

05 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.

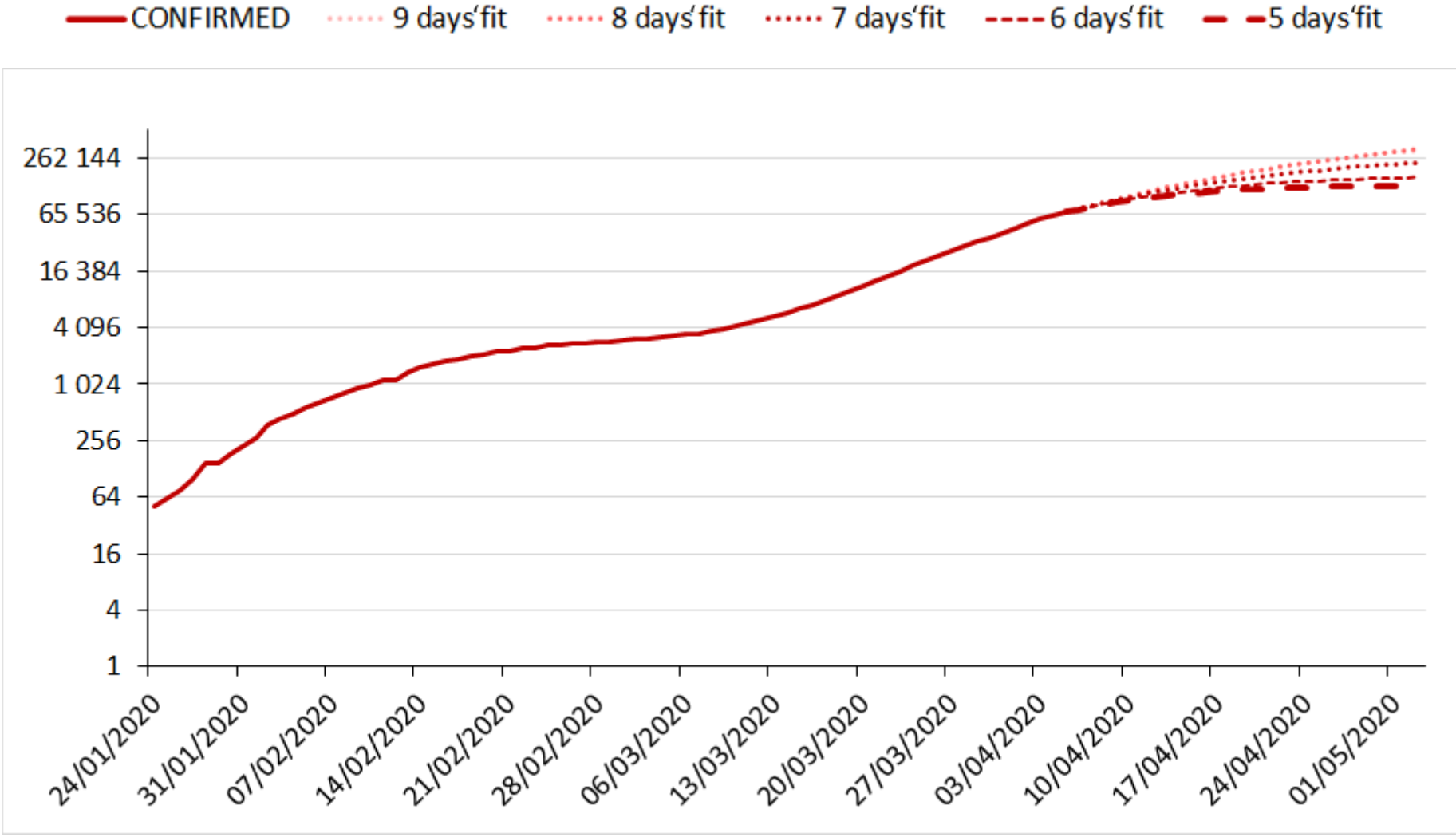
The jolt is fitted with an exponential function over, respectively, the previous 5, 6, 7, 8 and 9 days. Large numbers are truncated to facilitate the reading of the charts.

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

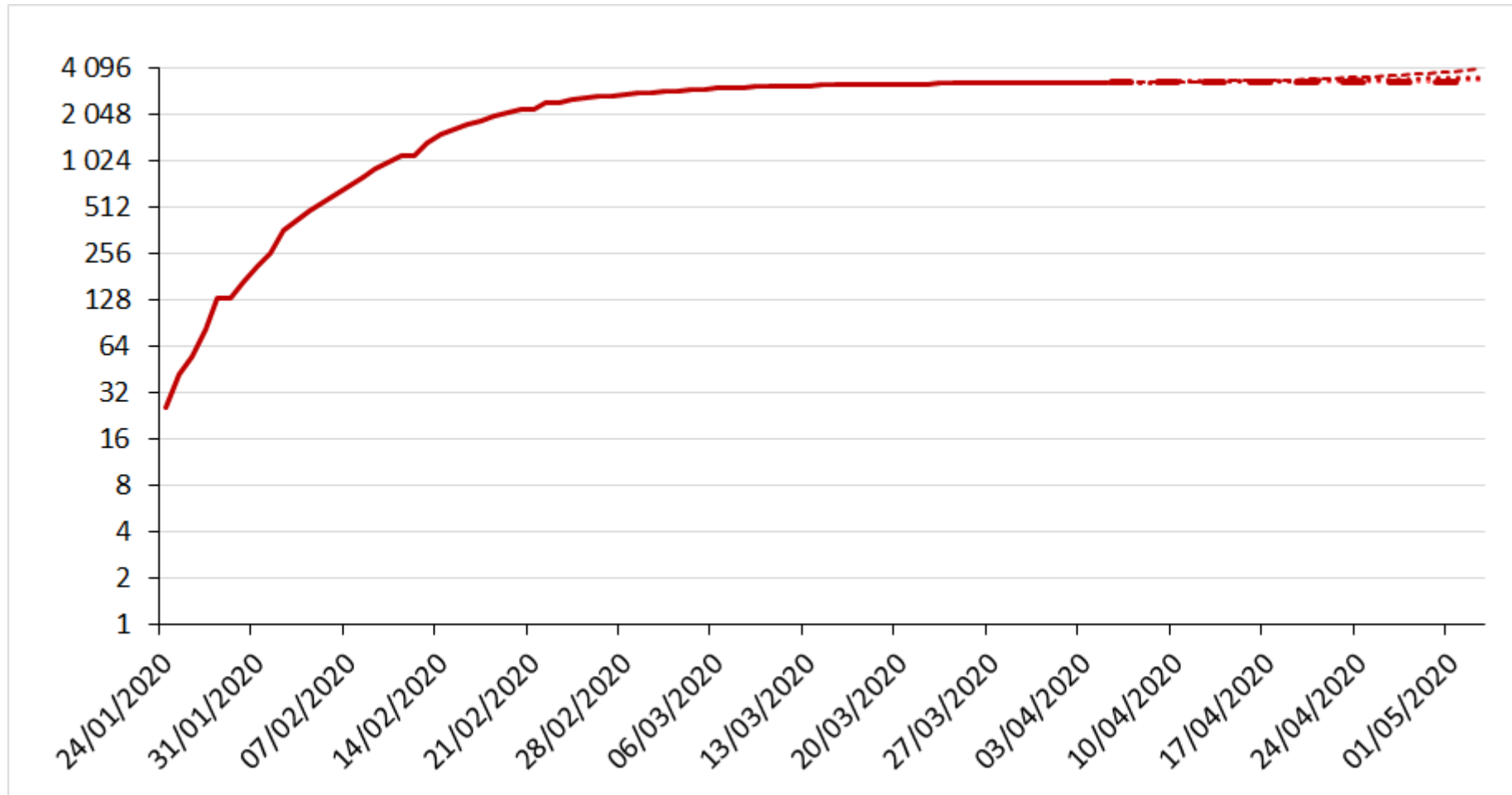
World



Data: The Johns Hopkins University, Politolog.com

China

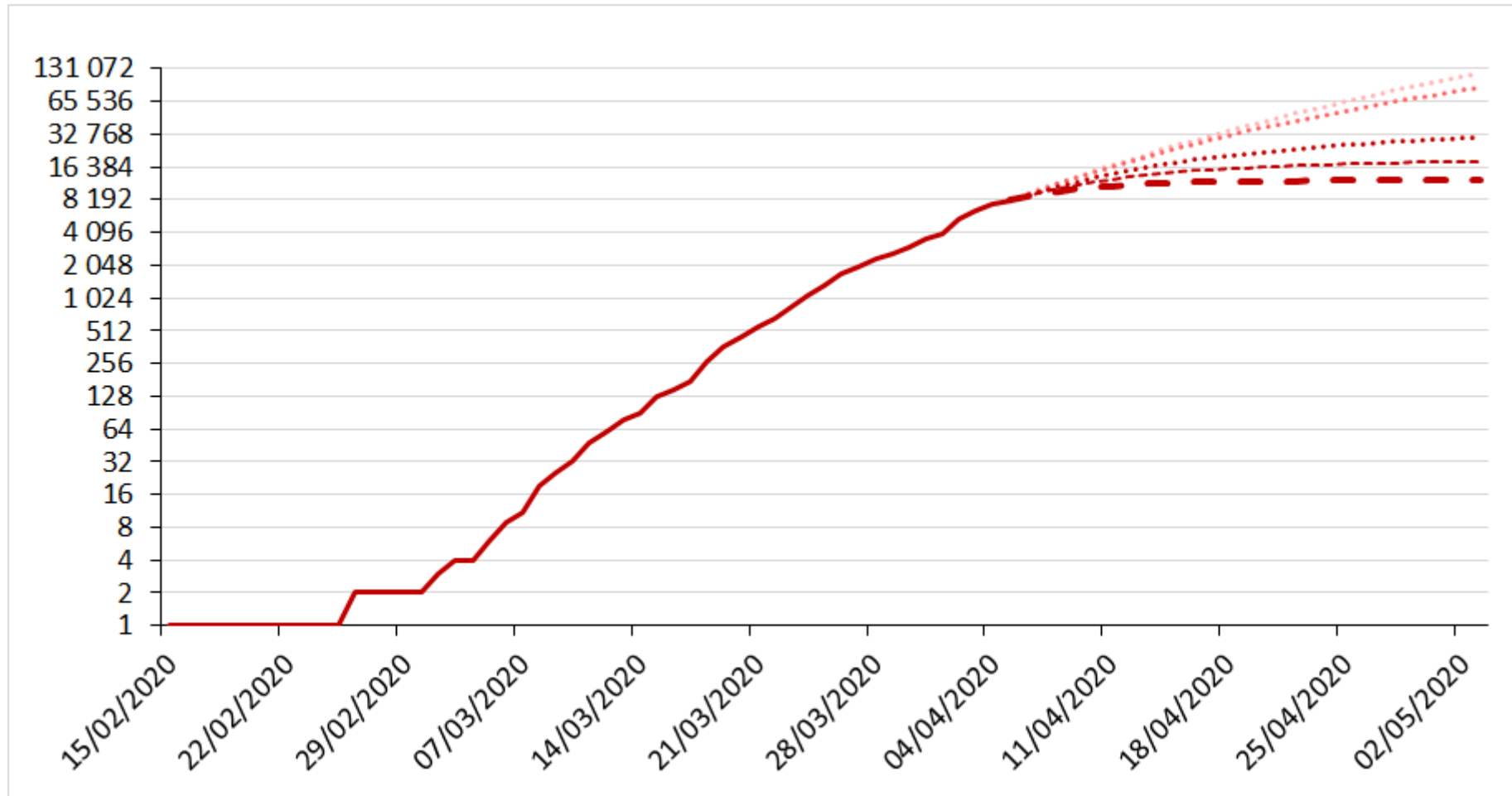
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Data: The Johns Hopkins University, Politolog.com

France

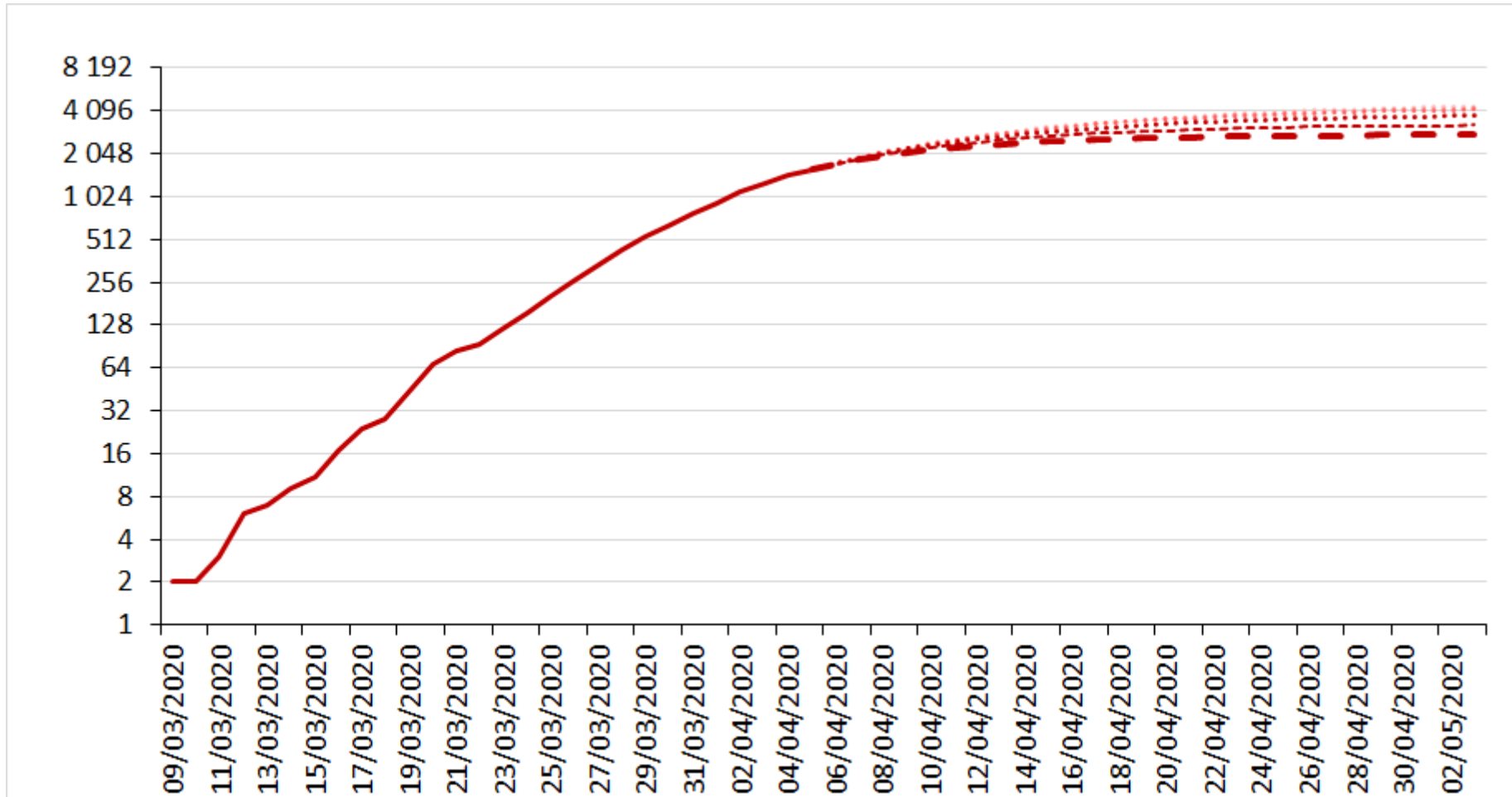
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Data: The Johns Hopkins University, Politolog.com

Germany

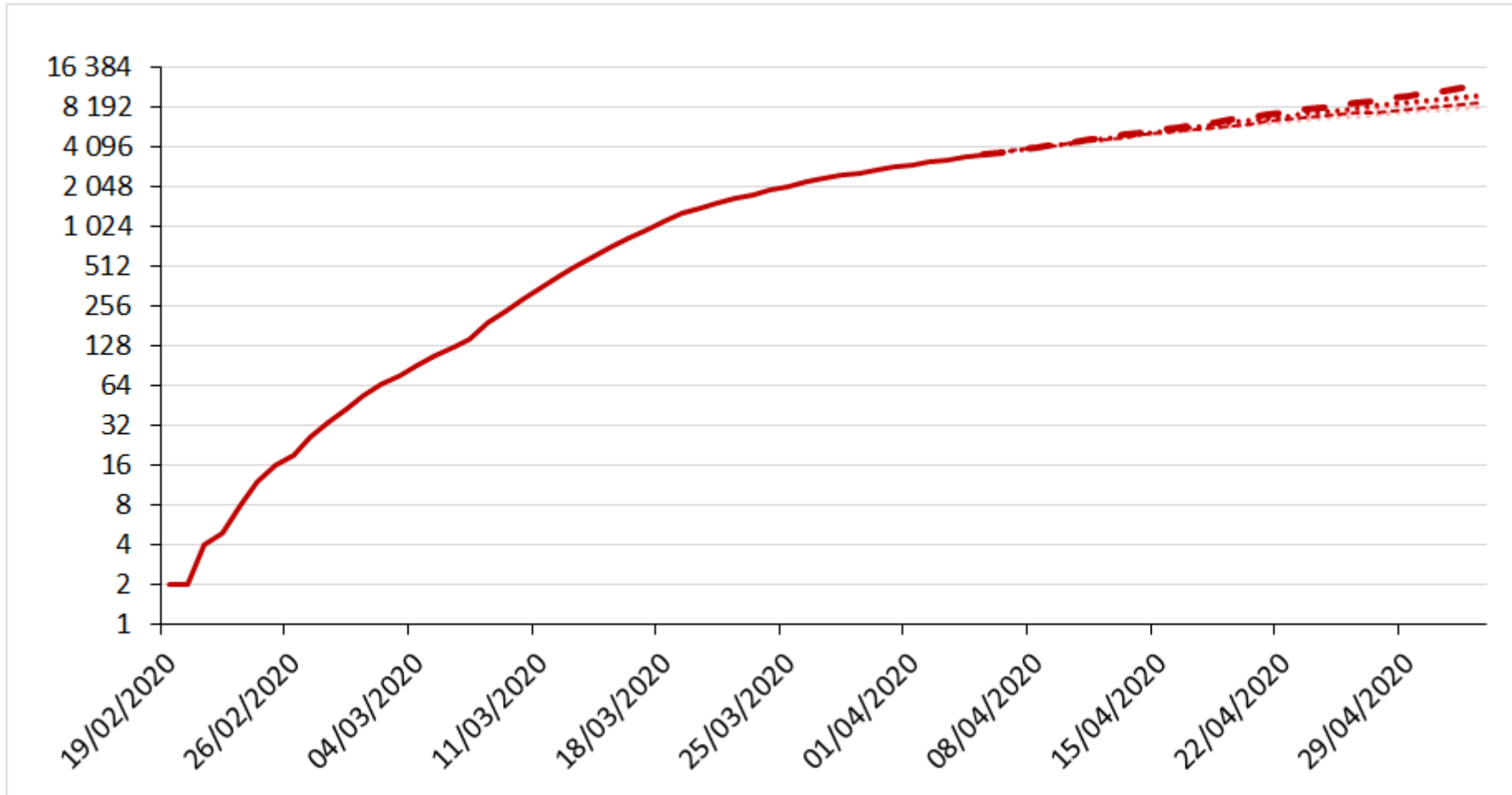
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Data: The Johns Hopkins University, Politolog.com

Iran

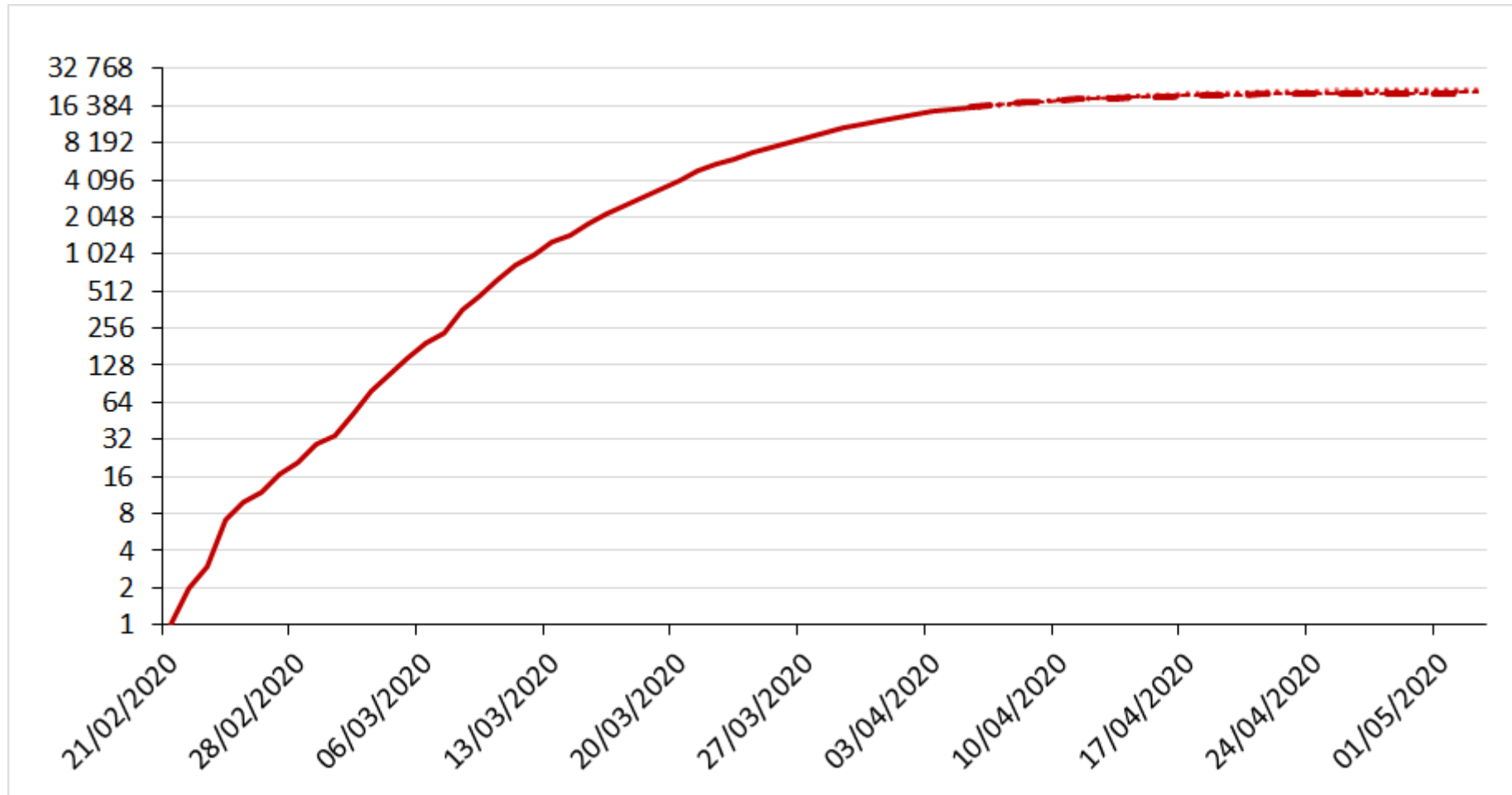
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Data: The Johns Hopkins University, Politolog.com

Italy

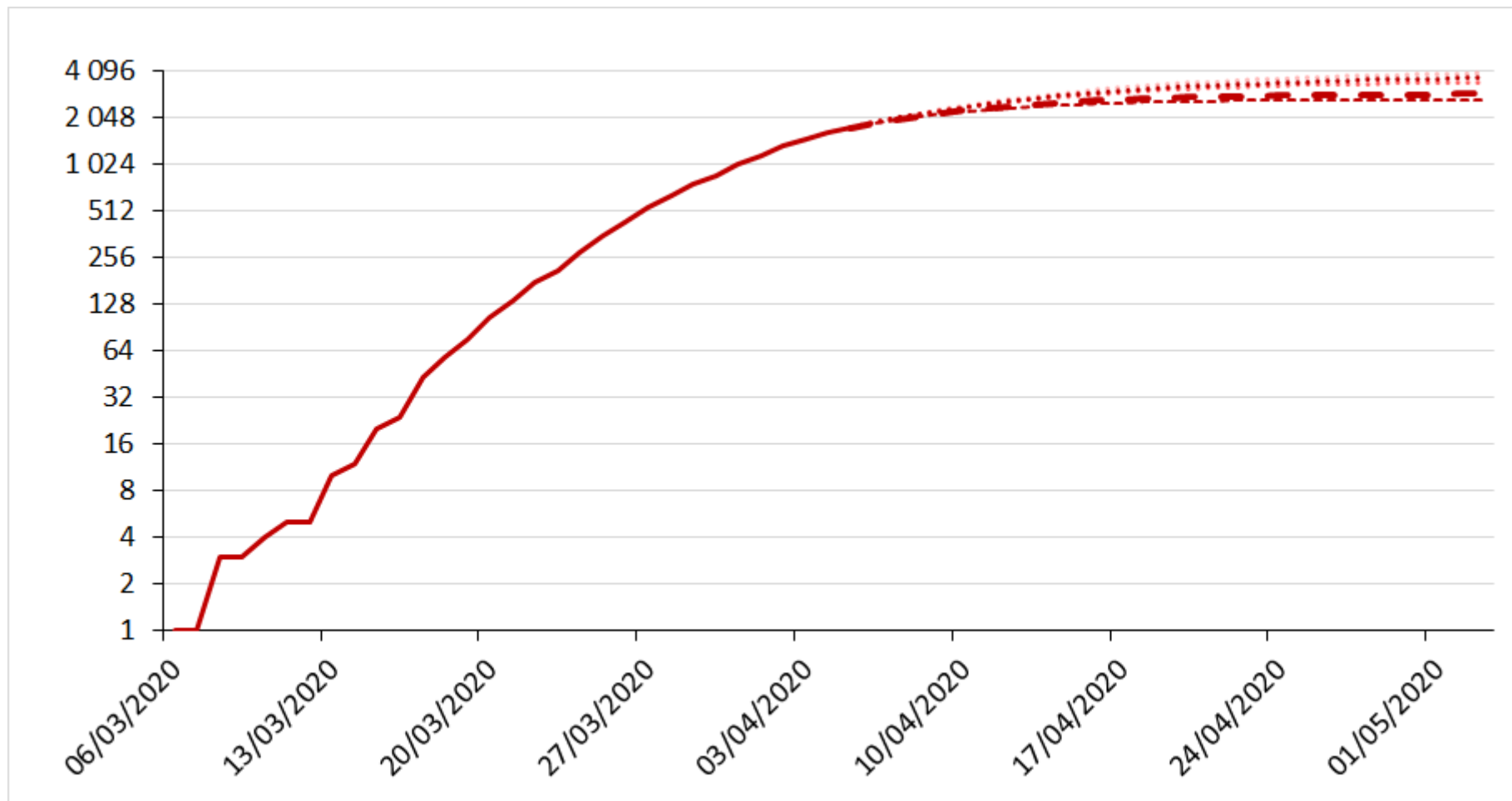
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Data: The Johns Hopkins University, Politolog.com

Netherlands

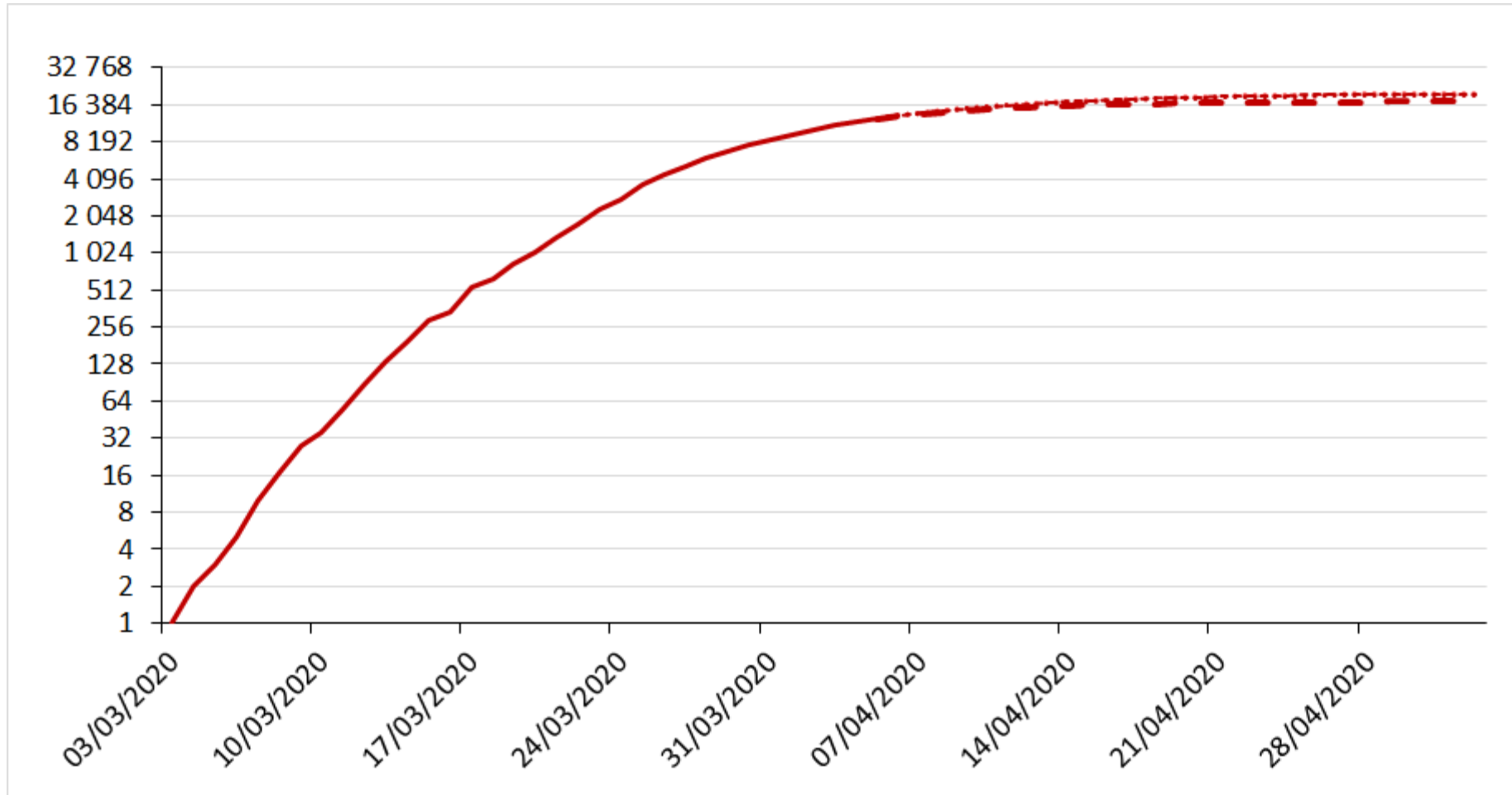
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Data: The Johns Hopkins University, Politolog.com

Spain

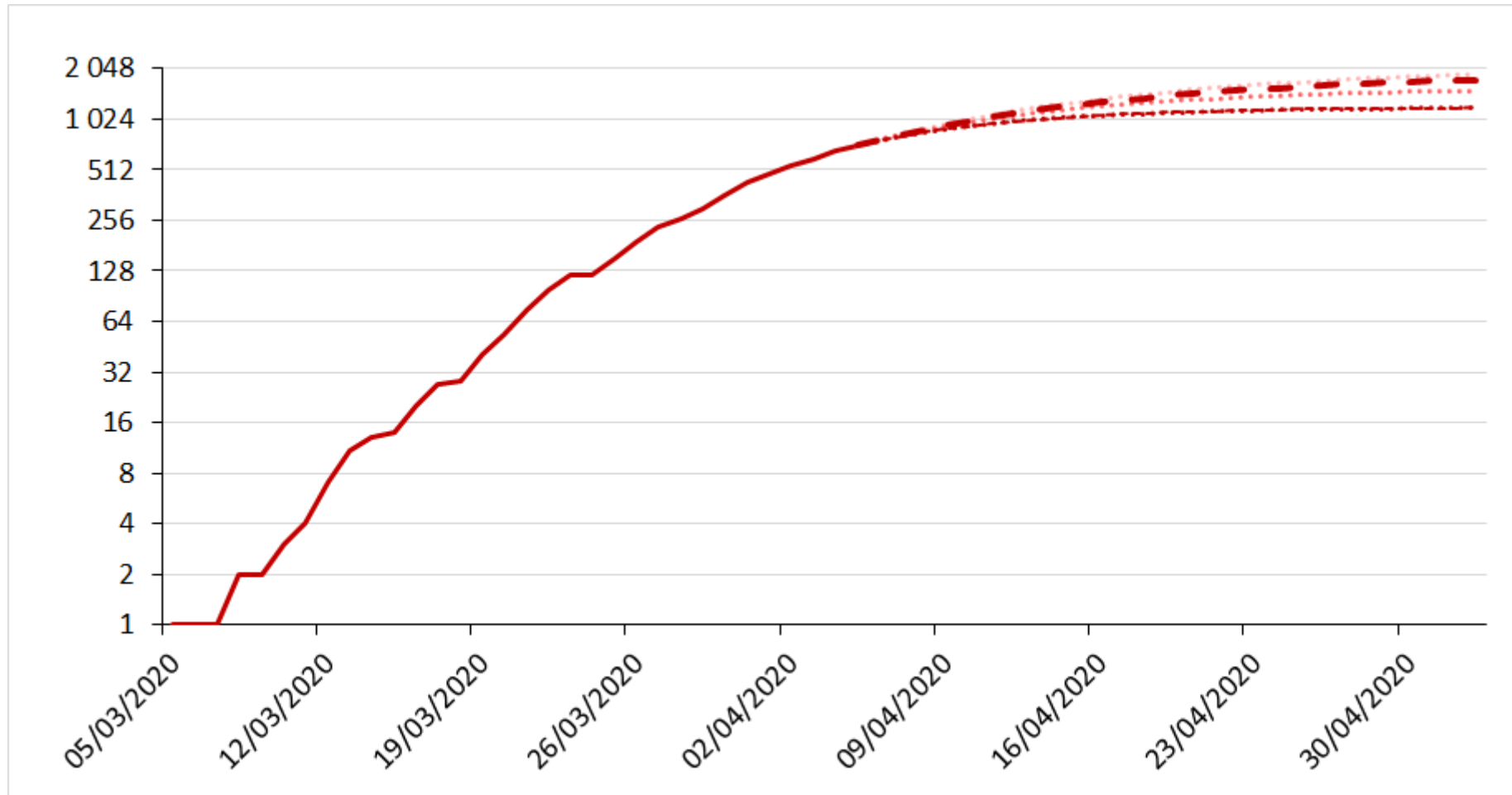
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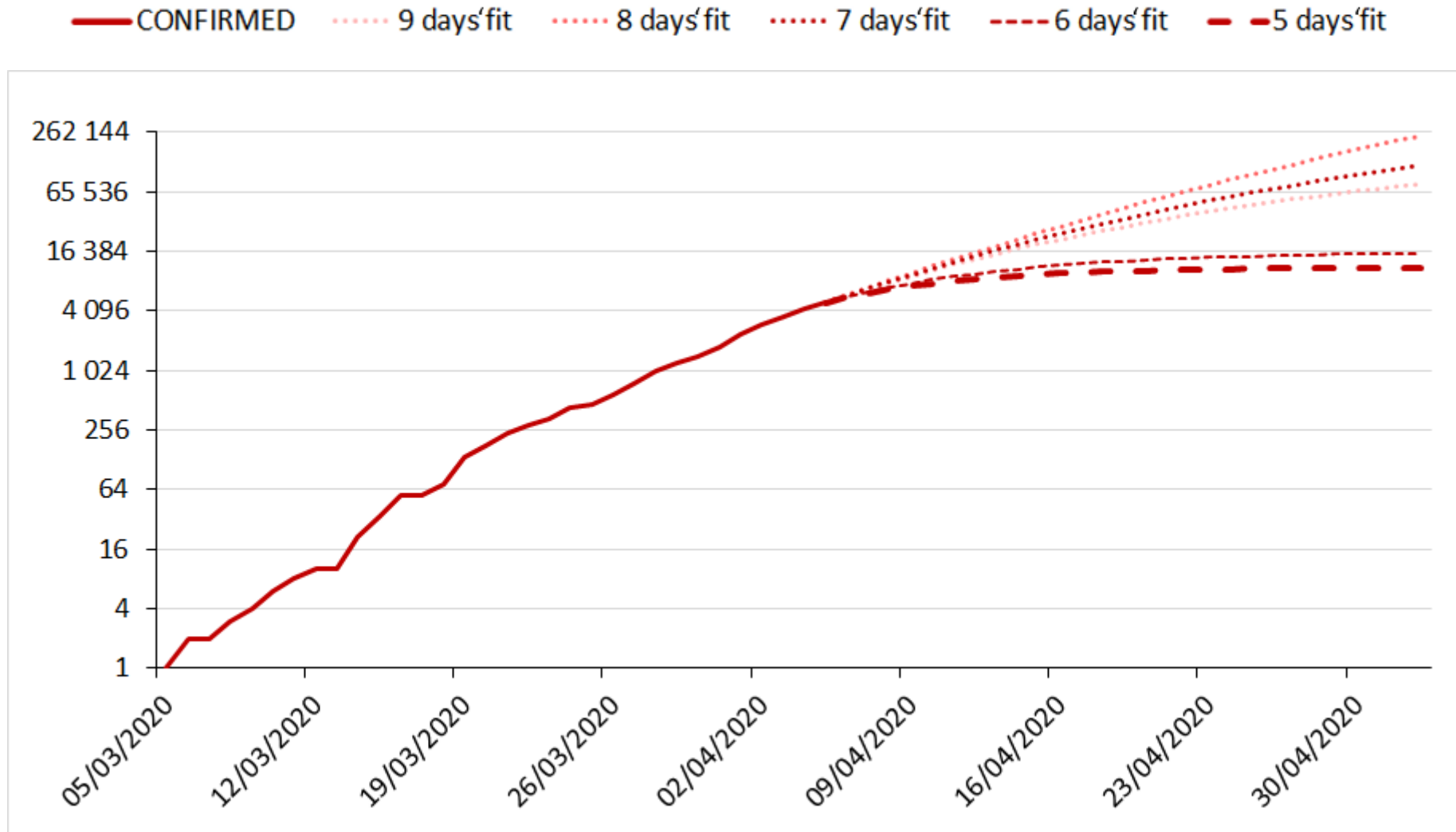
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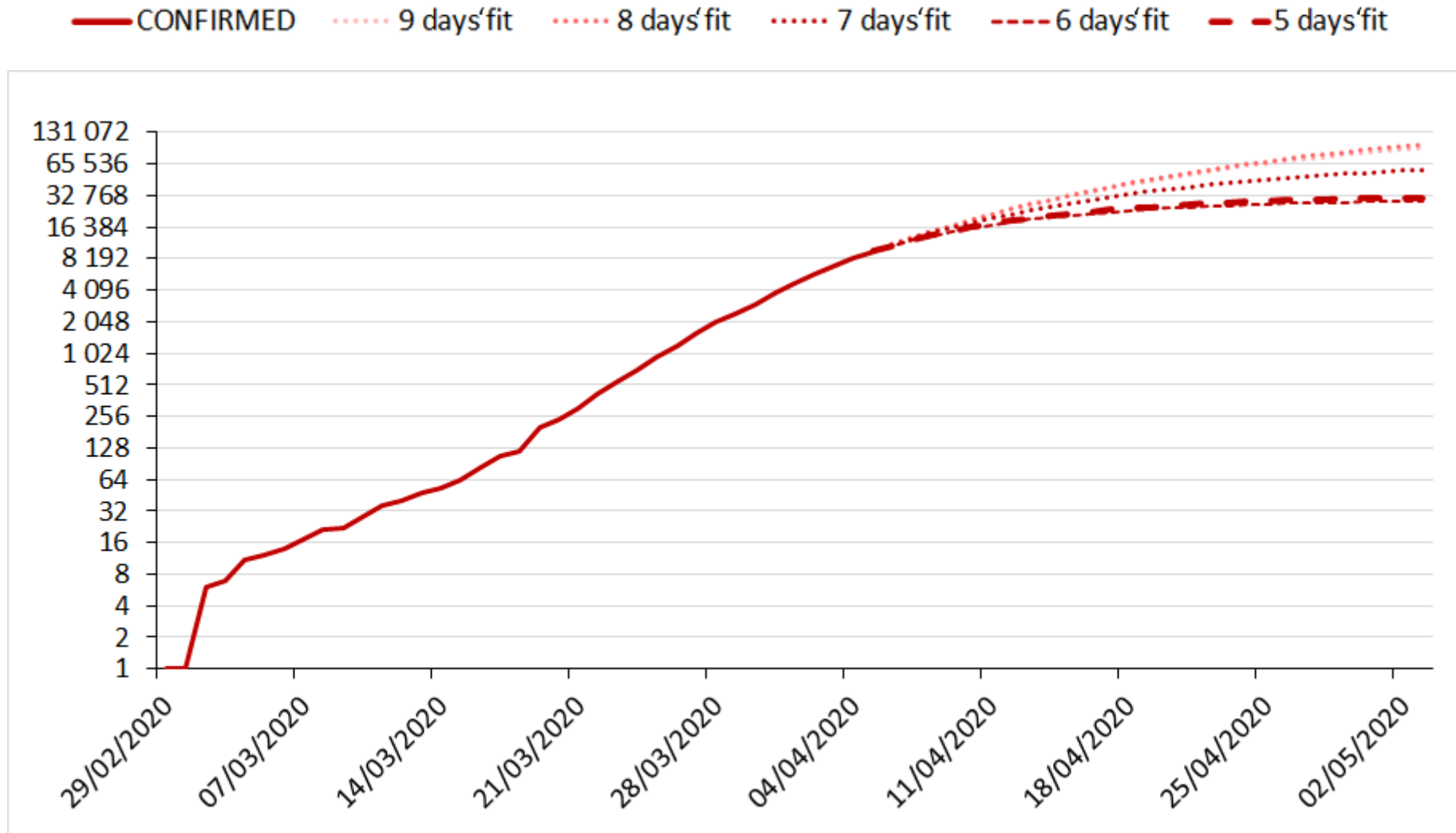
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United Kingdom



