

03 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.

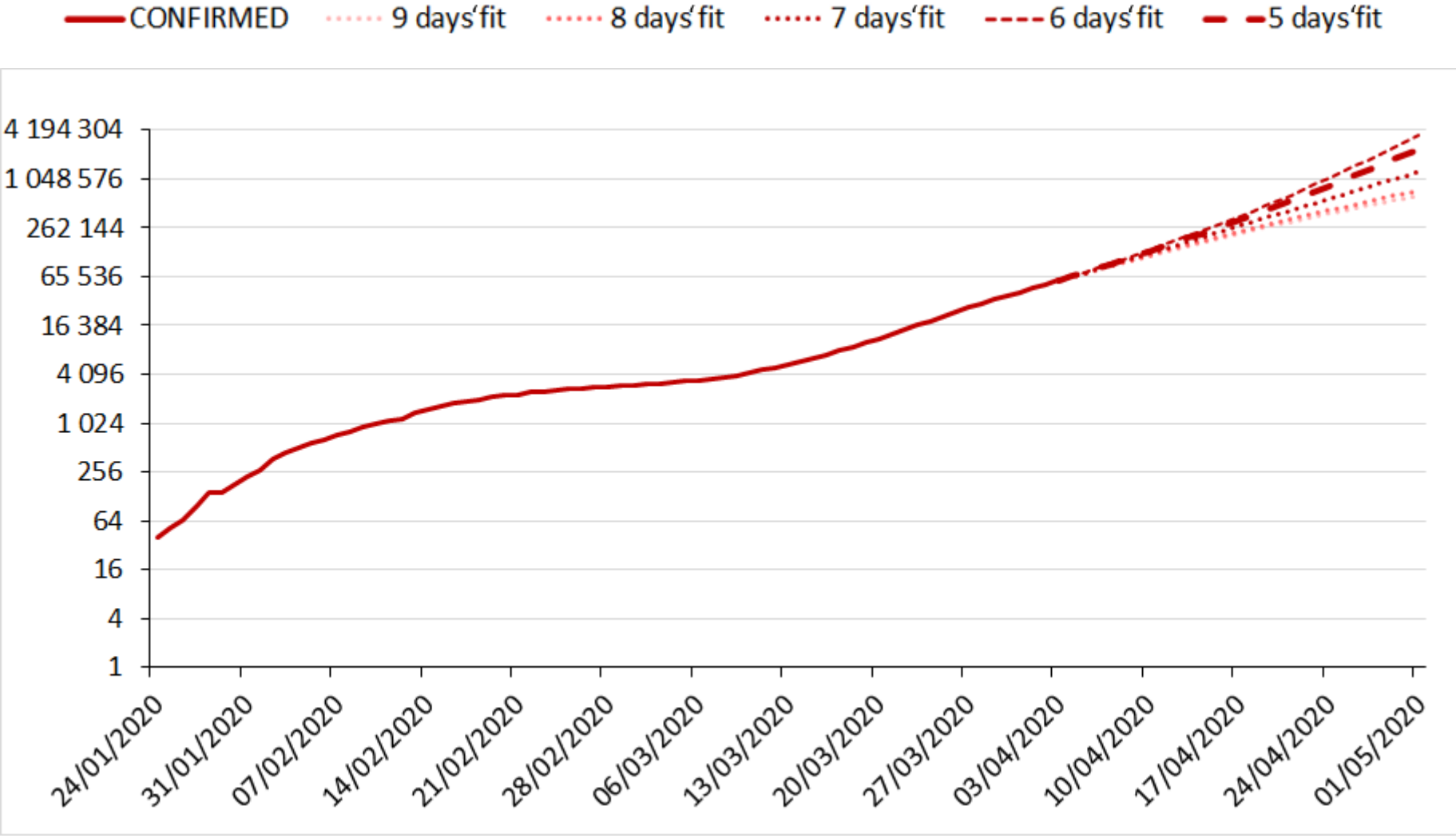
The jolt is fitted with an exponential function over, respectively, the previous 5, 6, 7, 8 and 9 days. Large numbers are truncated to facilitate the reading of the charts.

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

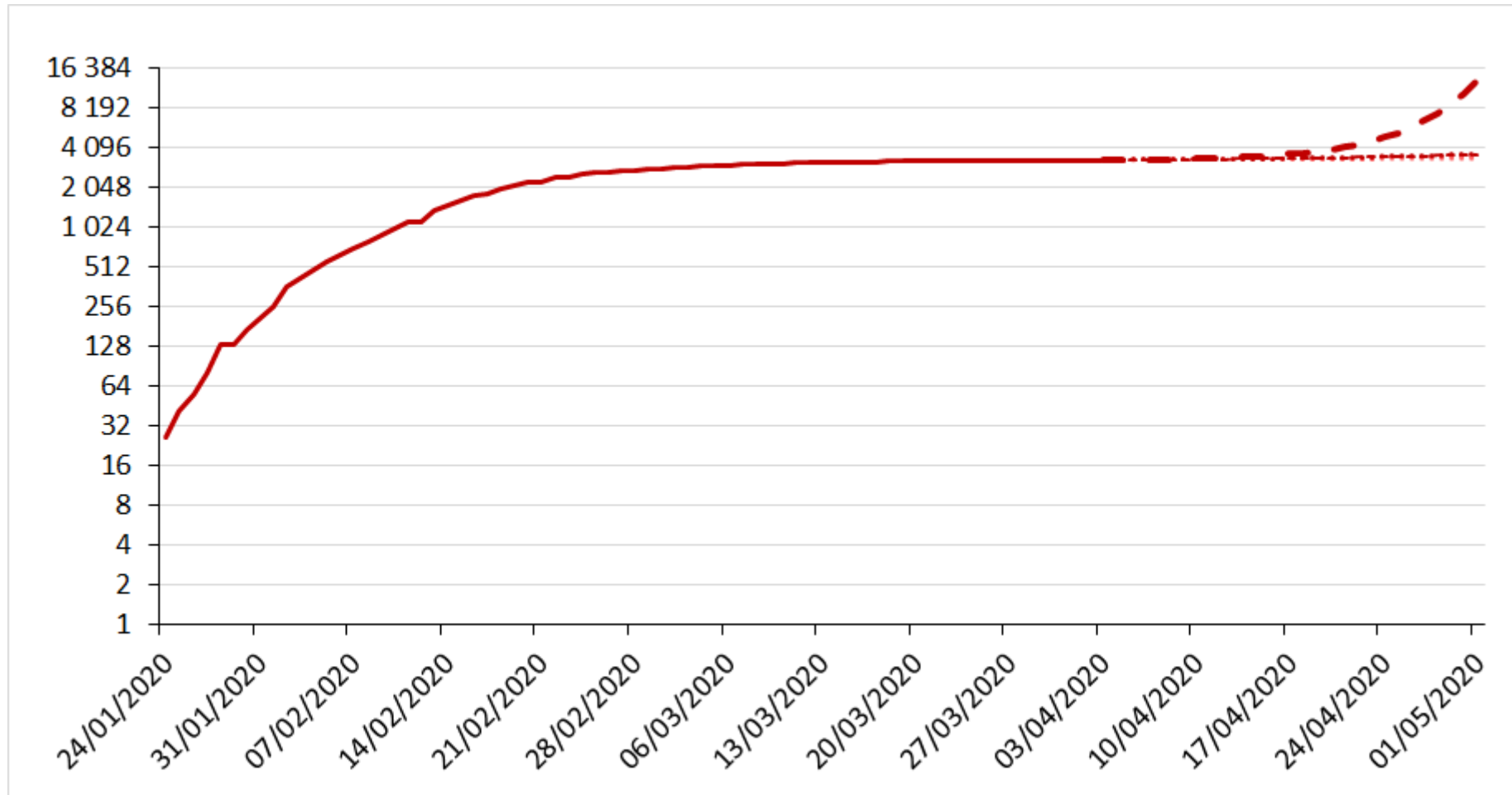
World



Data: The Johns Hopkins University, Politolog.com

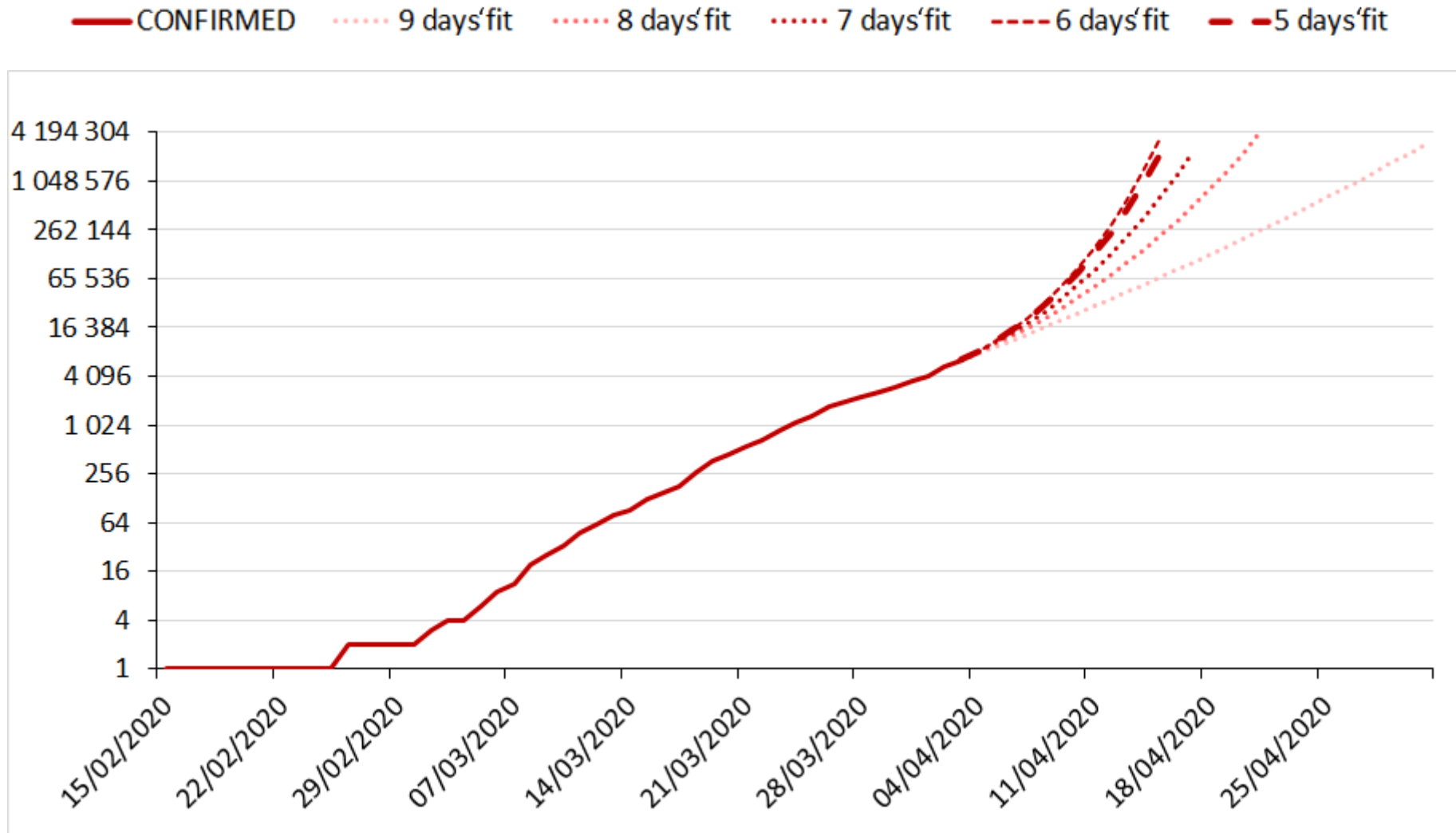
China

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



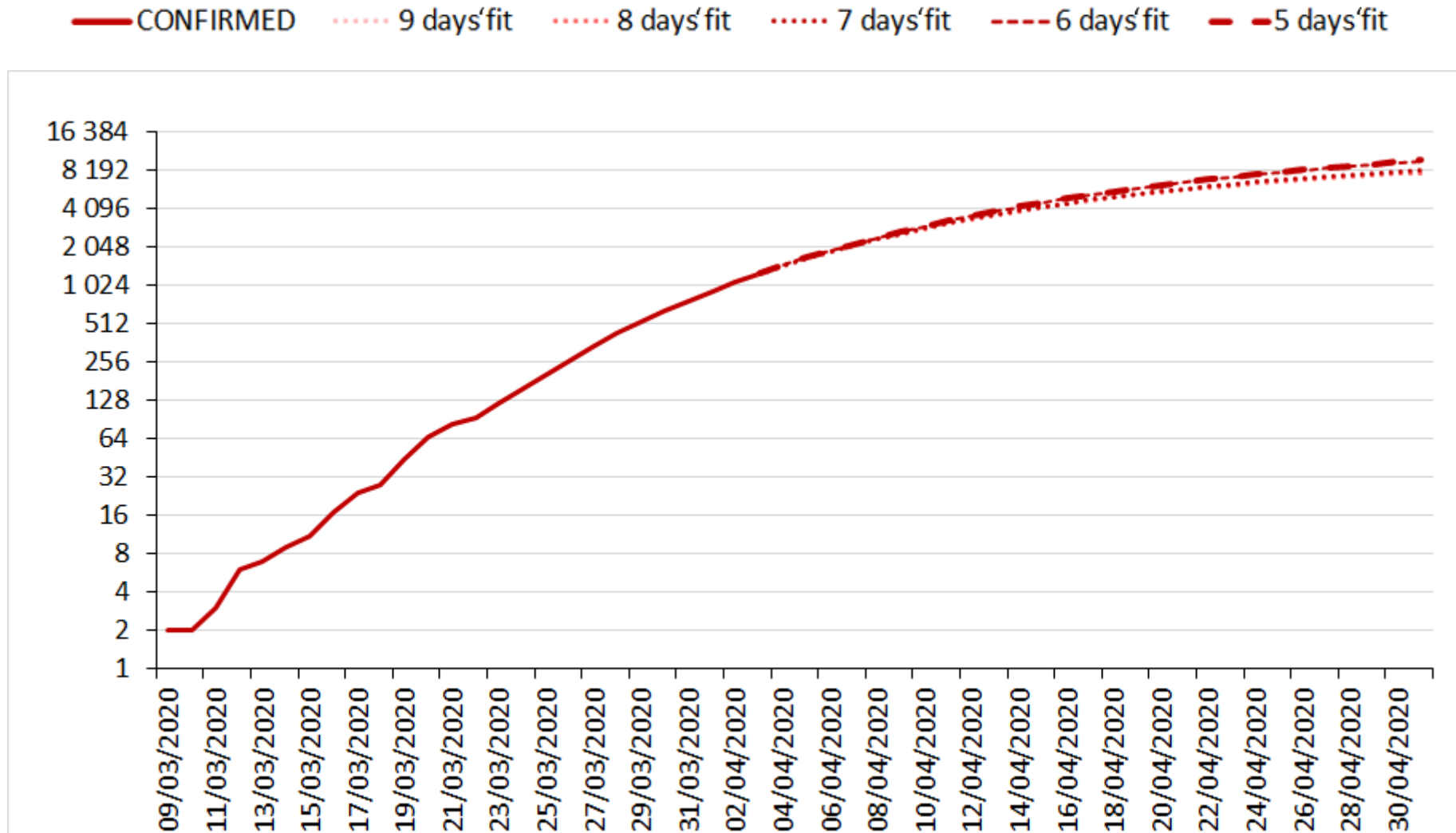
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France



