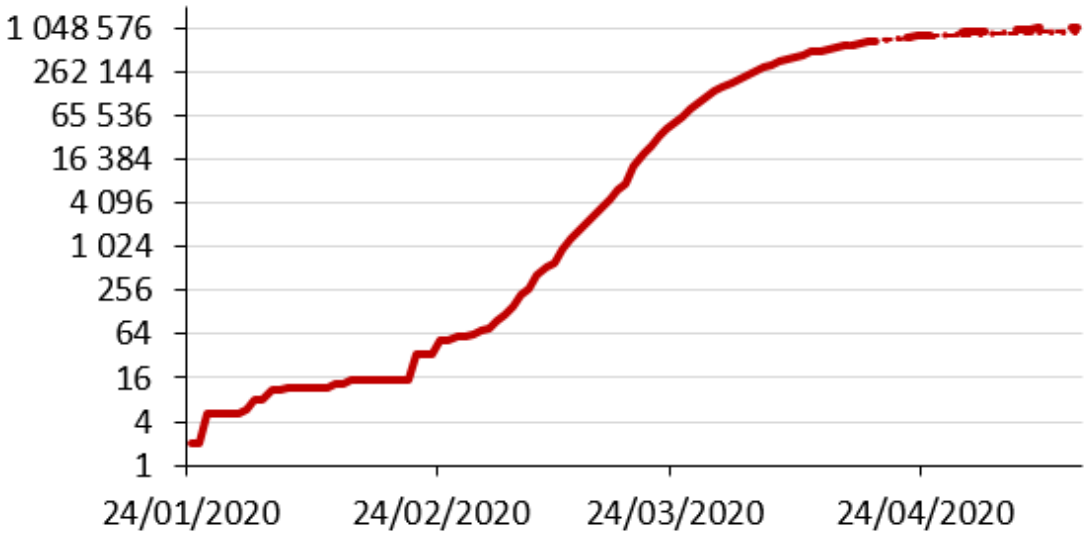
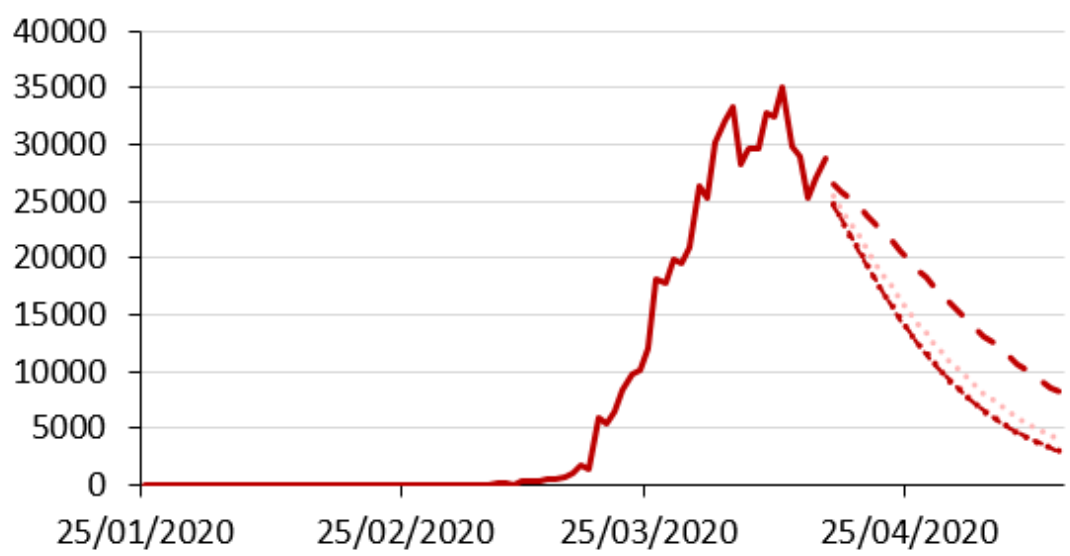


Daily



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