Data: The Johns Hopkins University, Politolog.com

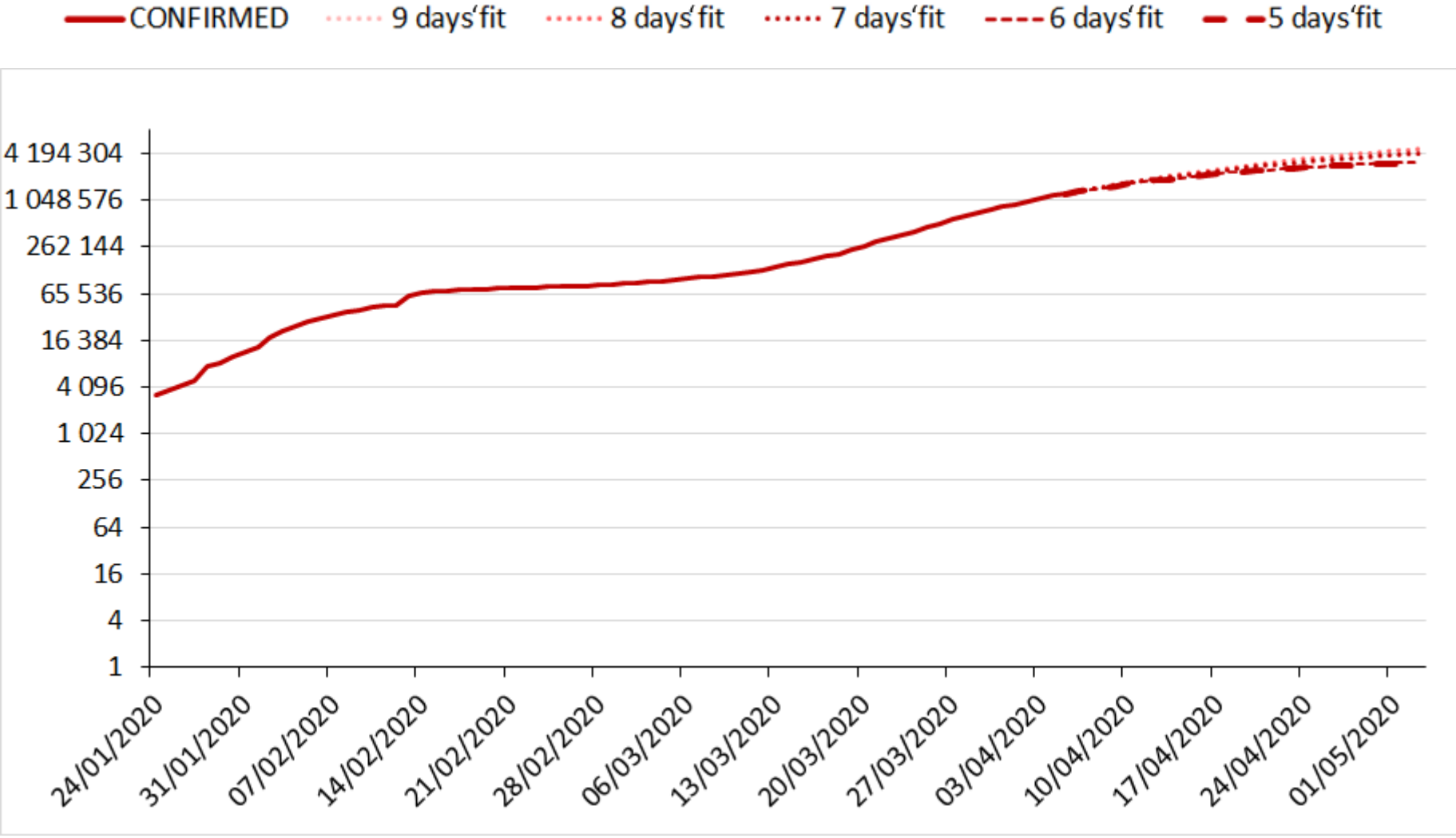
USA



Data: The Johns Hopkins University, Politolog.com

CUMULATED CASES - PROJECTIONS

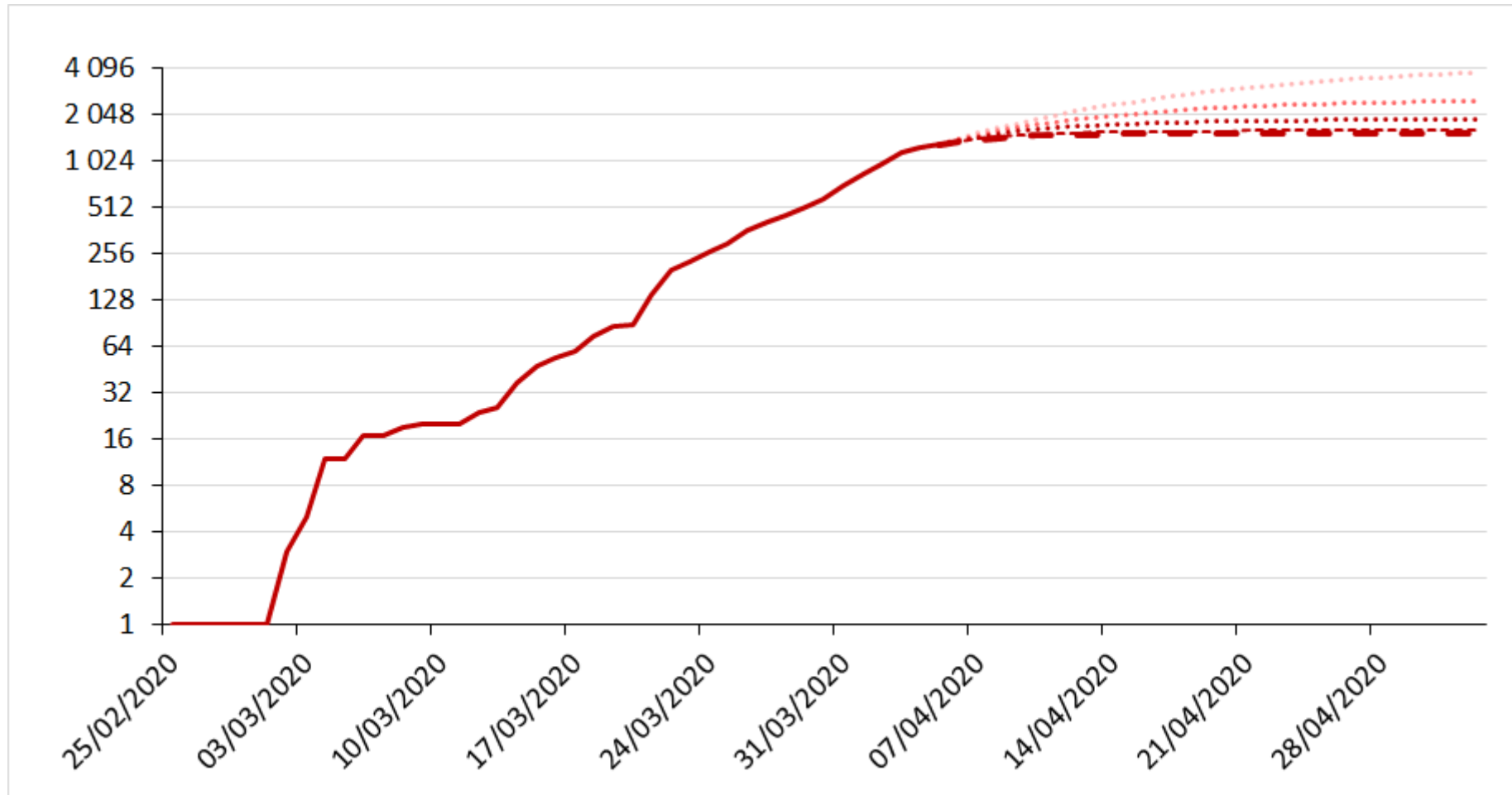
World



Data: The Johns Hopkins University, Politolog.com

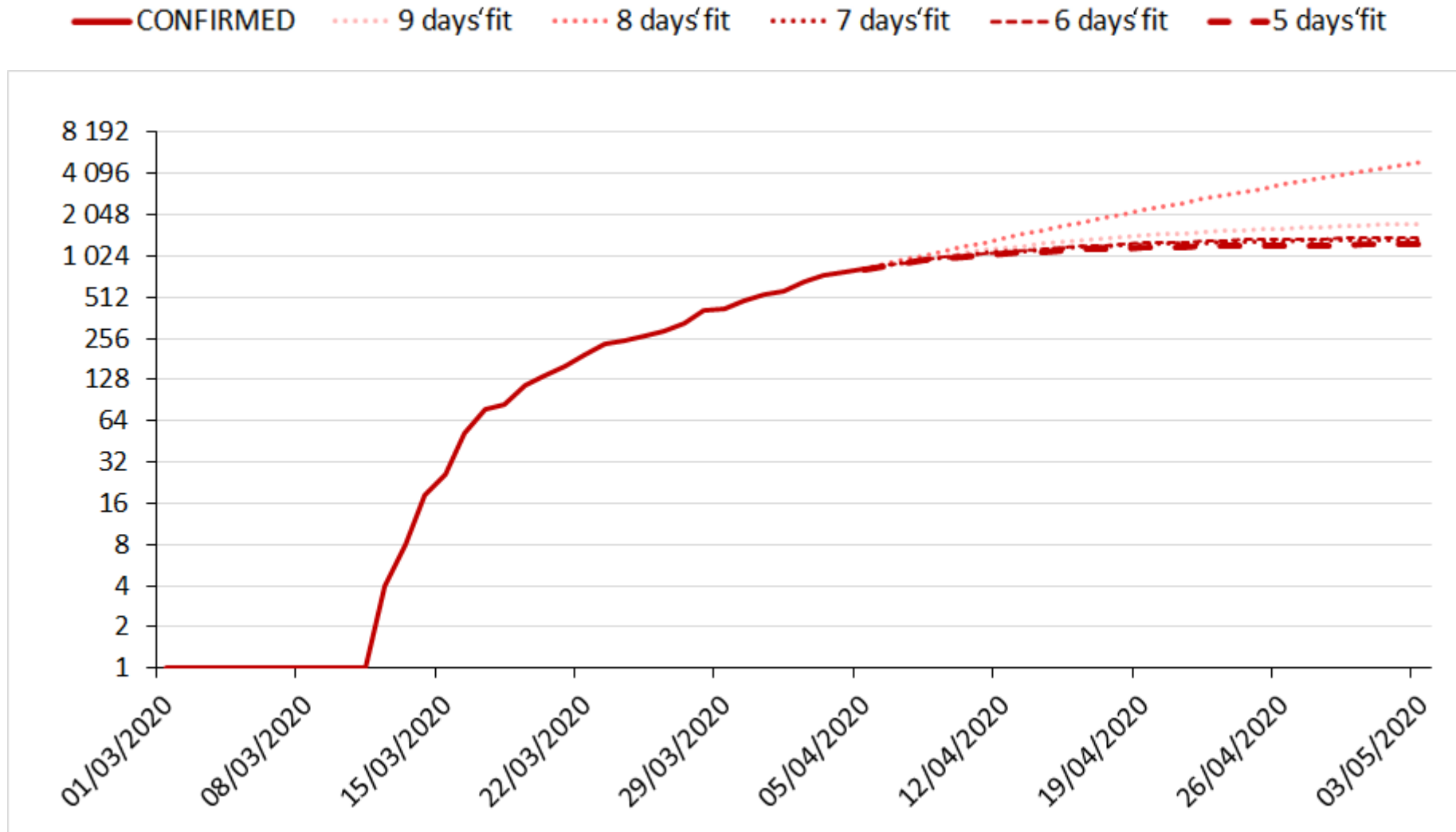
Algeria

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Data: The Johns Hopkins University, Politolog.com

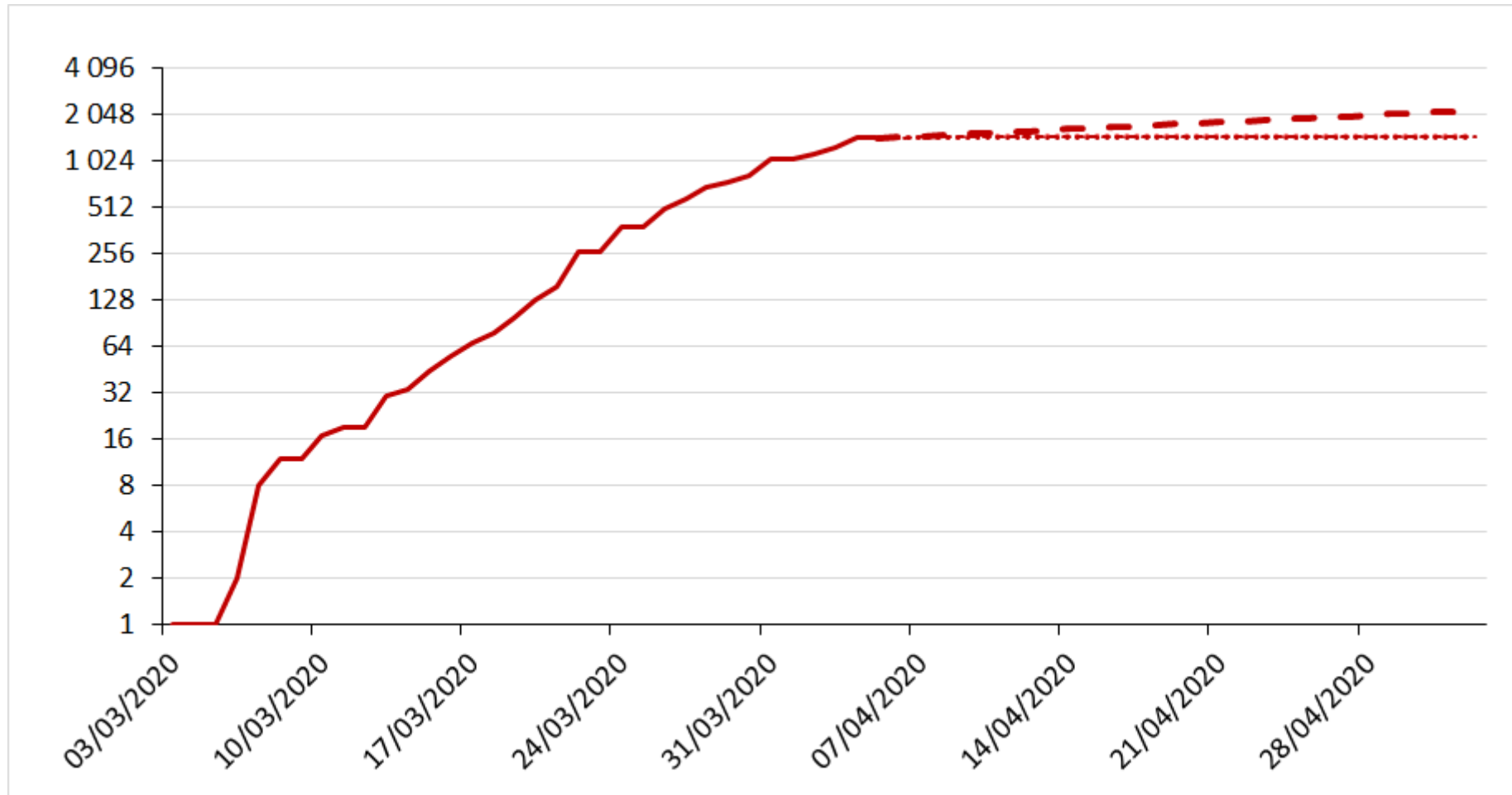
Armenia



Data: The Johns Hopkins University, Politolog.com

Argentina

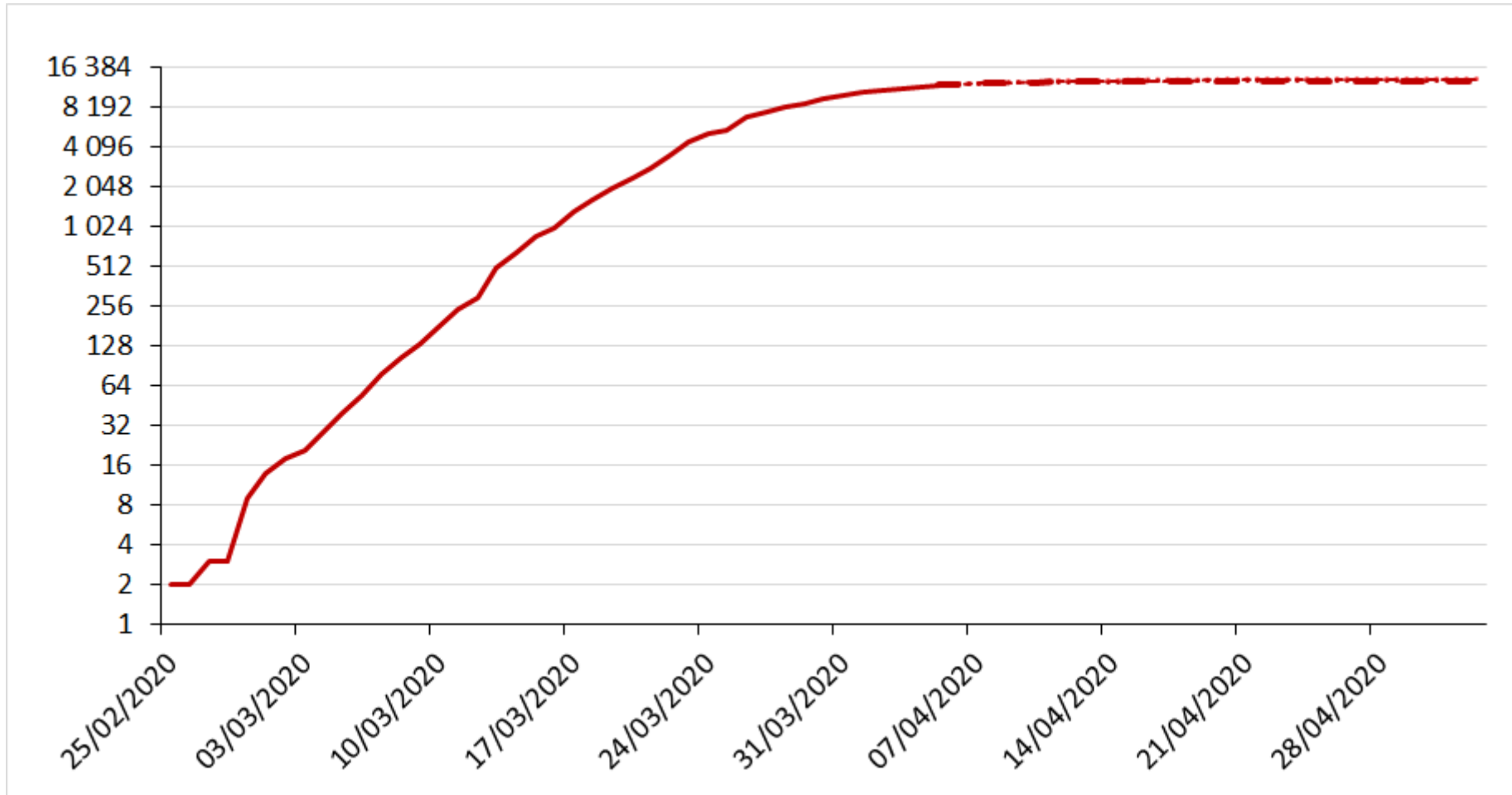
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Data: The Johns Hopkins University, Politolog.com

Austria

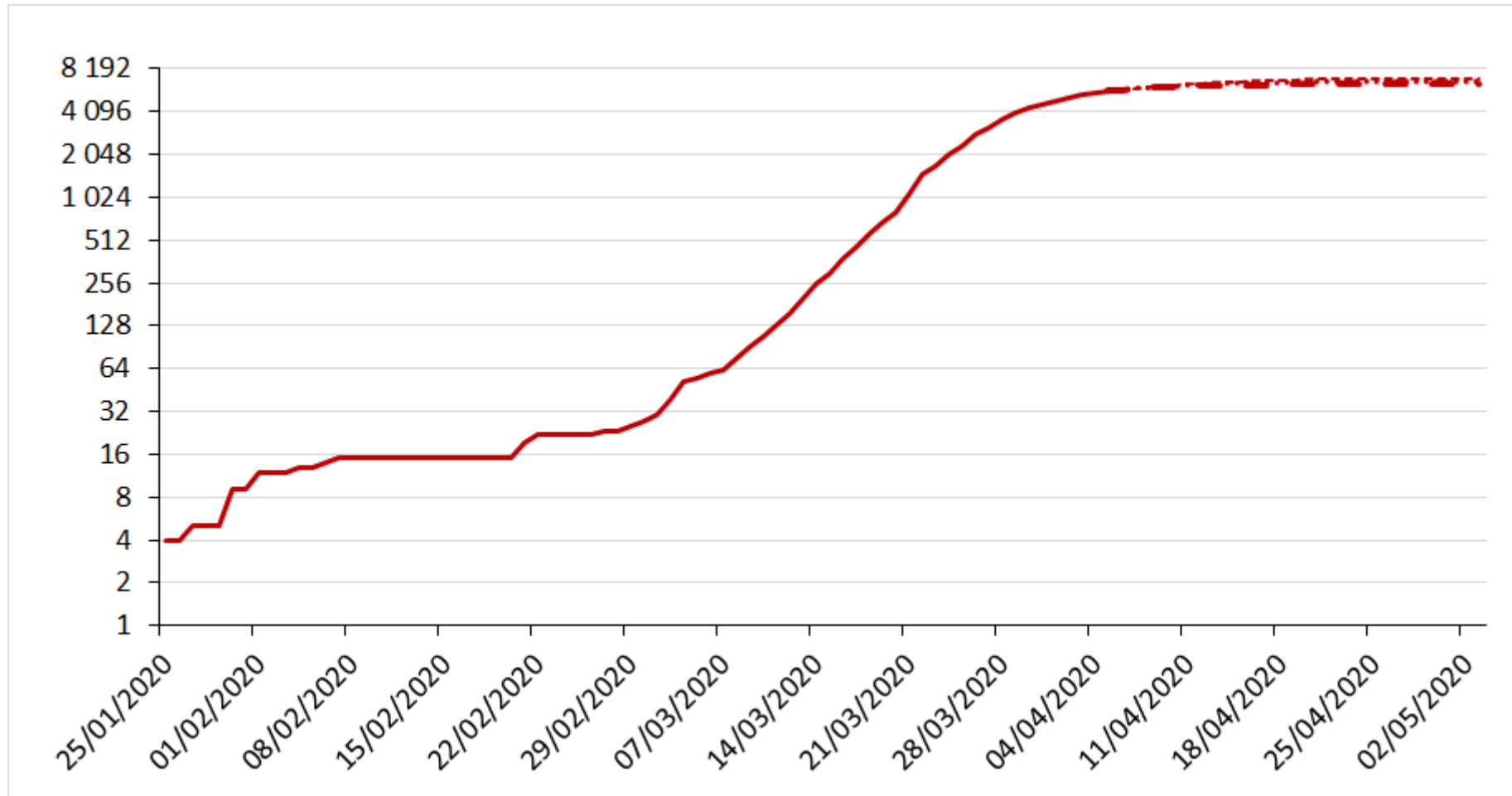
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Australia

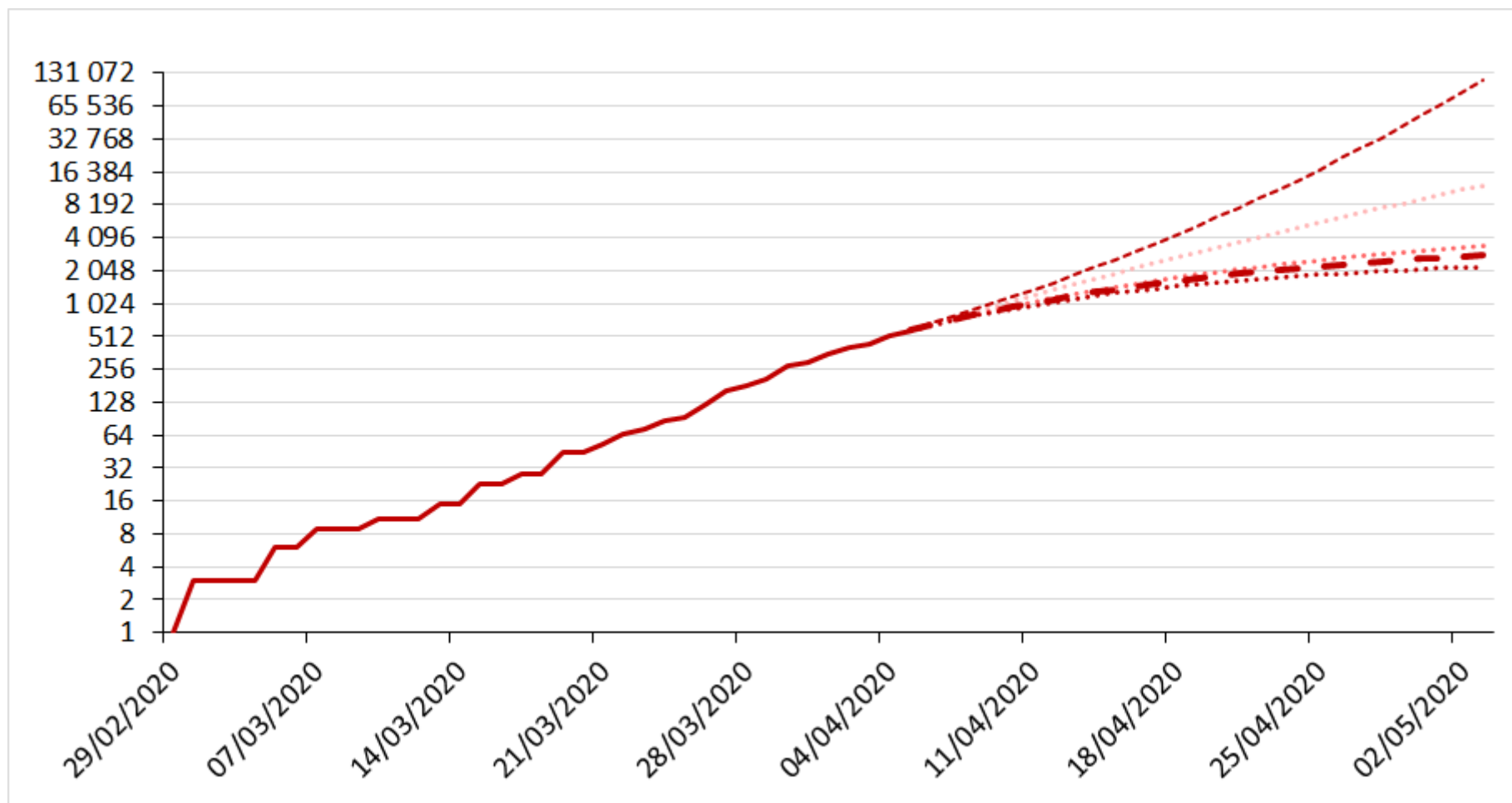
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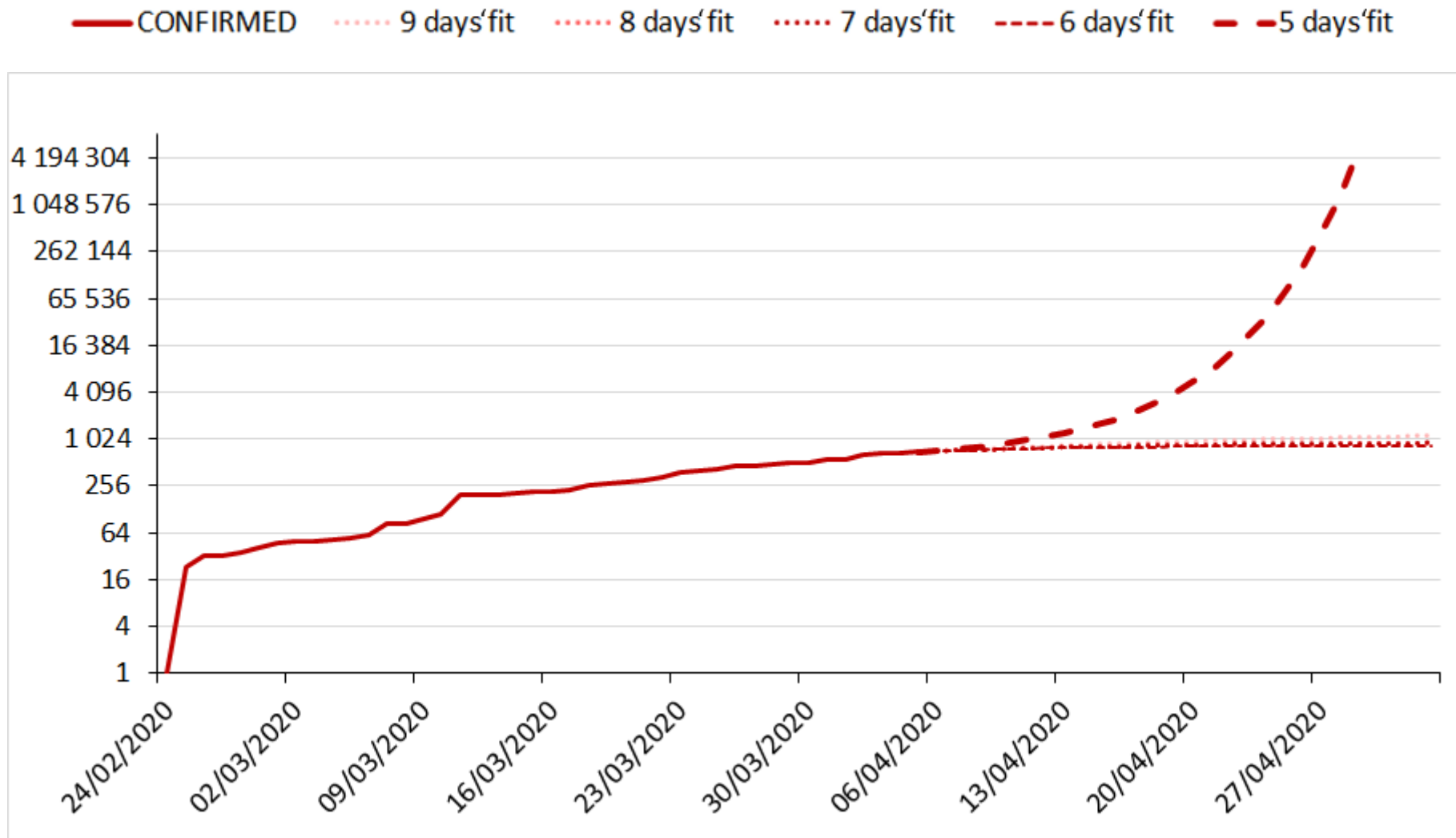
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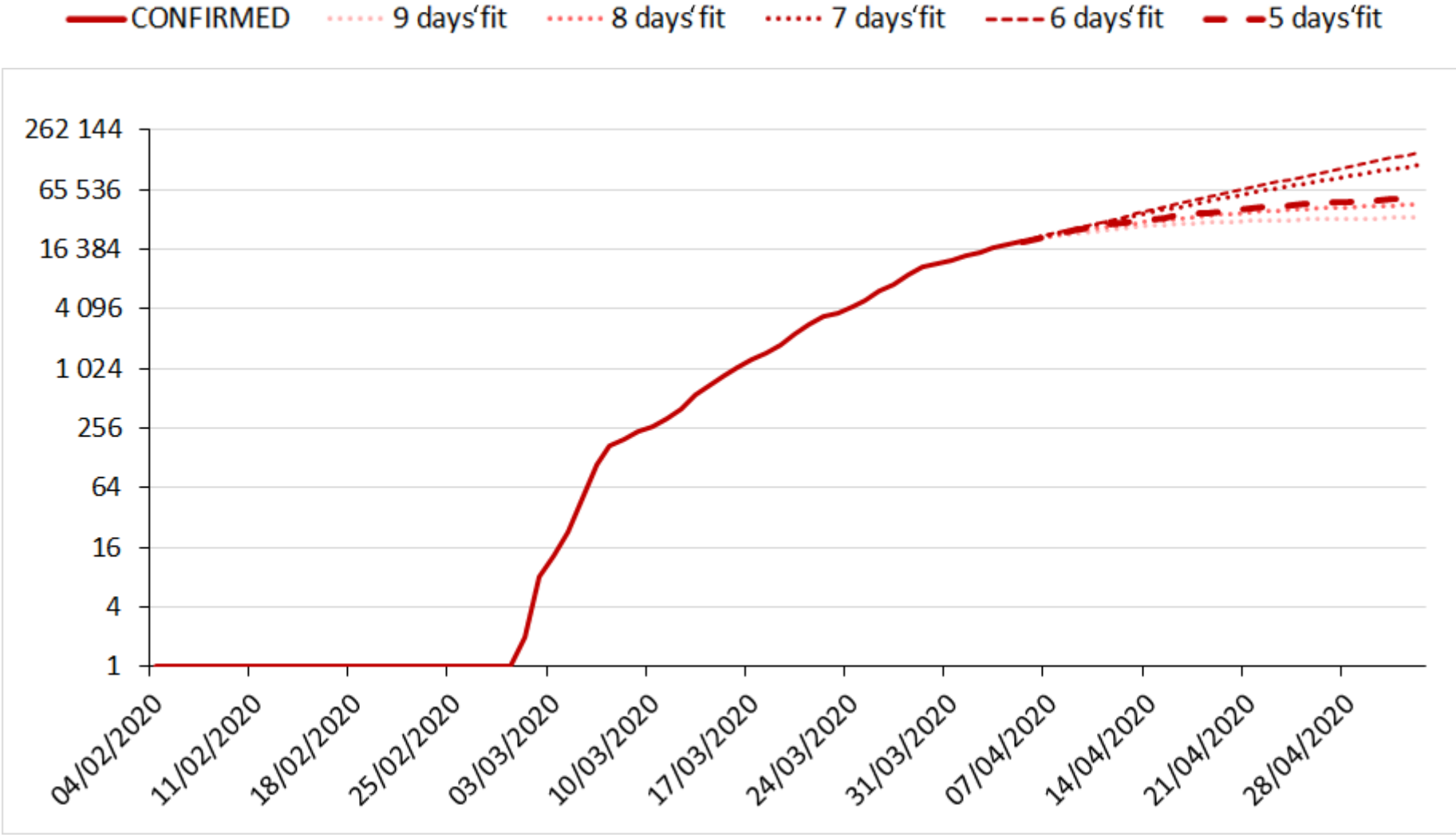
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Bahrain



Data: The Johns Hopkins University, Politolog.com

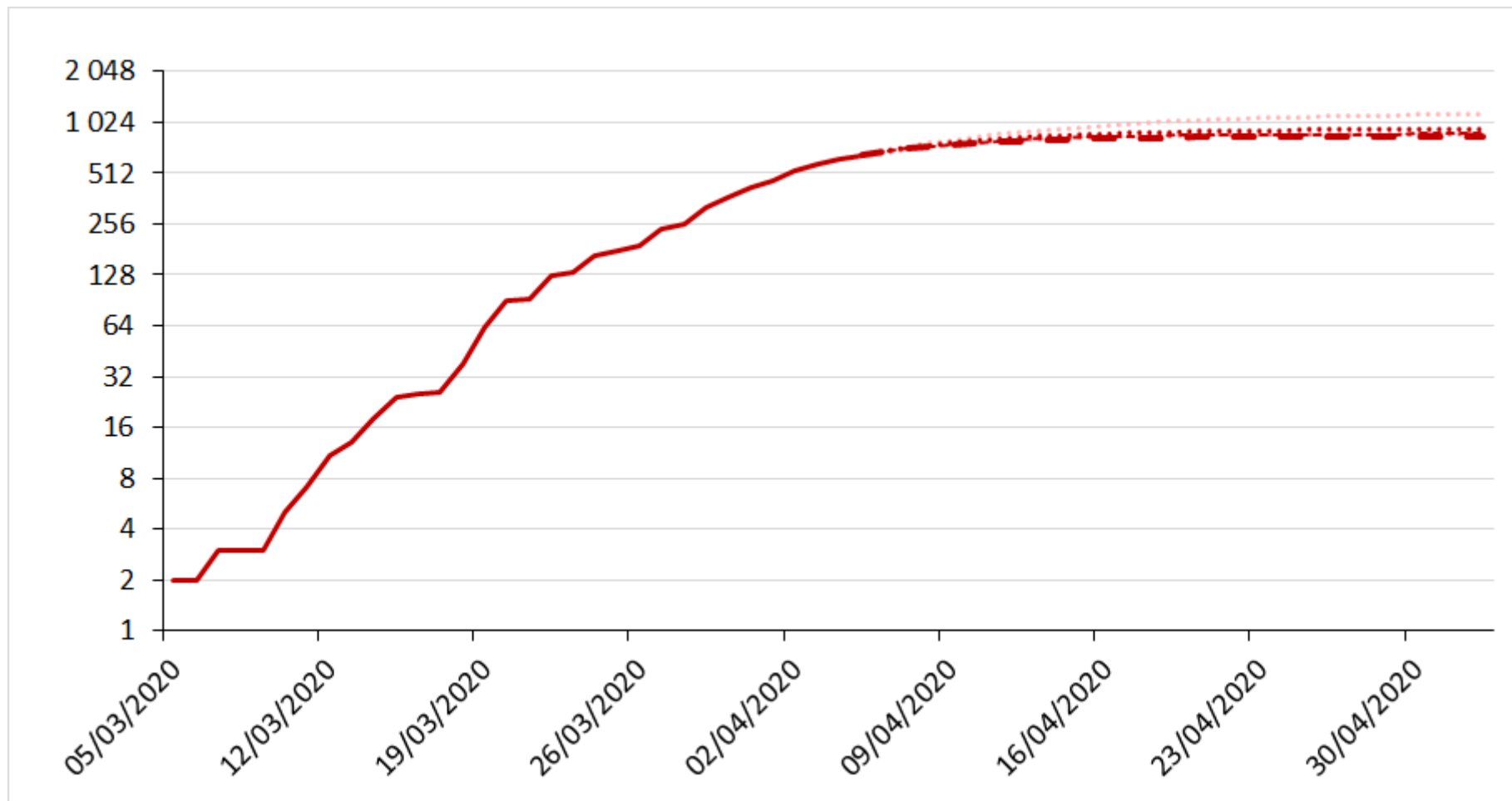
Belgium



Data: The Johns Hopkins University, Politolog.com

Bosnia and Herzegovina

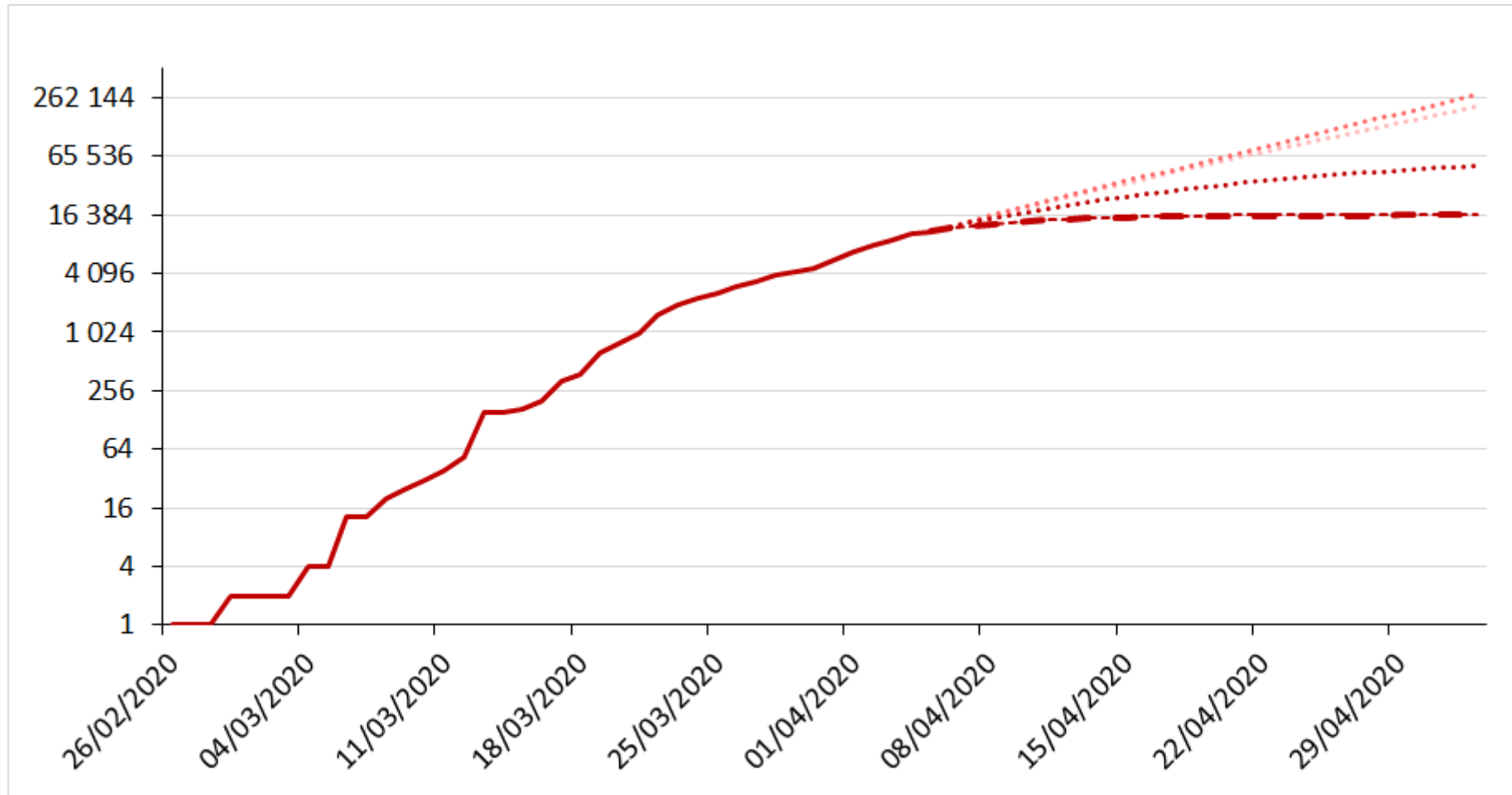
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Data: The Johns Hopkins University, Politolog.com