Data: The Johns Hopkins University, Politolog.com

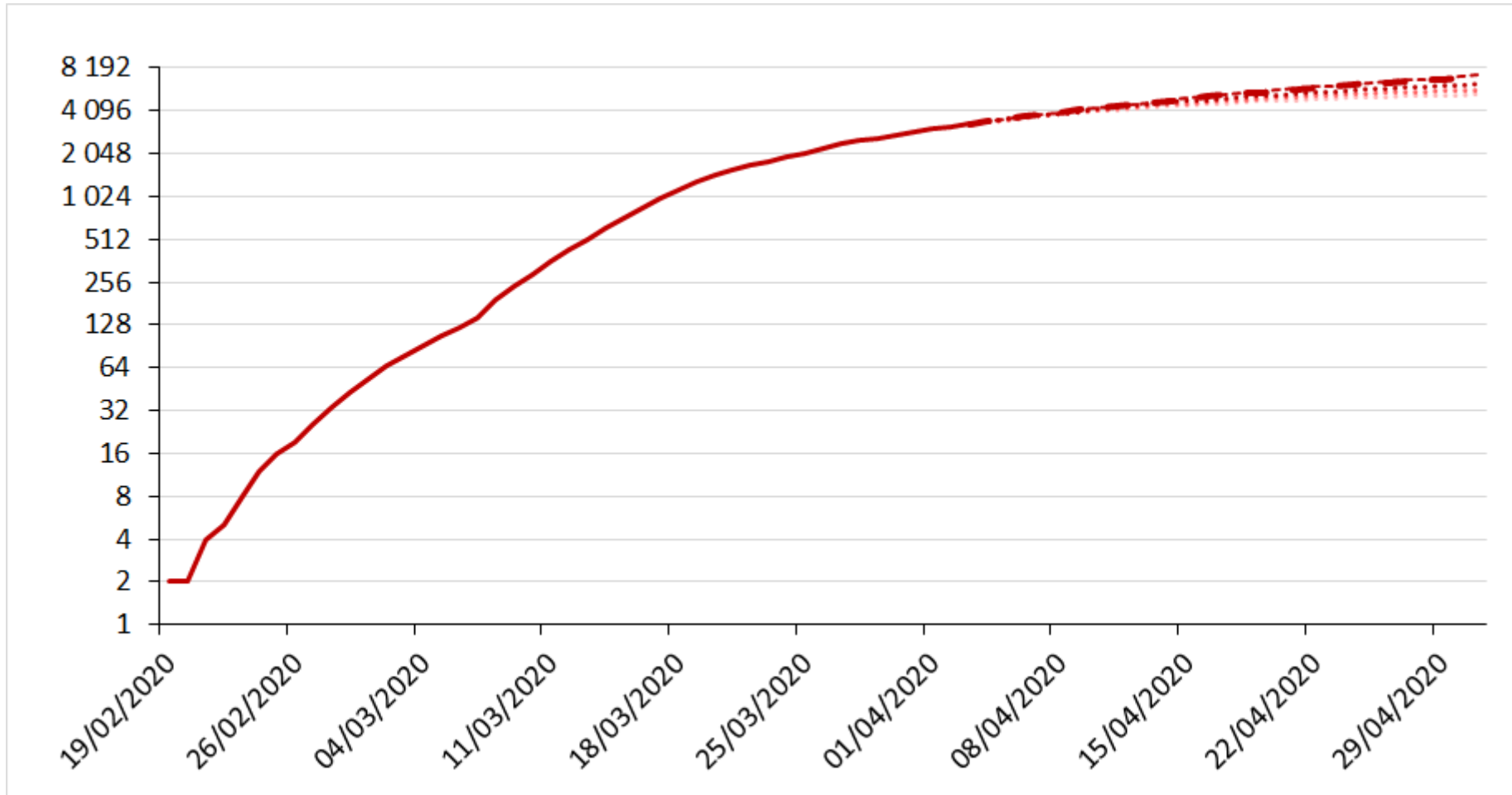
Germany



Data: The Johns Hopkins University, Politolog.com

Iran

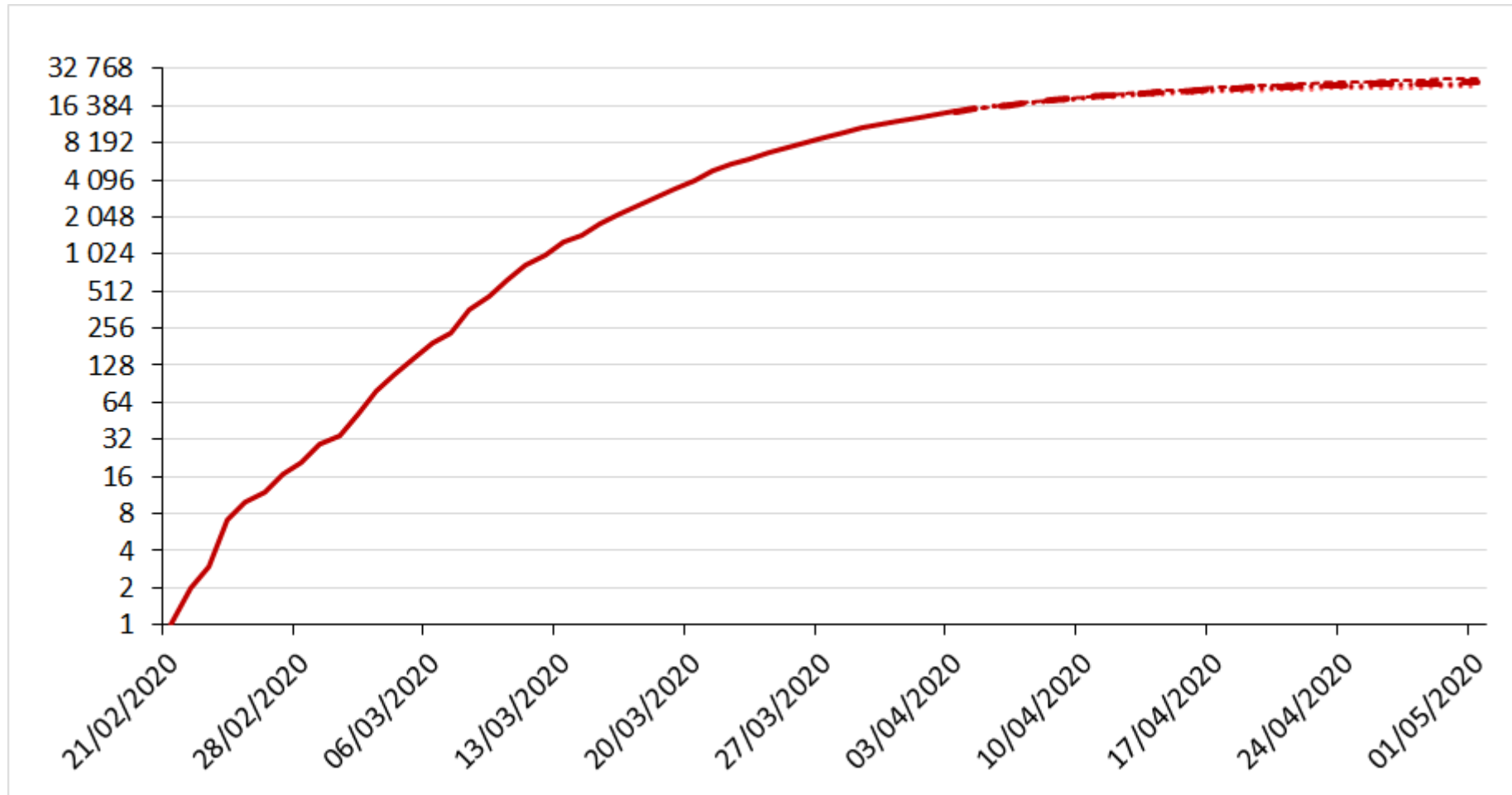
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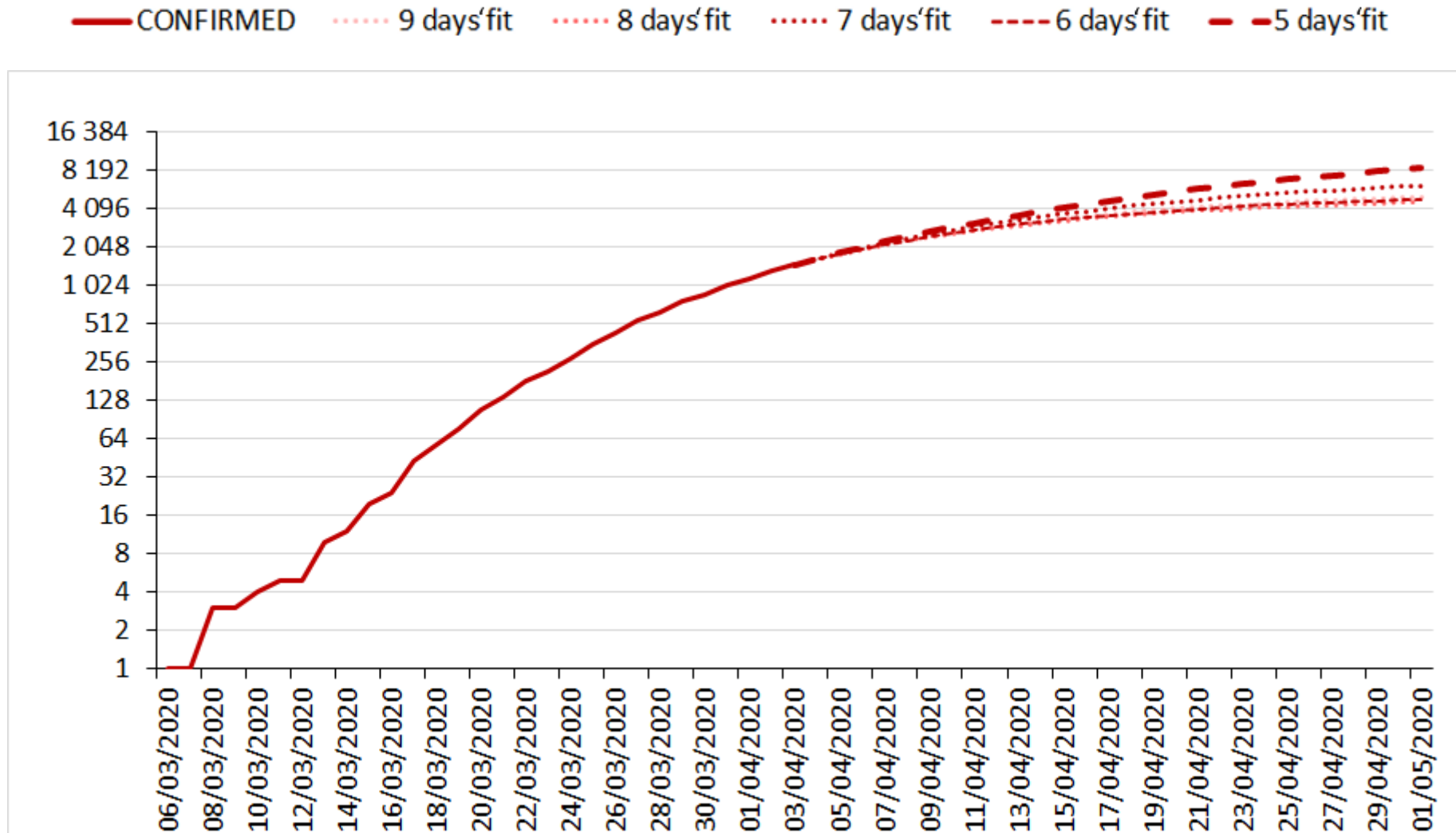
Italy

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Data: The Johns Hopkins University, Politolog.com

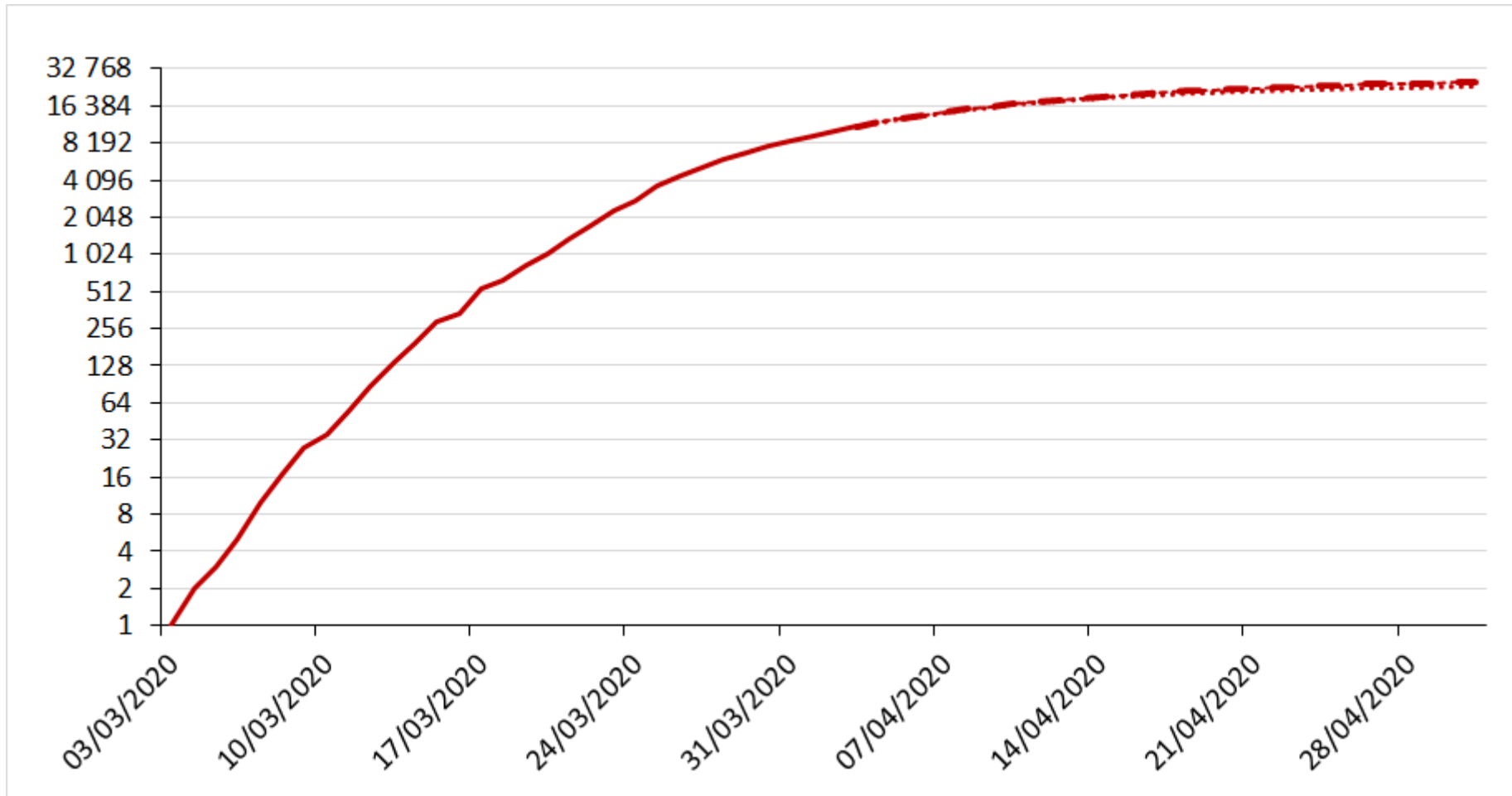
Netherlands



Data: The Johns Hopkins University, Politolog.com

Spain

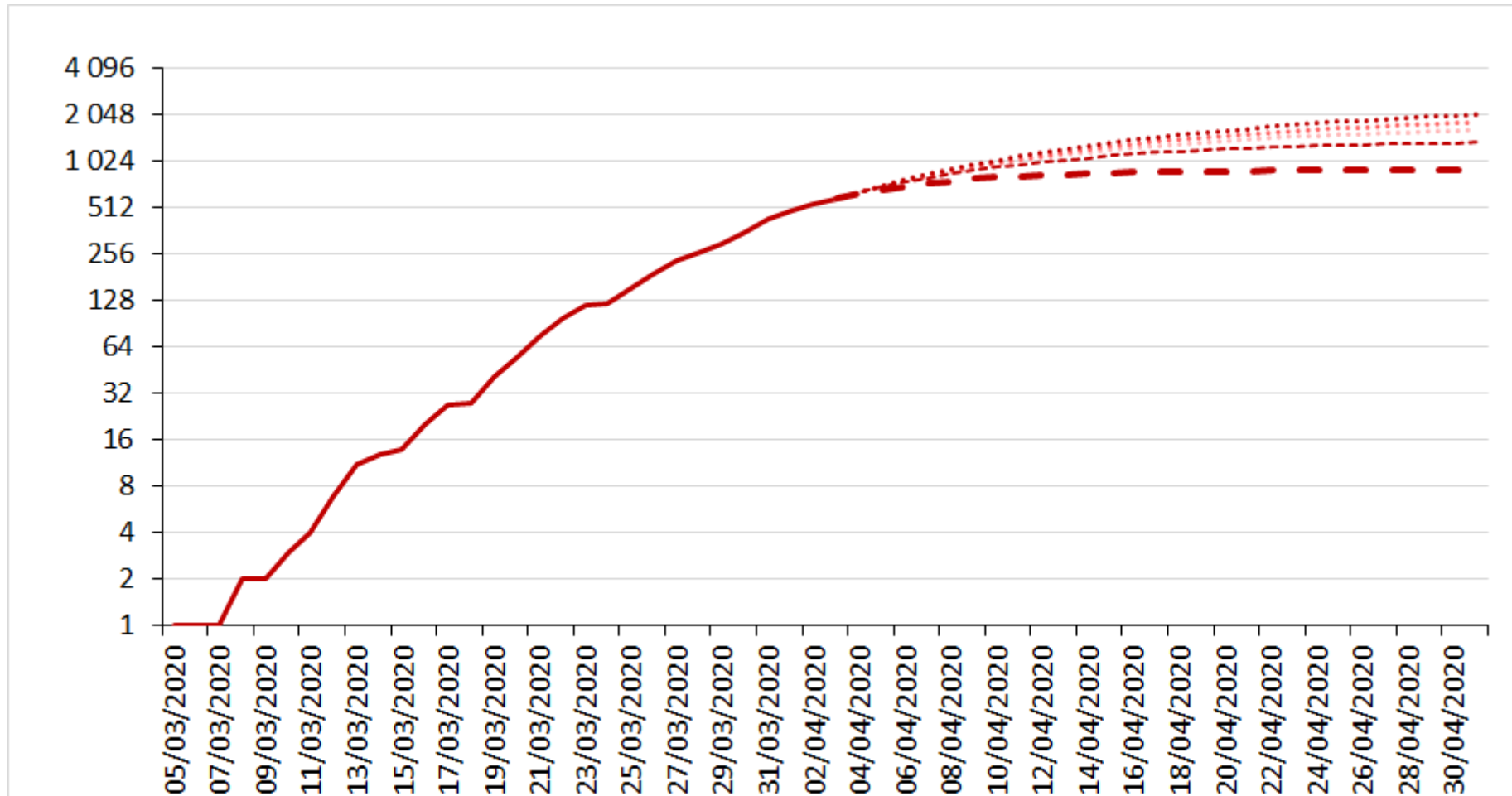
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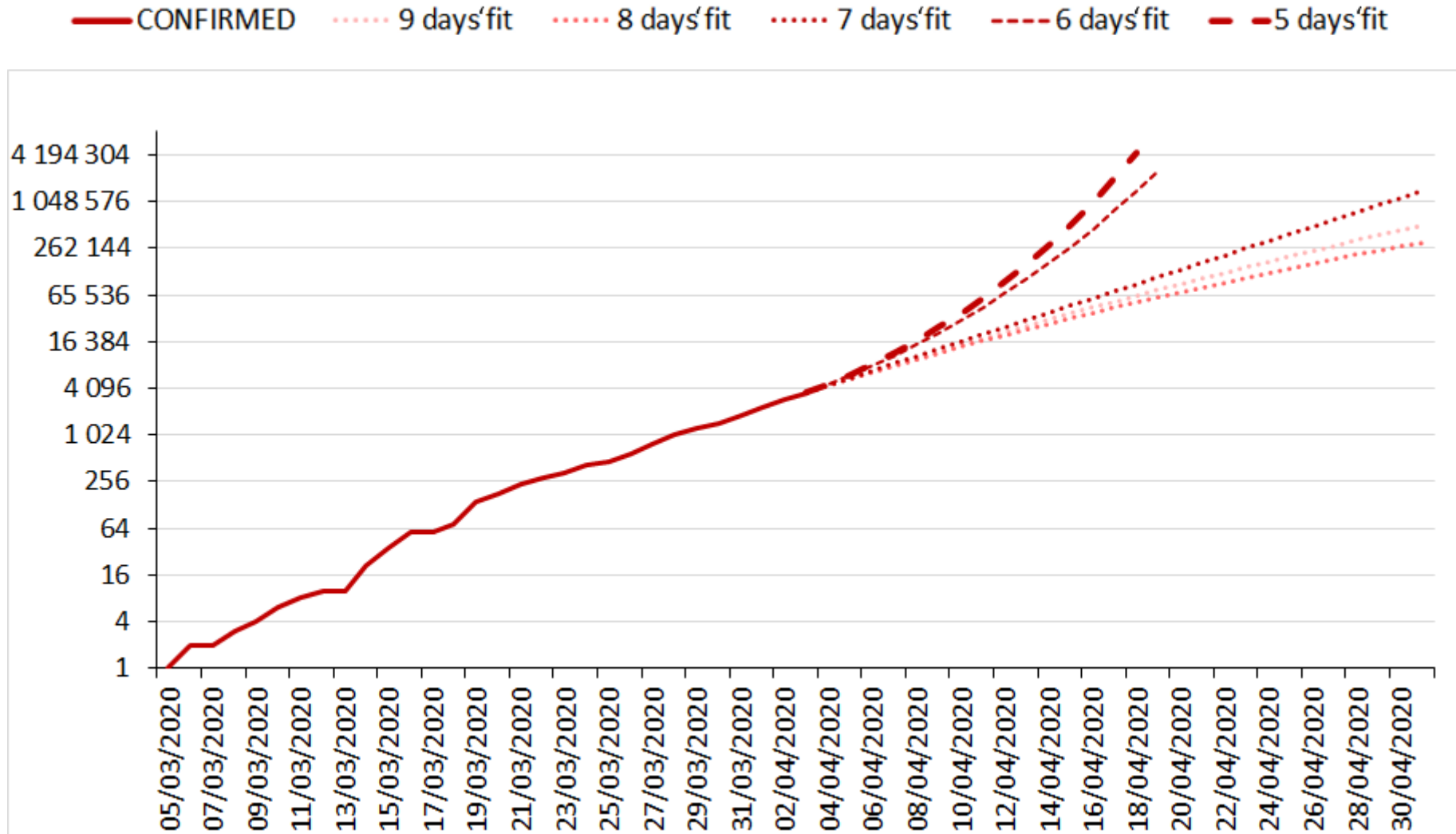
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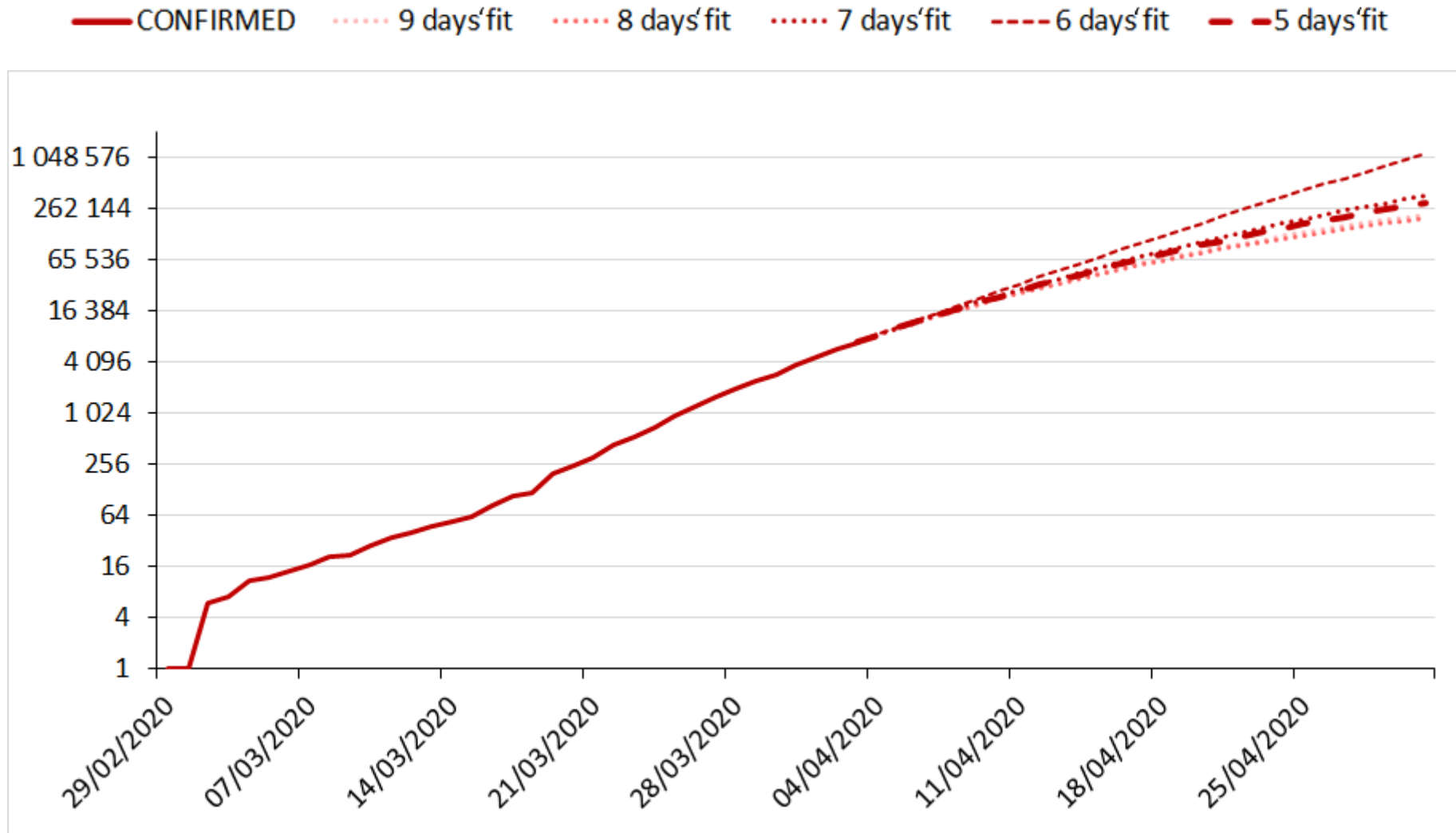
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United Kingdom



Data: The Johns Hopkins University, Politolog.com

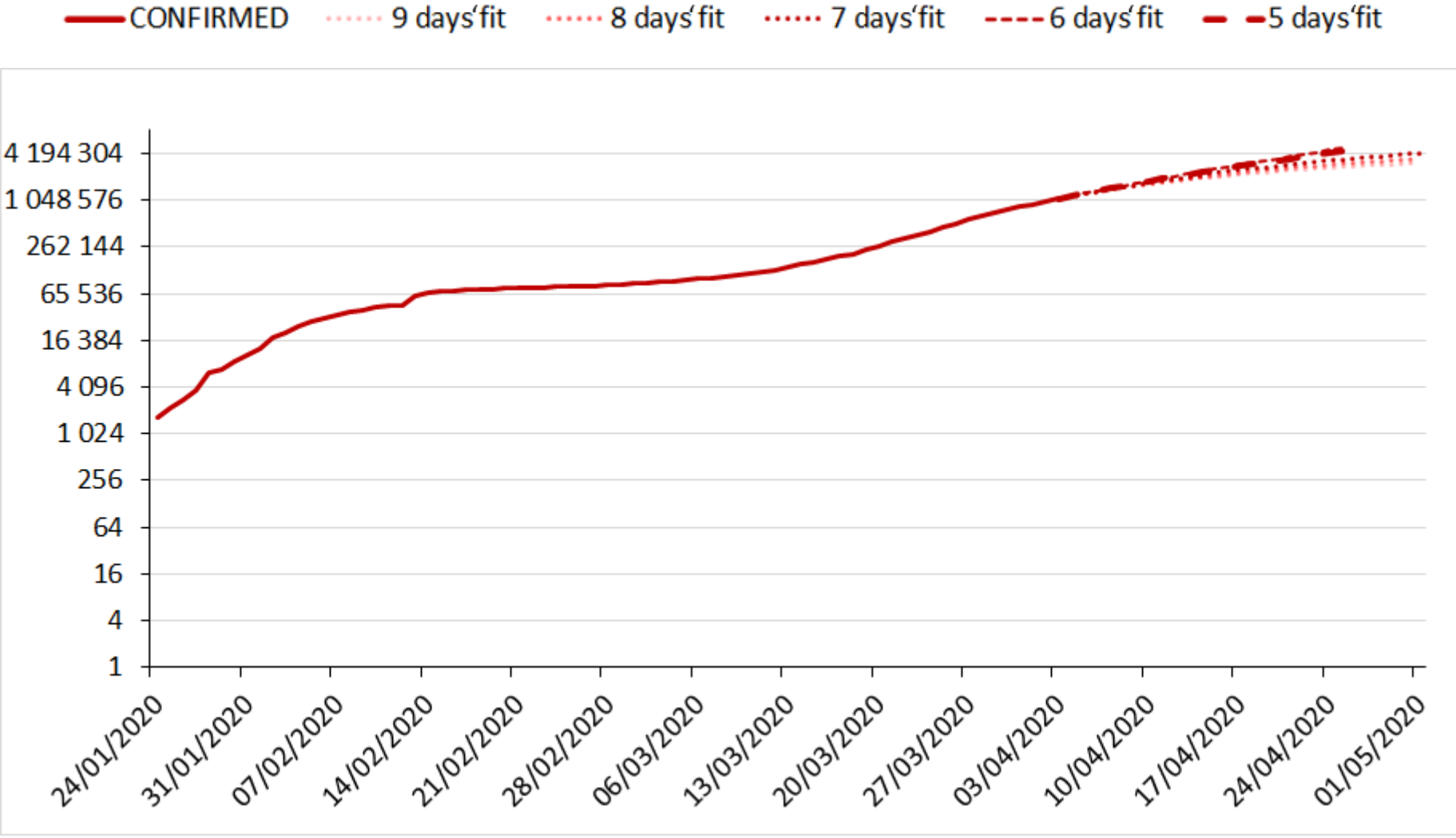
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Data: The Johns Hopkins University, Politolog.com