Brazil

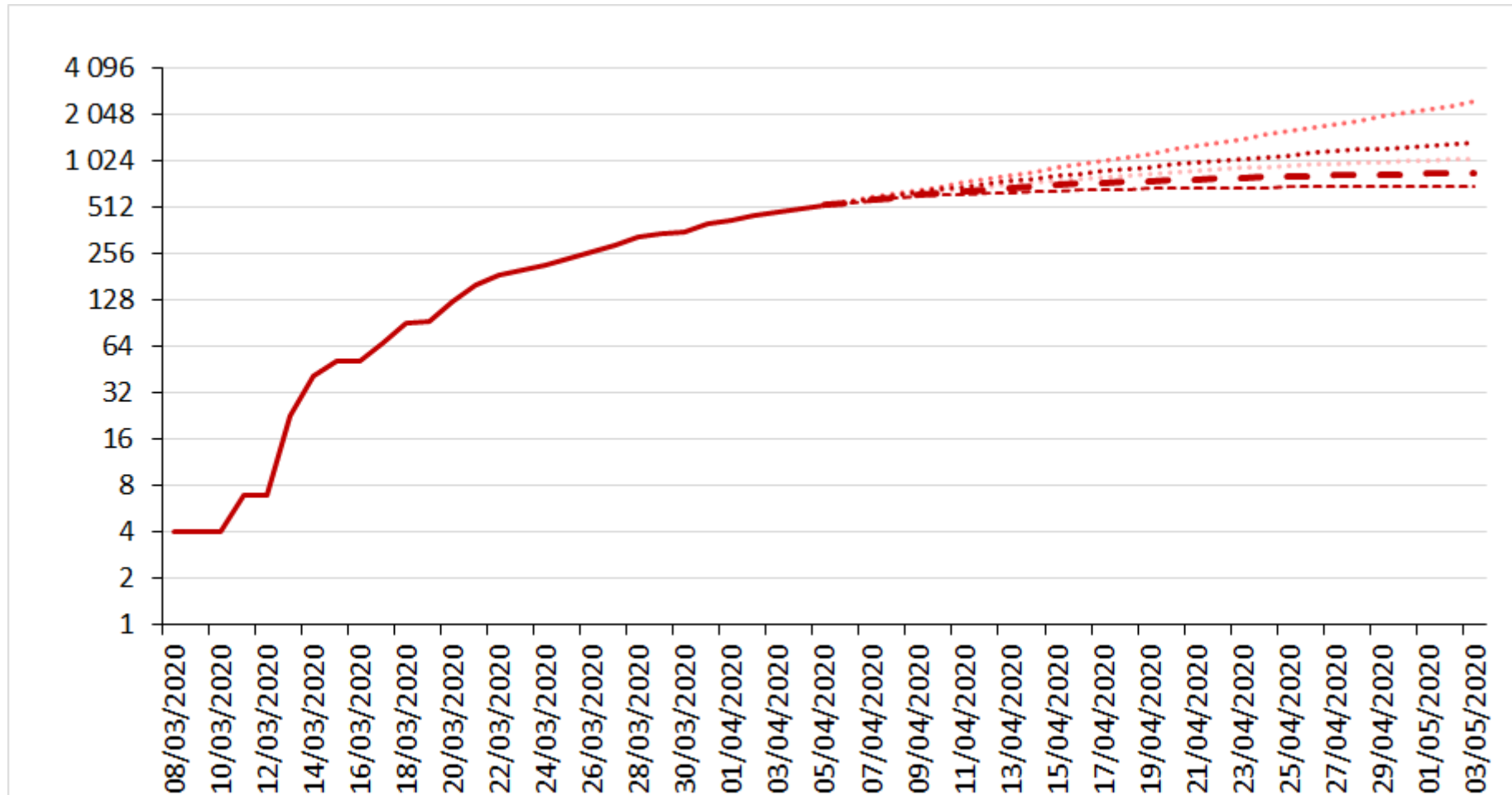
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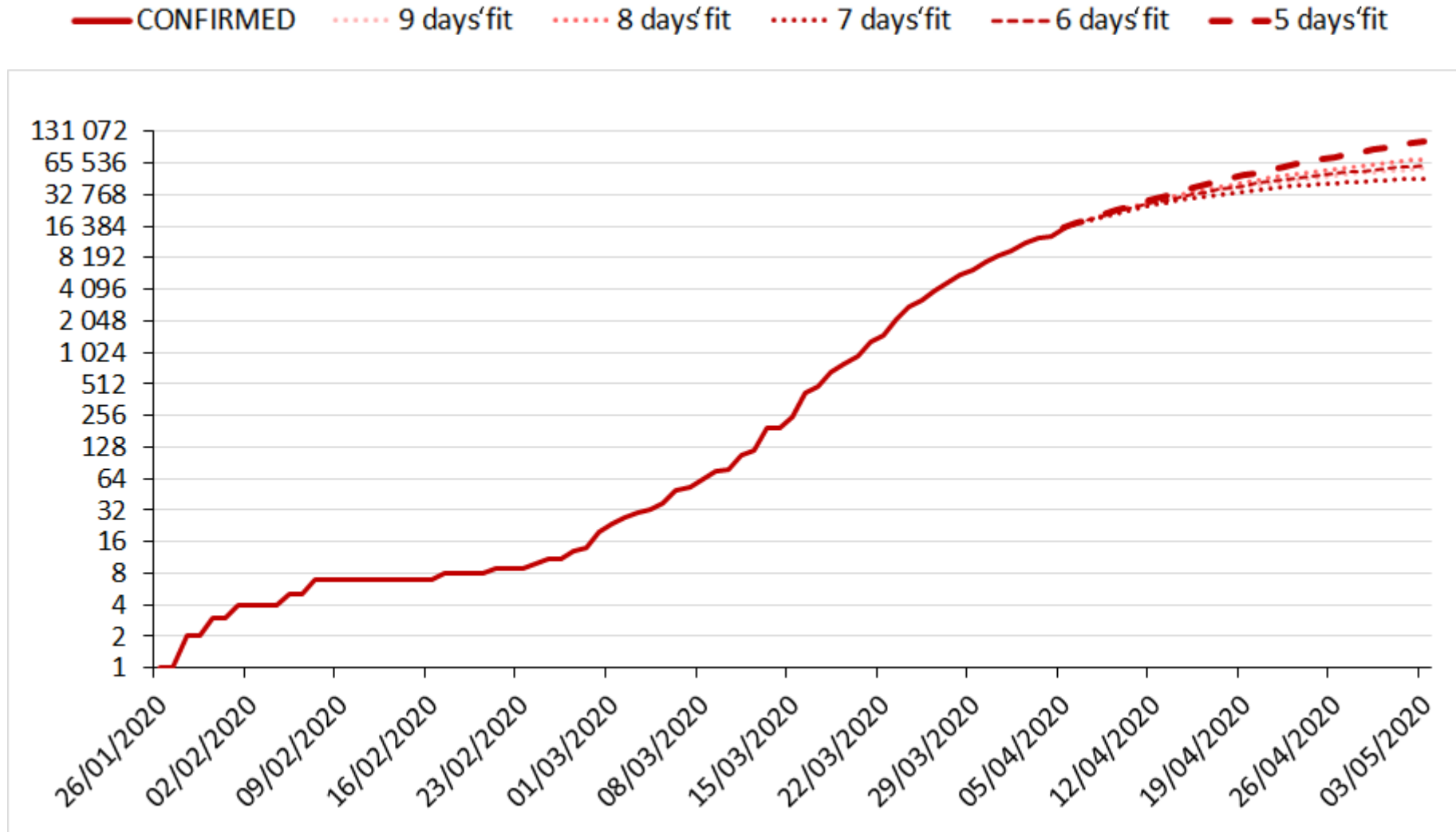
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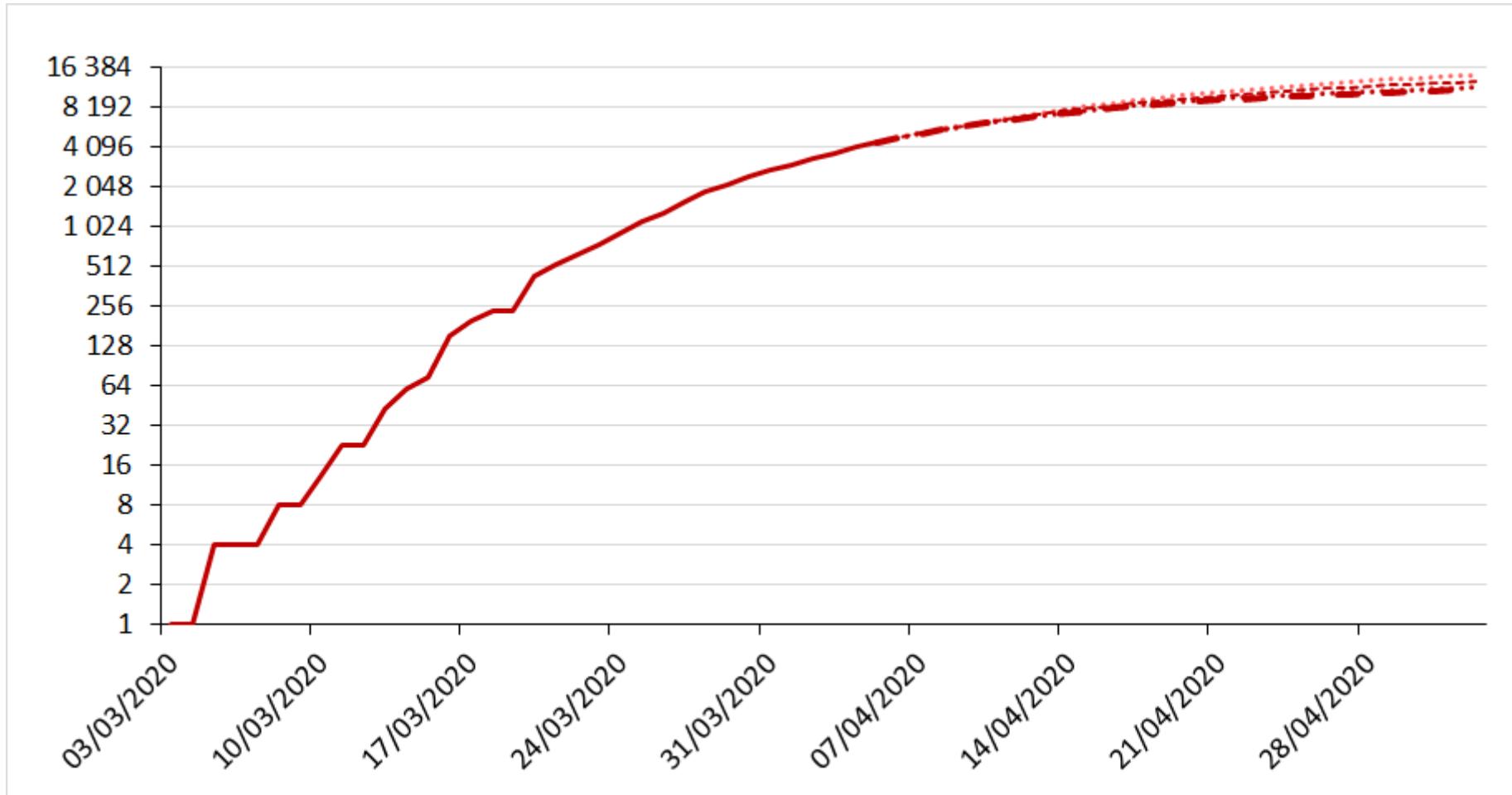
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Data: The Johns Hopkins University, Politolog.com

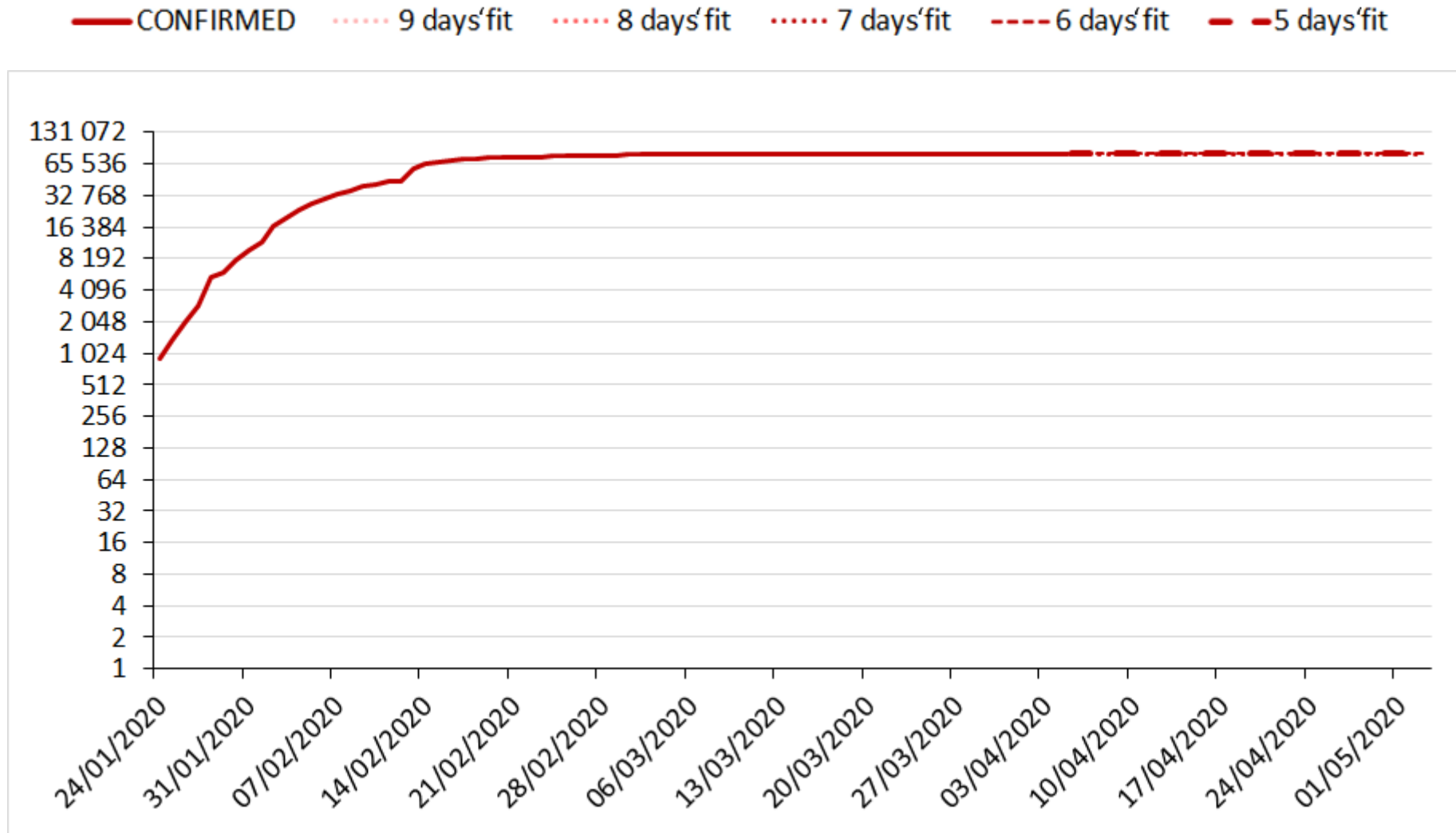
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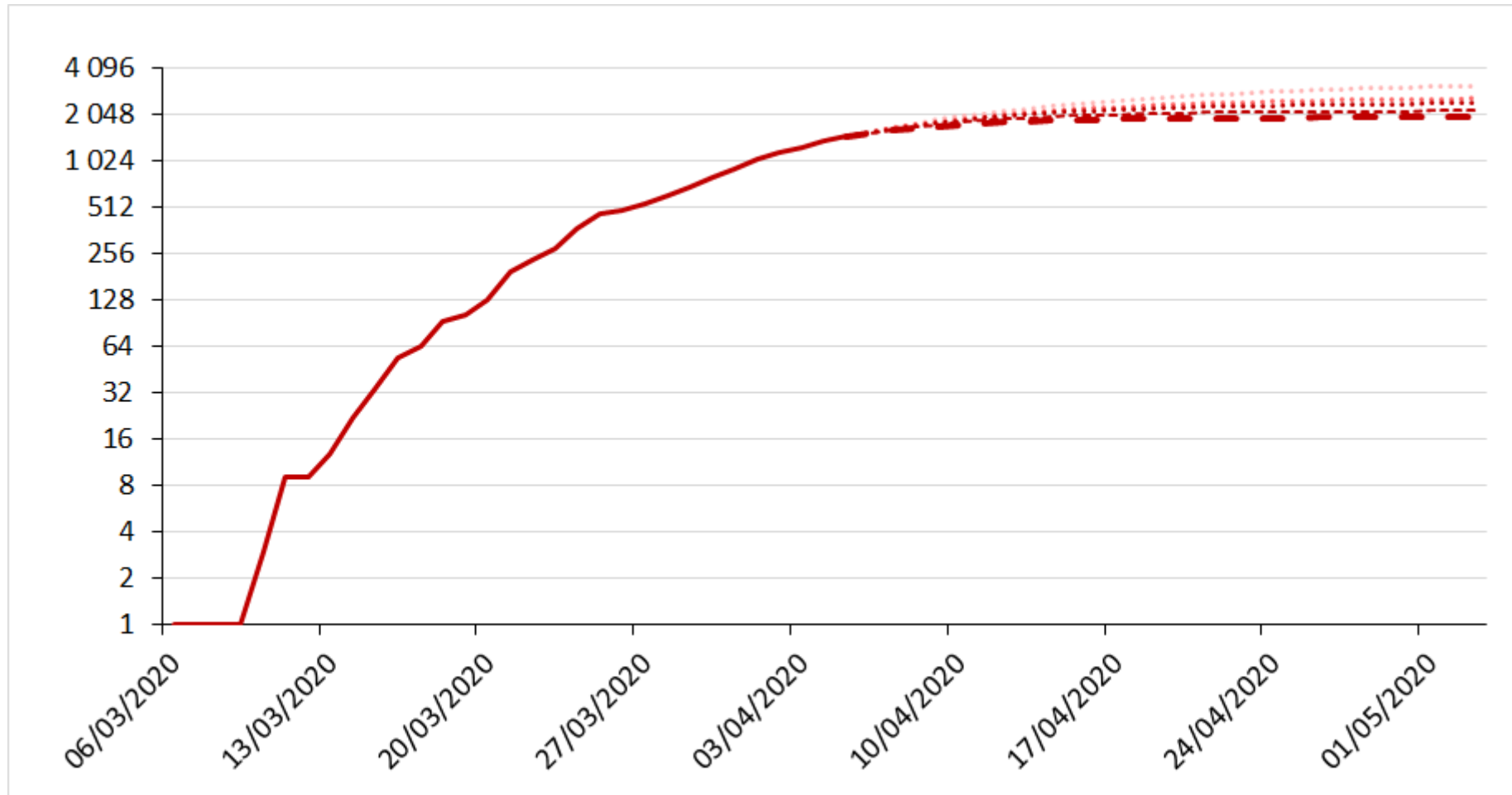
China



Data: The Johns Hopkins University, Politolog.com

Colombia

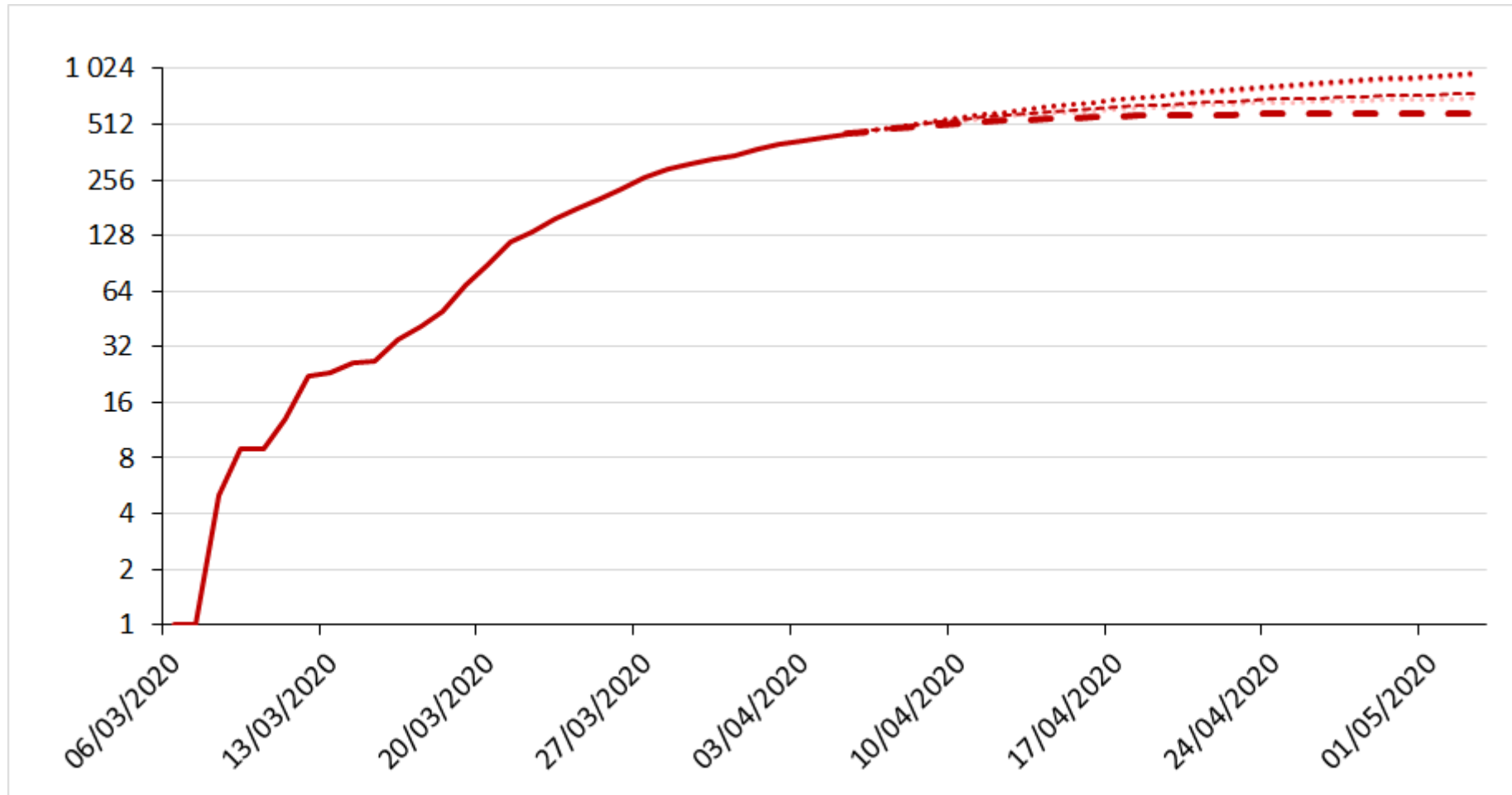
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Data: The Johns Hopkins University, Politolog.com

Costa Rica

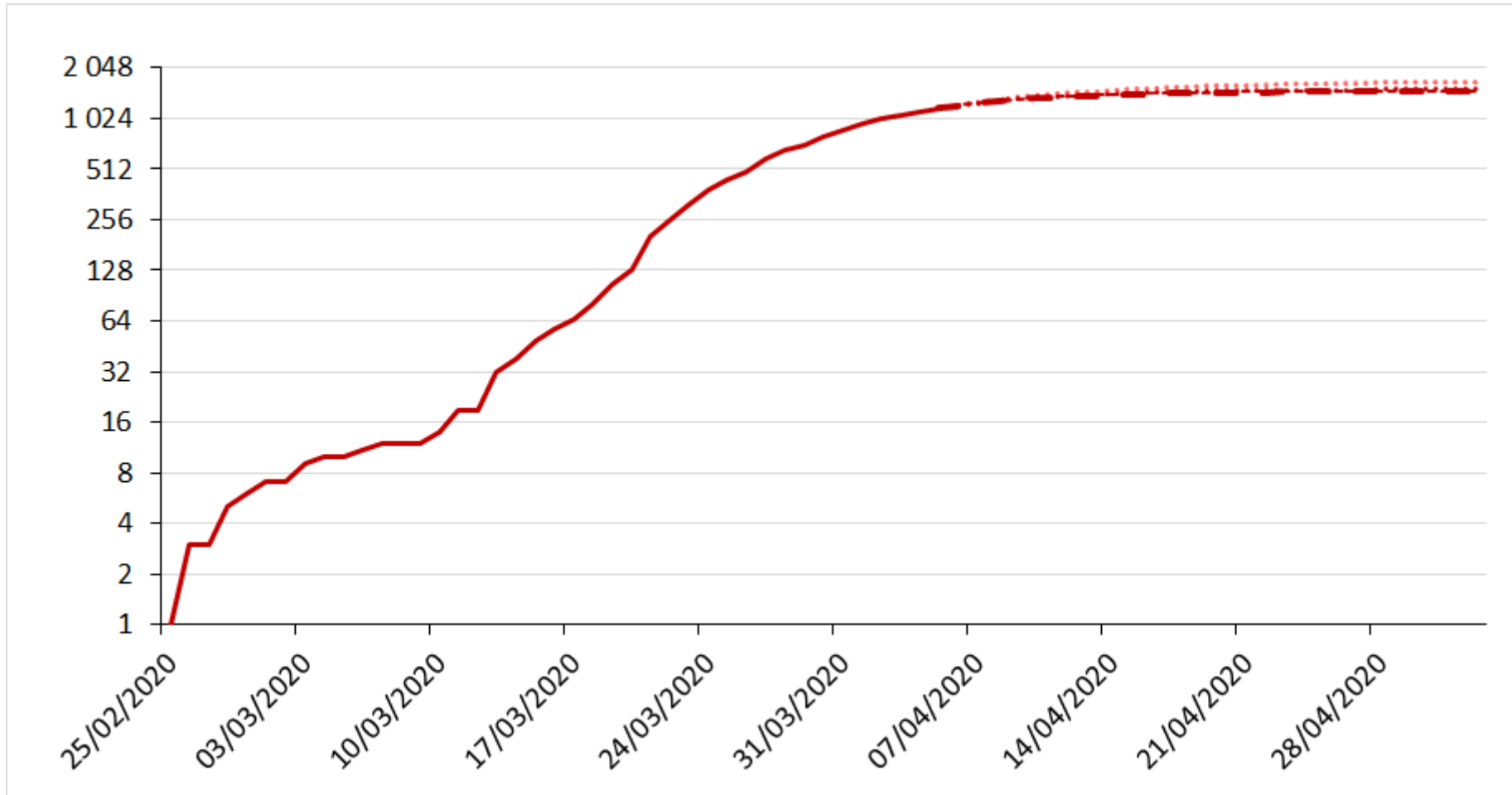
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Croatia

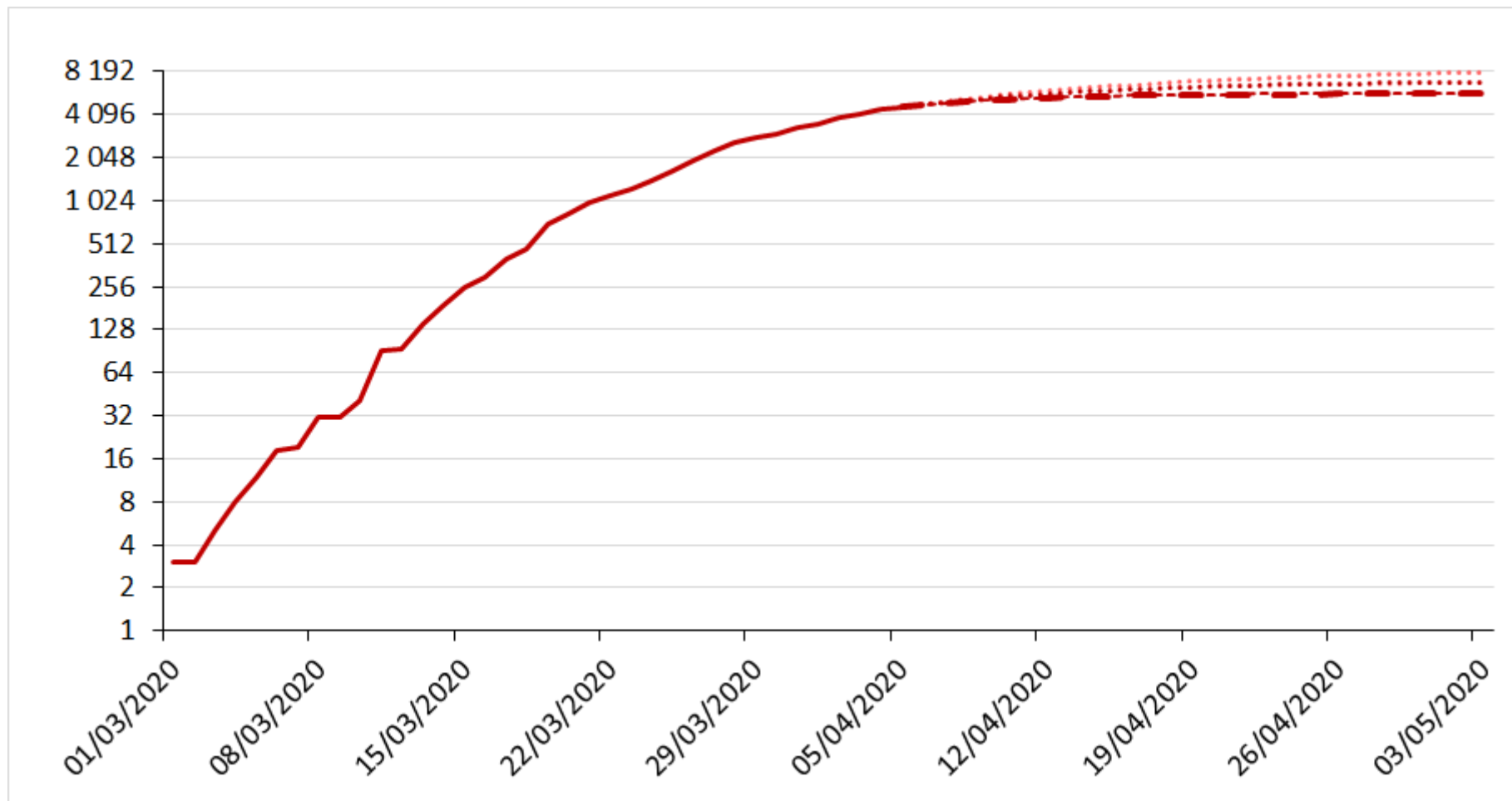
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Czech Republic

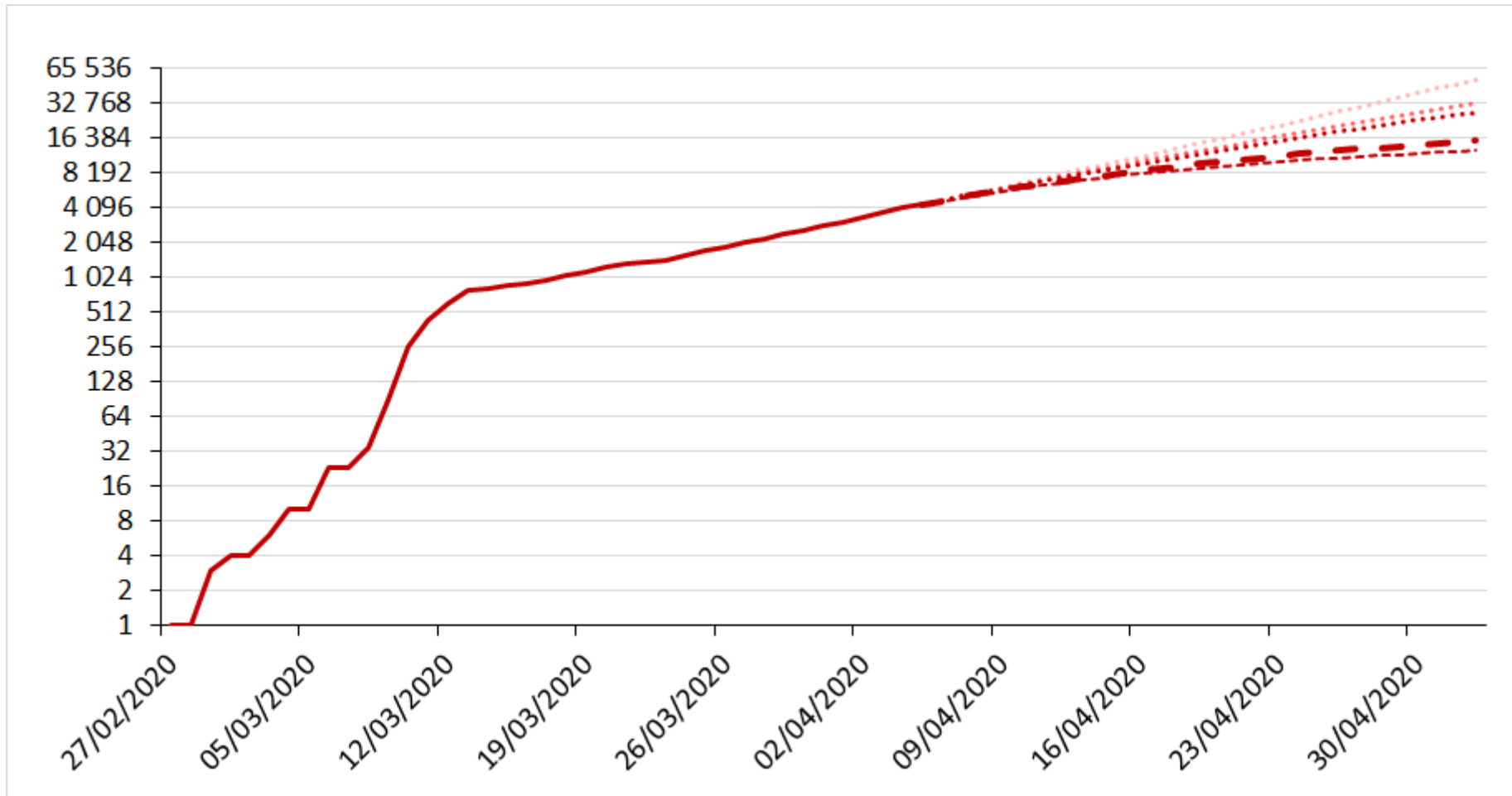
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Data: The Johns Hopkins University, Politolog.com

Denmark

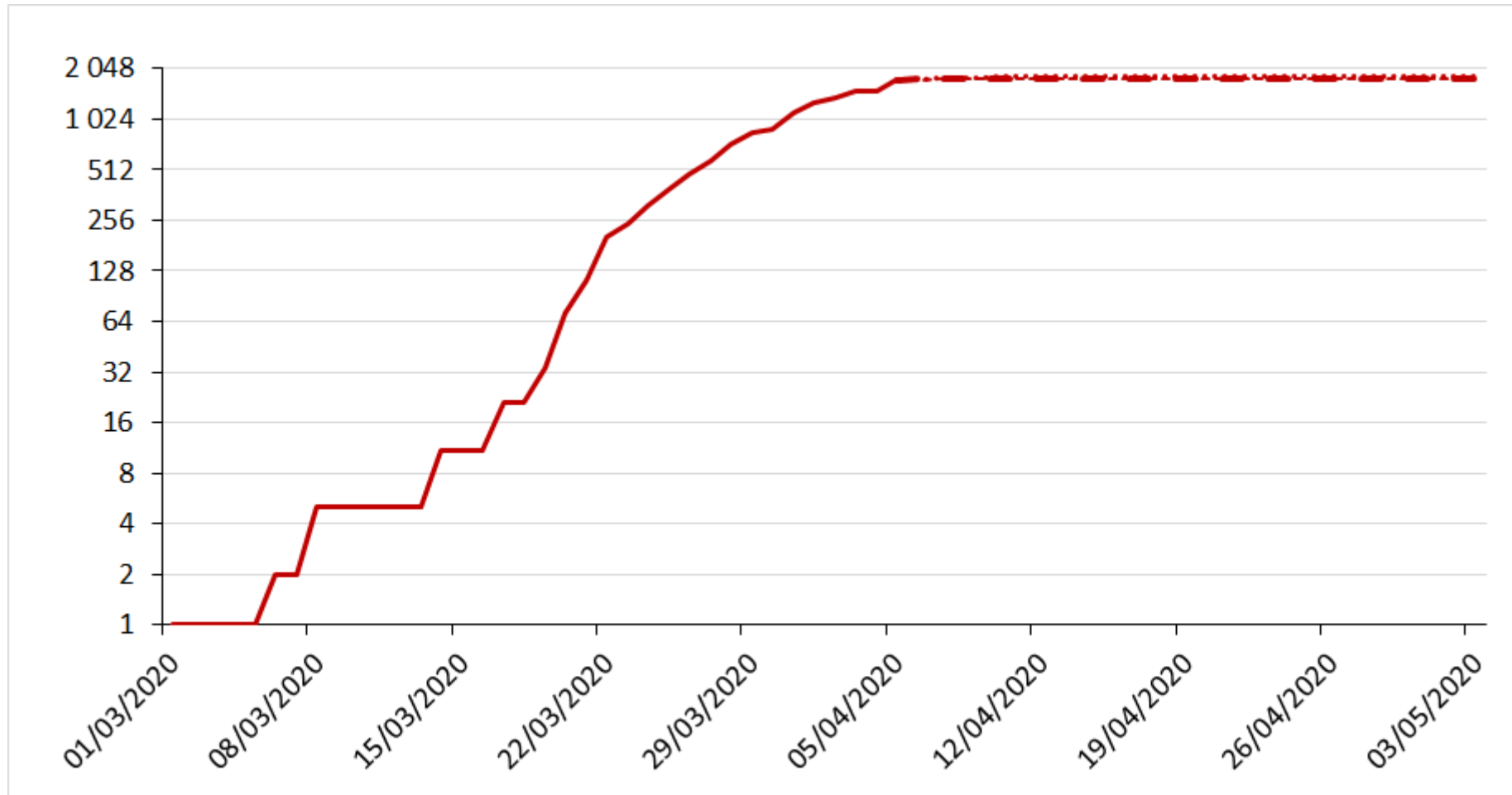
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Dominican Republic