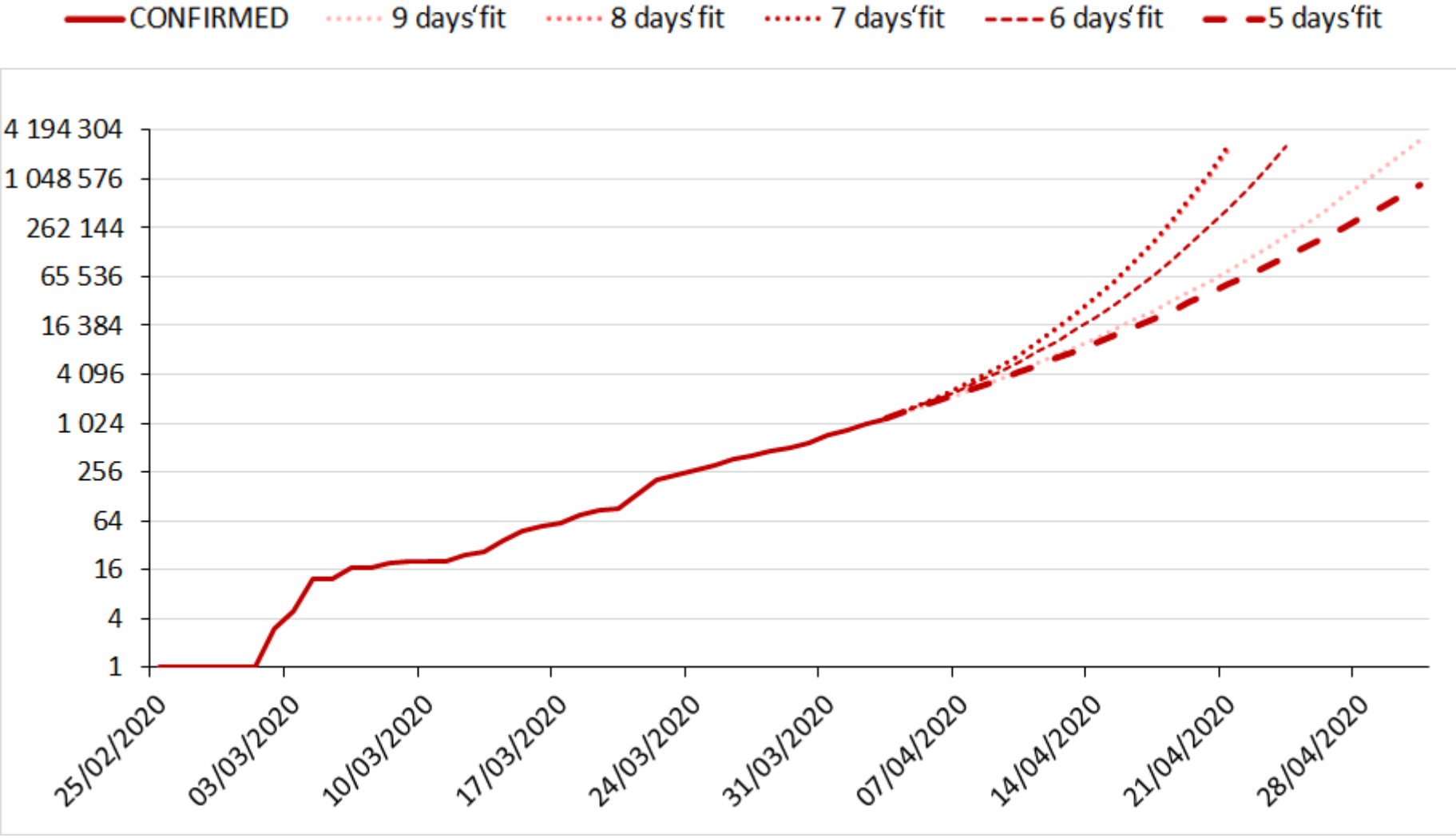
CUMULATED CASES - PROJECTIONS

World



Data: The Johns Hopkins University, Politolog.com

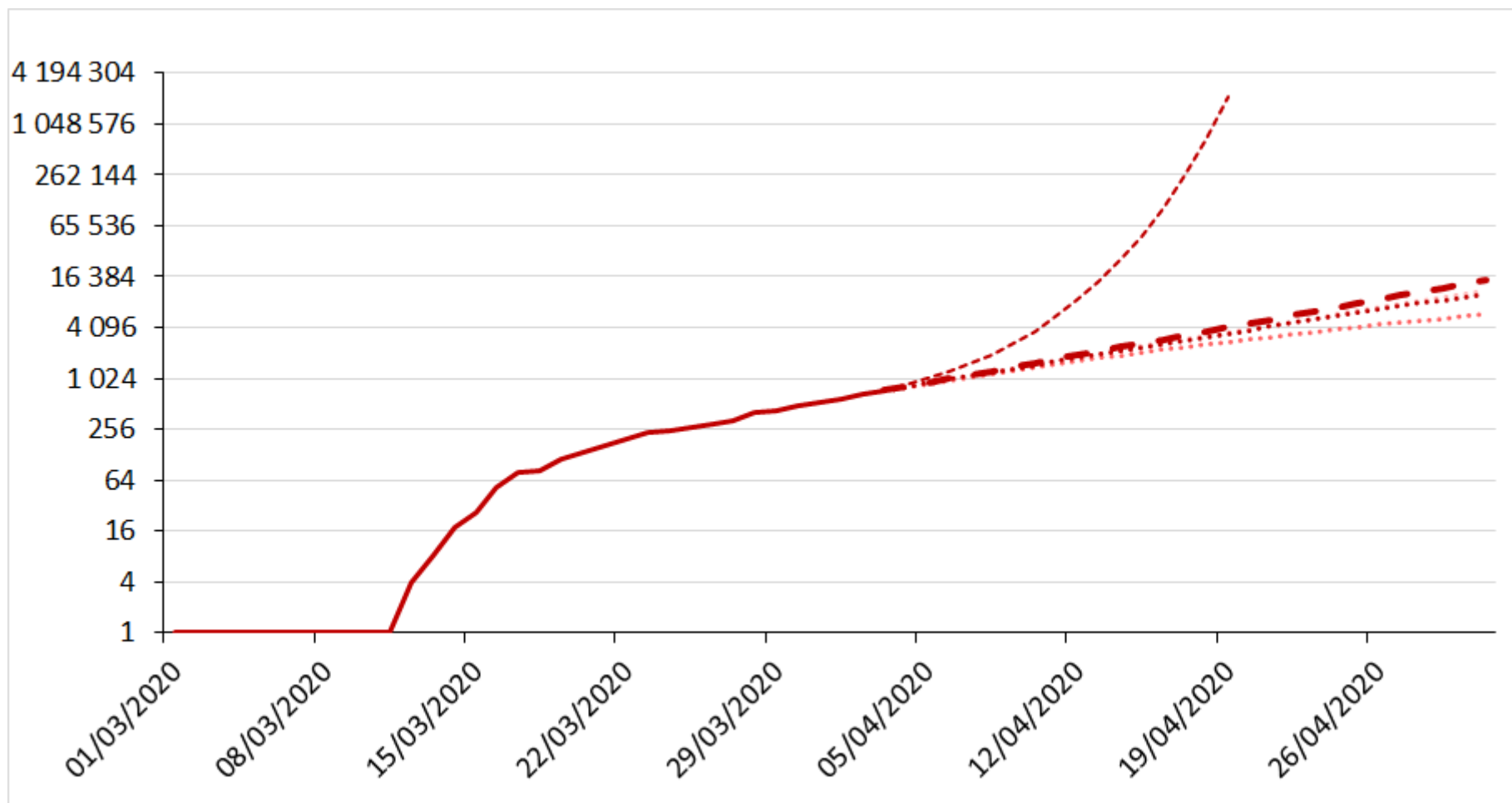
Algeria



Data: The Johns Hopkins University, Politolog.com

Armenia

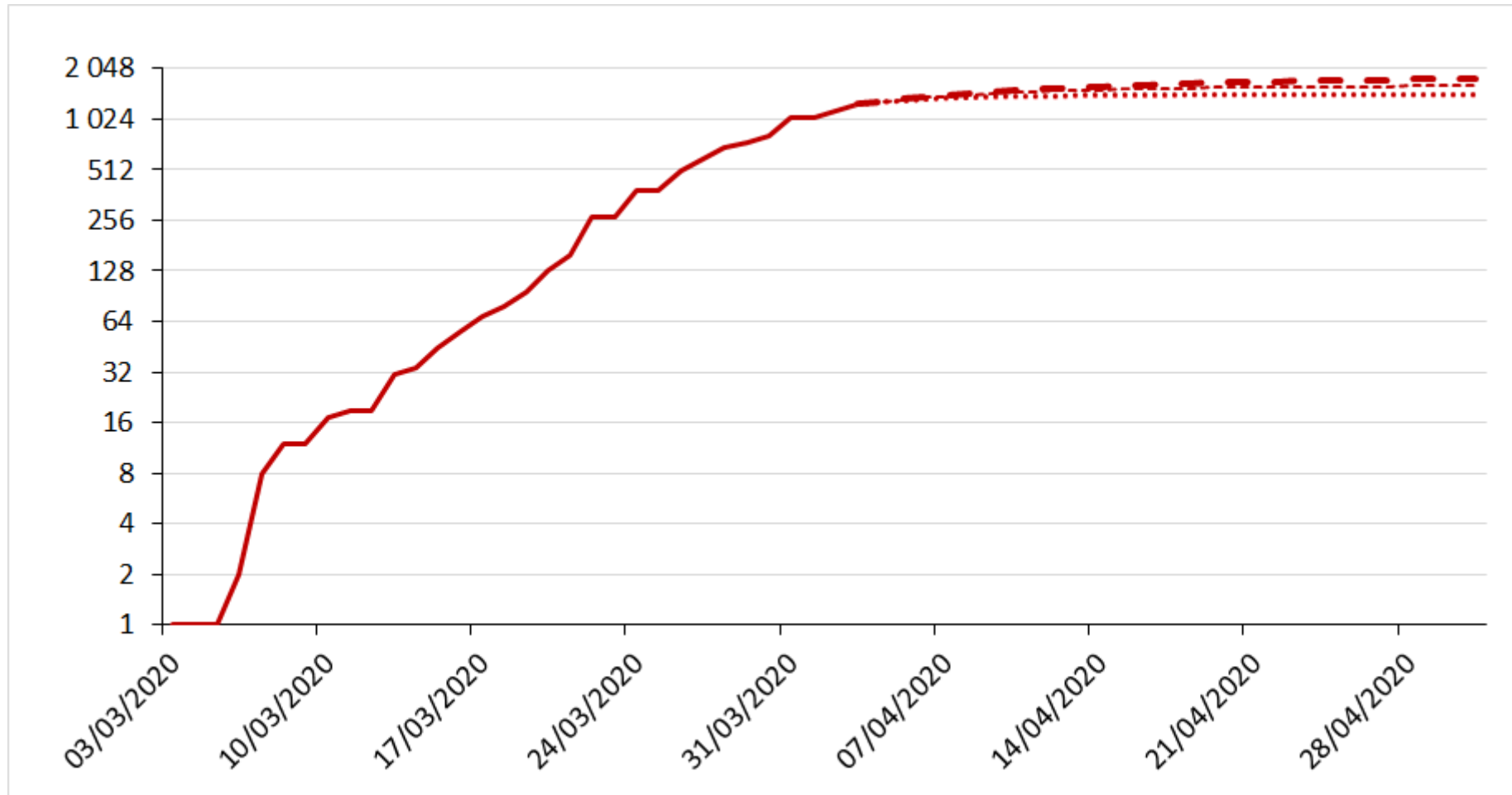
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Data: The Johns Hopkins University, Politolog.com

Argentina

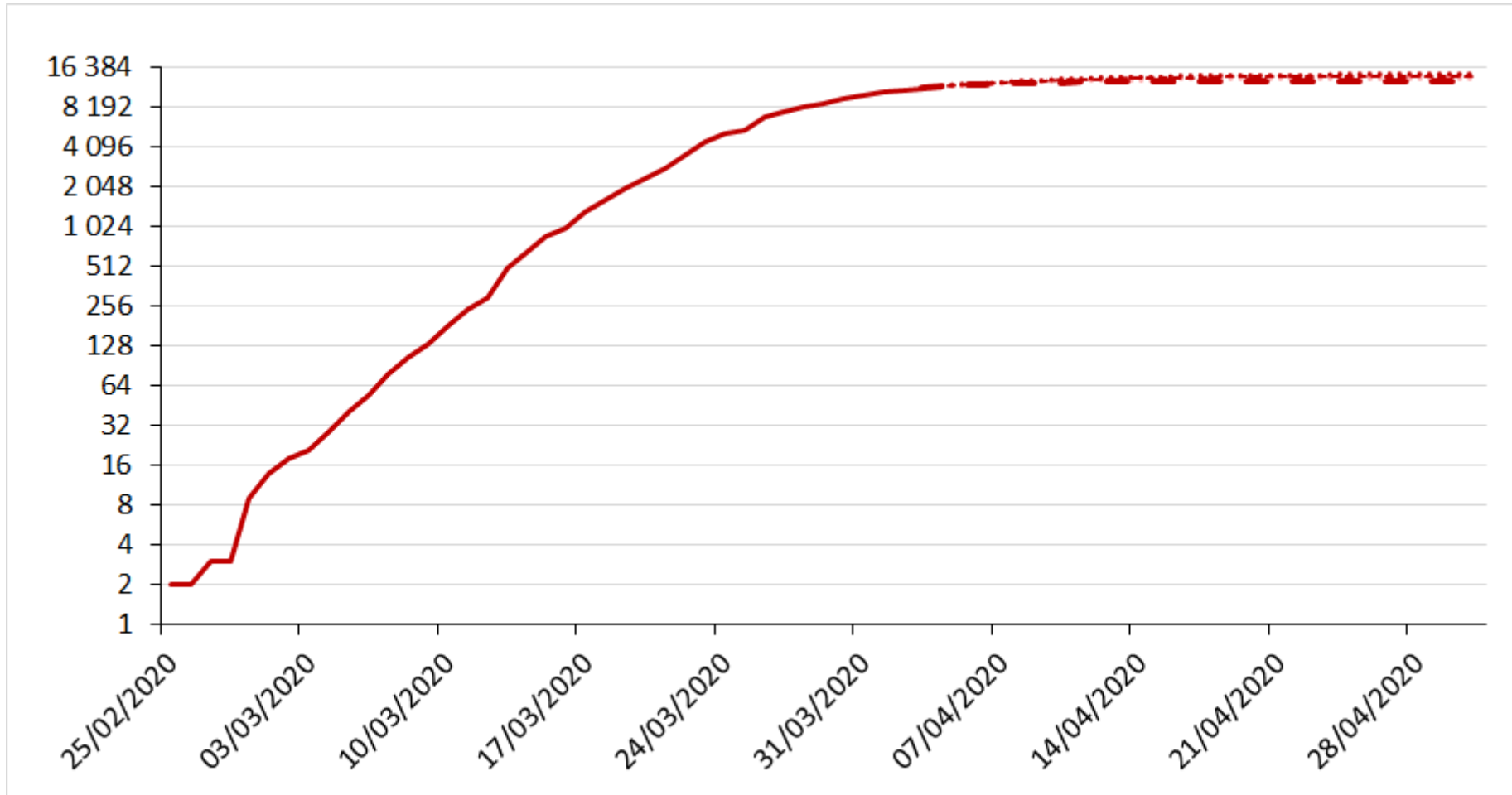
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Data: The Johns Hopkins University, Politolog.com

Austria

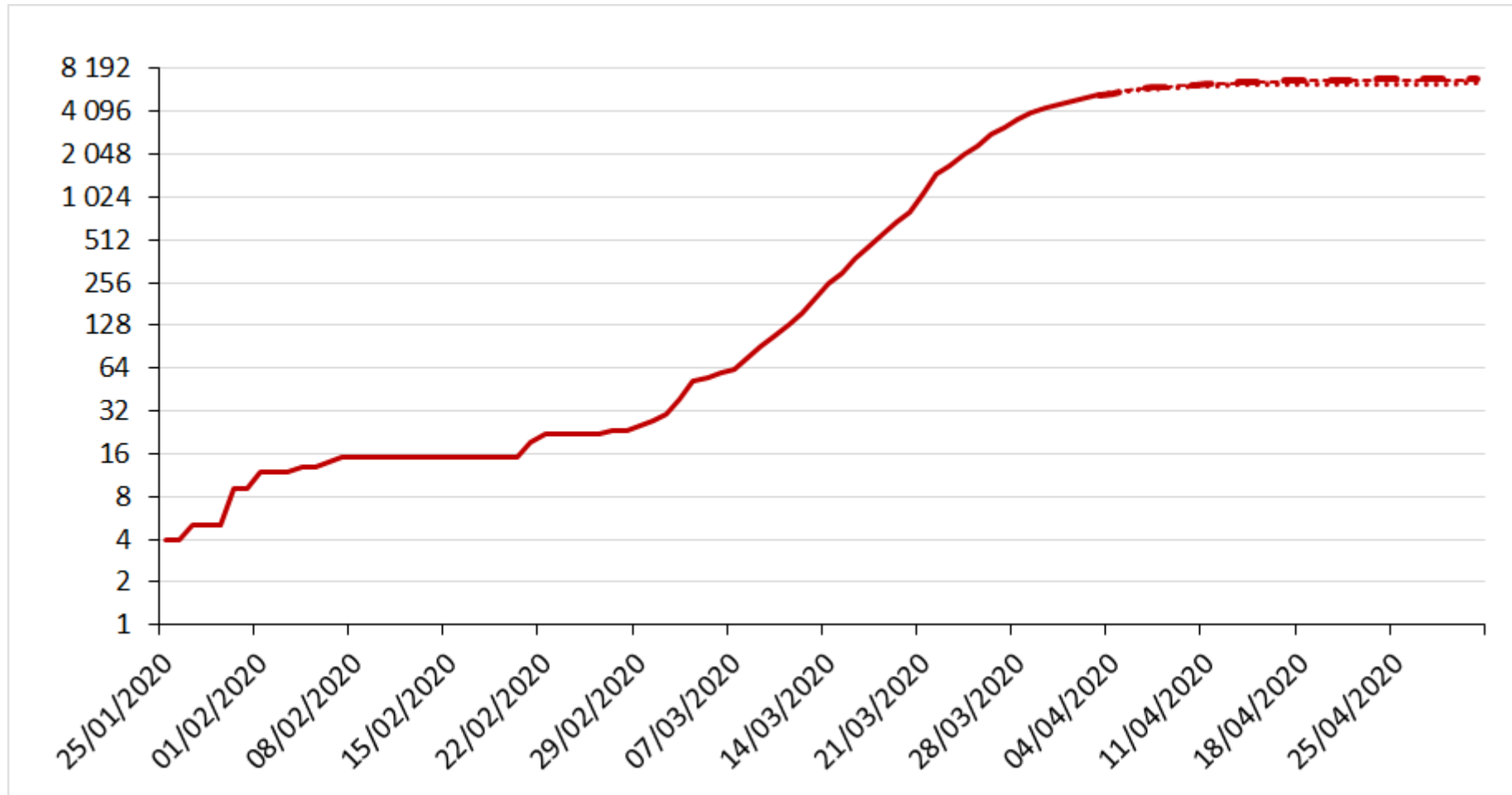
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Data: The Johns Hopkins University, Politolog.com

Australia

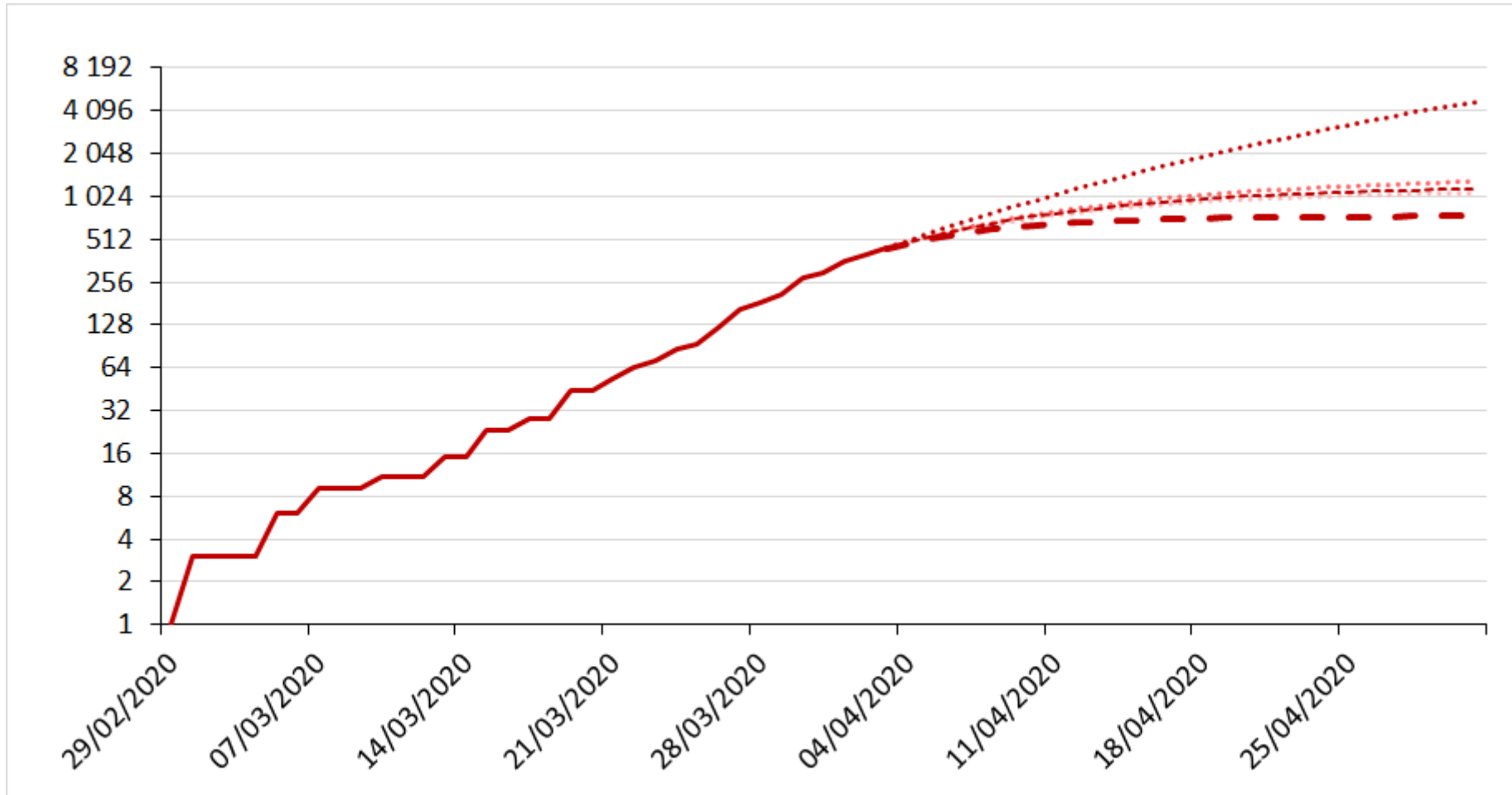
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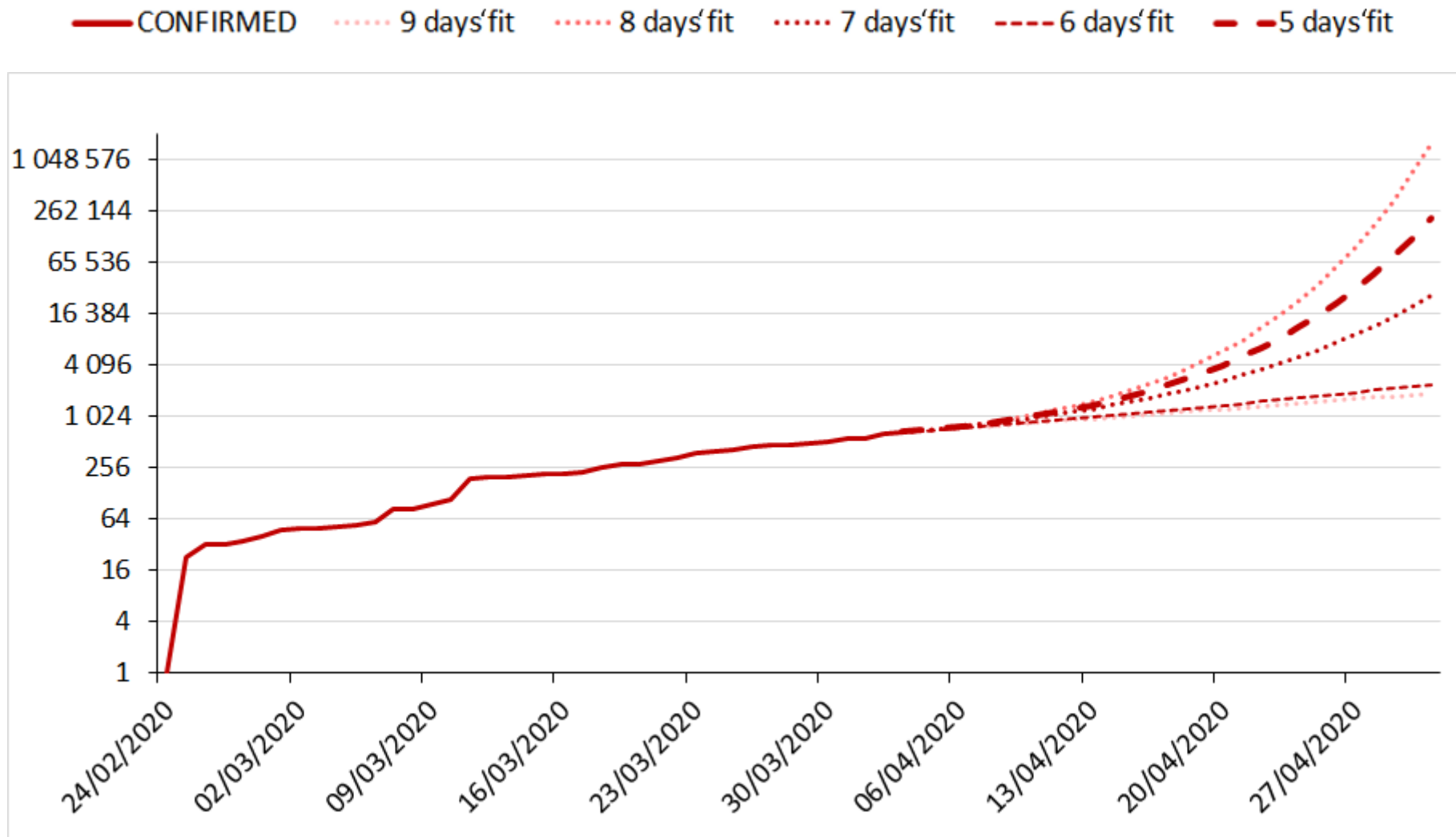
Azerbaijan