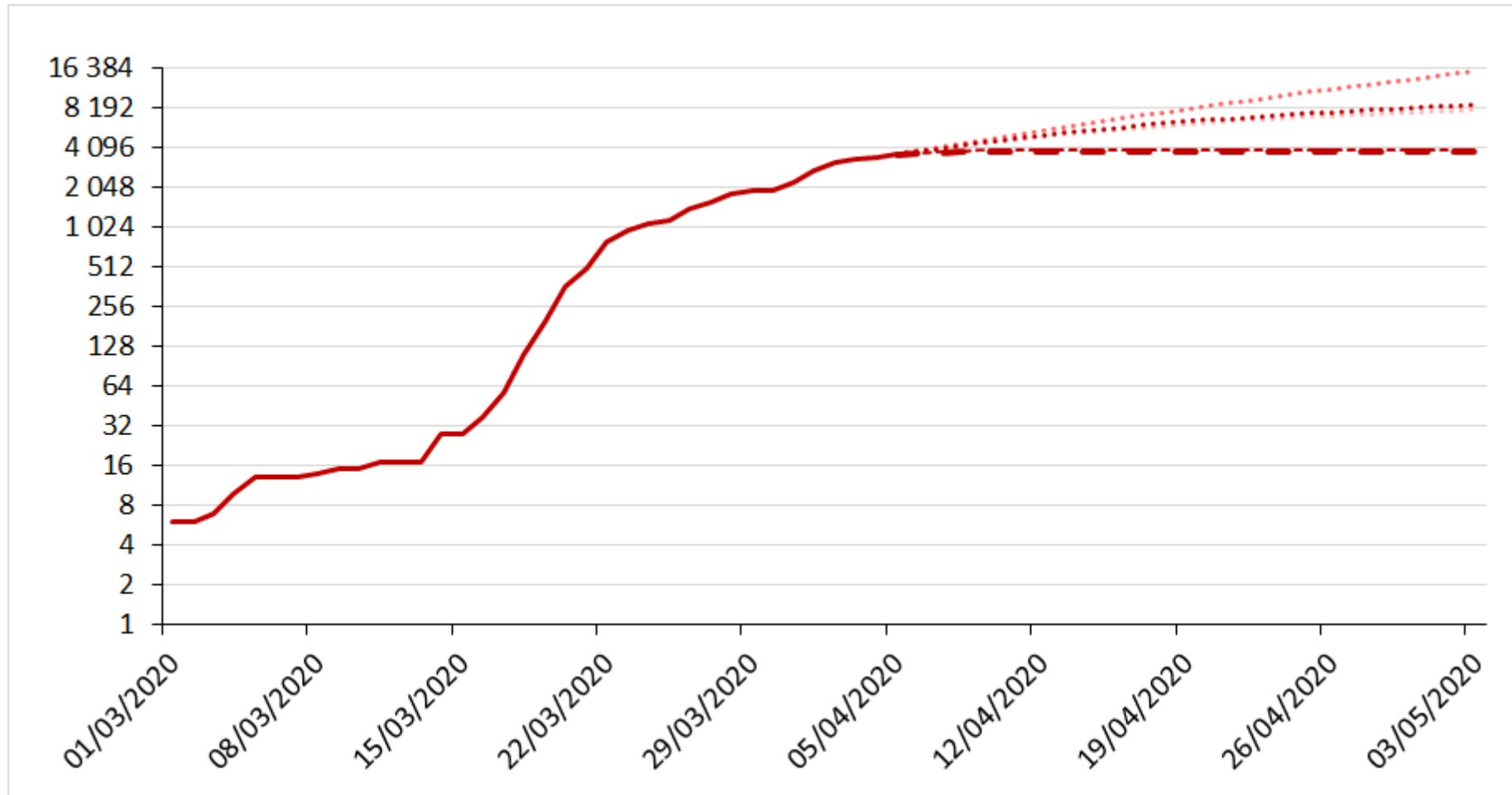
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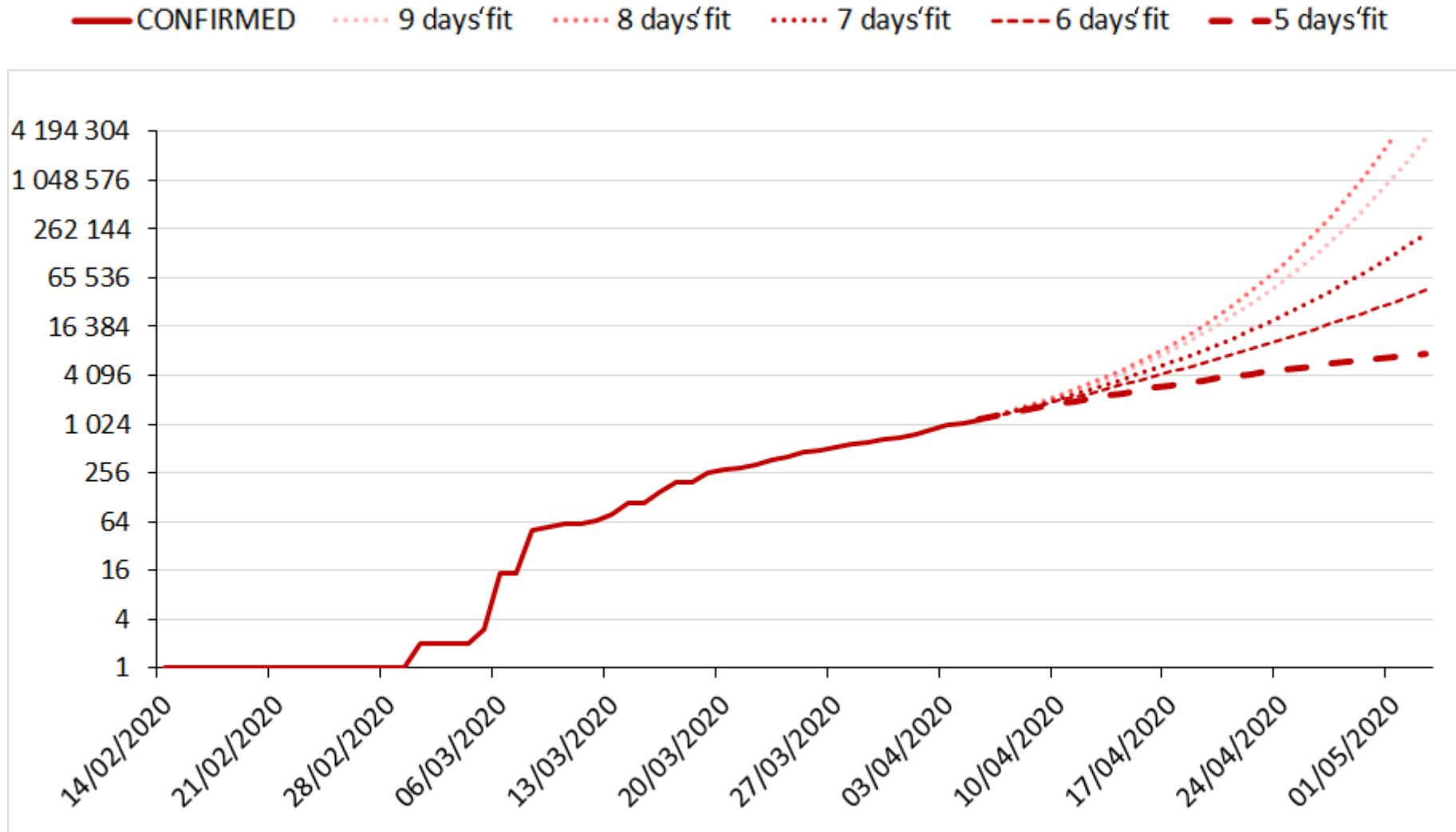
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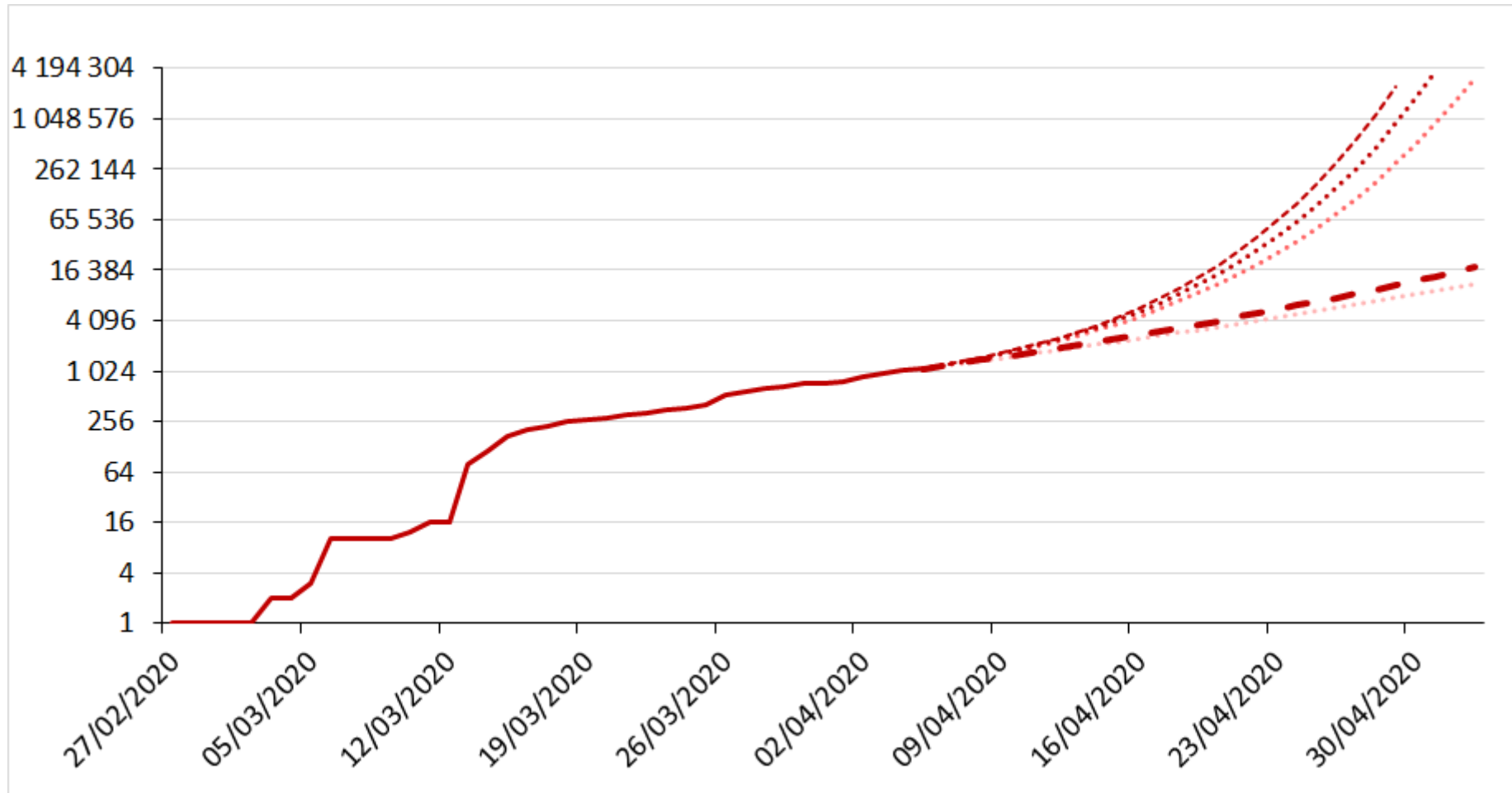
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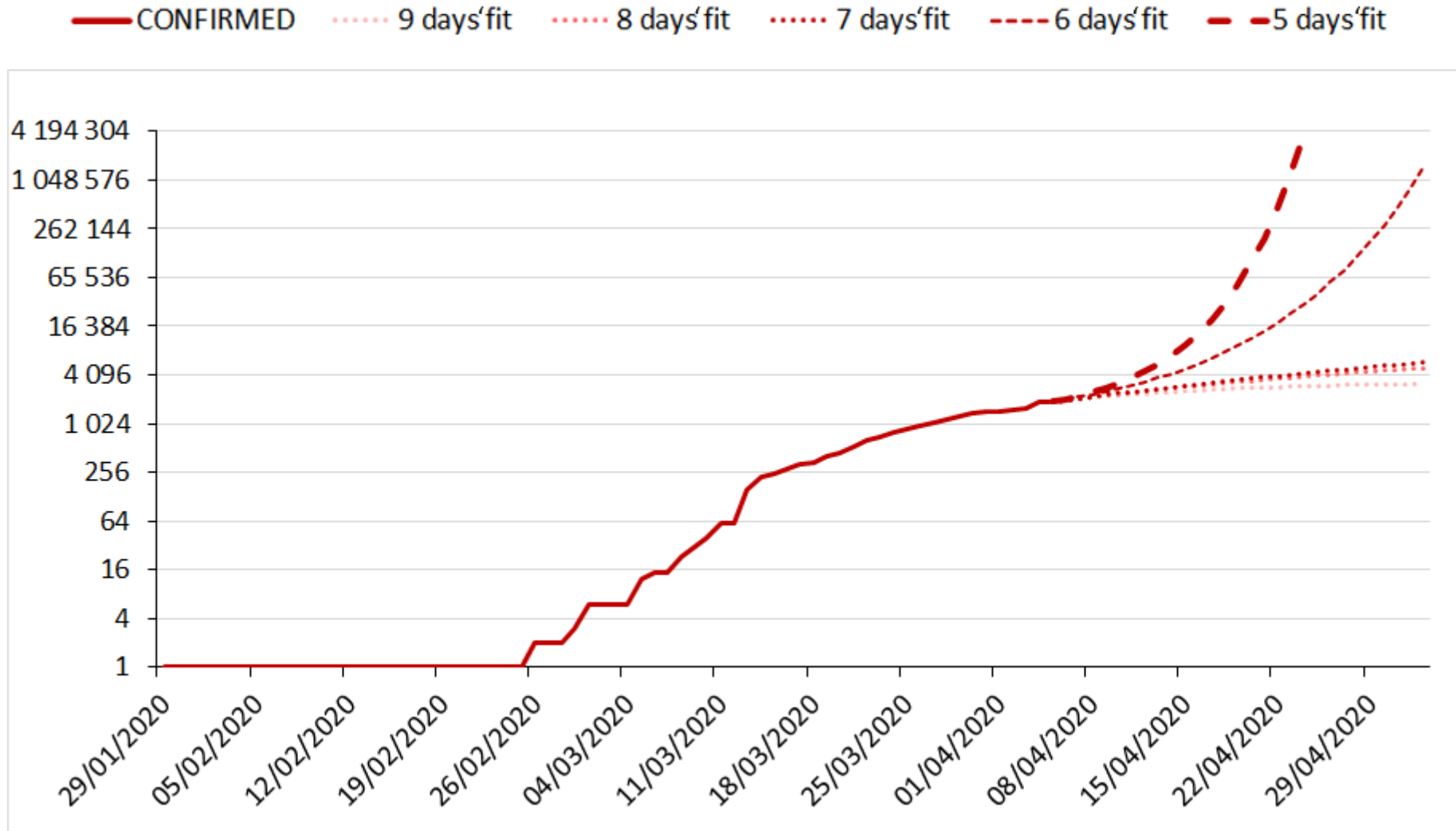
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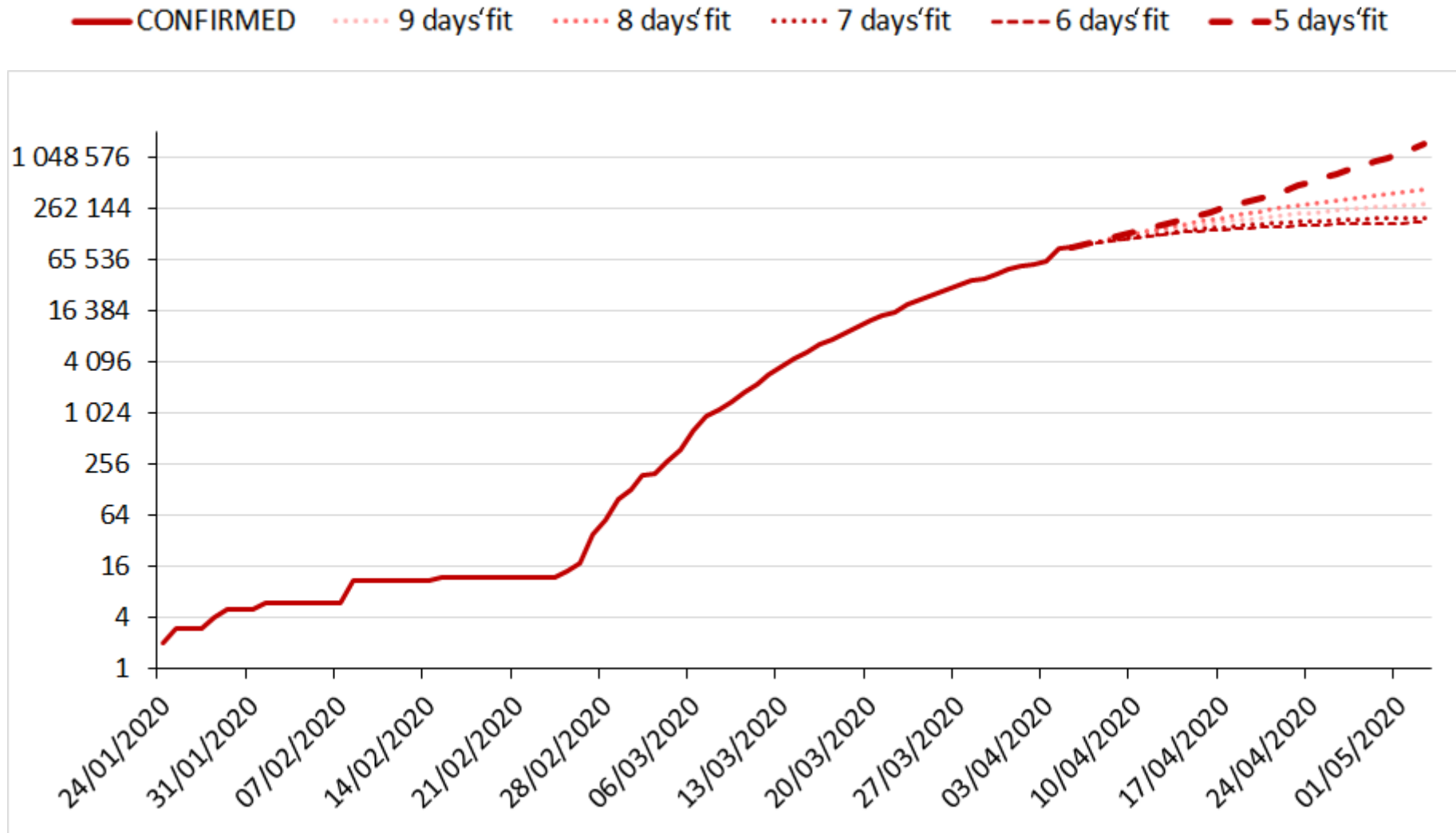
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Finland



Data: The Johns Hopkins University, Politolog.com

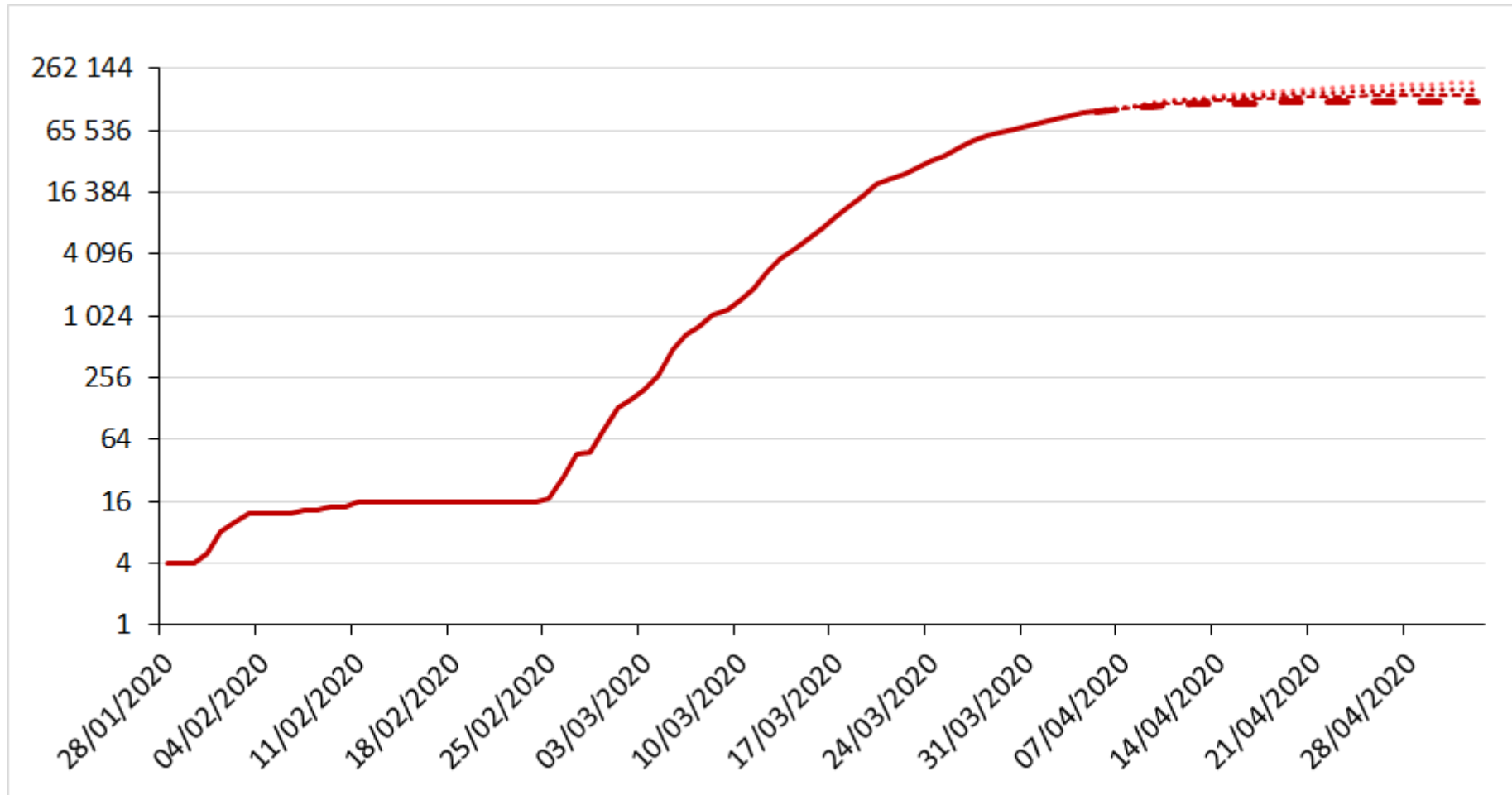
France



Data: The Johns Hopkins University, Politolog.com

Germany

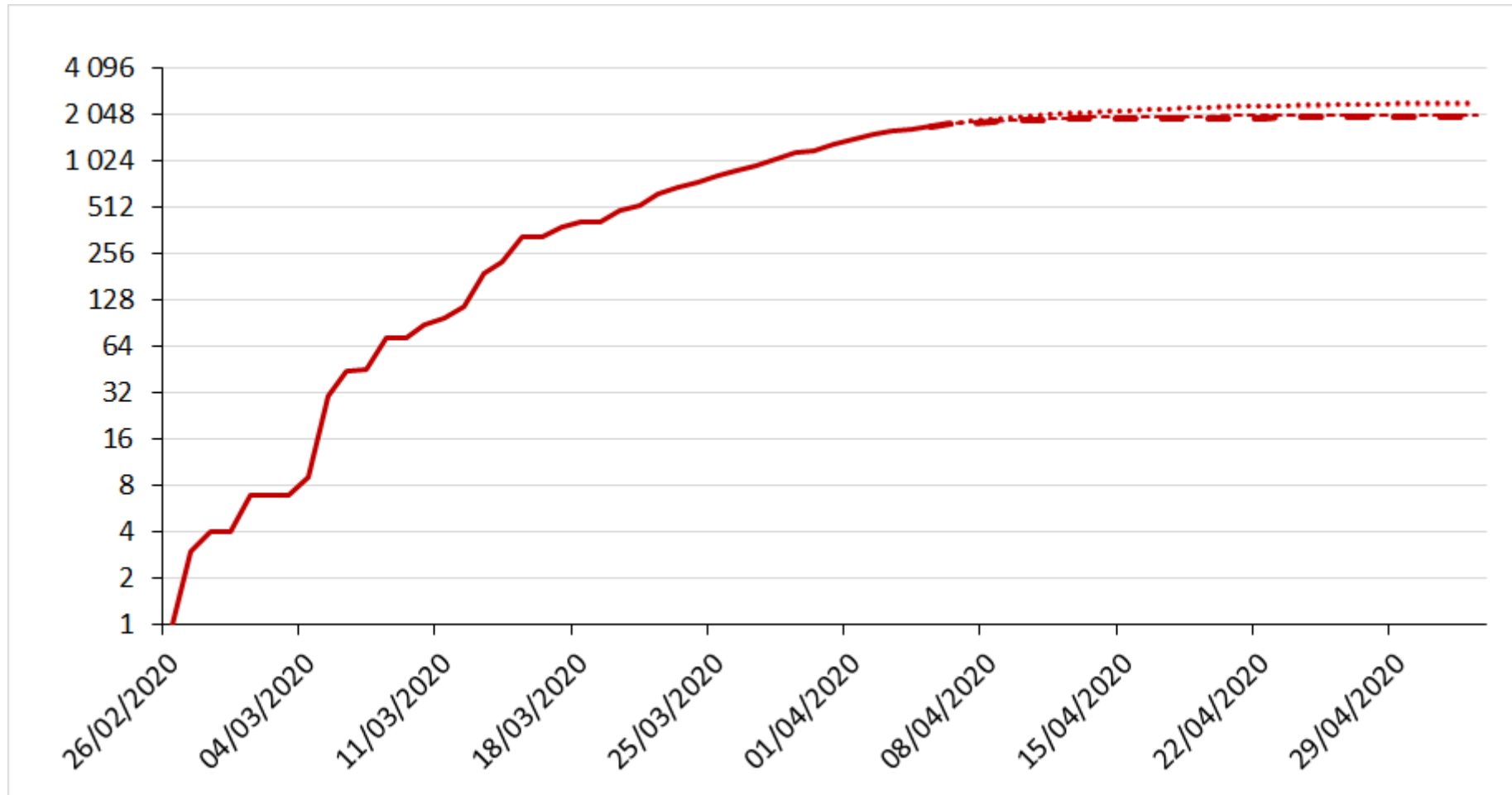
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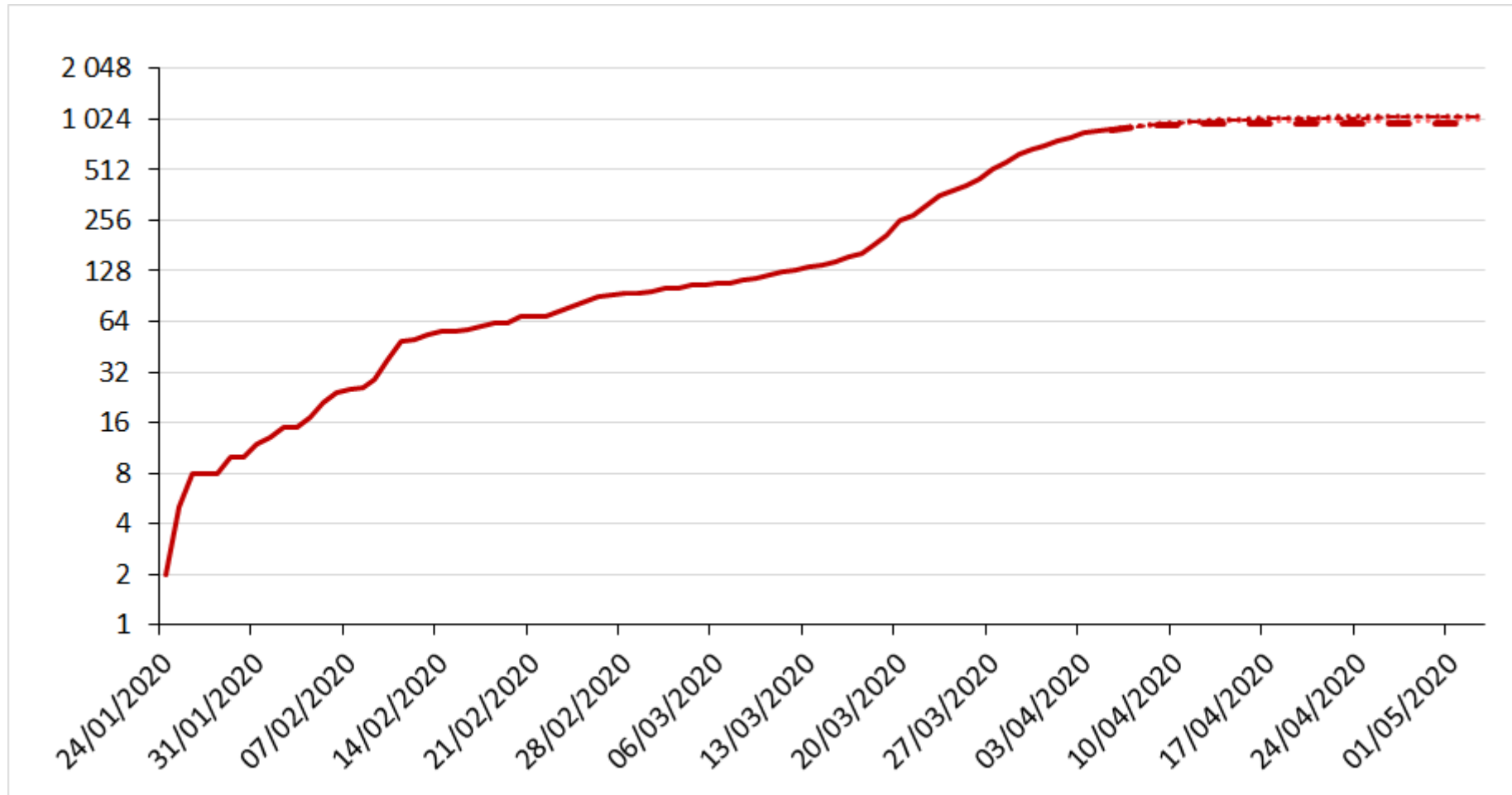
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Hong Kong

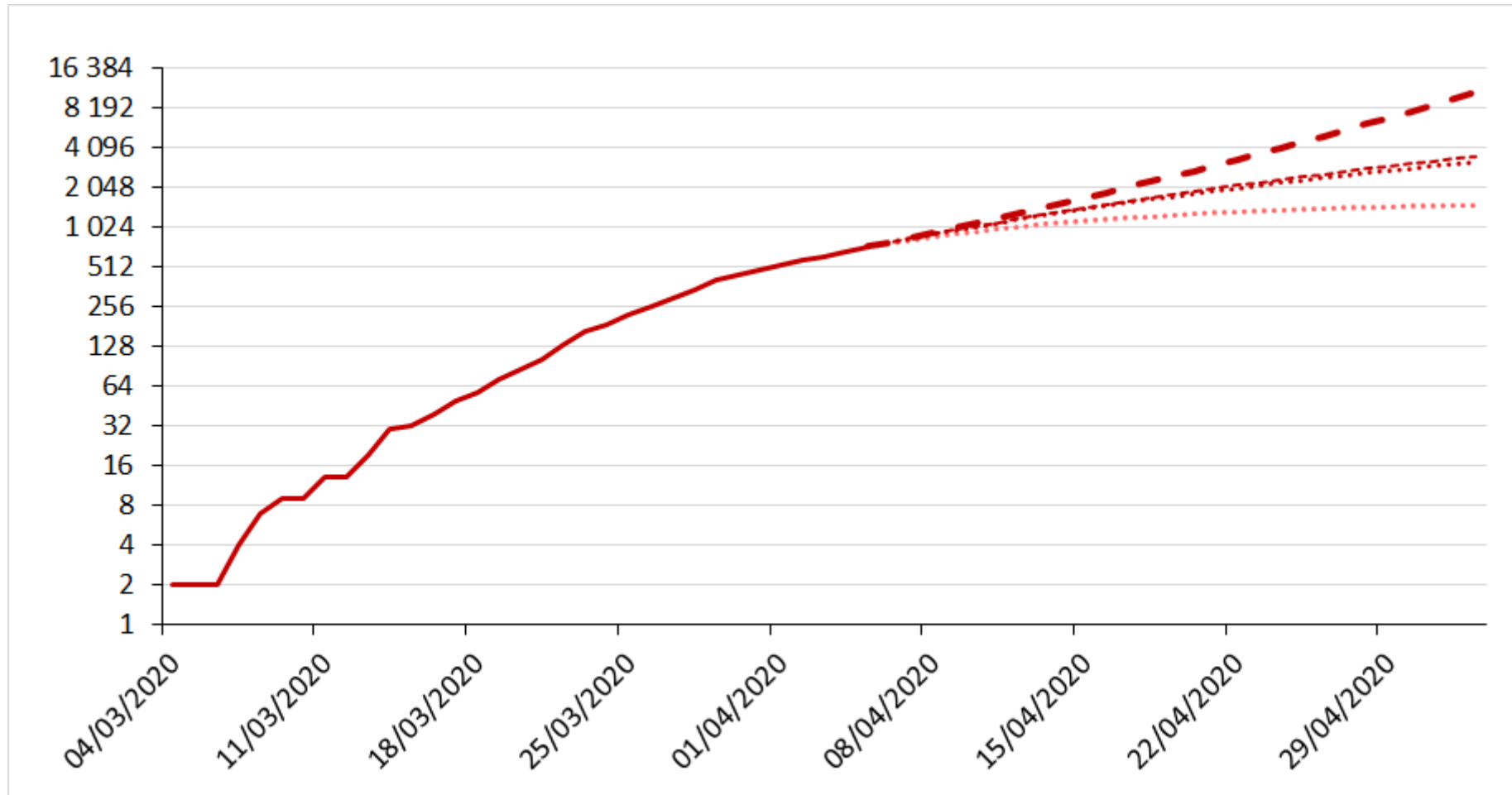
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Hungary

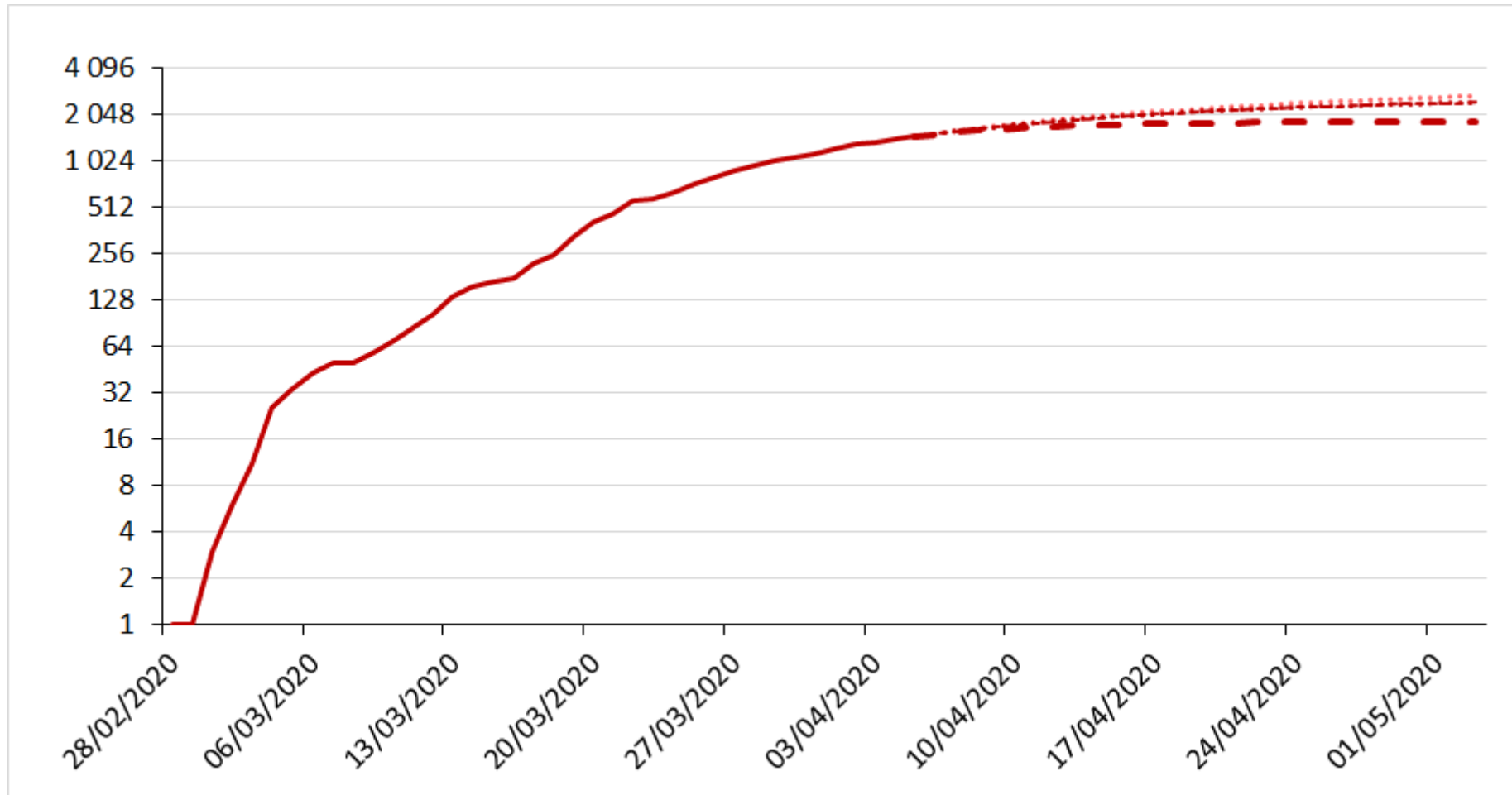
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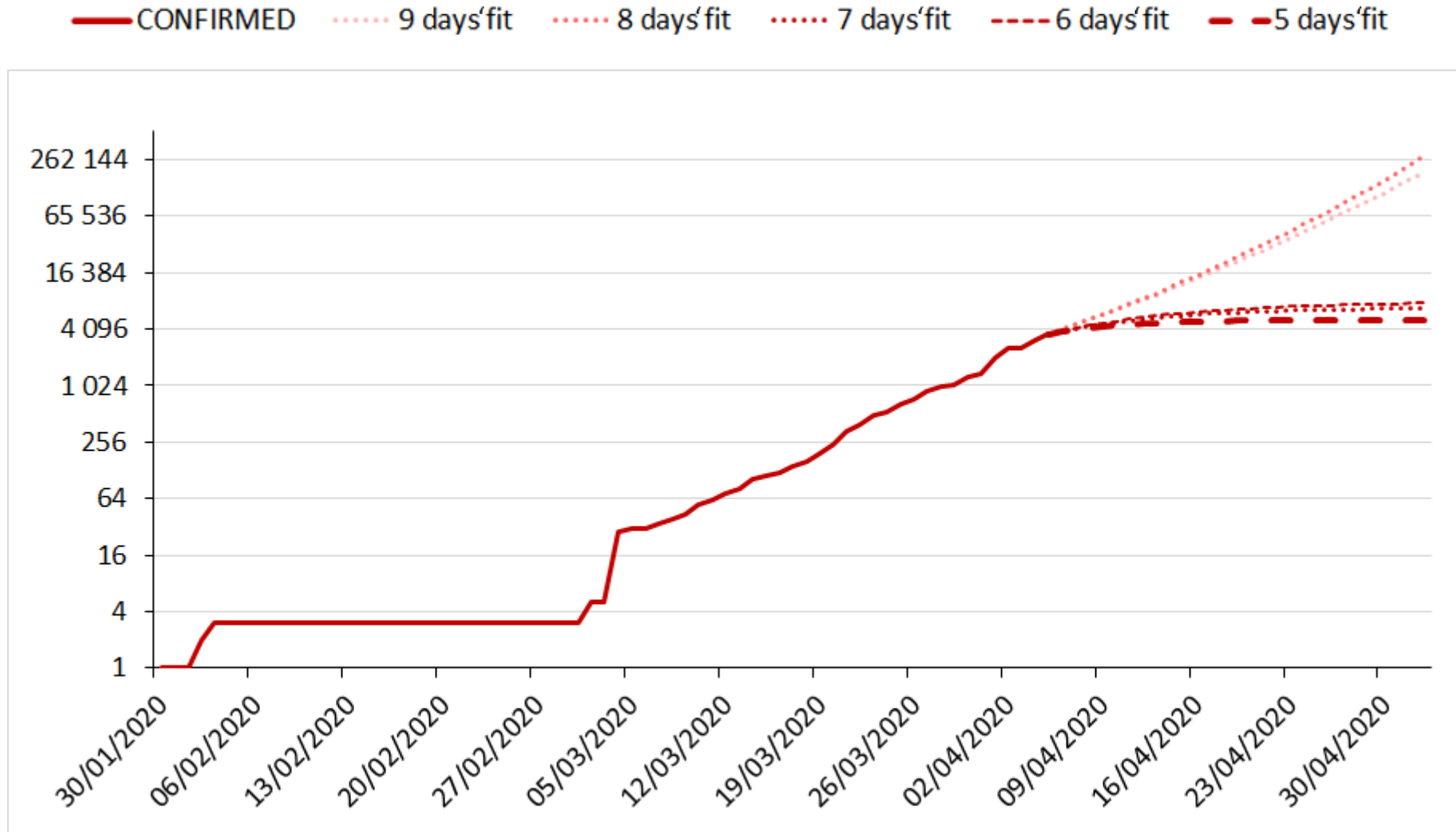
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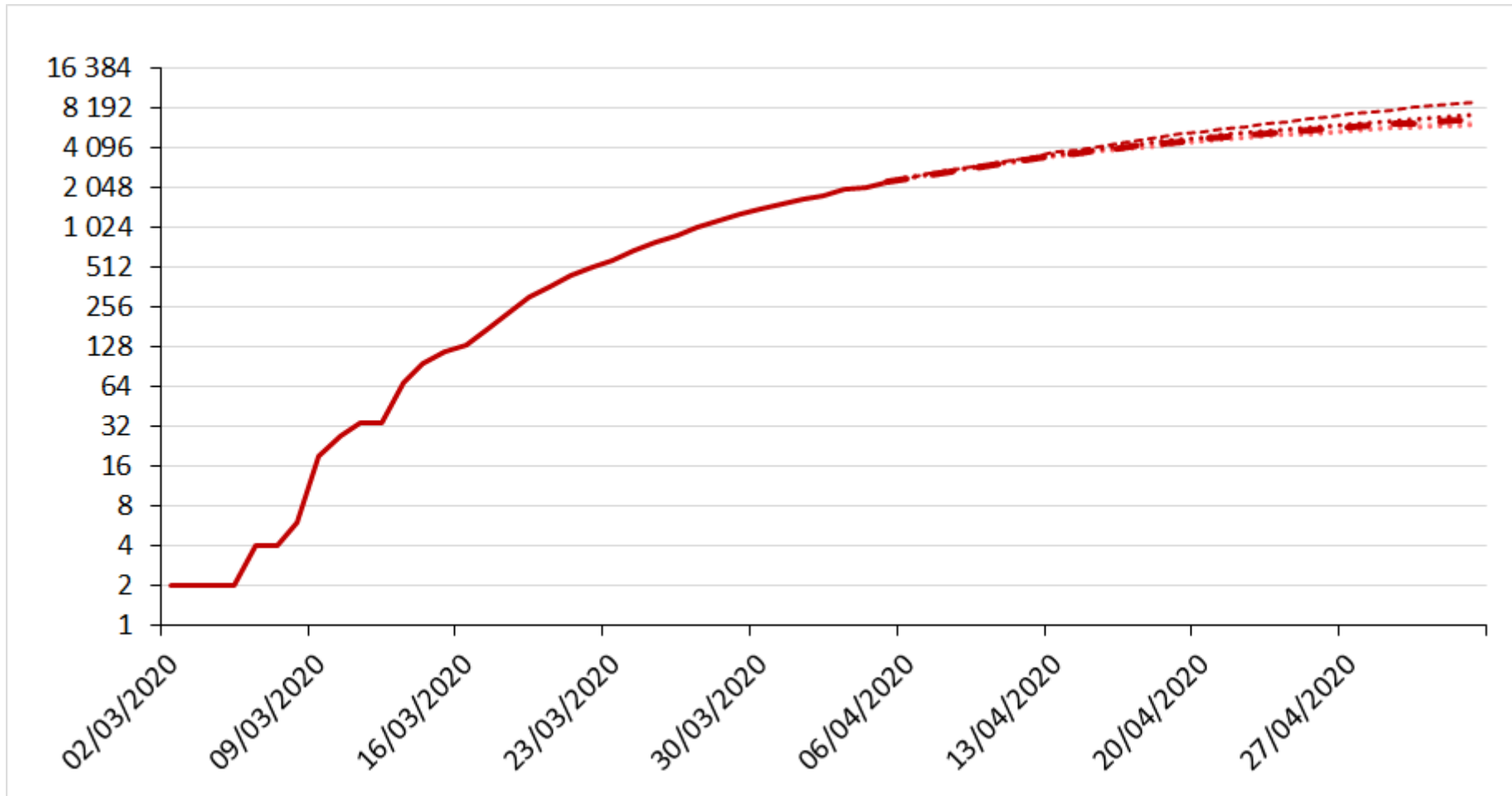
India



Data: The Johns Hopkins University, Politolog.com

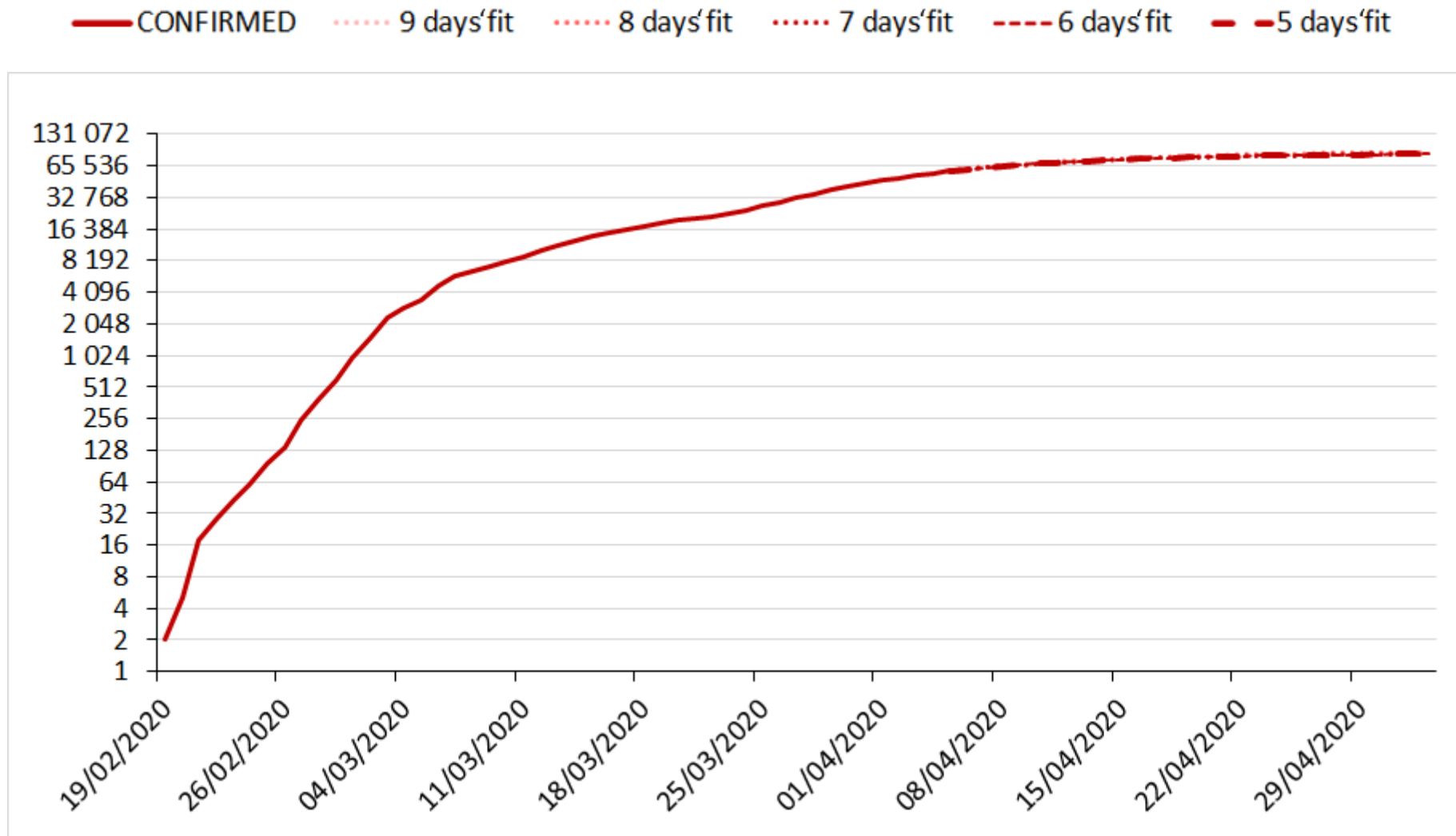
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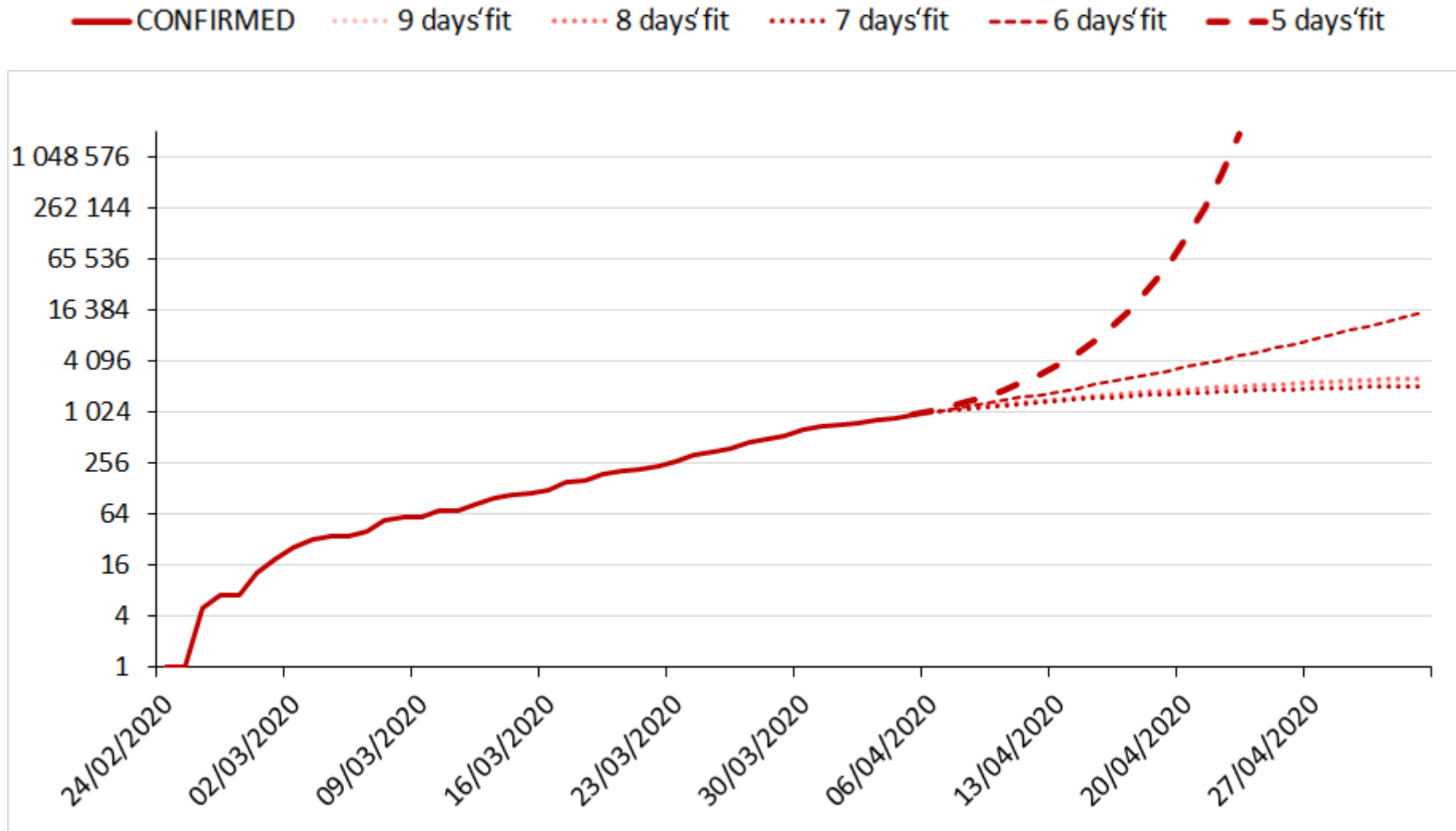
Data: The Johns Hopkins University, Politolog.com