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



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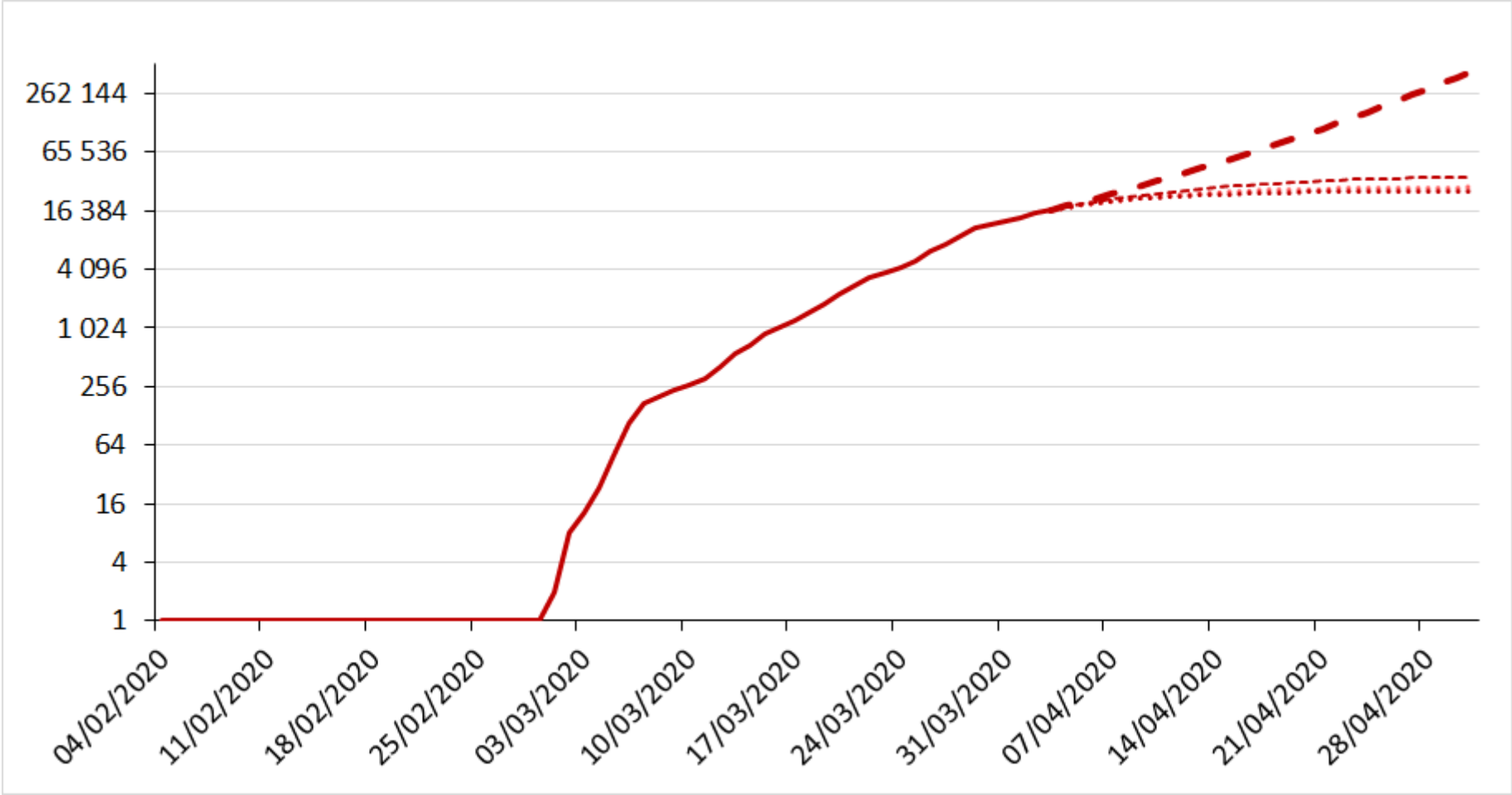
Bahrain



Data: The Johns Hopkins University, Politolog.com

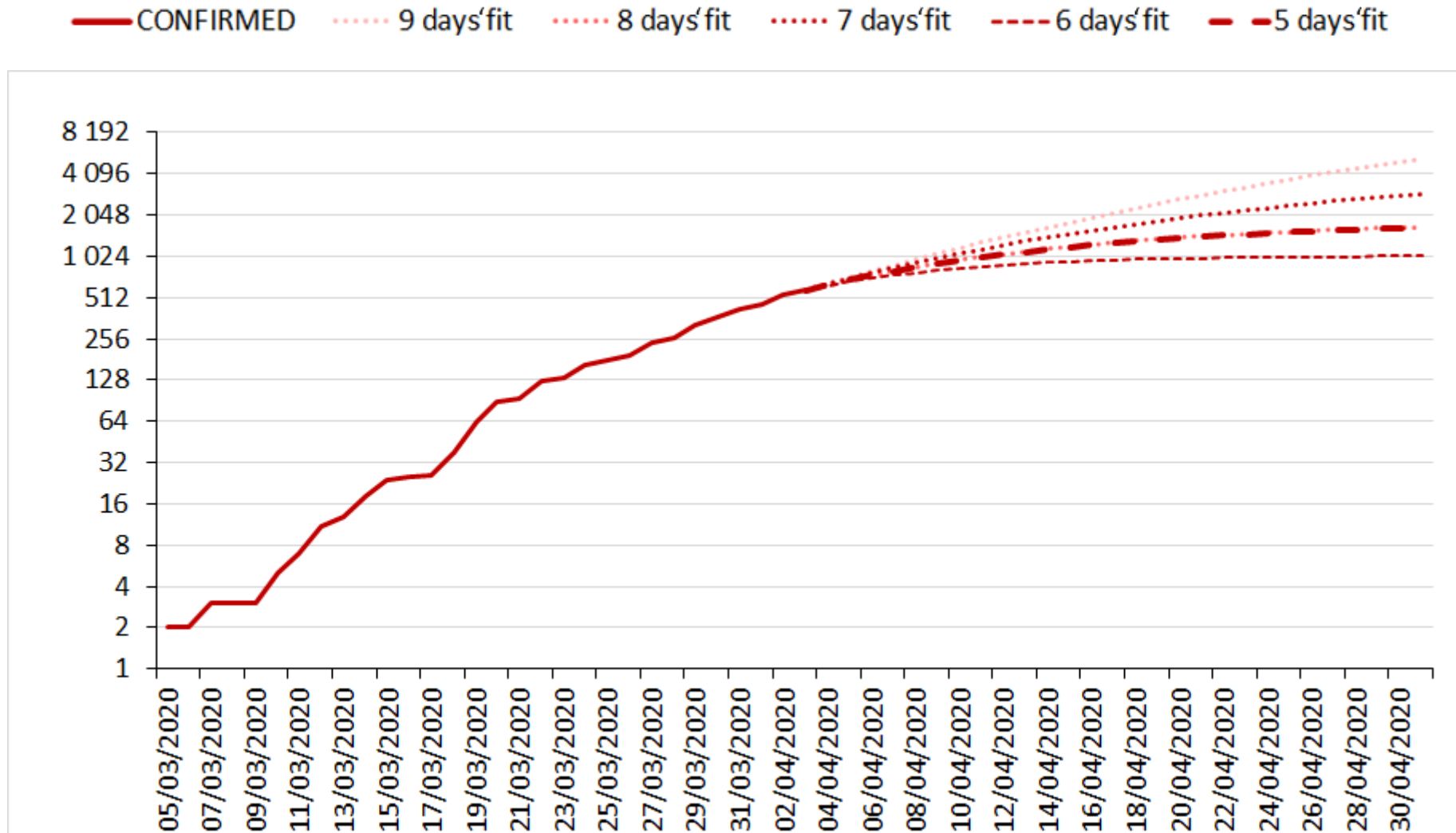
Belgium

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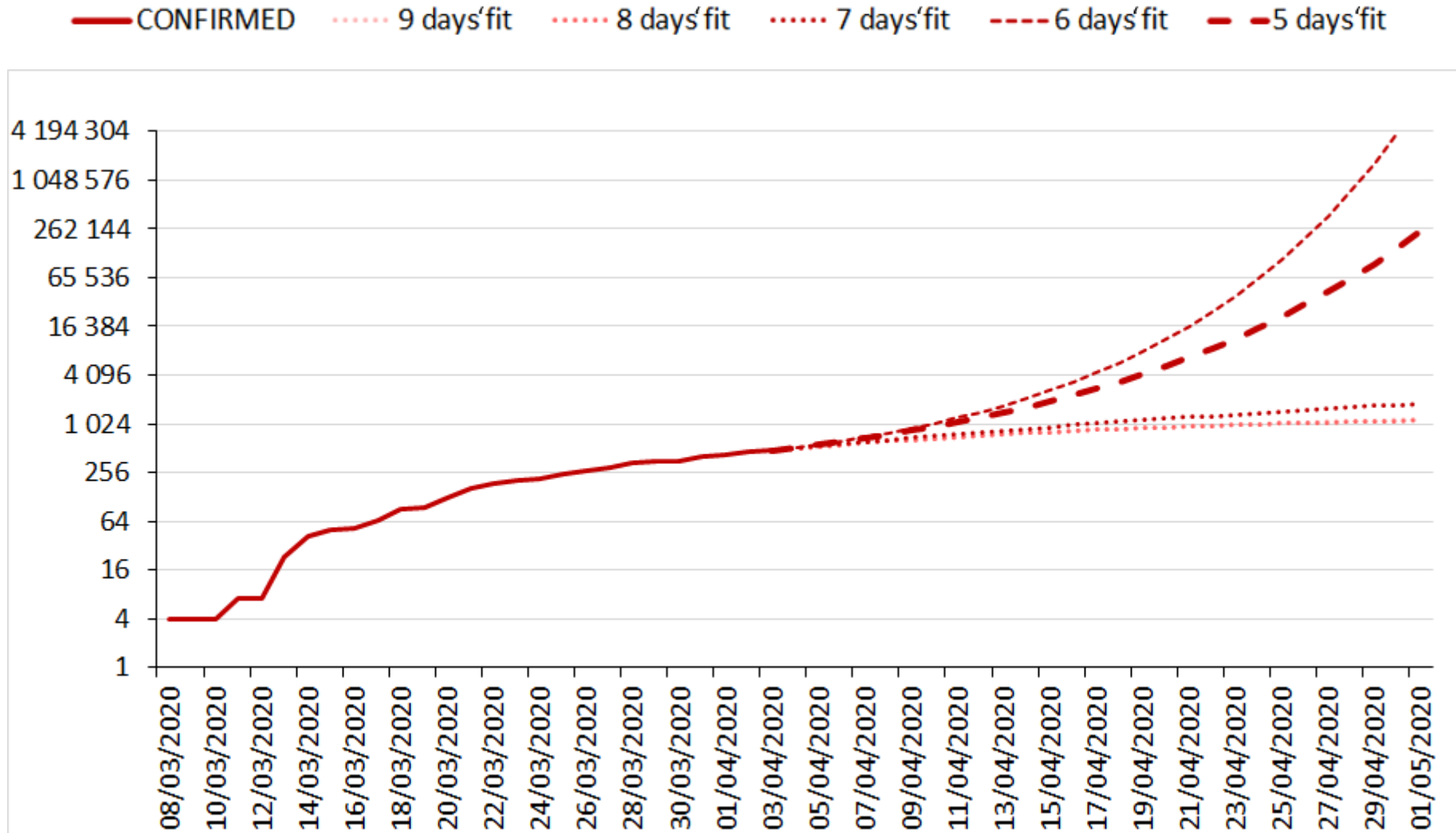
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Bosnia and Herzegovina



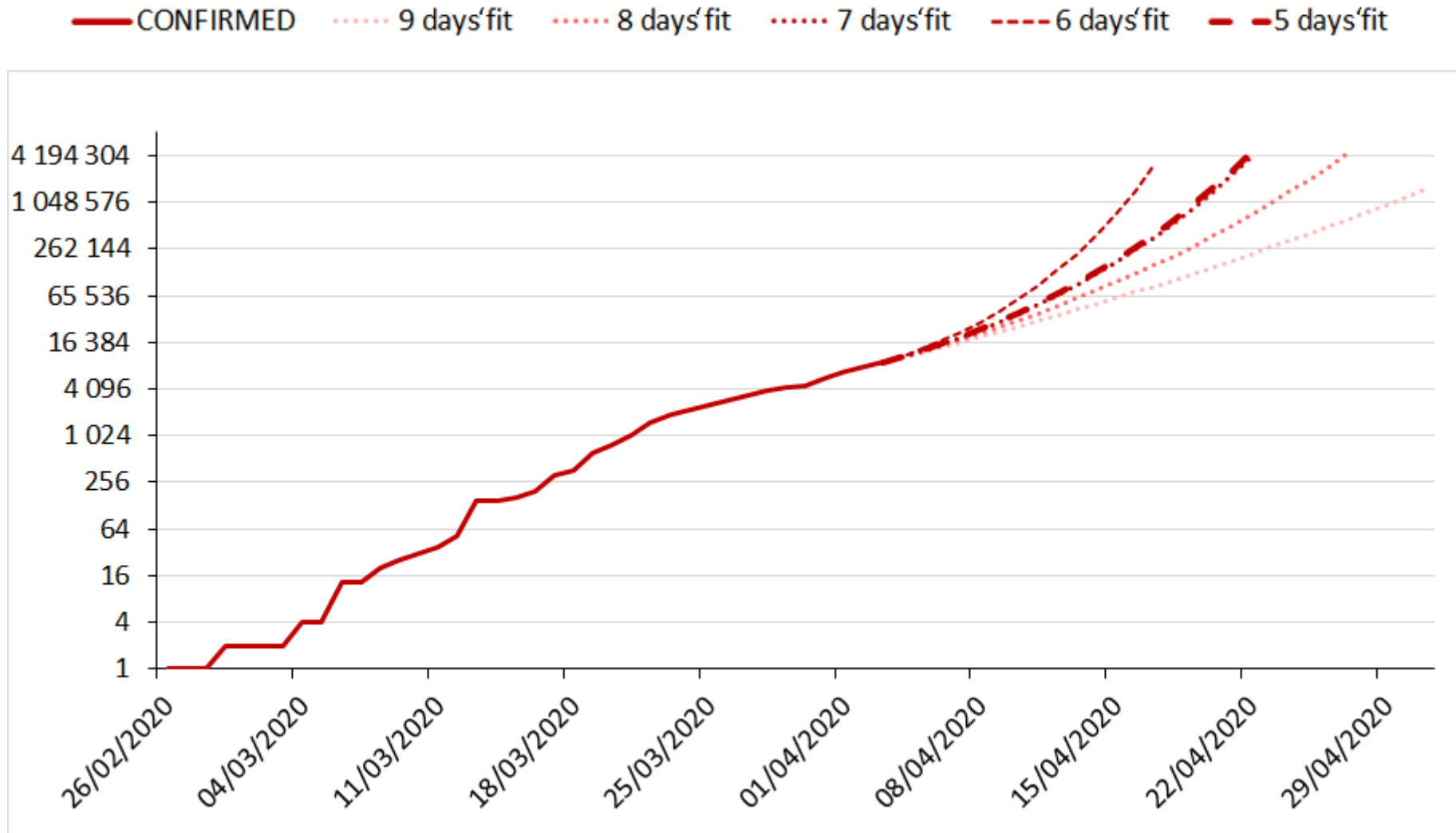
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Bulgaria



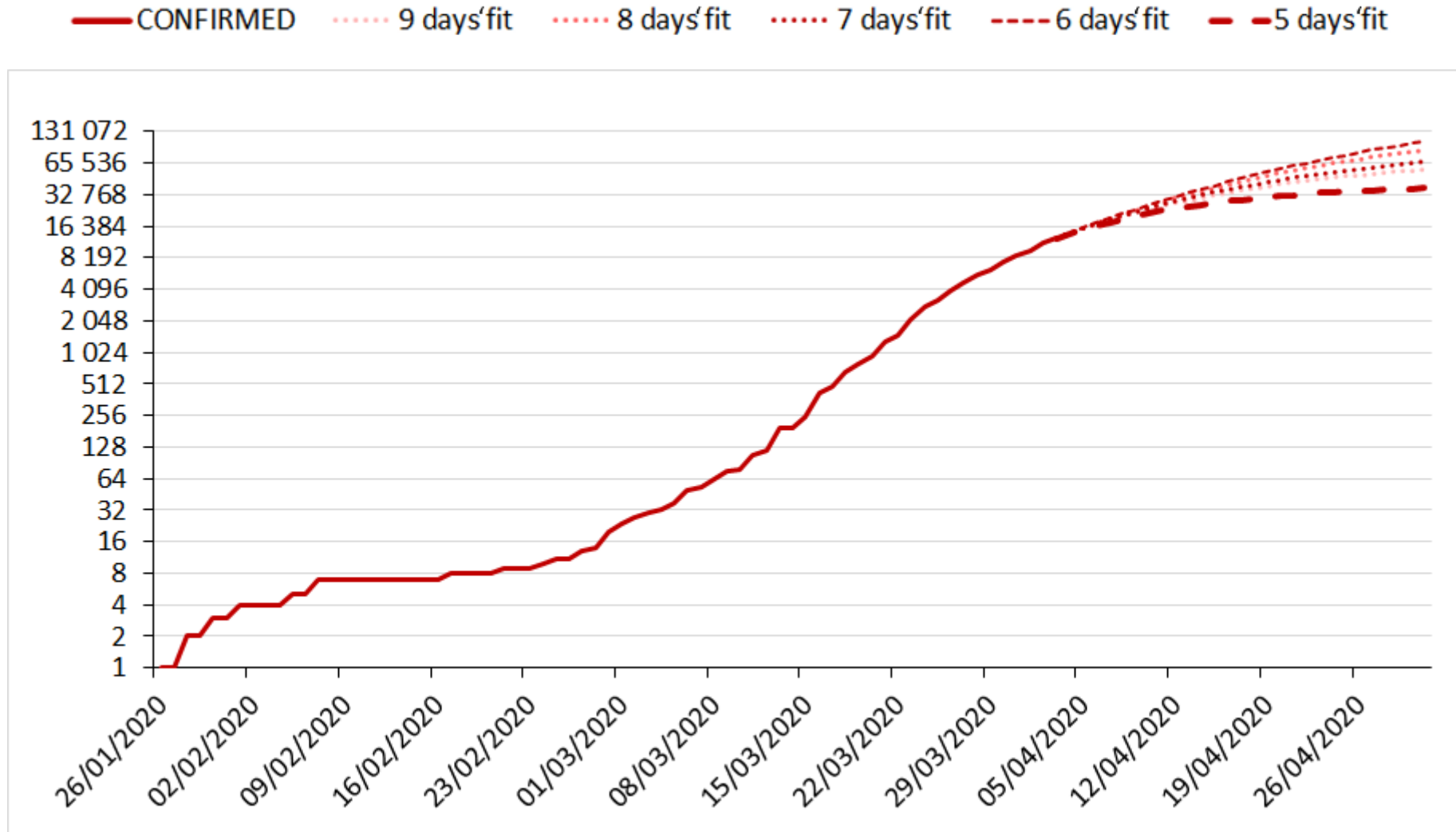
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Brazil



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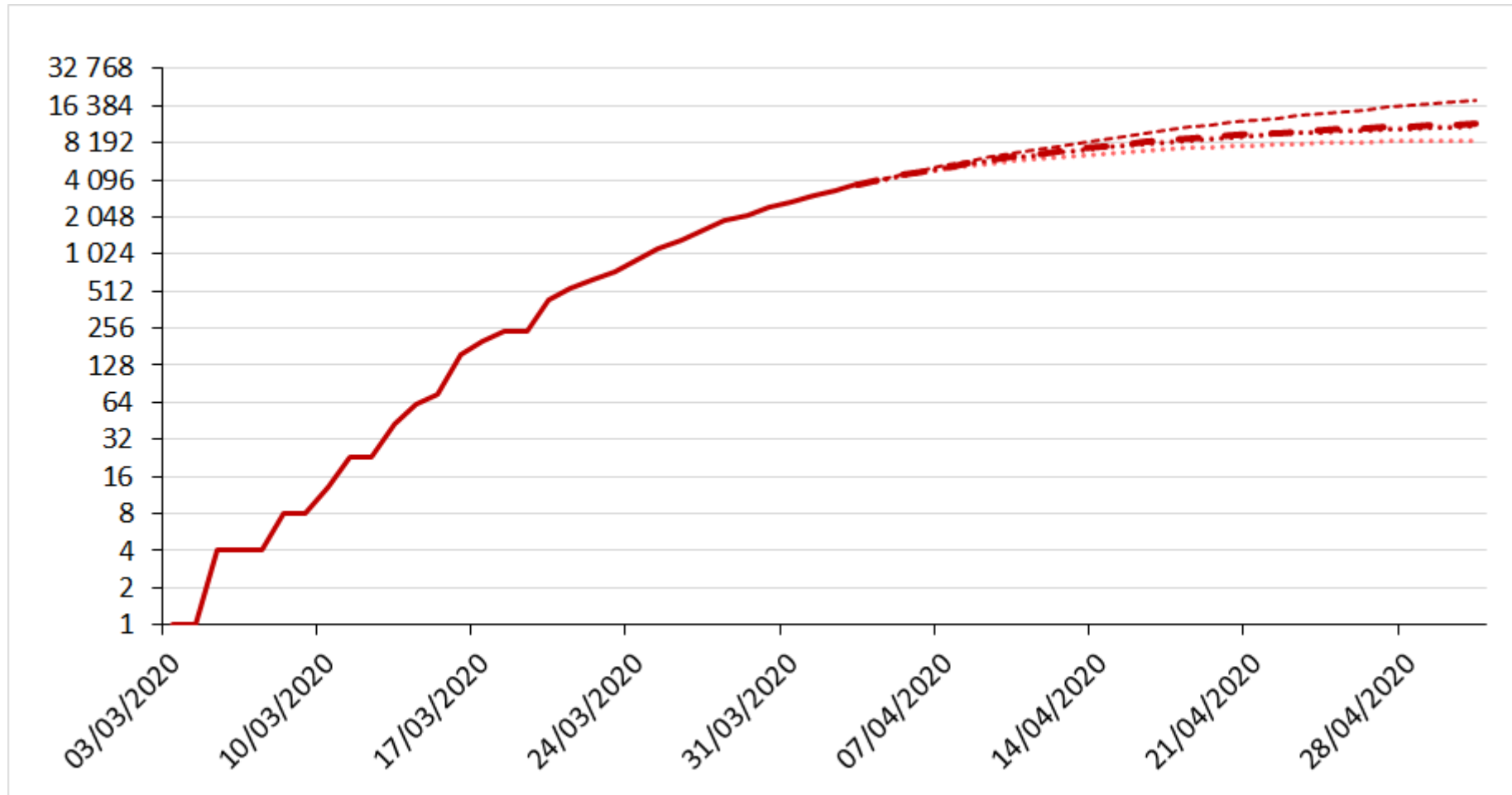
Canada



Data: The Johns Hopkins University, Politolog.com

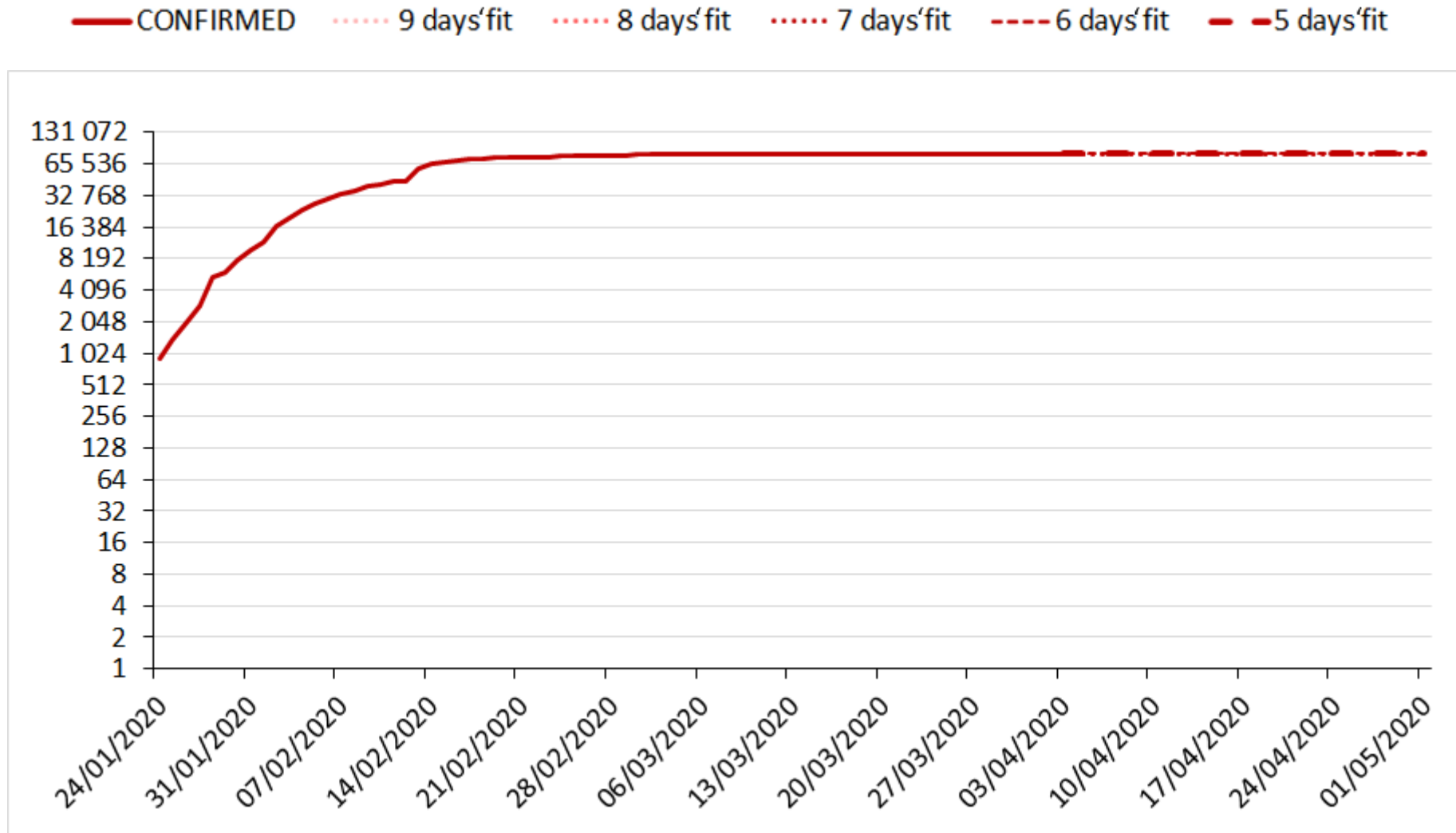
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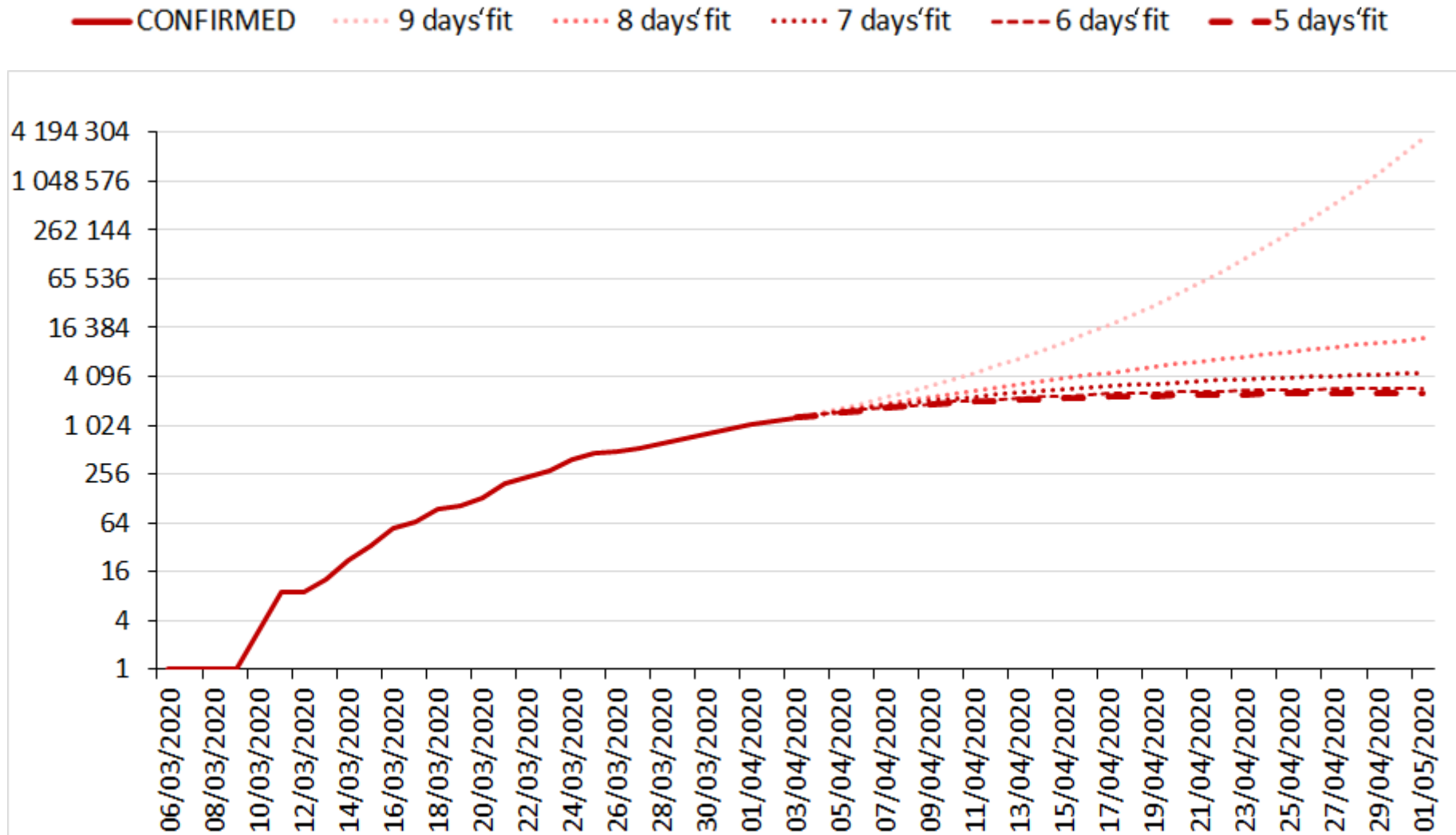
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China