Iran



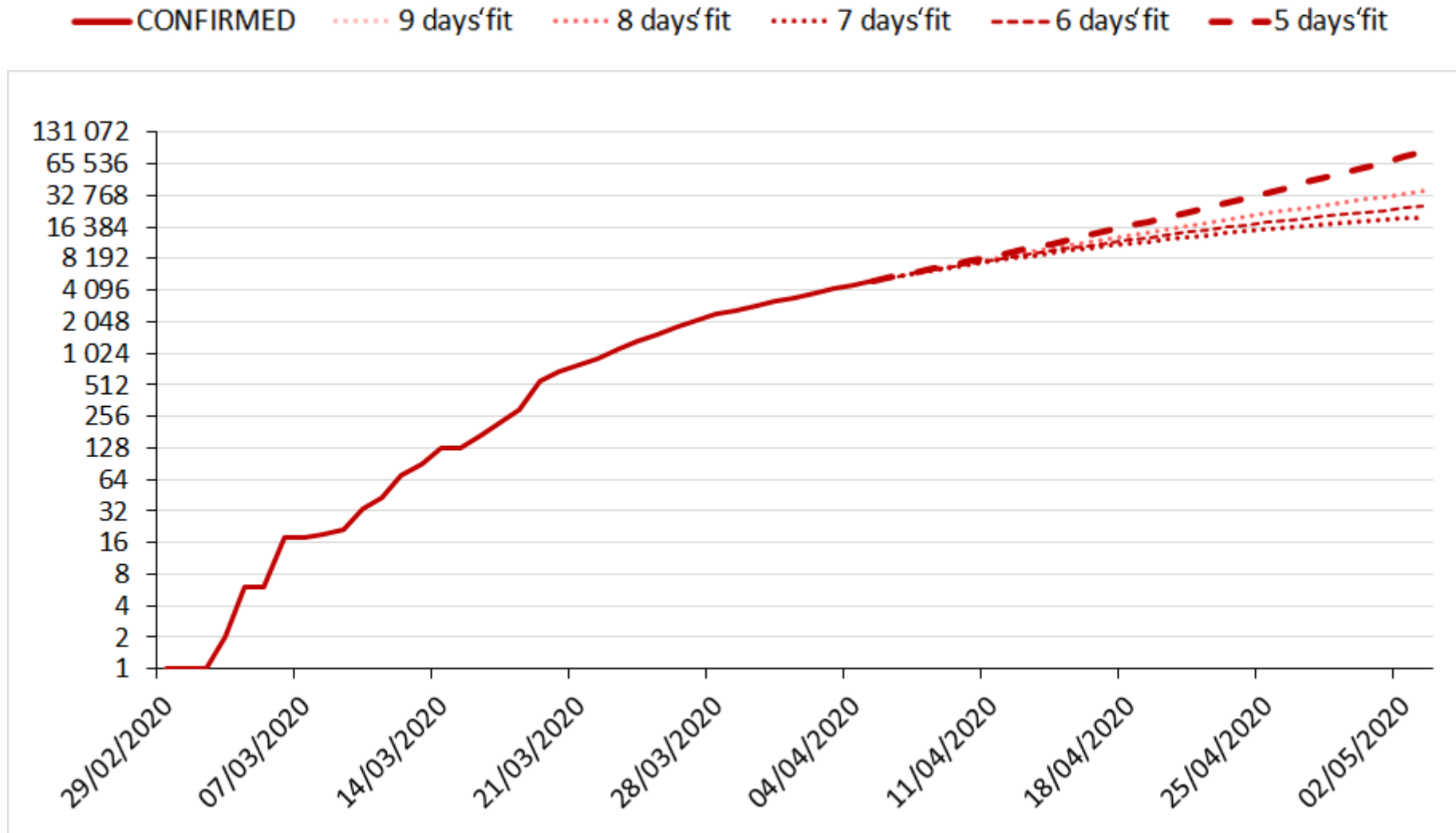
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Iraq



Data: The Johns Hopkins University, Politolog.com

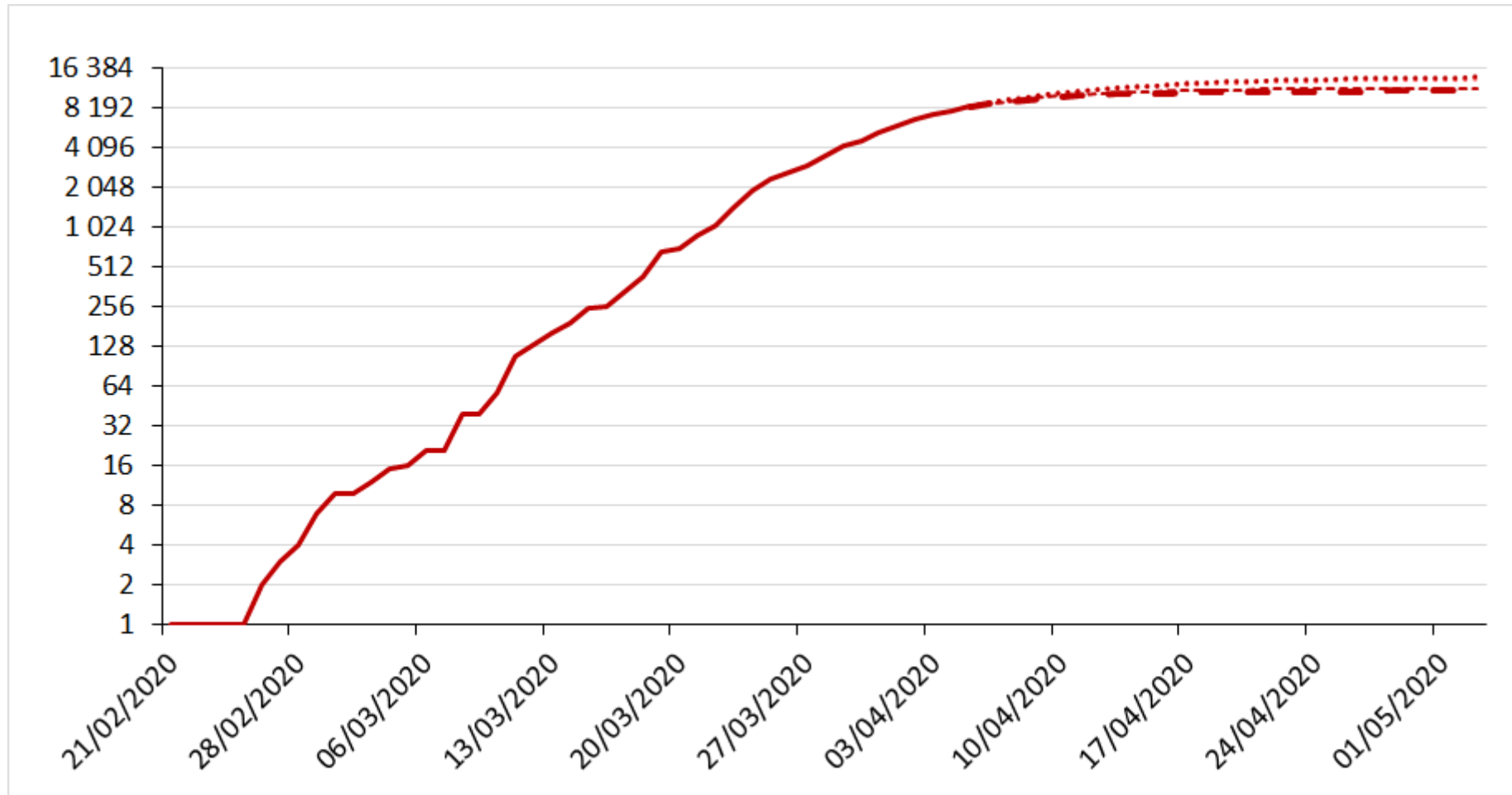
Ireland



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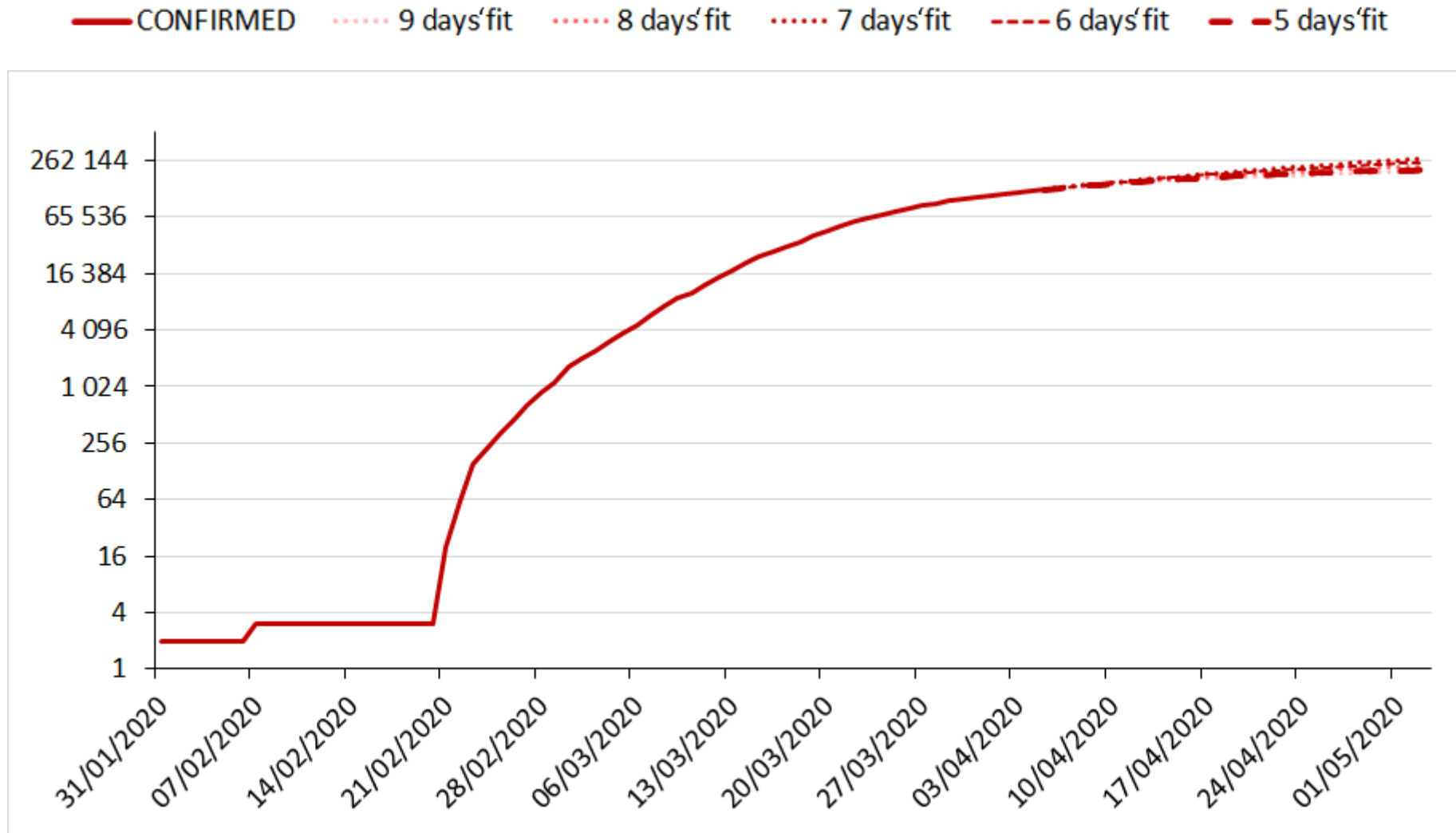
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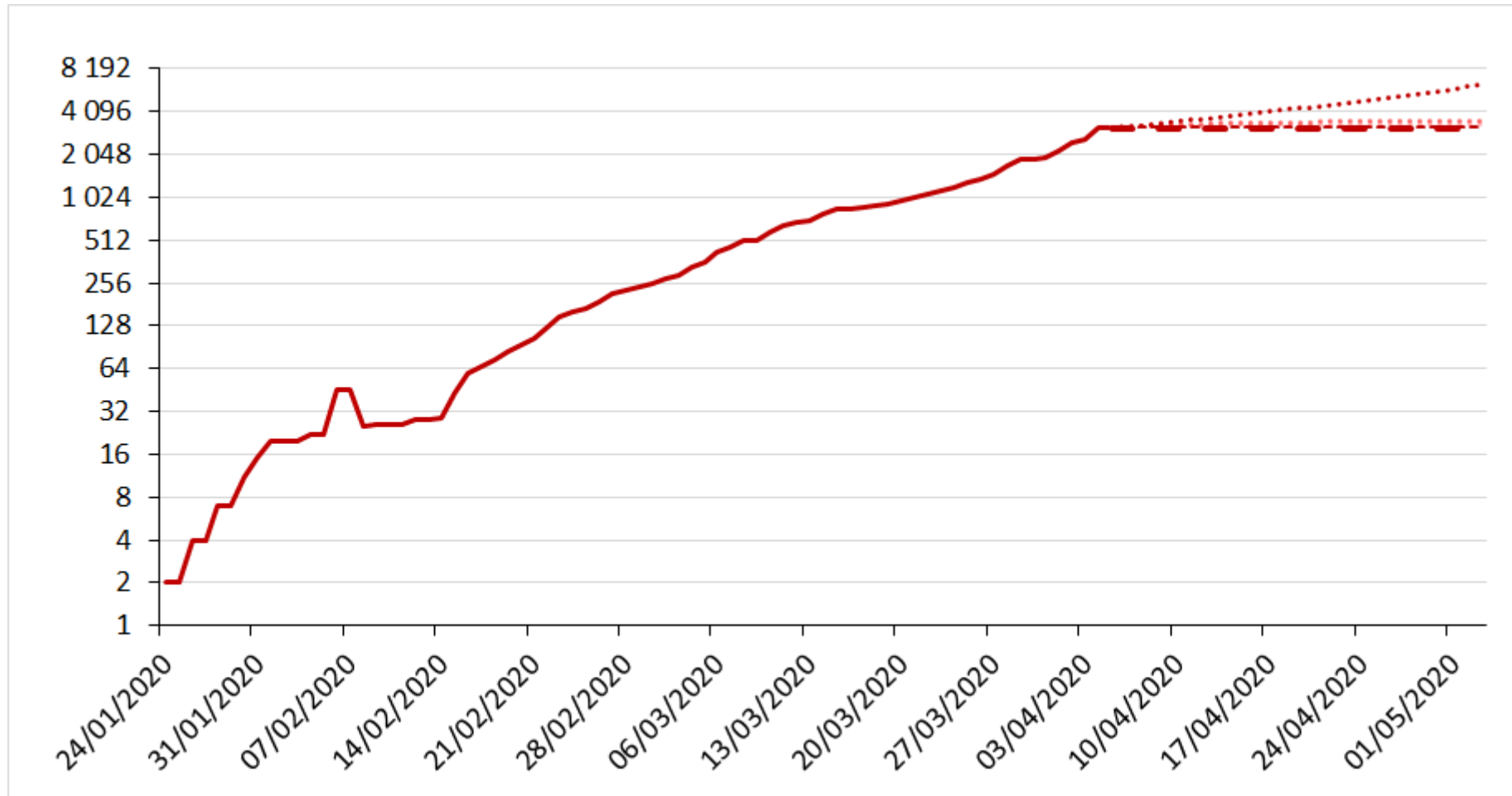
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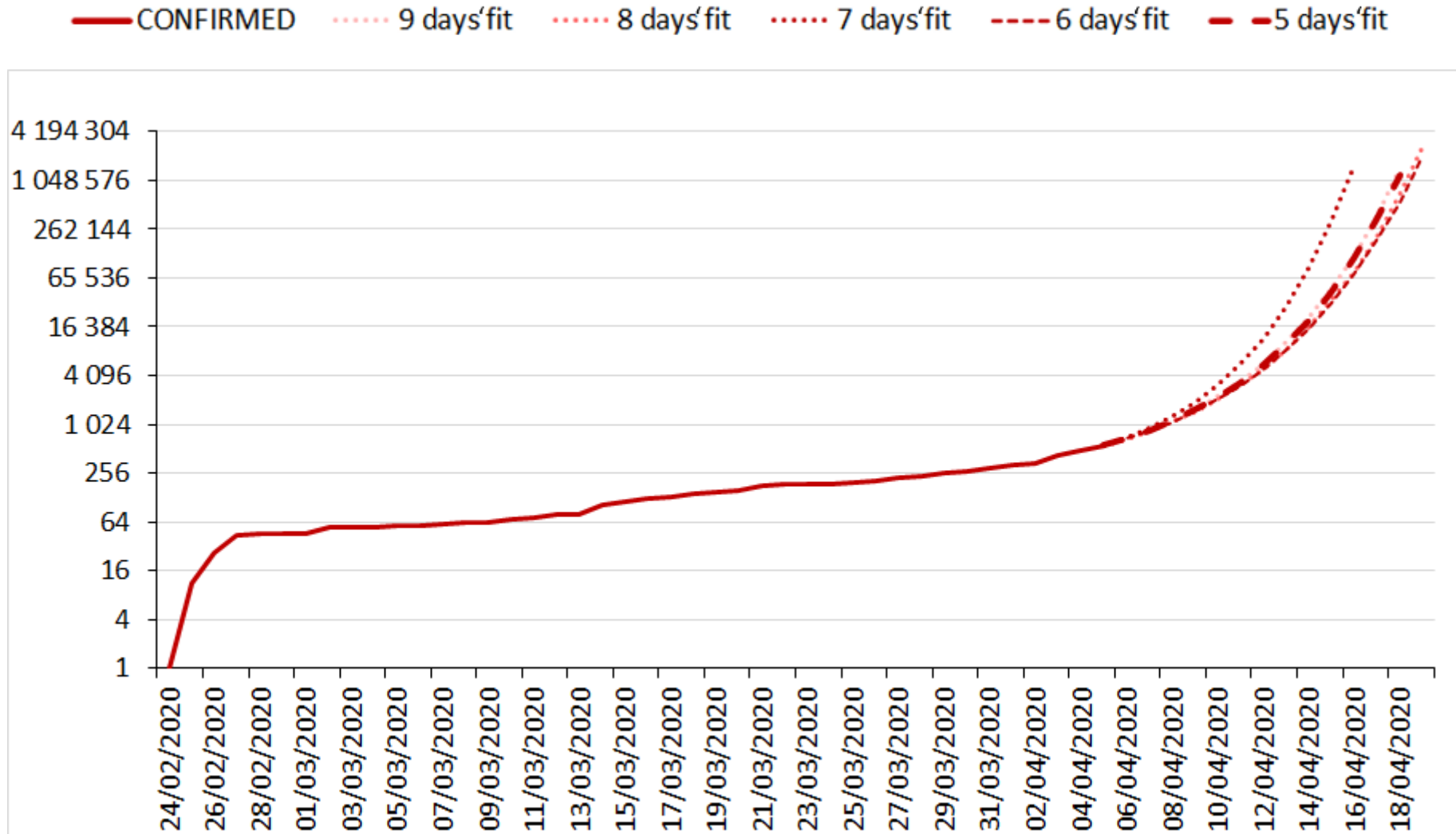
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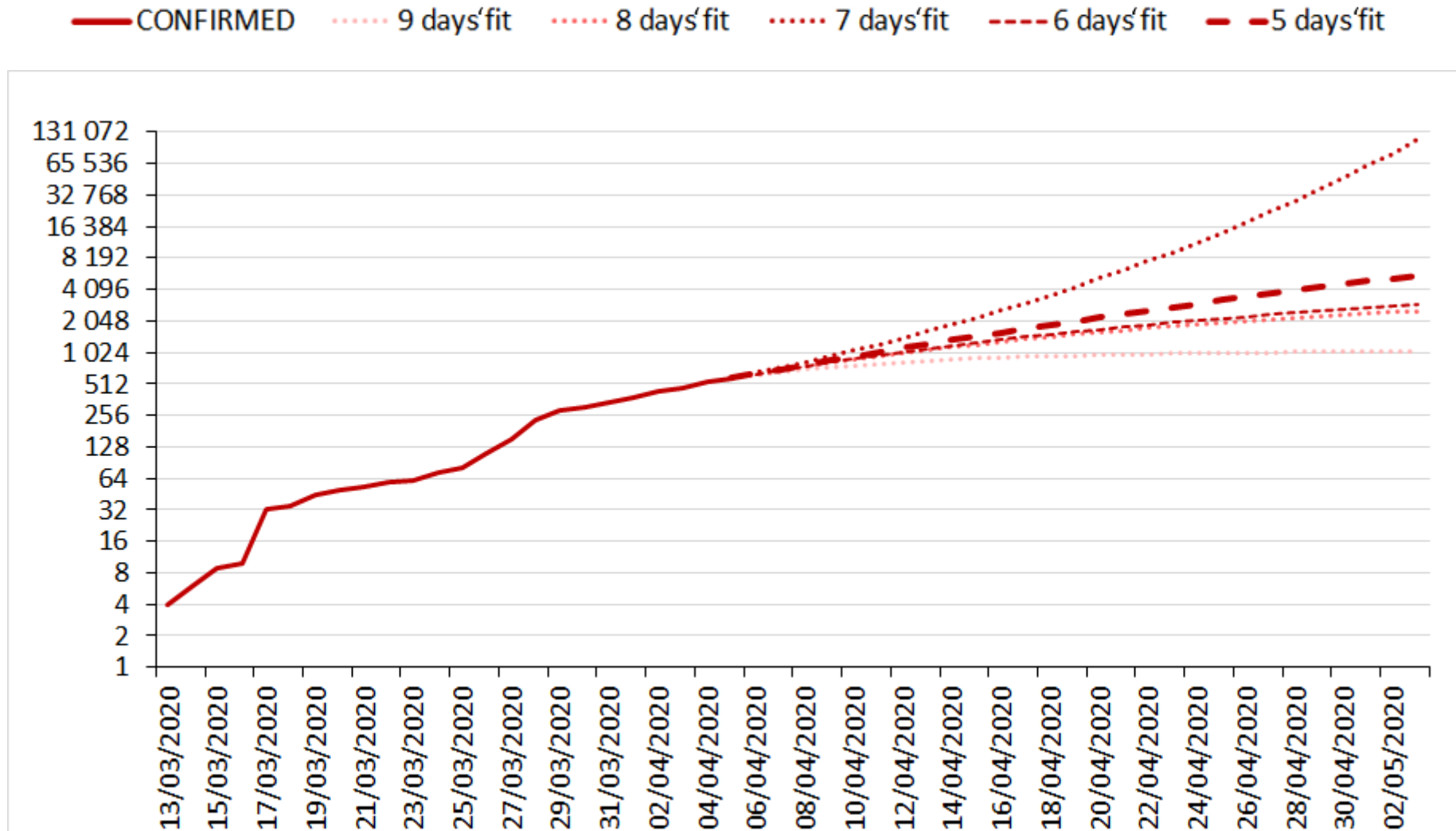
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Kuwait



Data: The Johns Hopkins University, Politolog.com

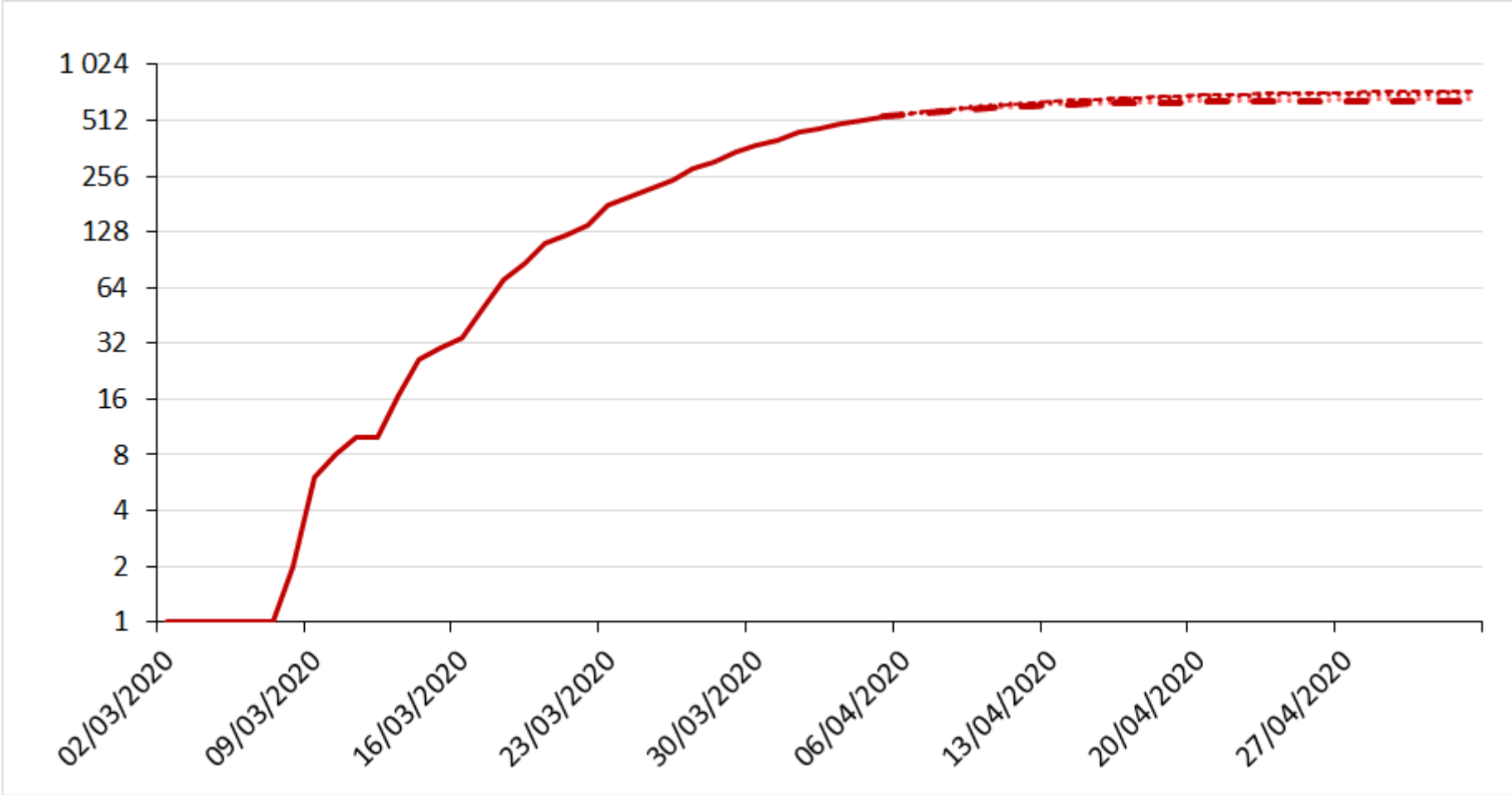
Kazakhstan



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Latvia

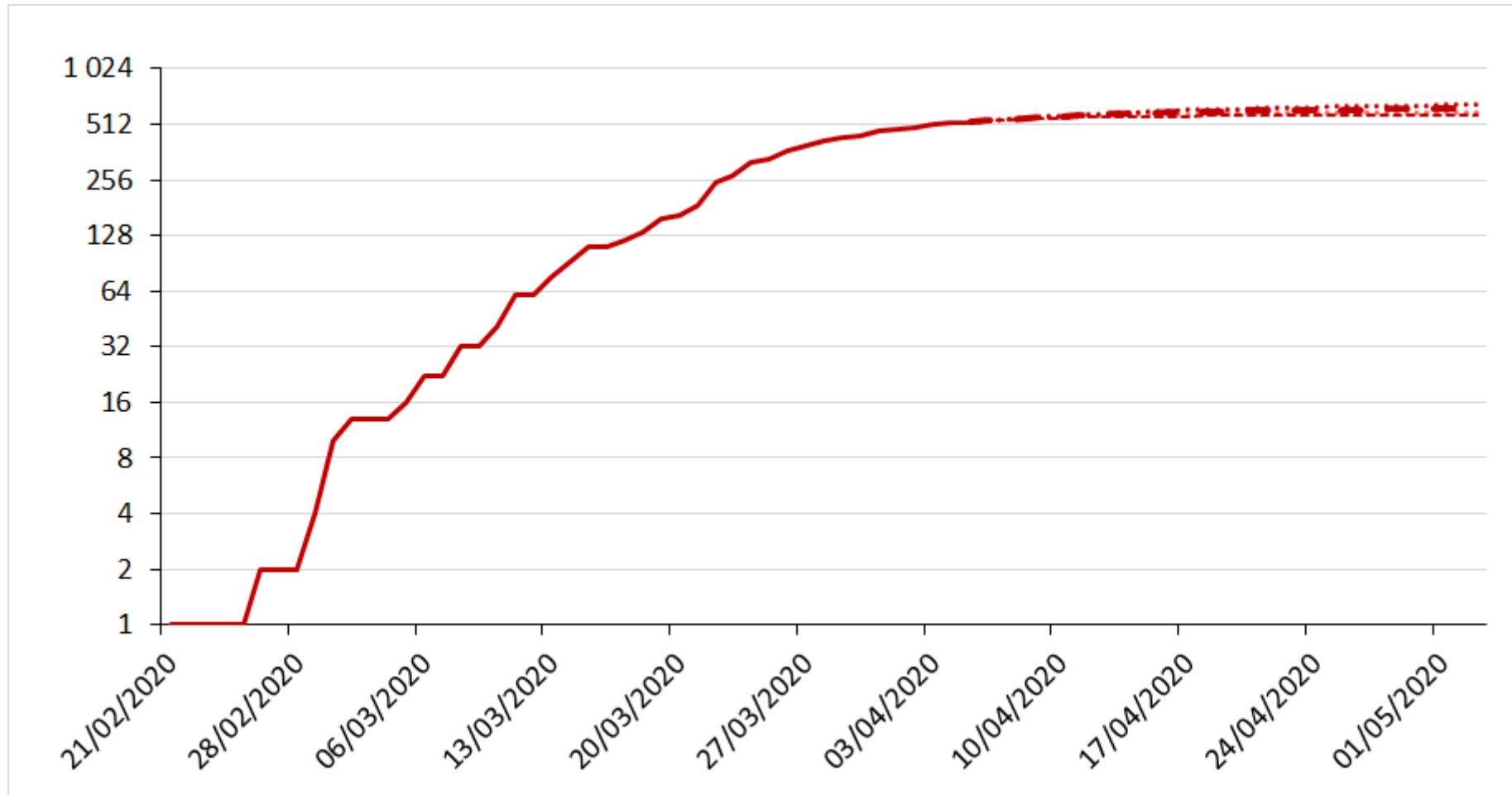
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Data: The Johns Hopkins University, Politolog.com

Lebanon

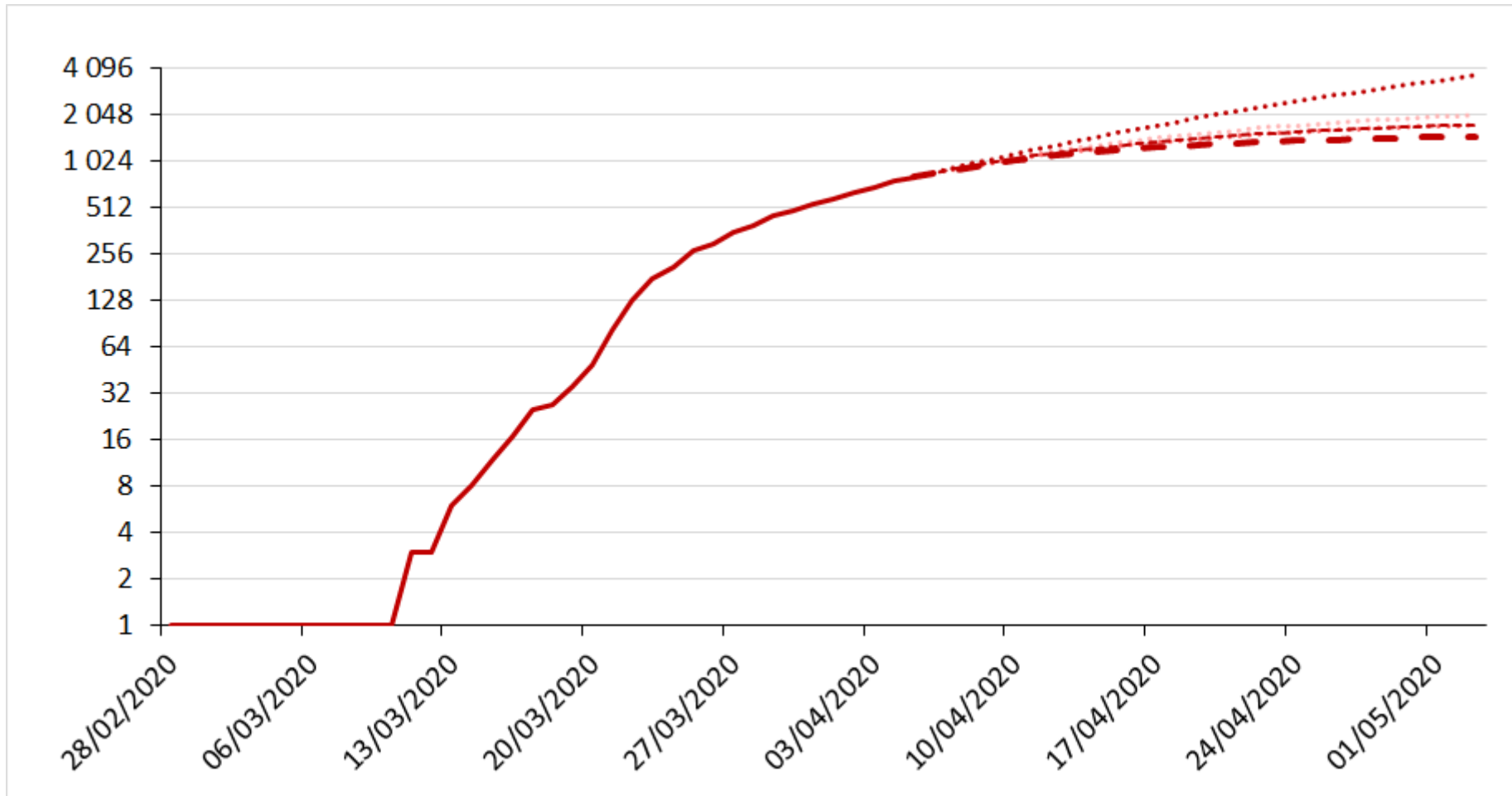
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Data: The Johns Hopkins University, Politolog.com

Lithuania

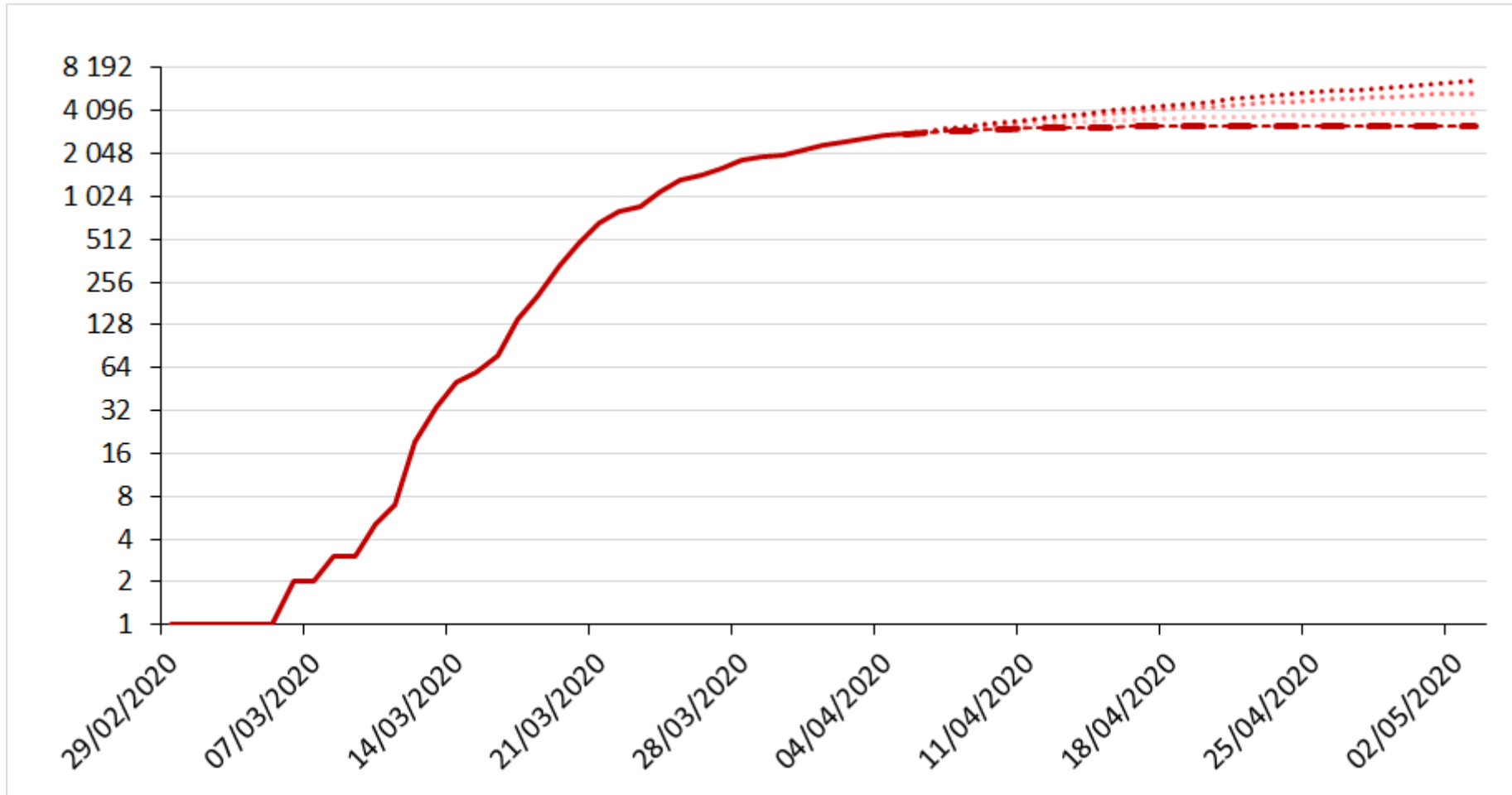
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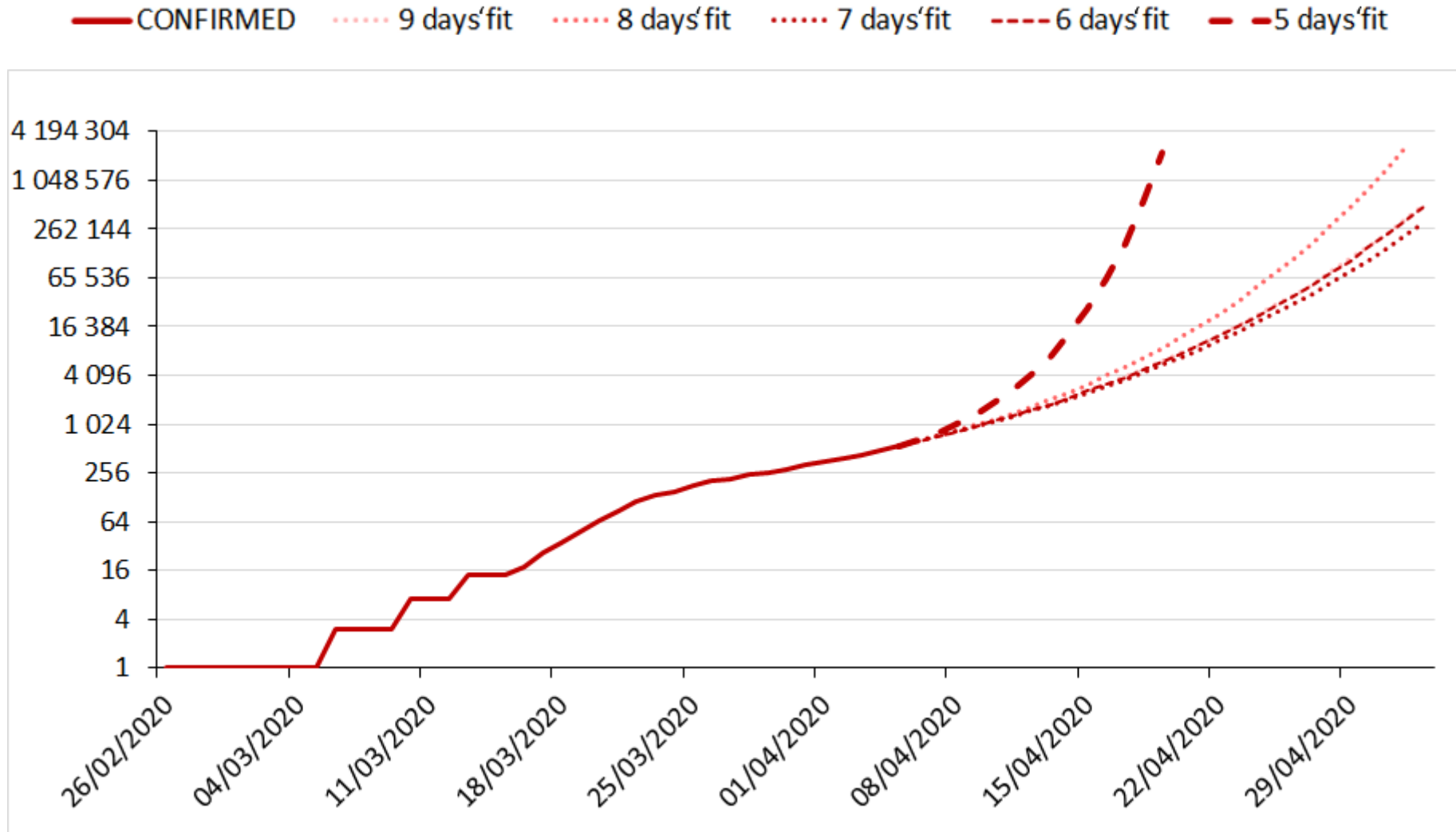
Luxembourg

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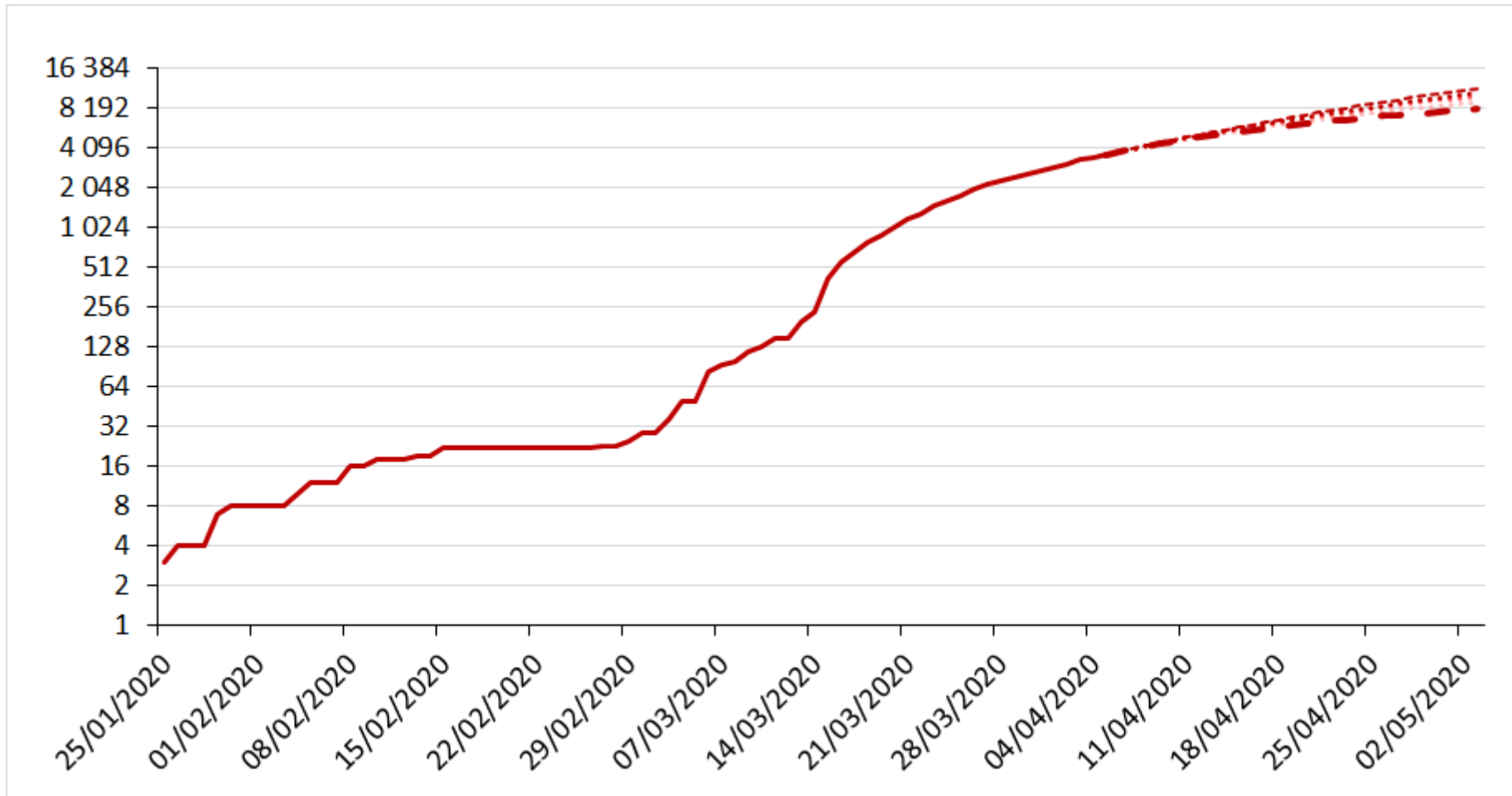
Macedonia



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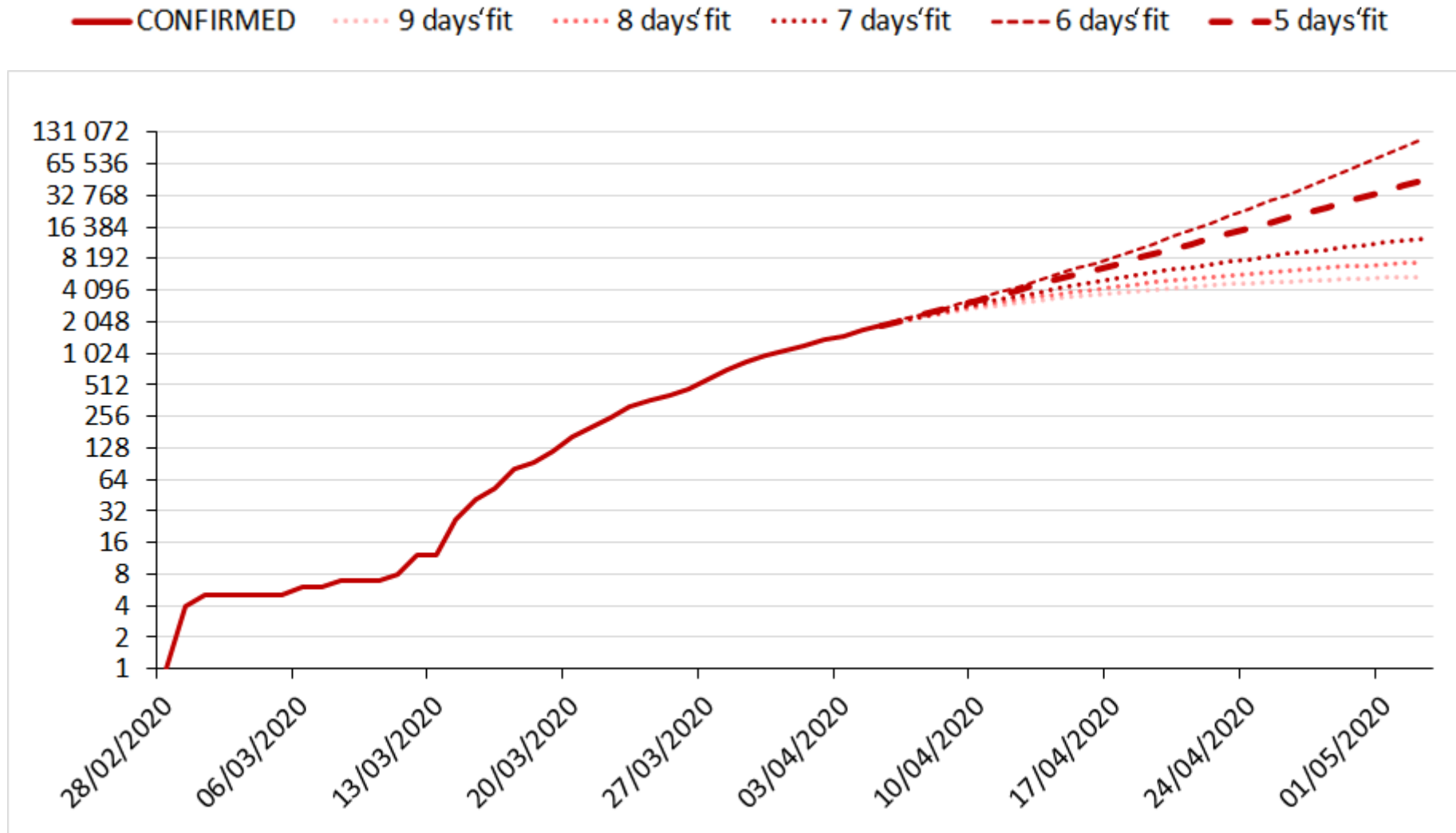
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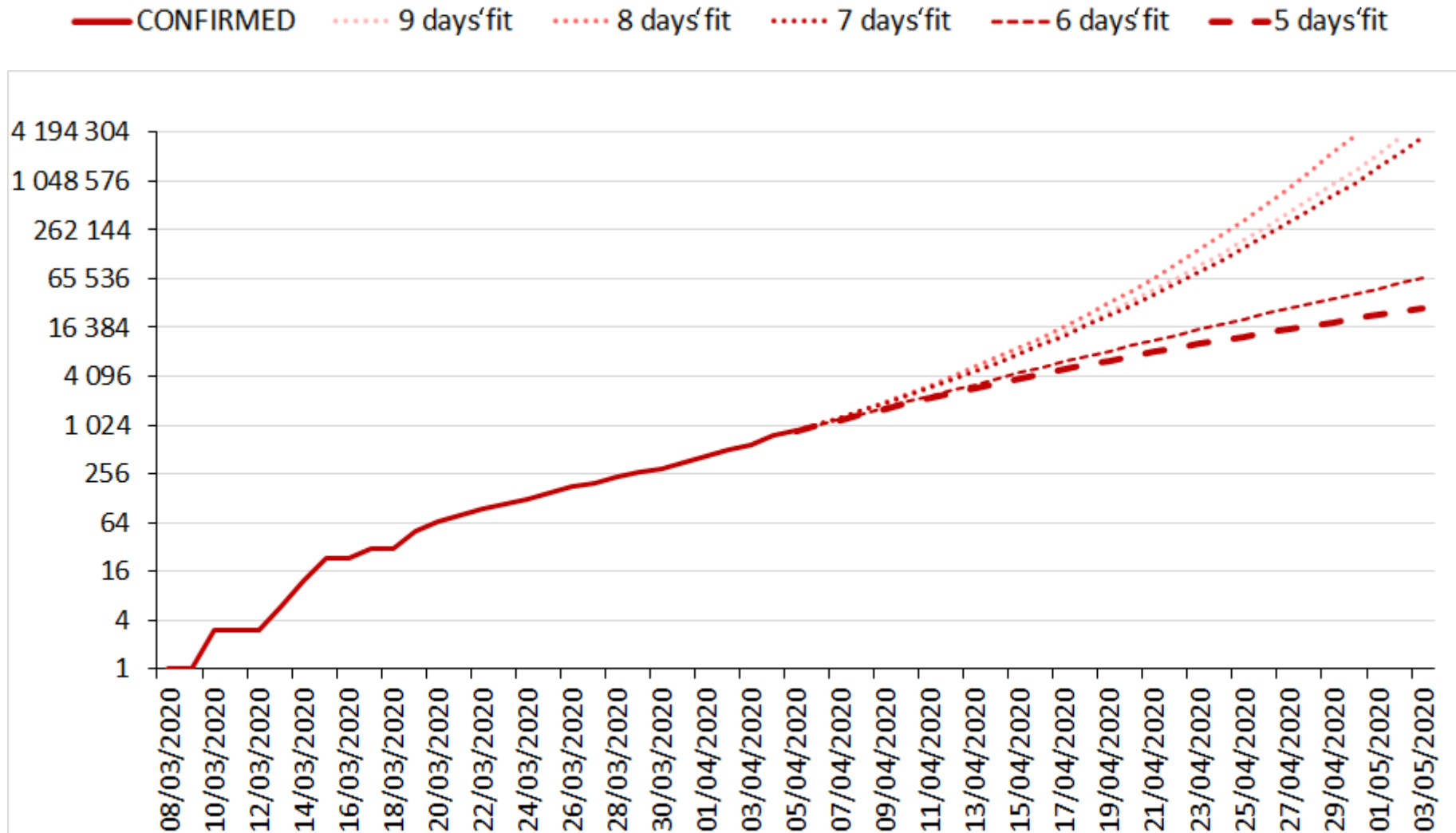
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Mexico



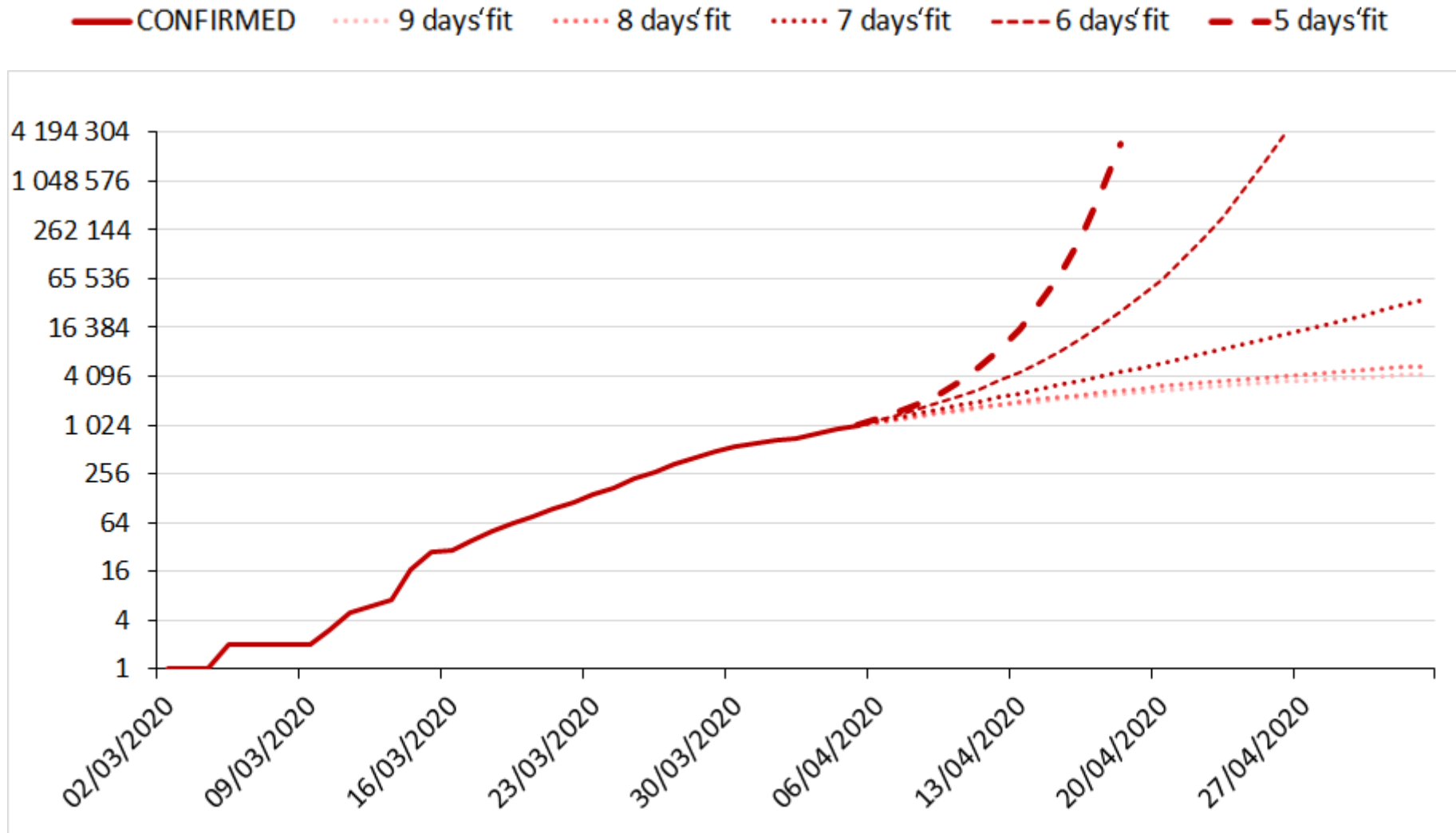
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Moldova



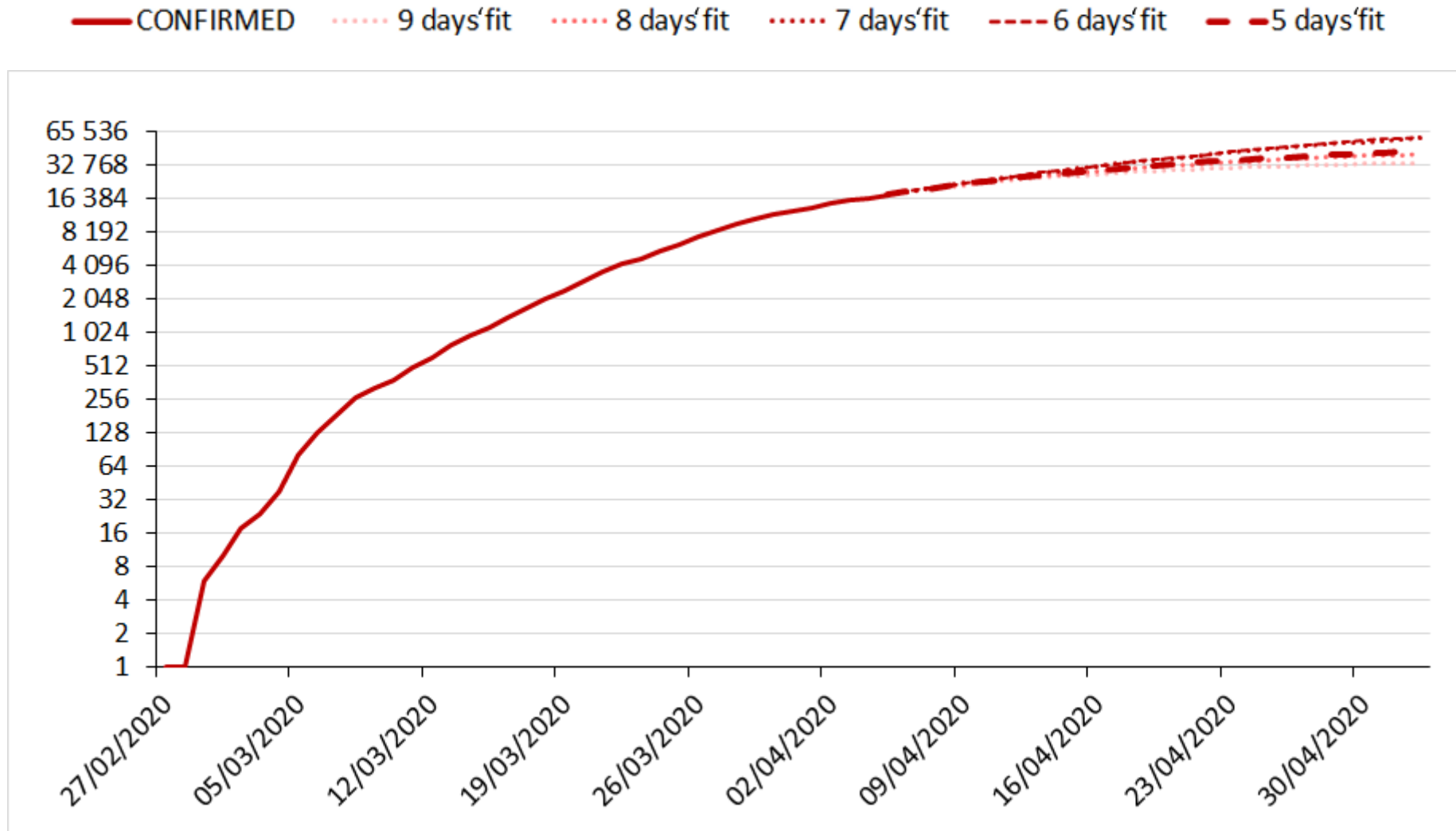
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Morocco



Data: The Johns Hopkins University, Politolog.com

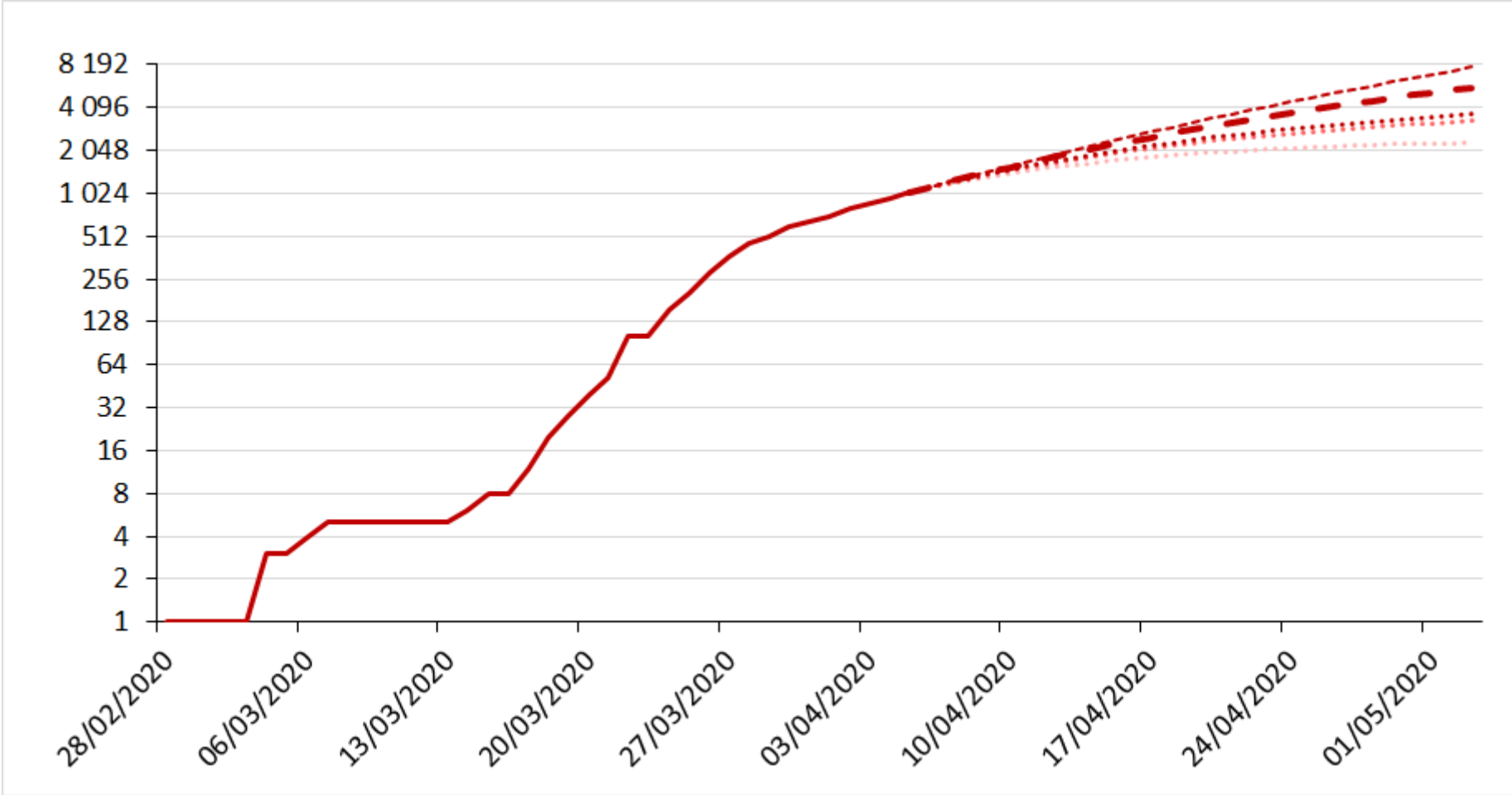
Netherlands



Data: The Johns Hopkins University, Politolog.com

New Zealand

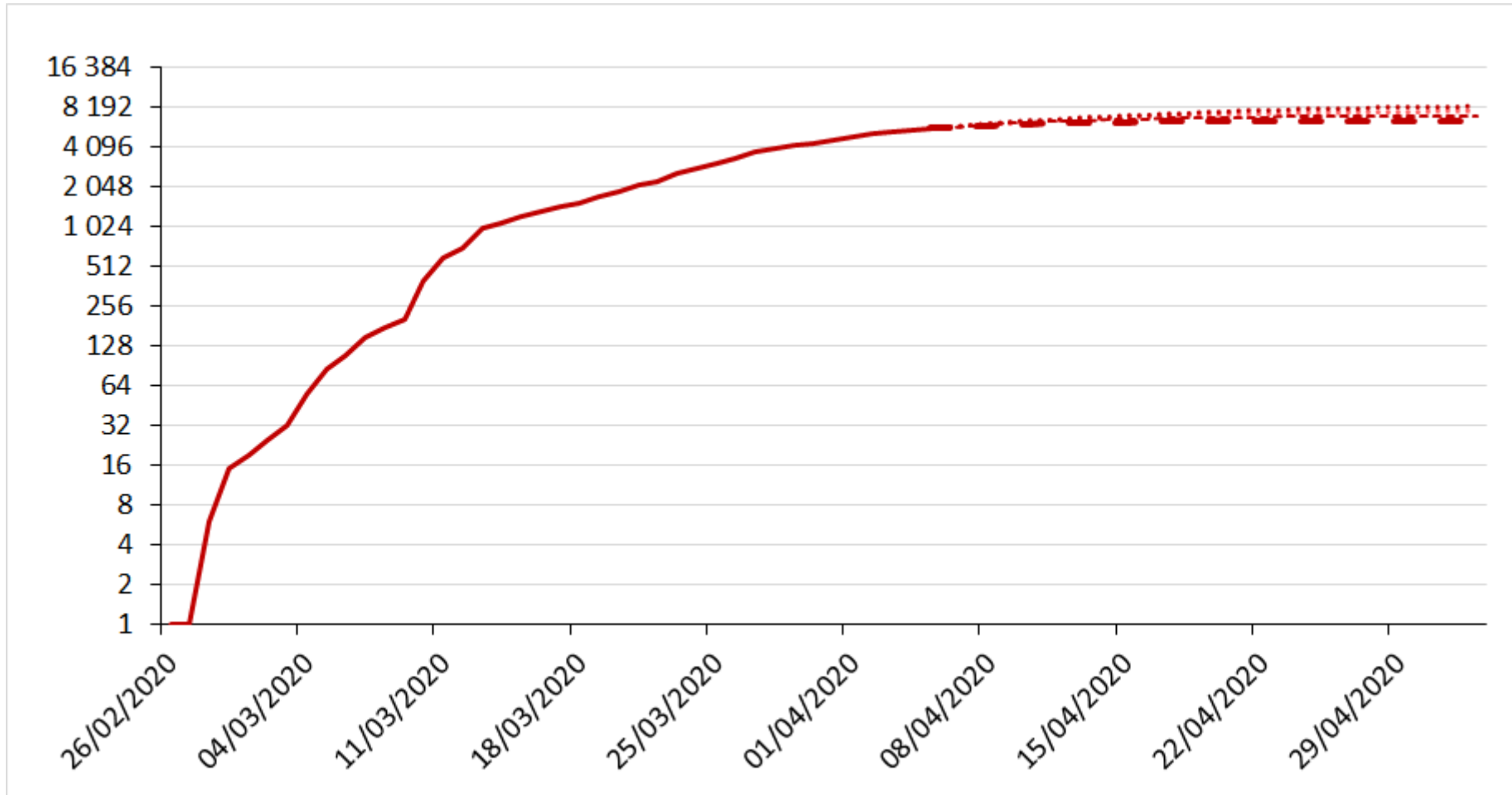
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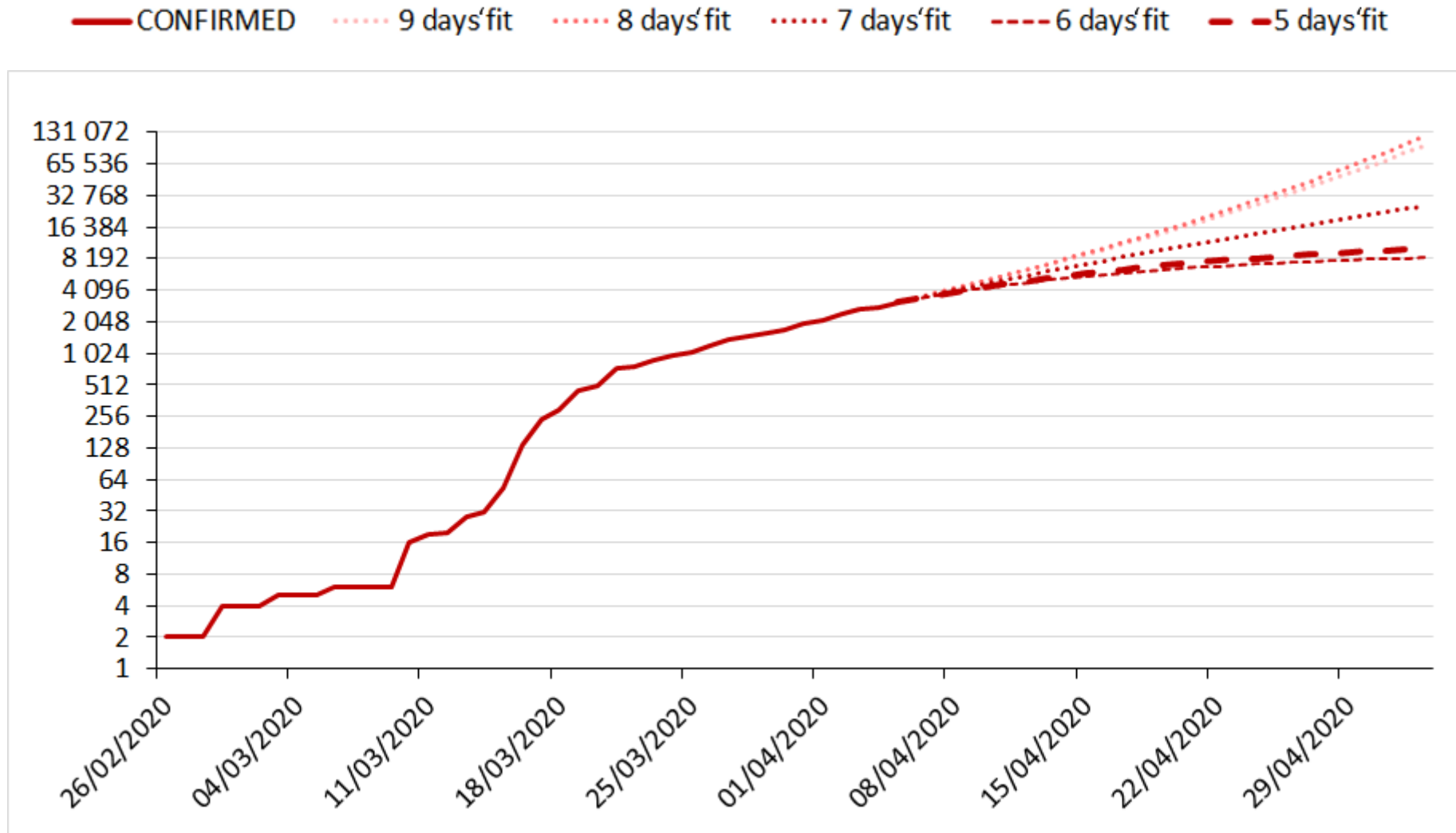
Norway

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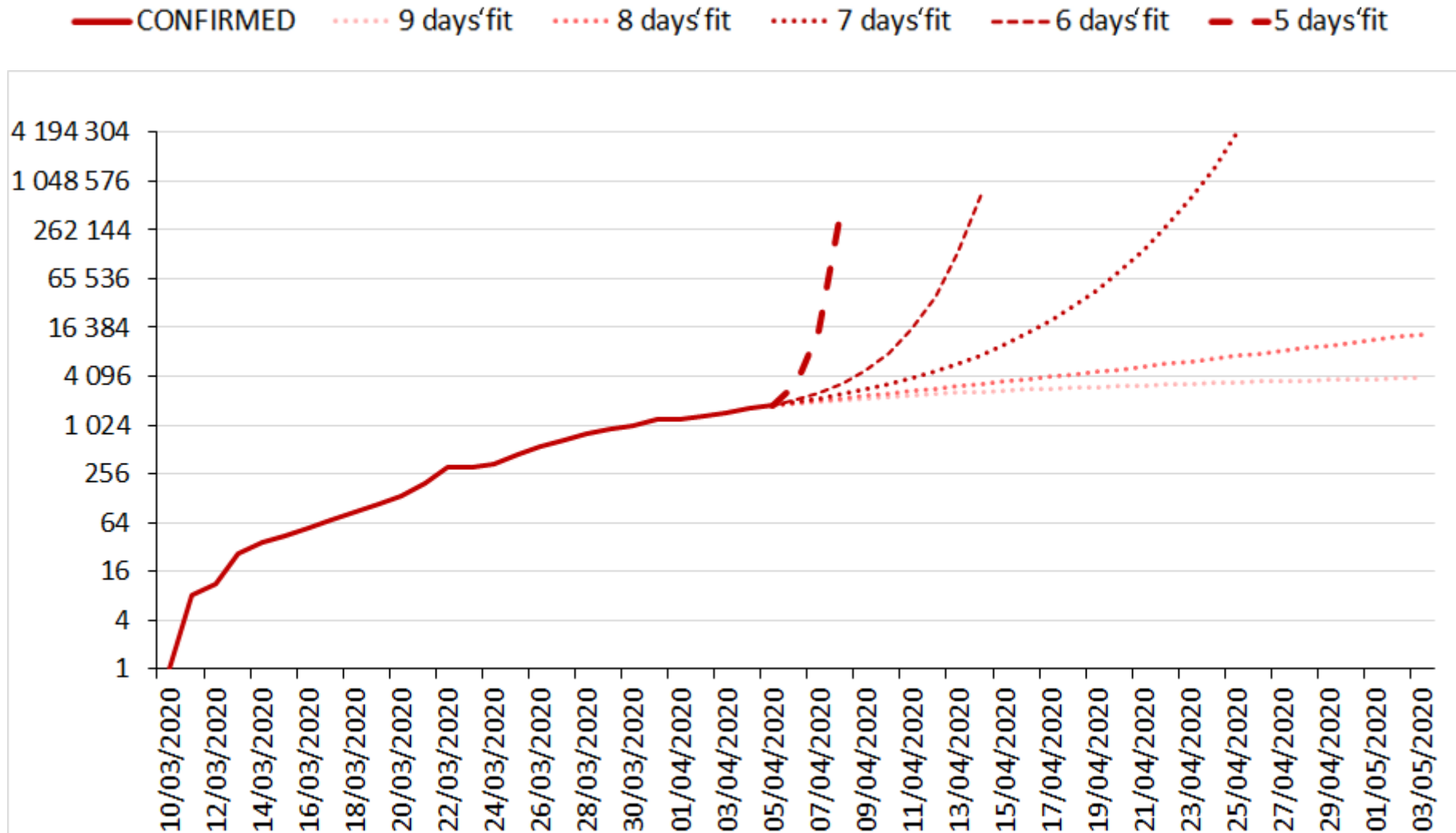
Data: The Johns Hopkins University, Politolog.com

Pakistan



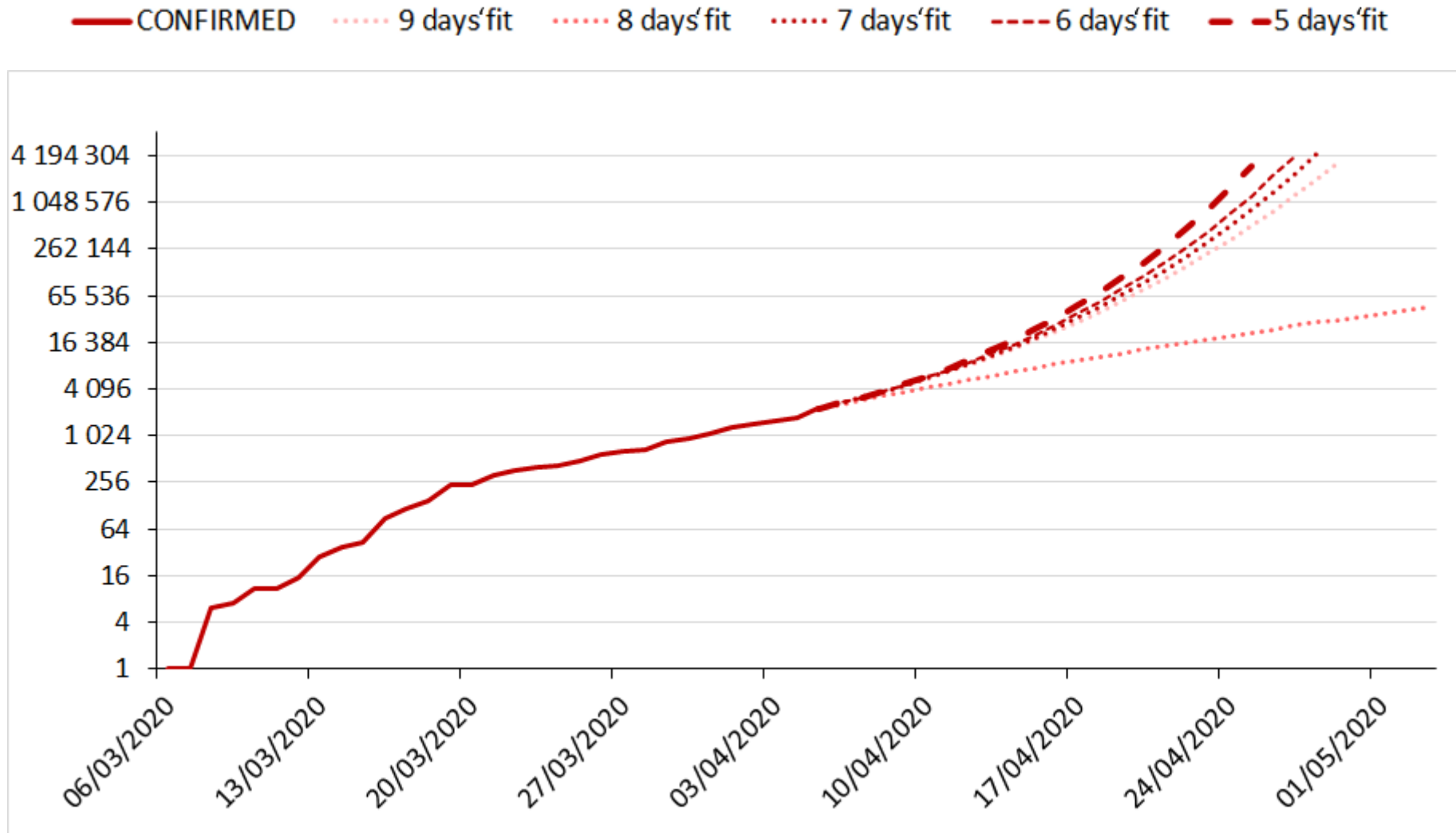
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Panama



Data: The Johns Hopkins University, Politolog.com

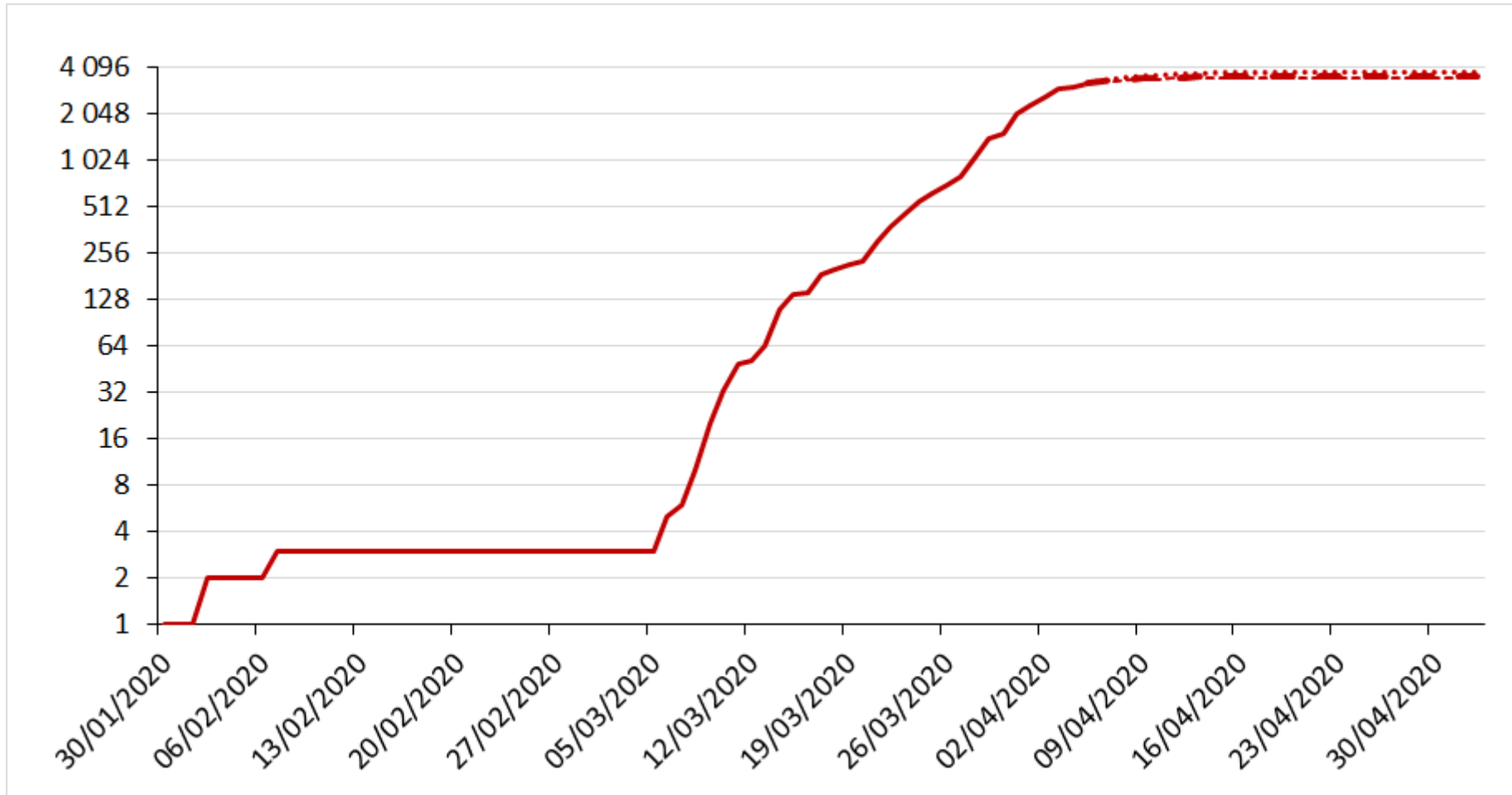
Peru



Data: The Johns Hopkins University, Politolog.com

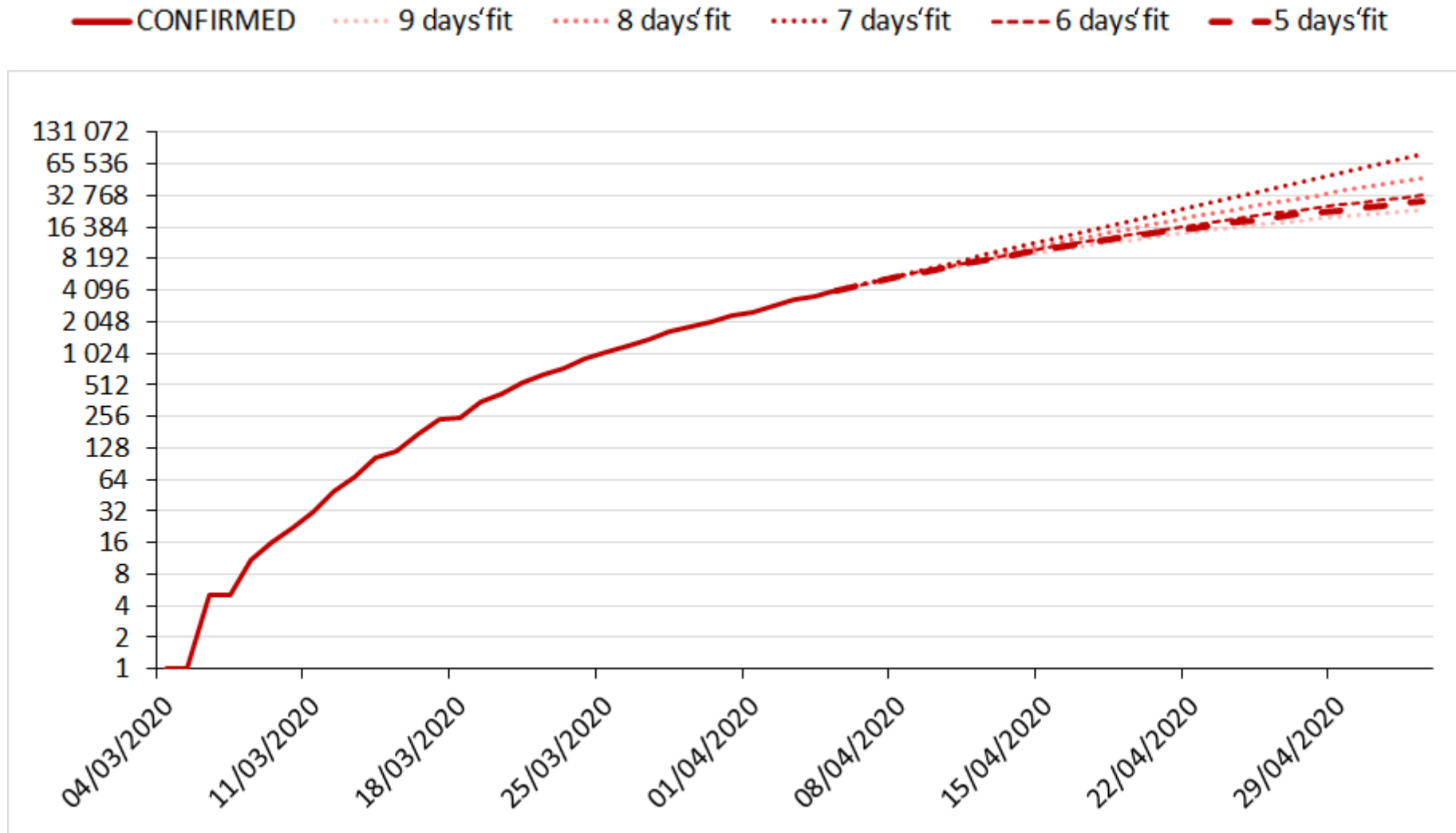
Philippines

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Data: The Johns Hopkins University, Politolog.com

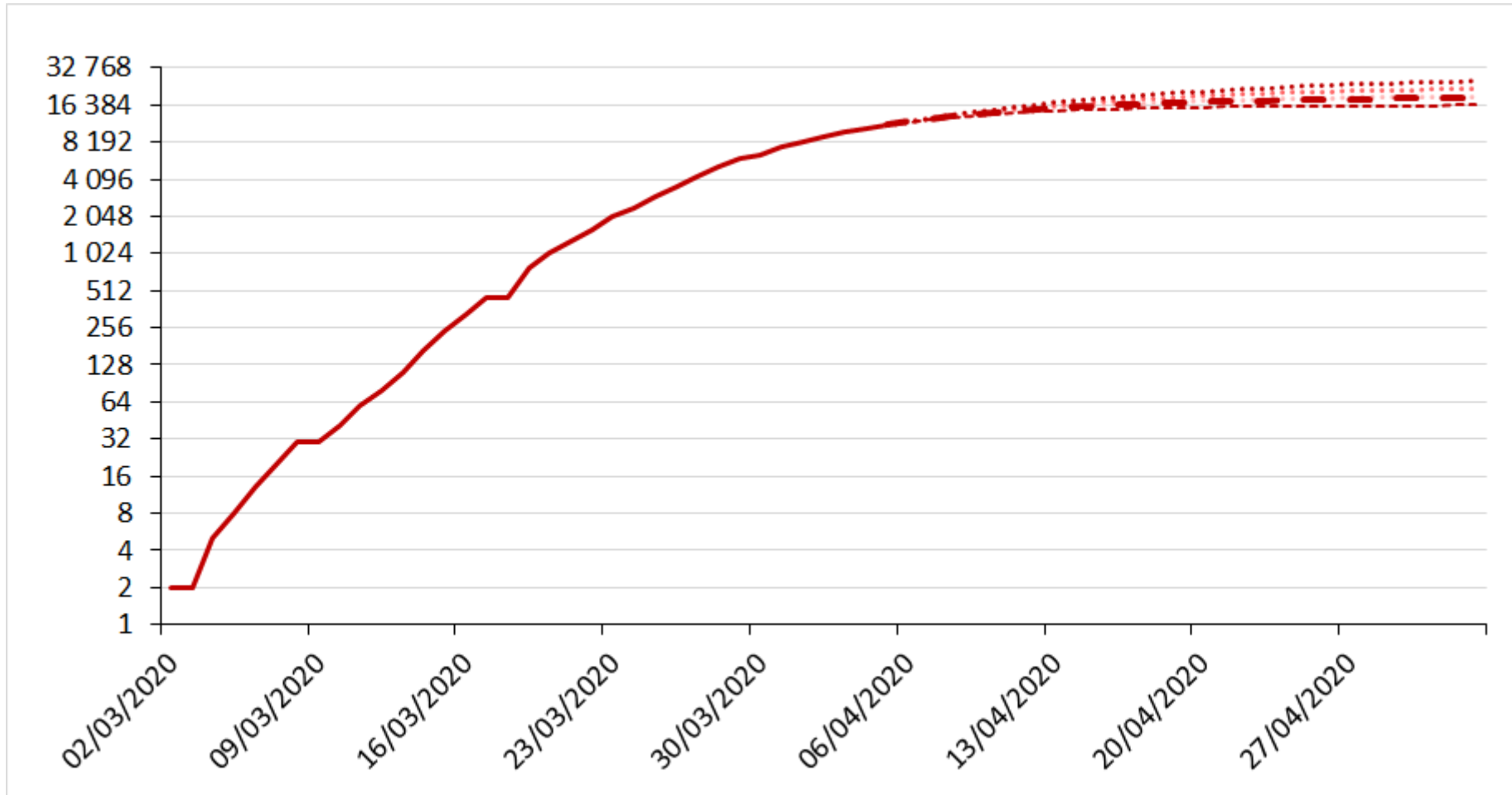
Poland



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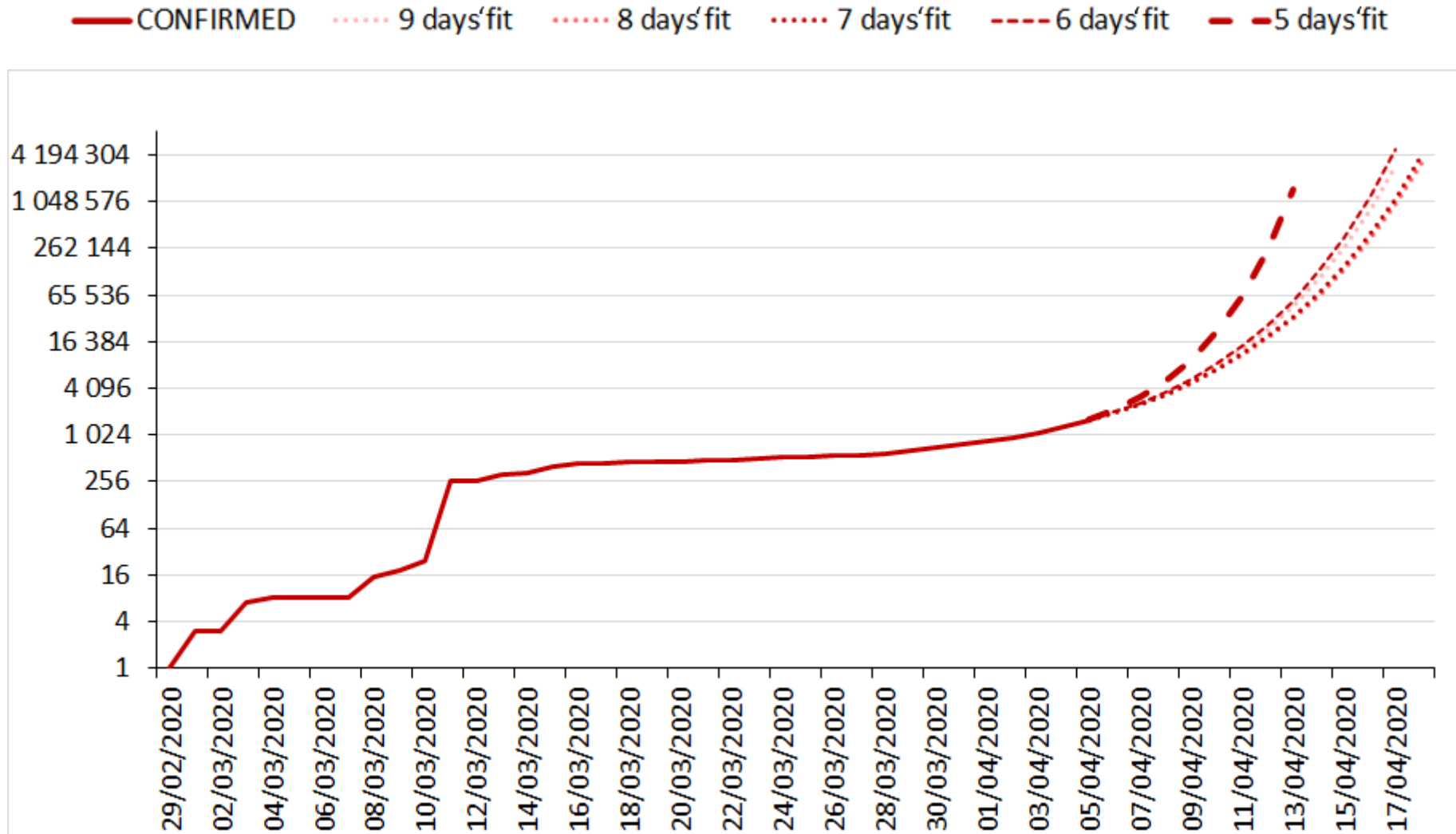
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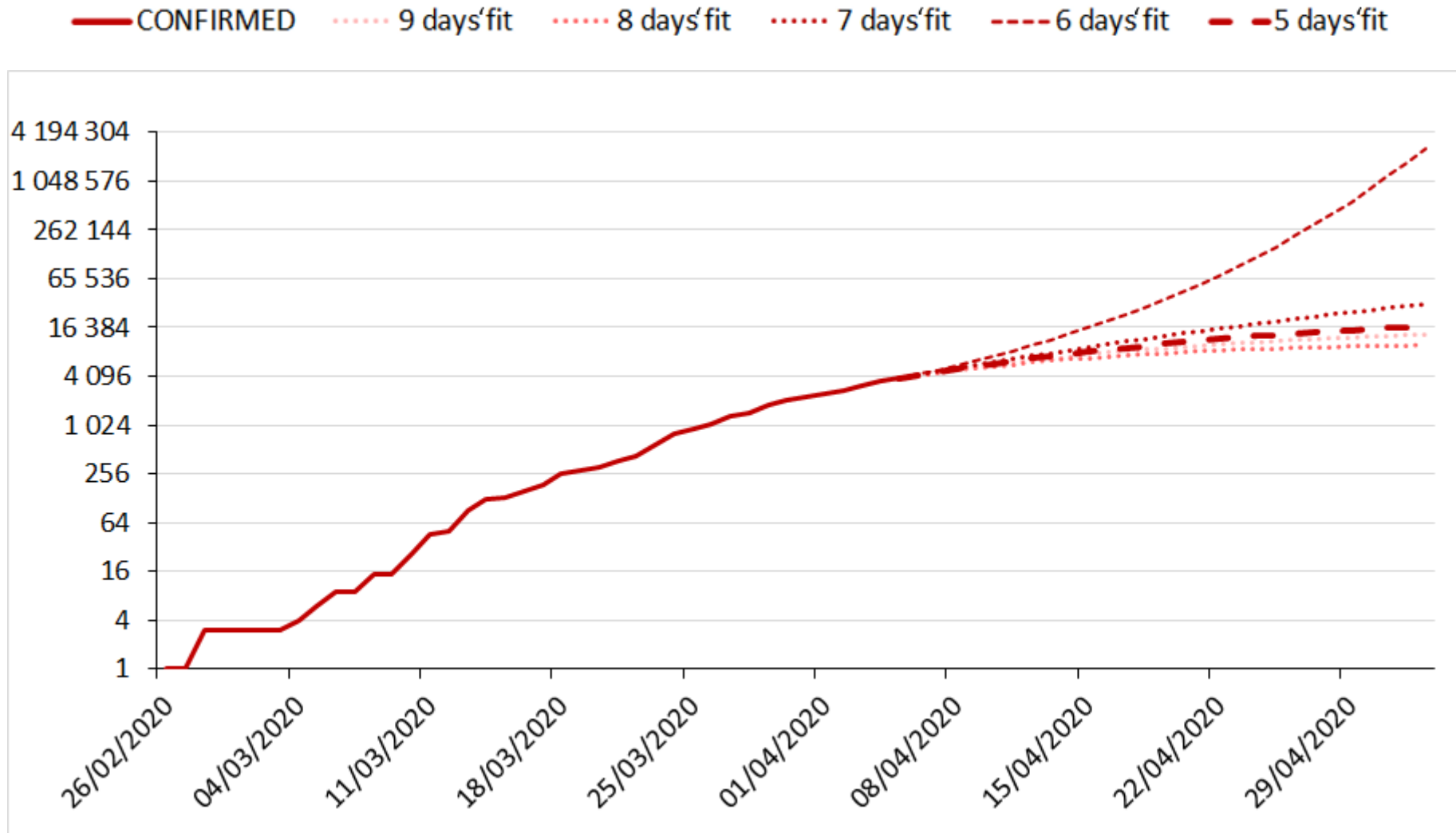
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Qatar



Data: The Johns Hopkins University, Politolog.com

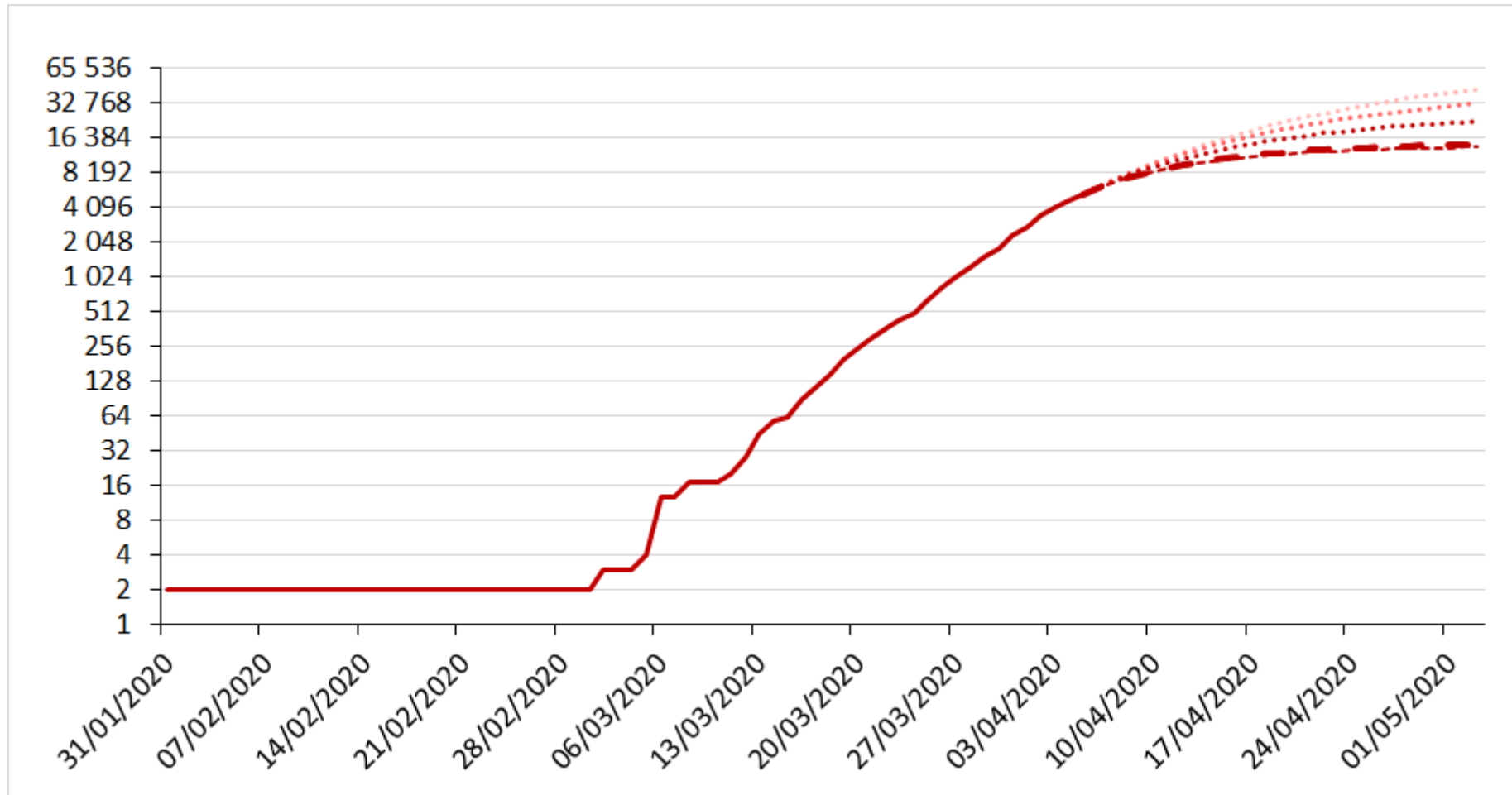
Romania



Data: The Johns Hopkins University, Politolog.com

Russia

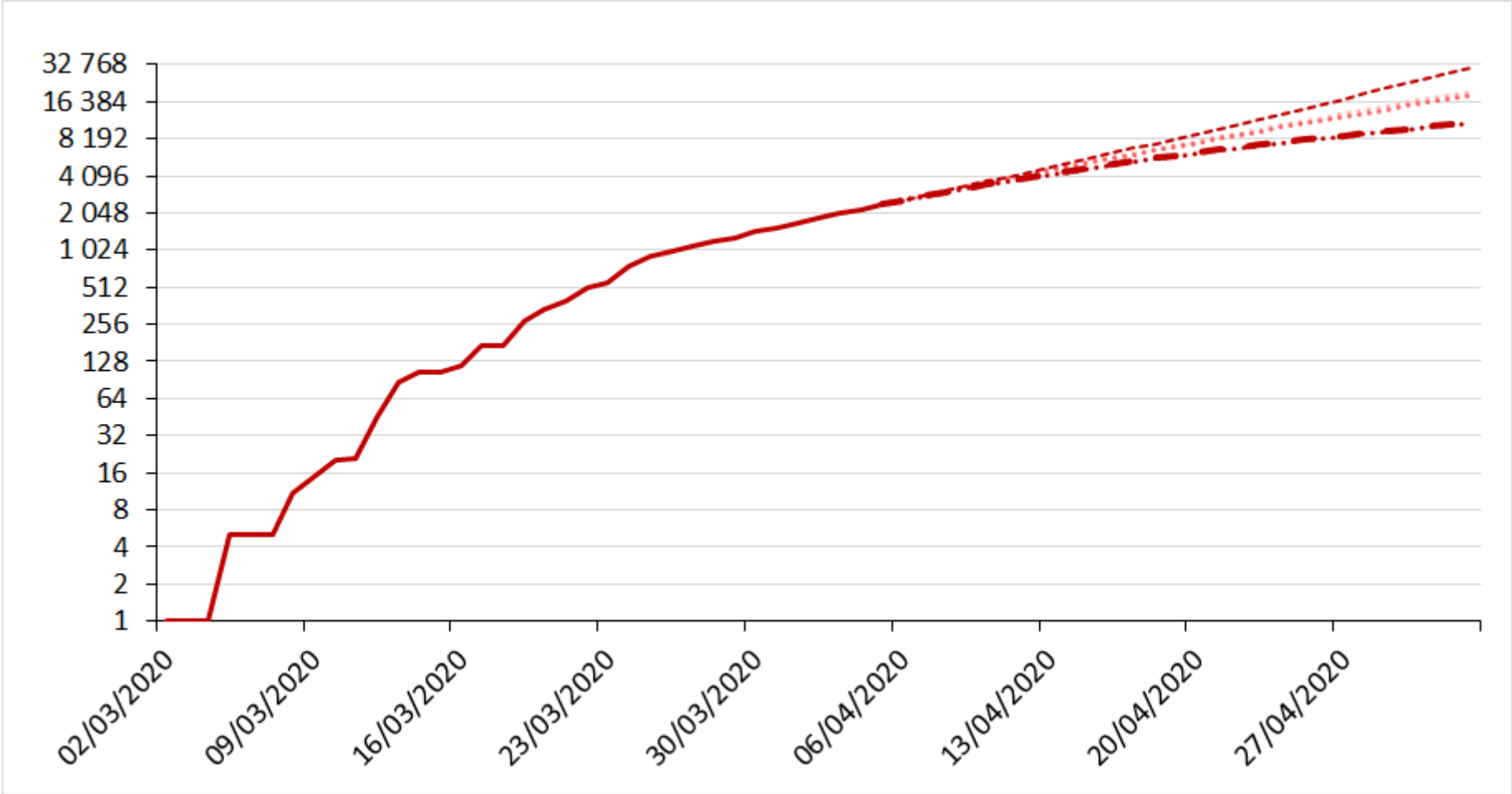
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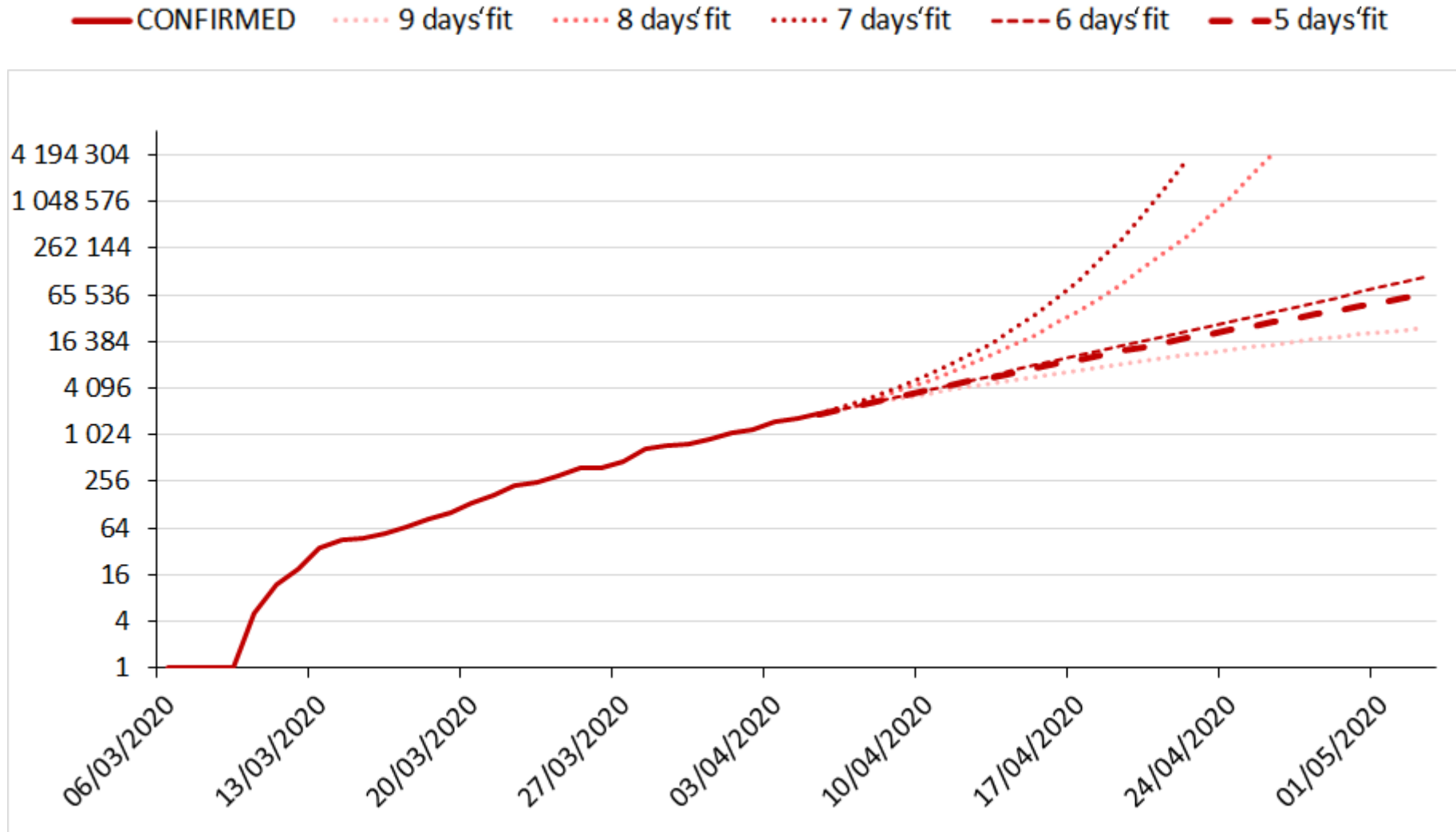
Saudi Arabia

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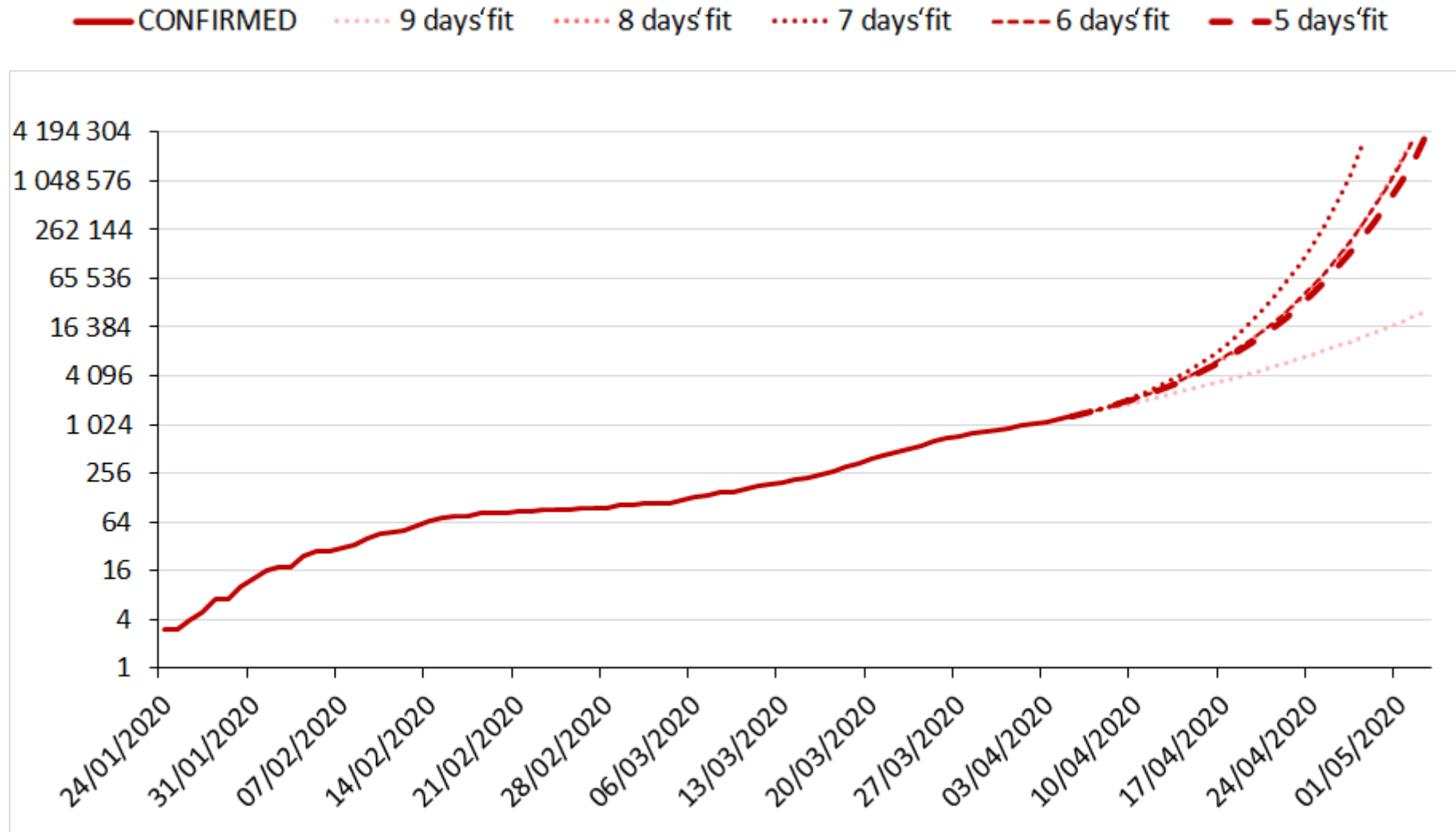
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Serbia



Data: The Johns Hopkins University, Politolog.com

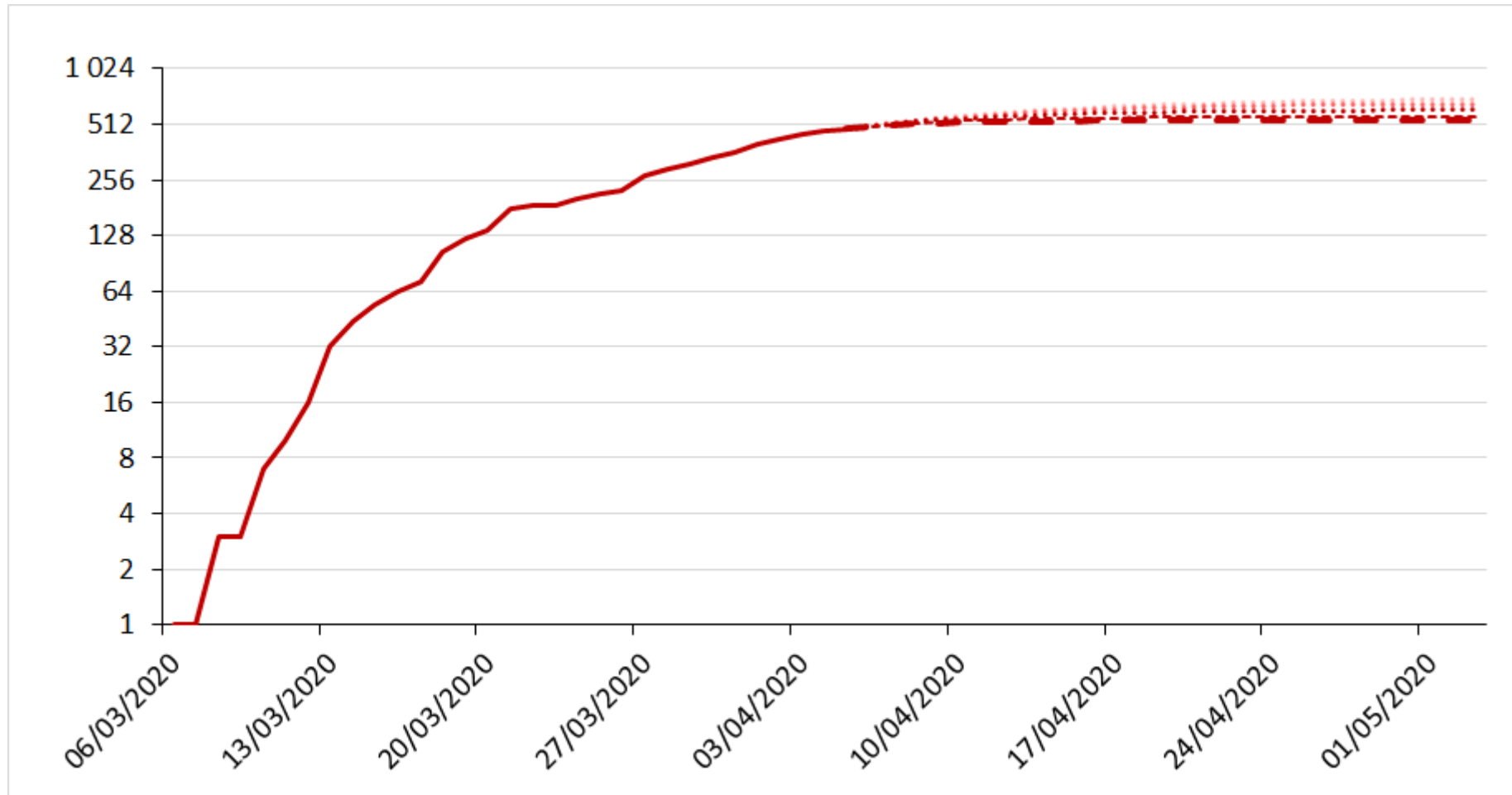
Singapore



Data: The Johns Hopkins University, Politolog.com

Slovakia

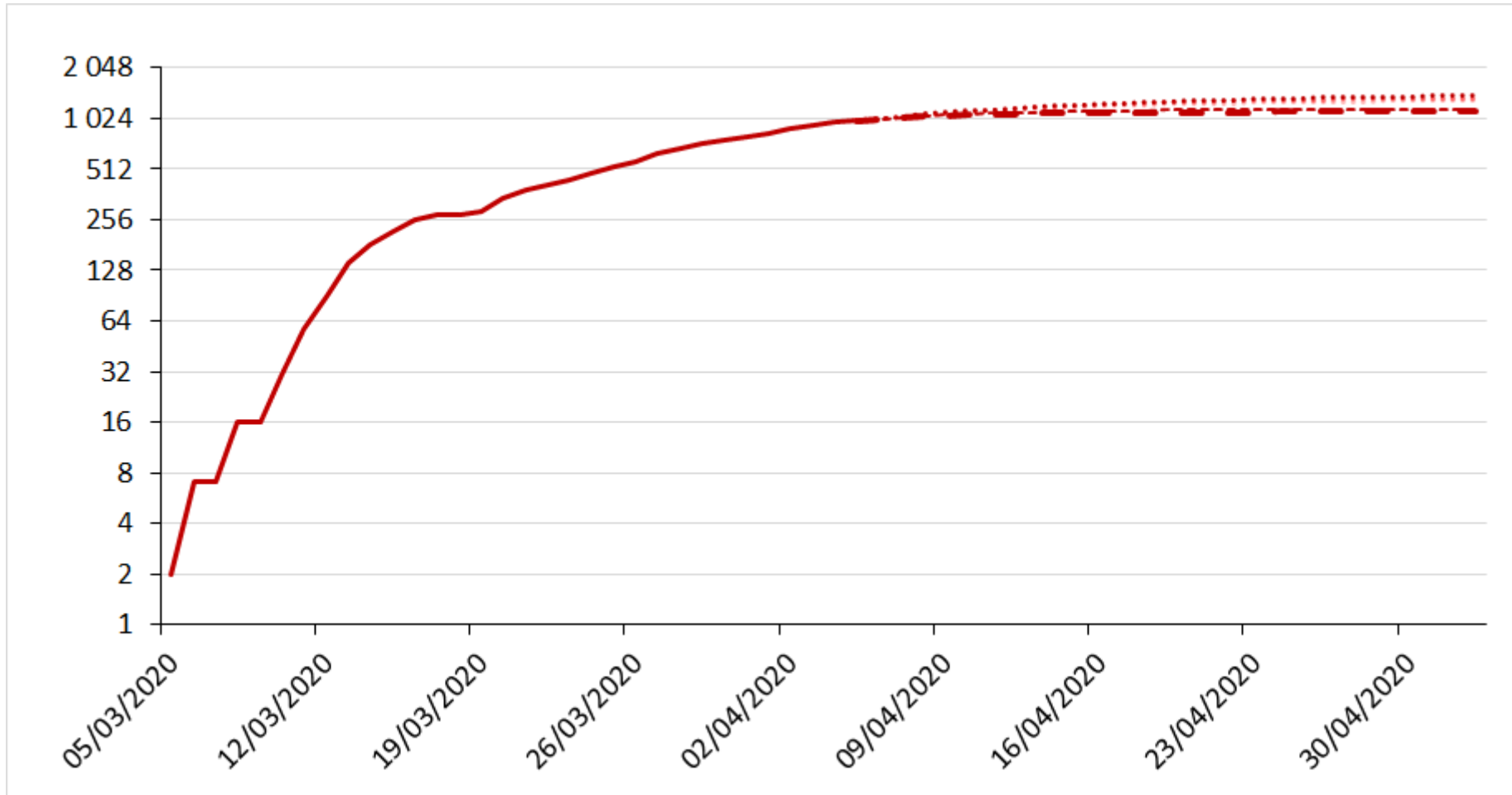
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Slovenia

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Data: The Johns Hopkins University, Politolog.com

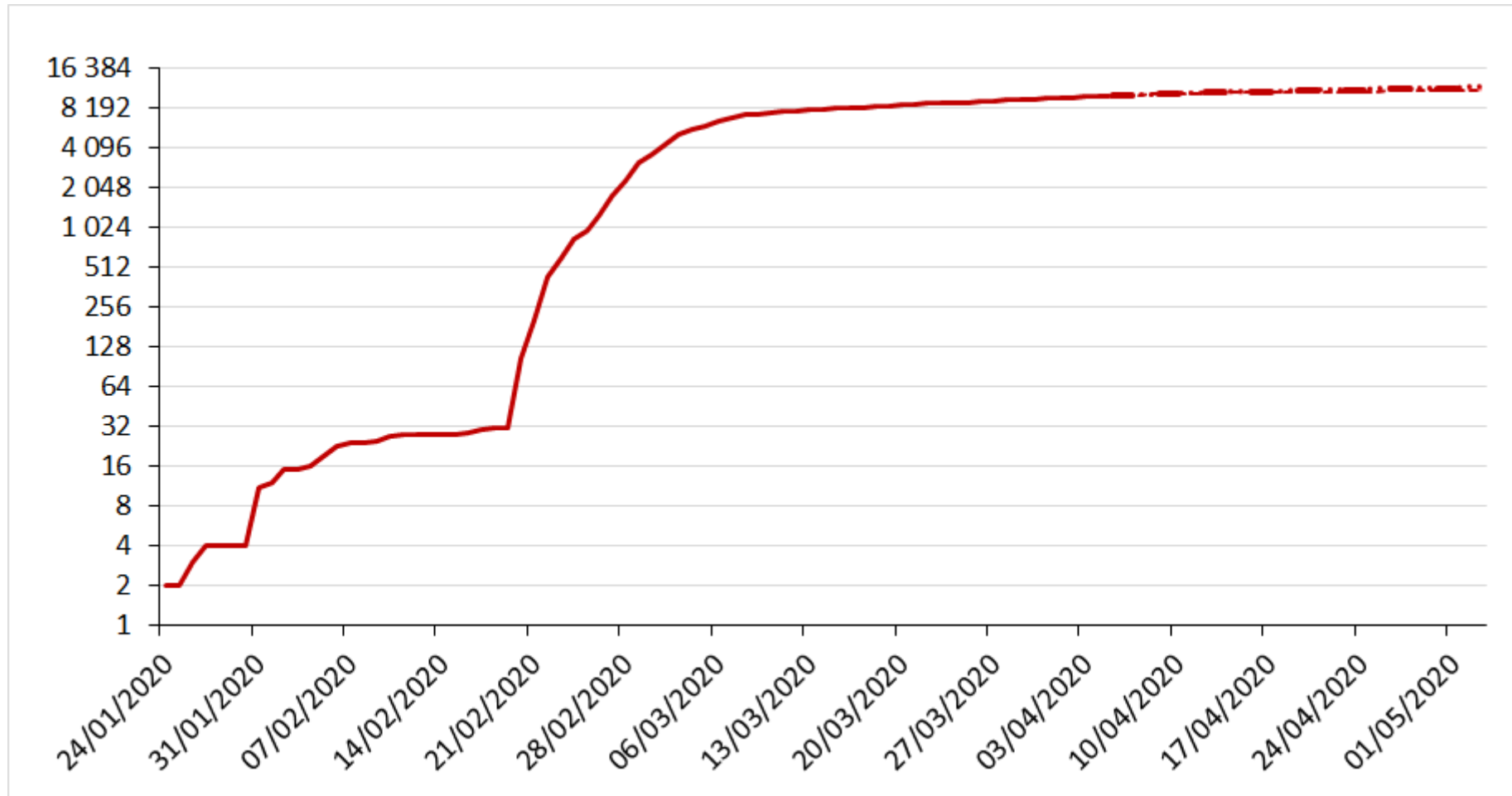
South Africa

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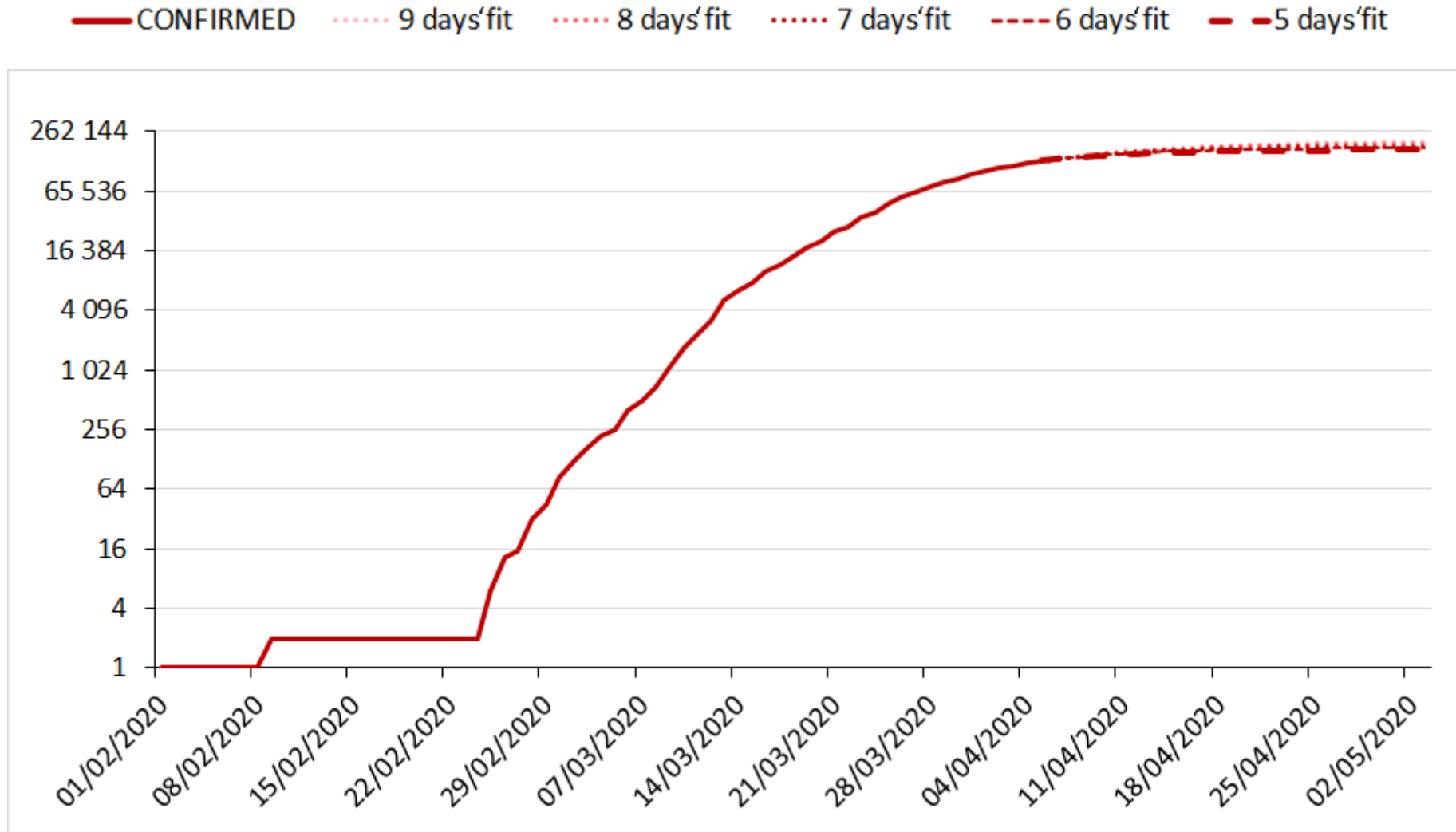
South Korea

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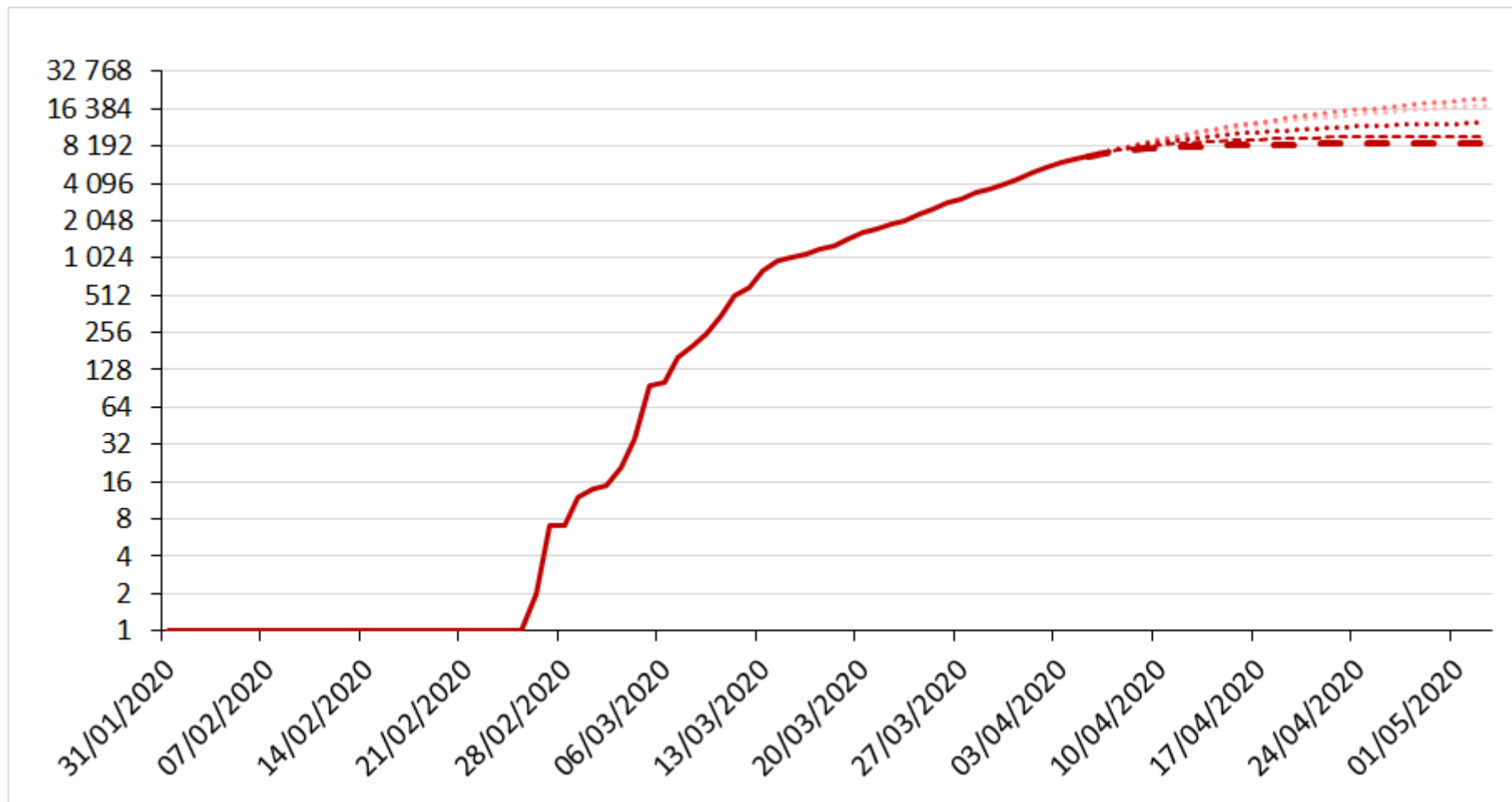
Spain



Data: The Johns Hopkins University, Politolog.com

Sweden

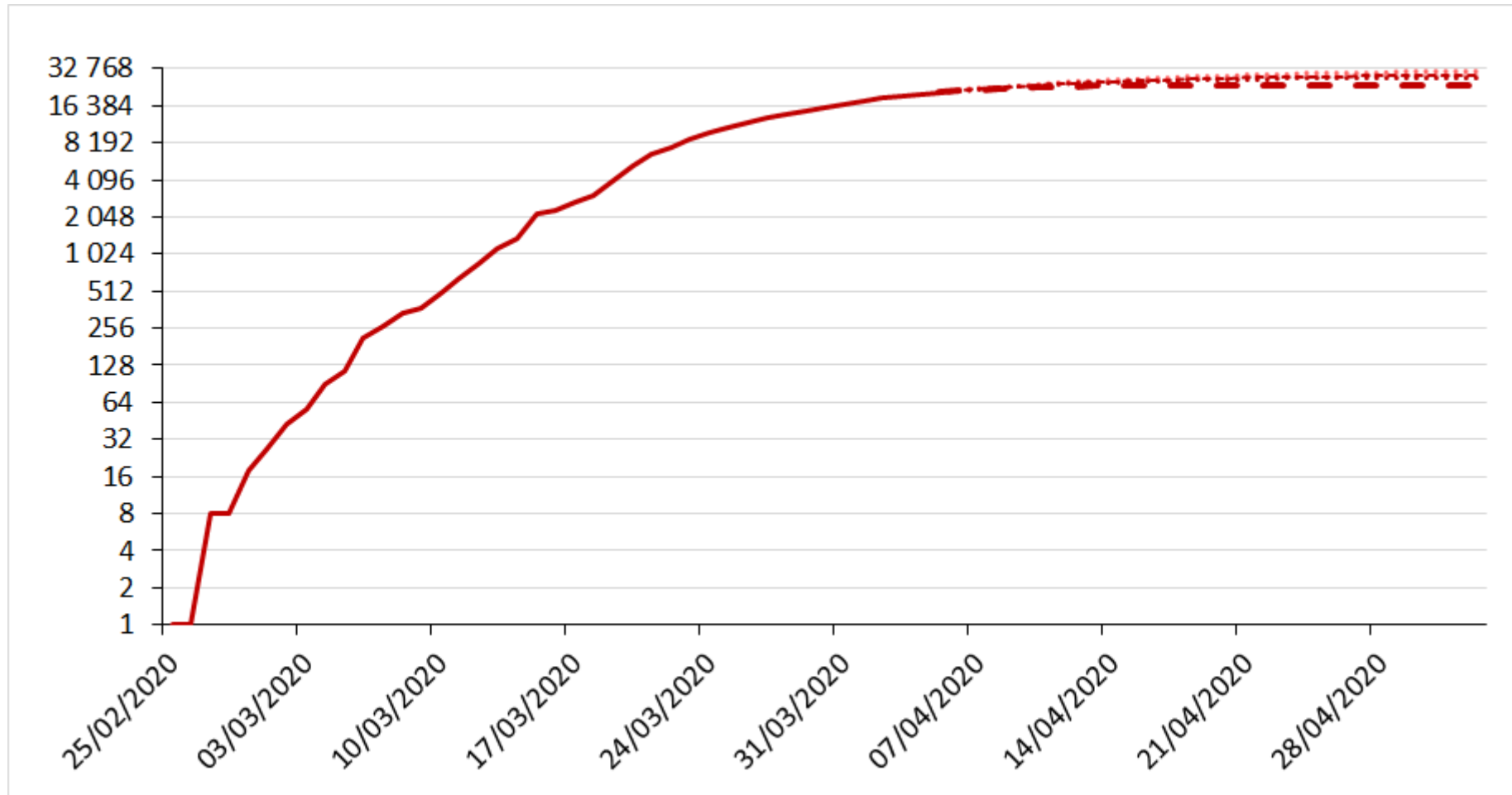
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Switzerland

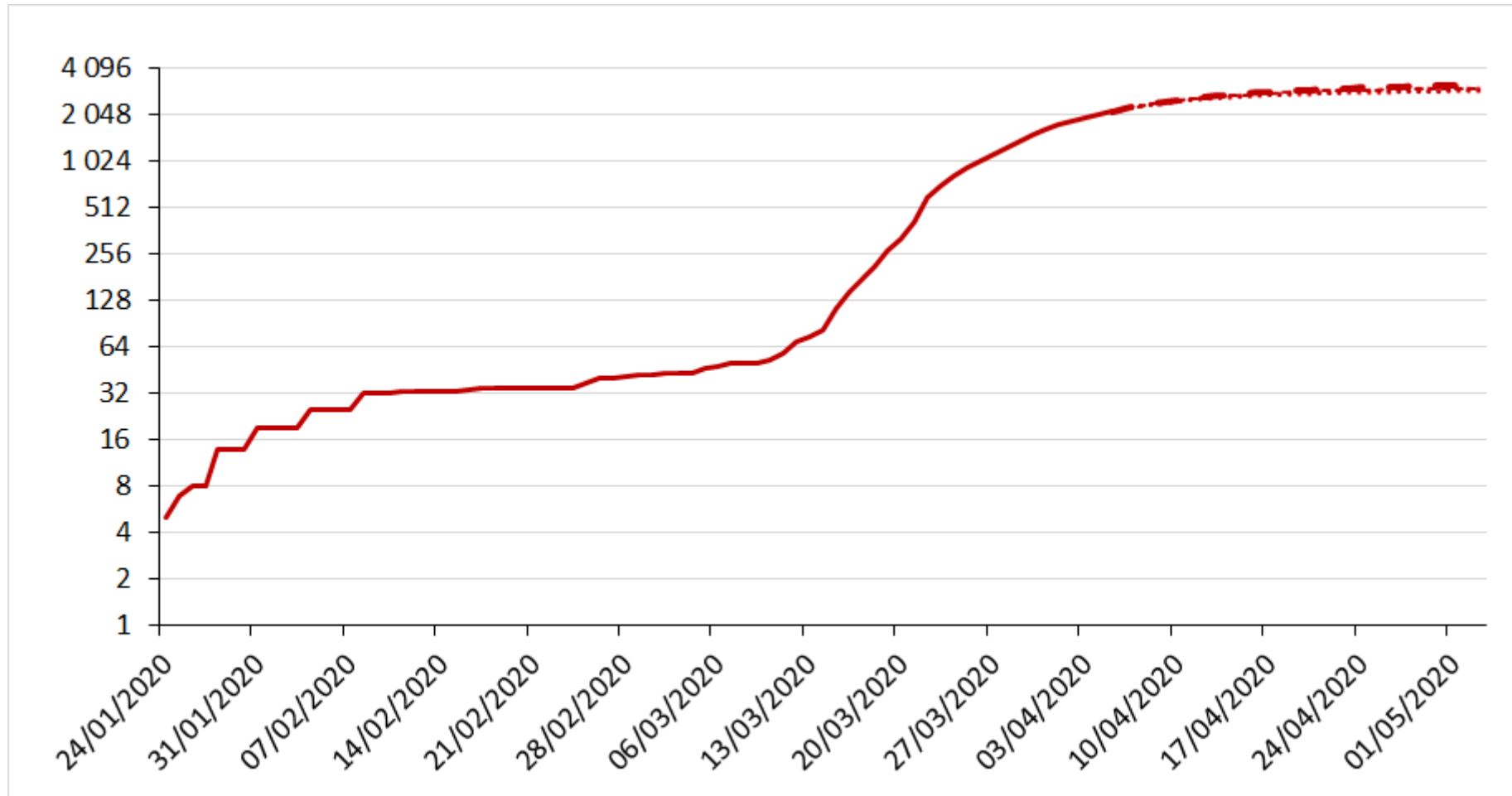
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Thailand

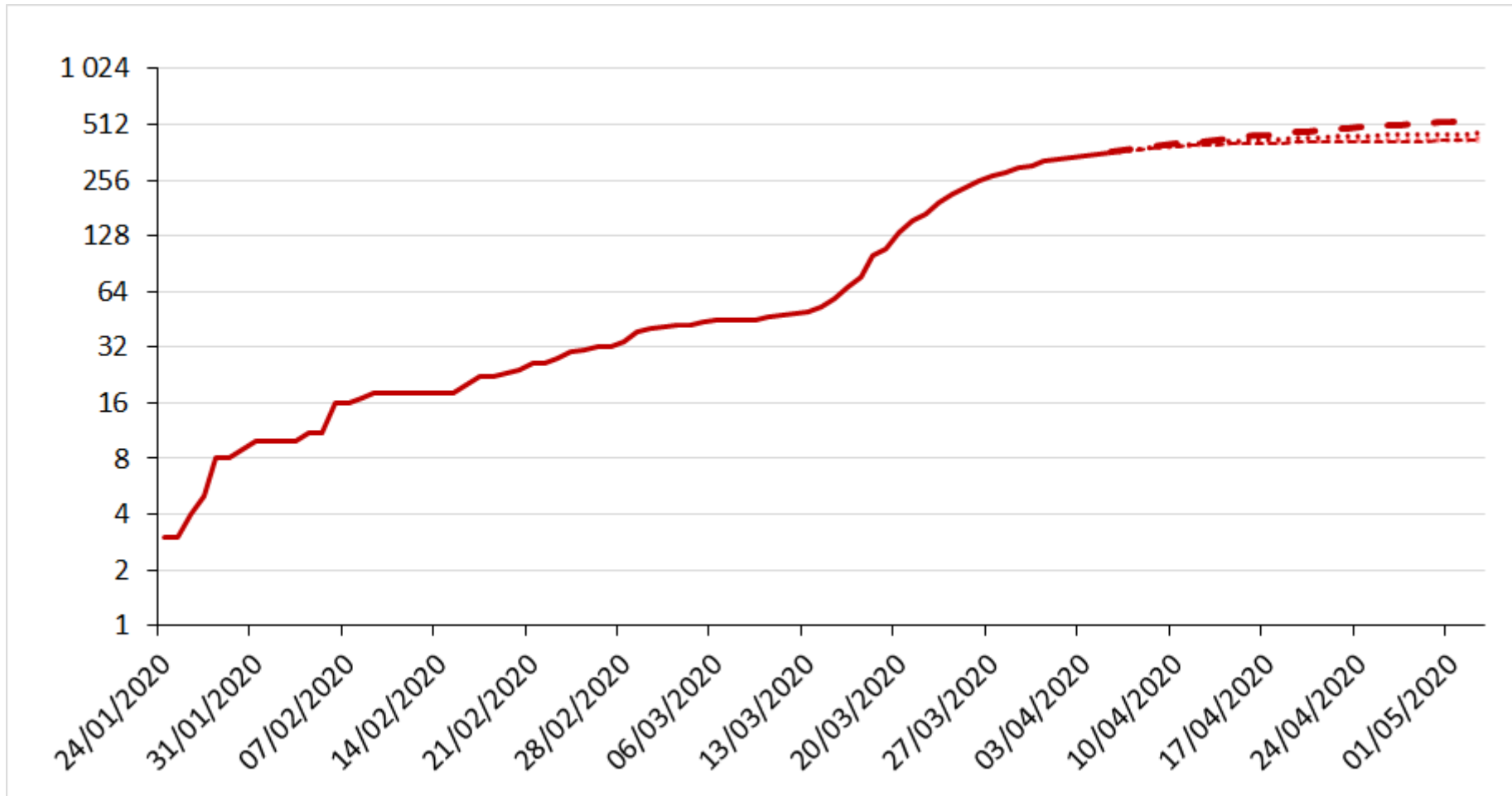
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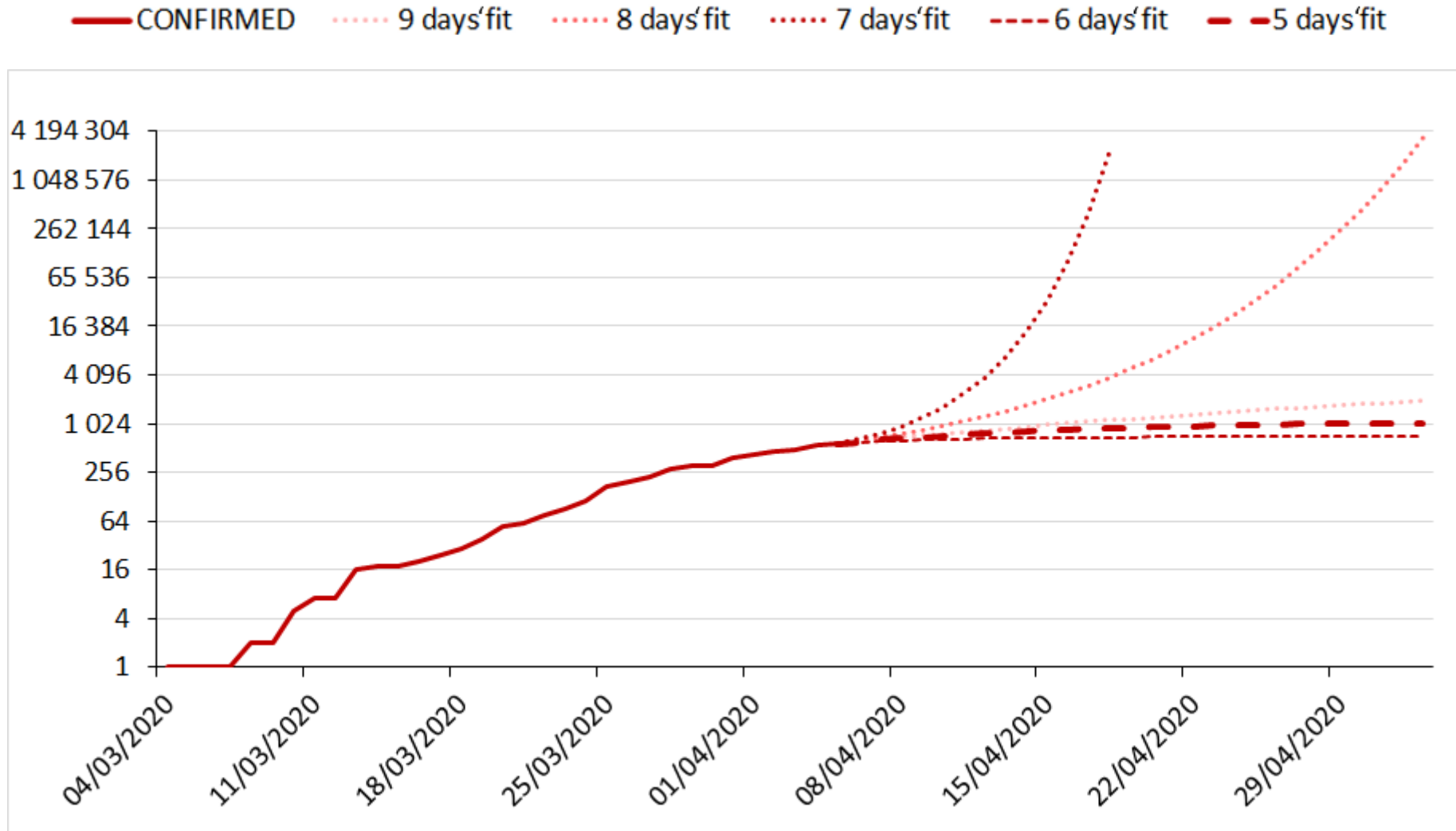
Taiwan

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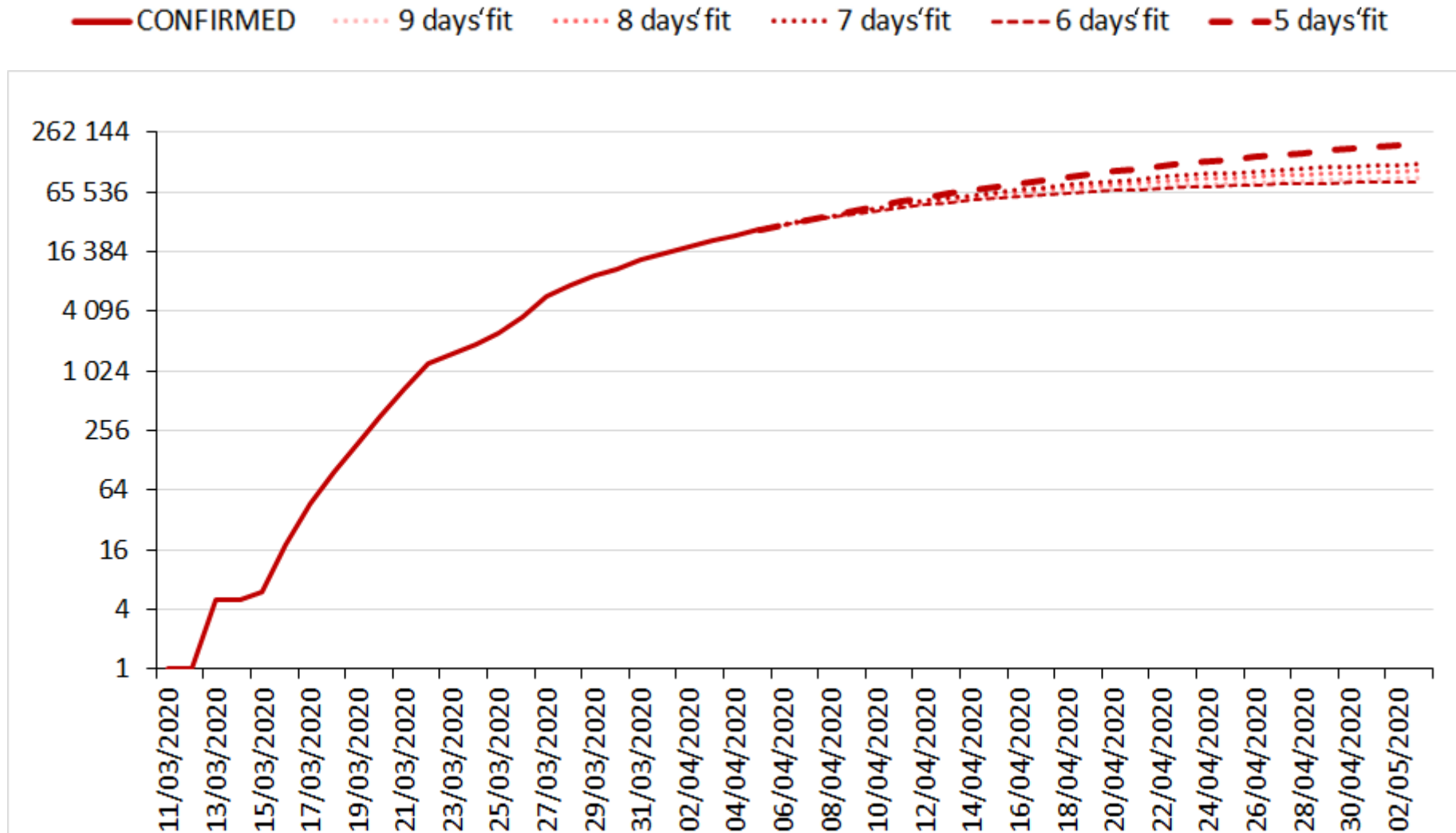
Data: The Johns Hopkins University, Politolog.com

Tunisia



Data: The Johns Hopkins University, Politolog.com

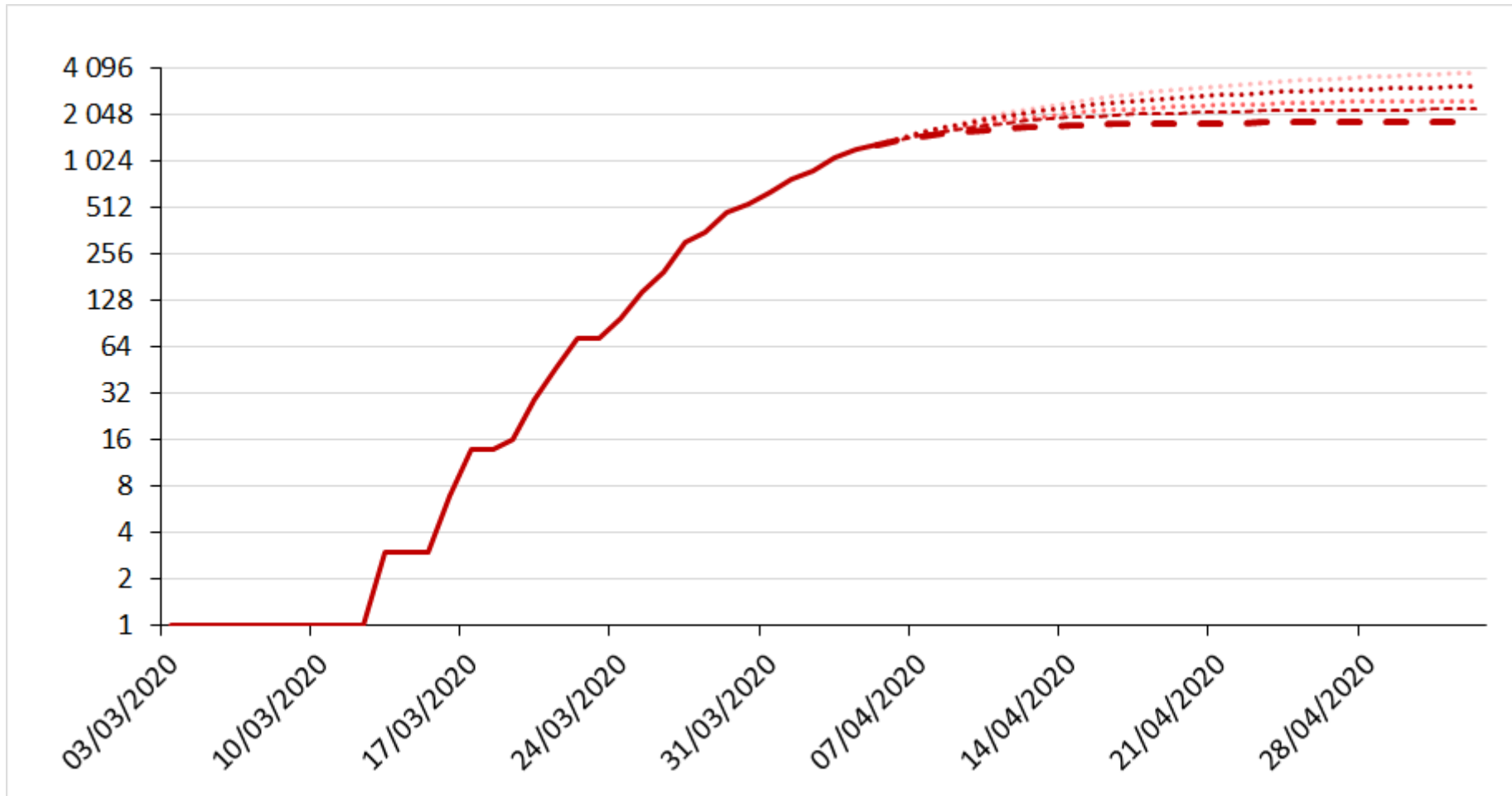
Turkey



Data: The Johns Hopkins University, Politolog.com

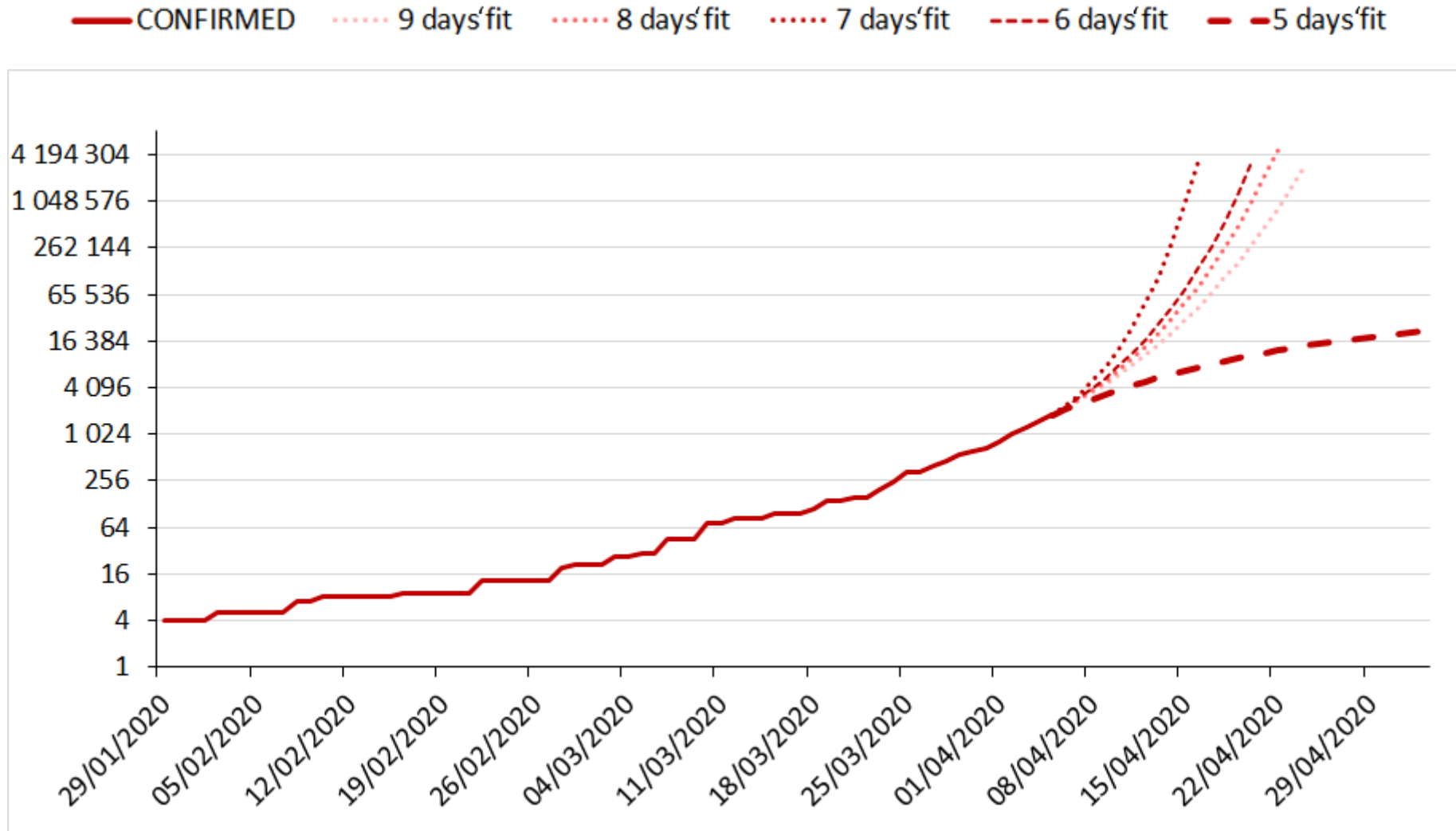
Ukraine

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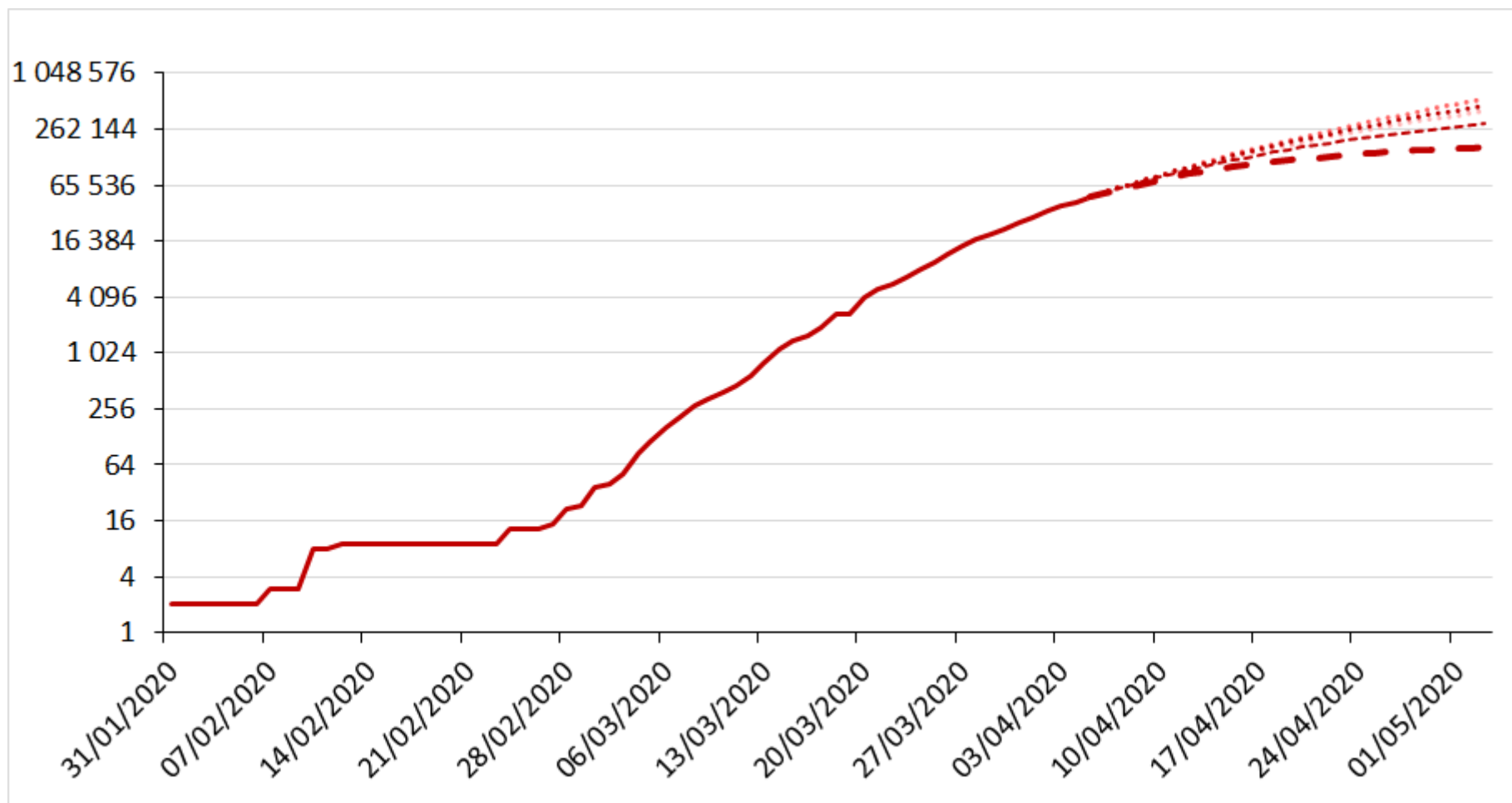
United Arab Emirates



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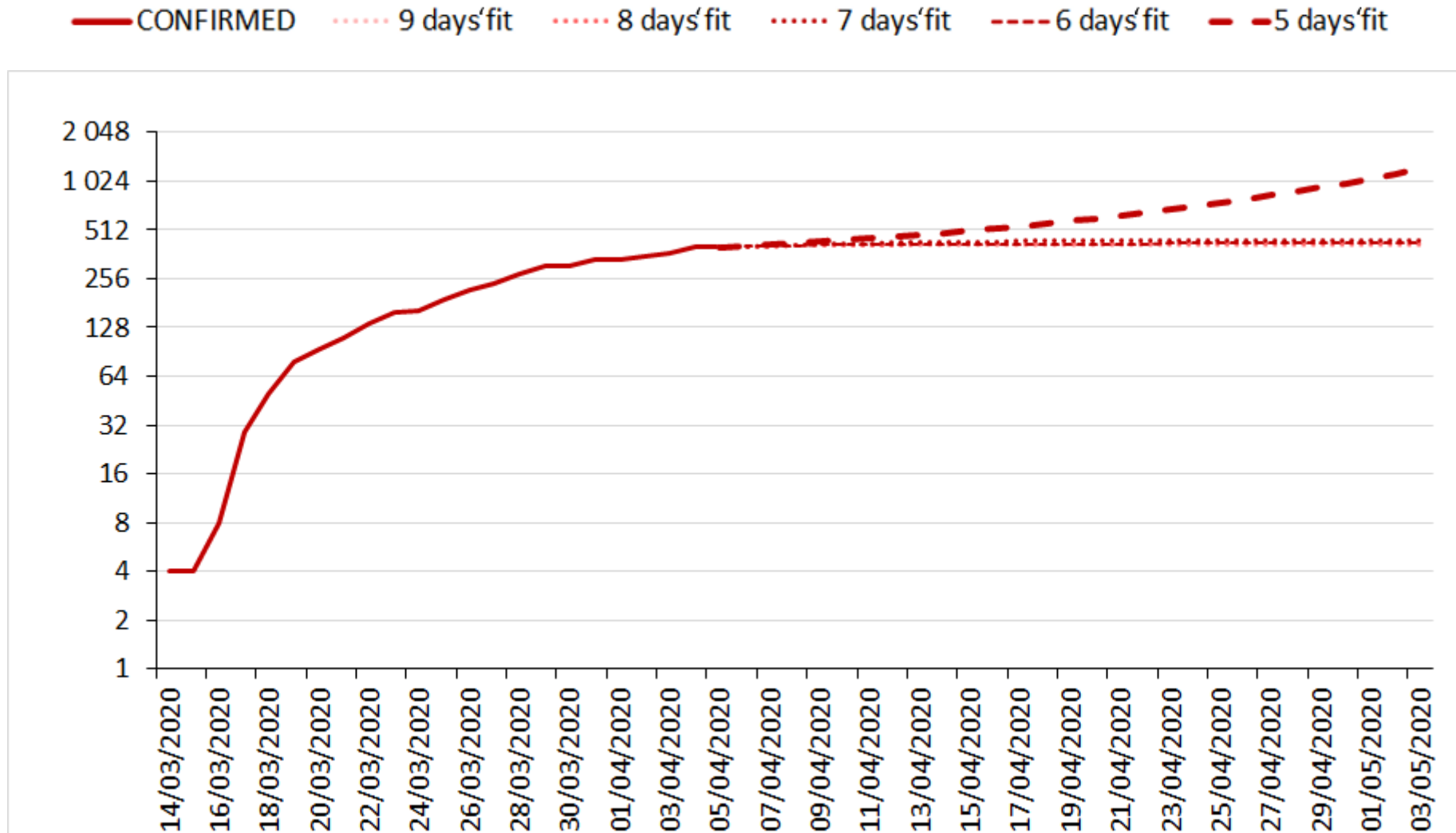
United Kingdom

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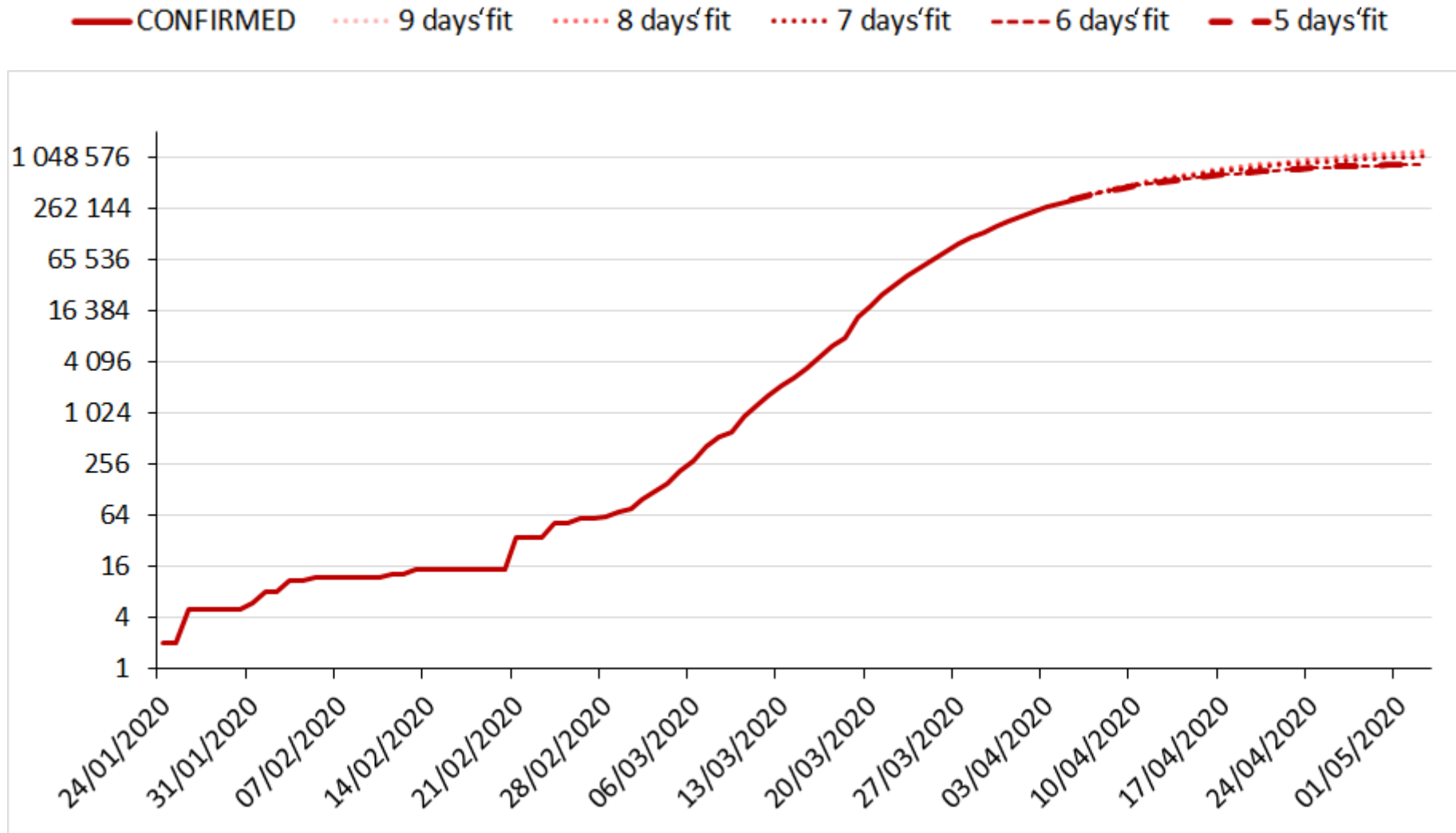
Data: The Johns Hopkins University, Politolog.com

Uruguay



Data: The Johns Hopkins University, Politolog.com

USA



Data: The Johns Hopkins University, Politolog.com



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