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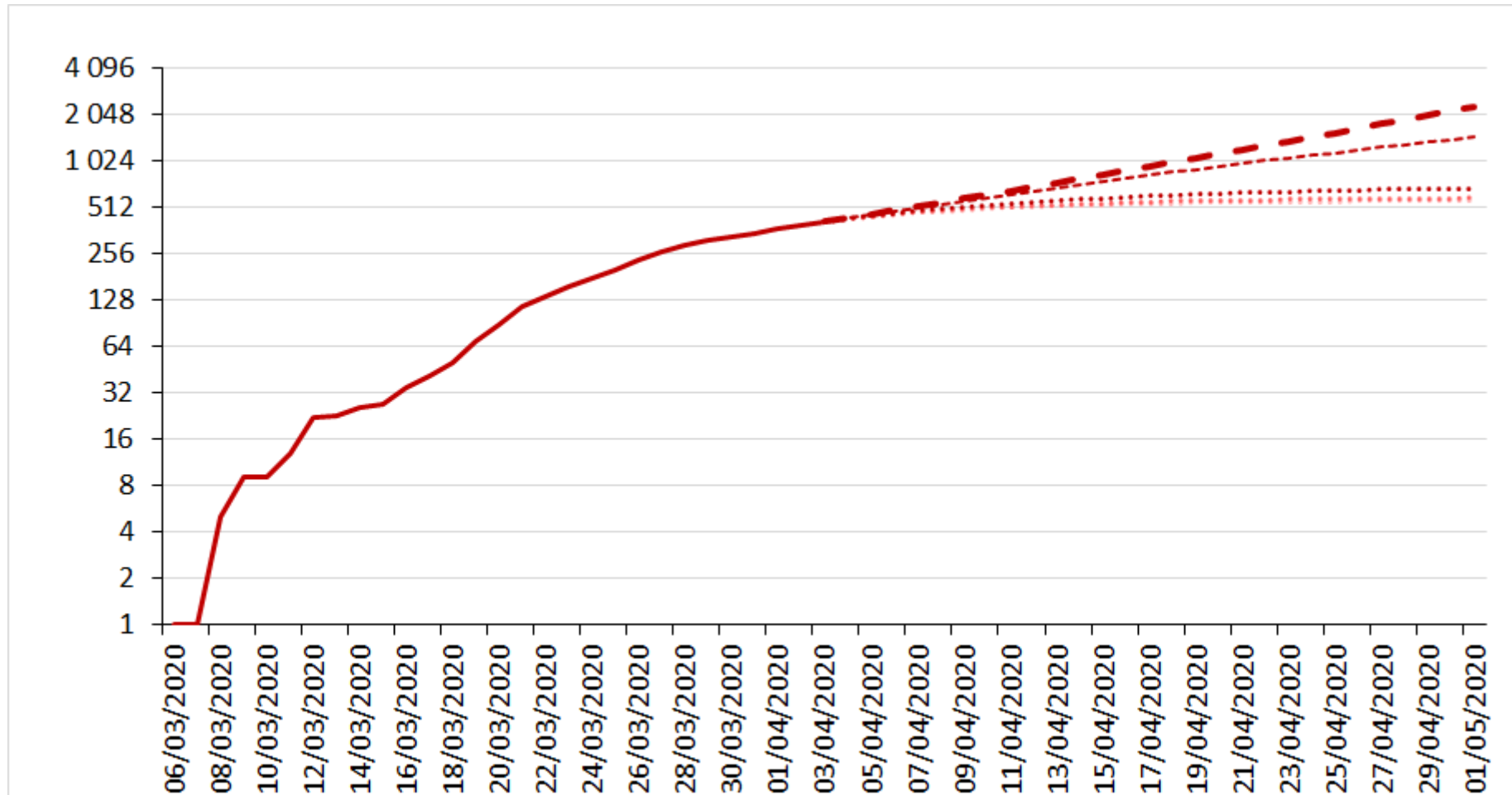
Colombia



Data: The Johns Hopkins University, Politolog.com

Costa Rica

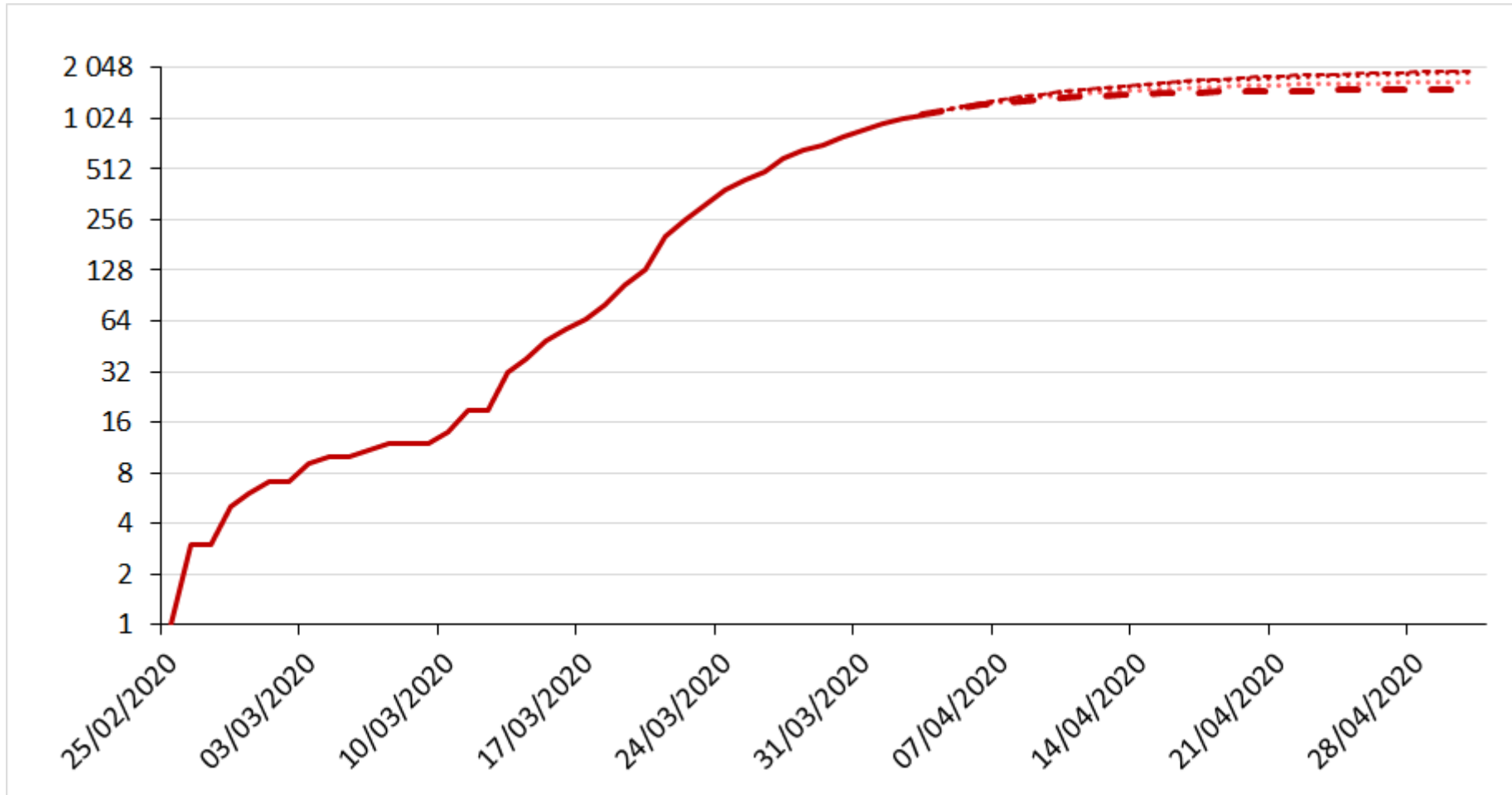
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Data: The Johns Hopkins University, Politolog.com

Croatia

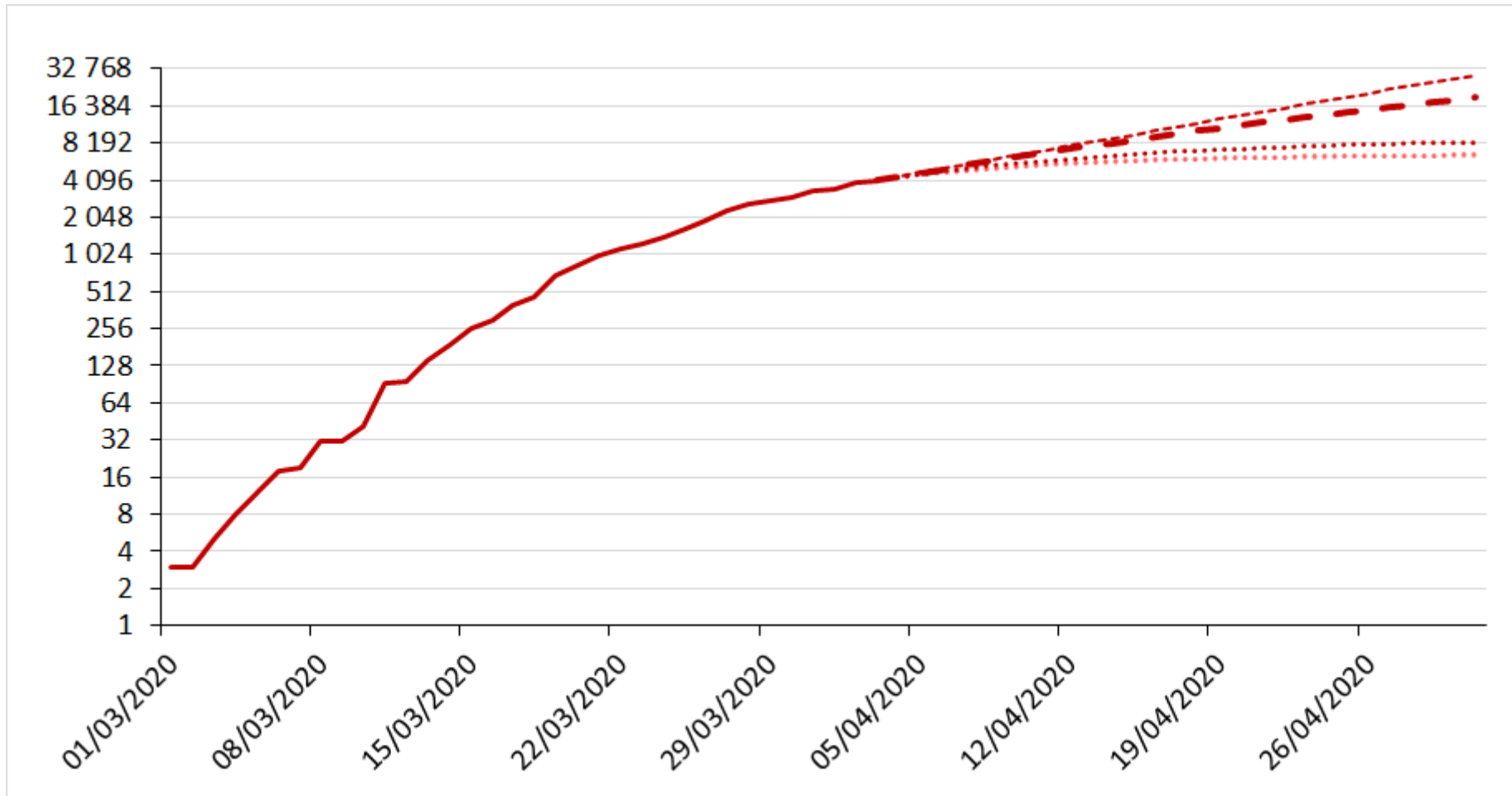
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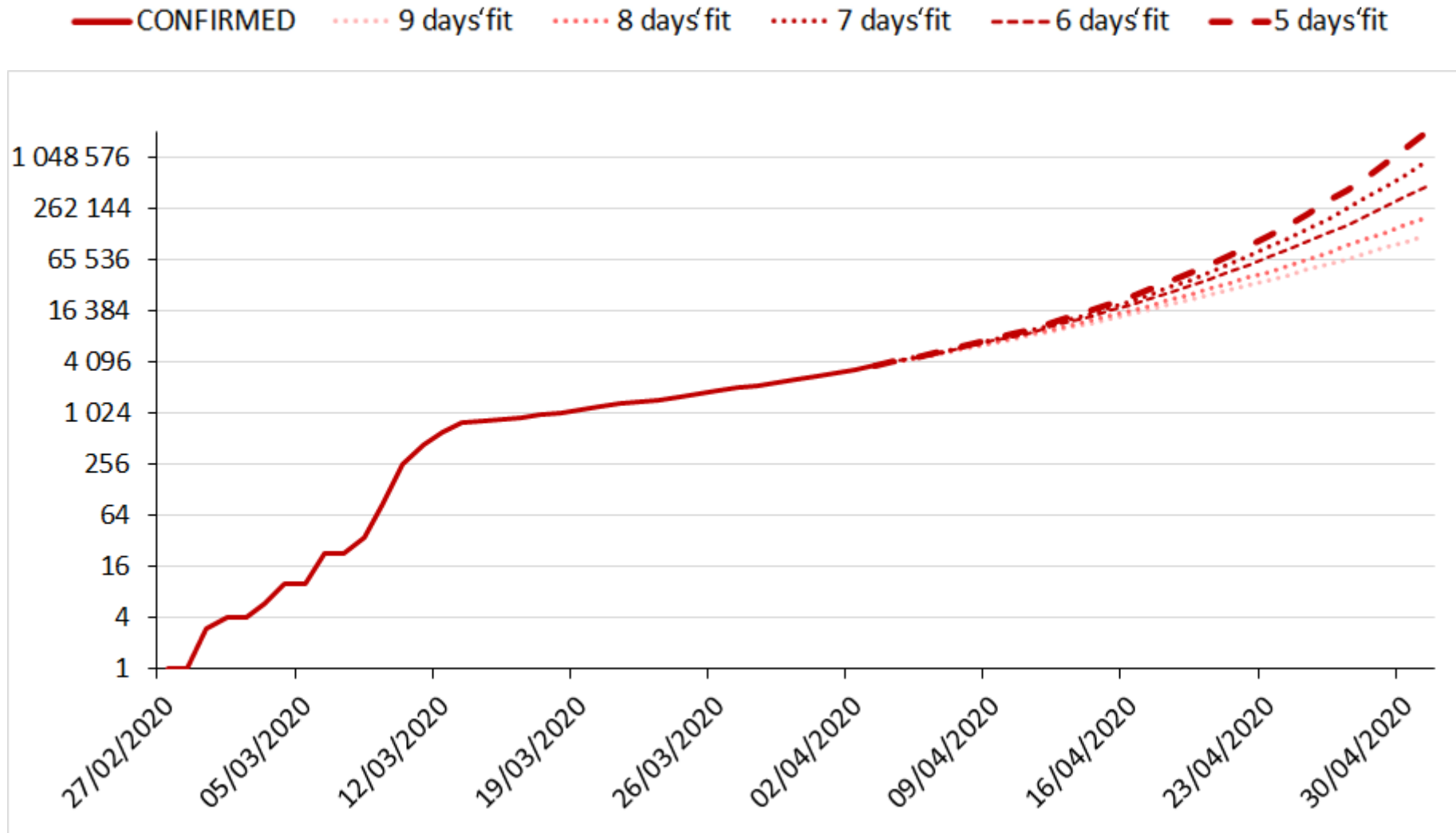
Czech Republic

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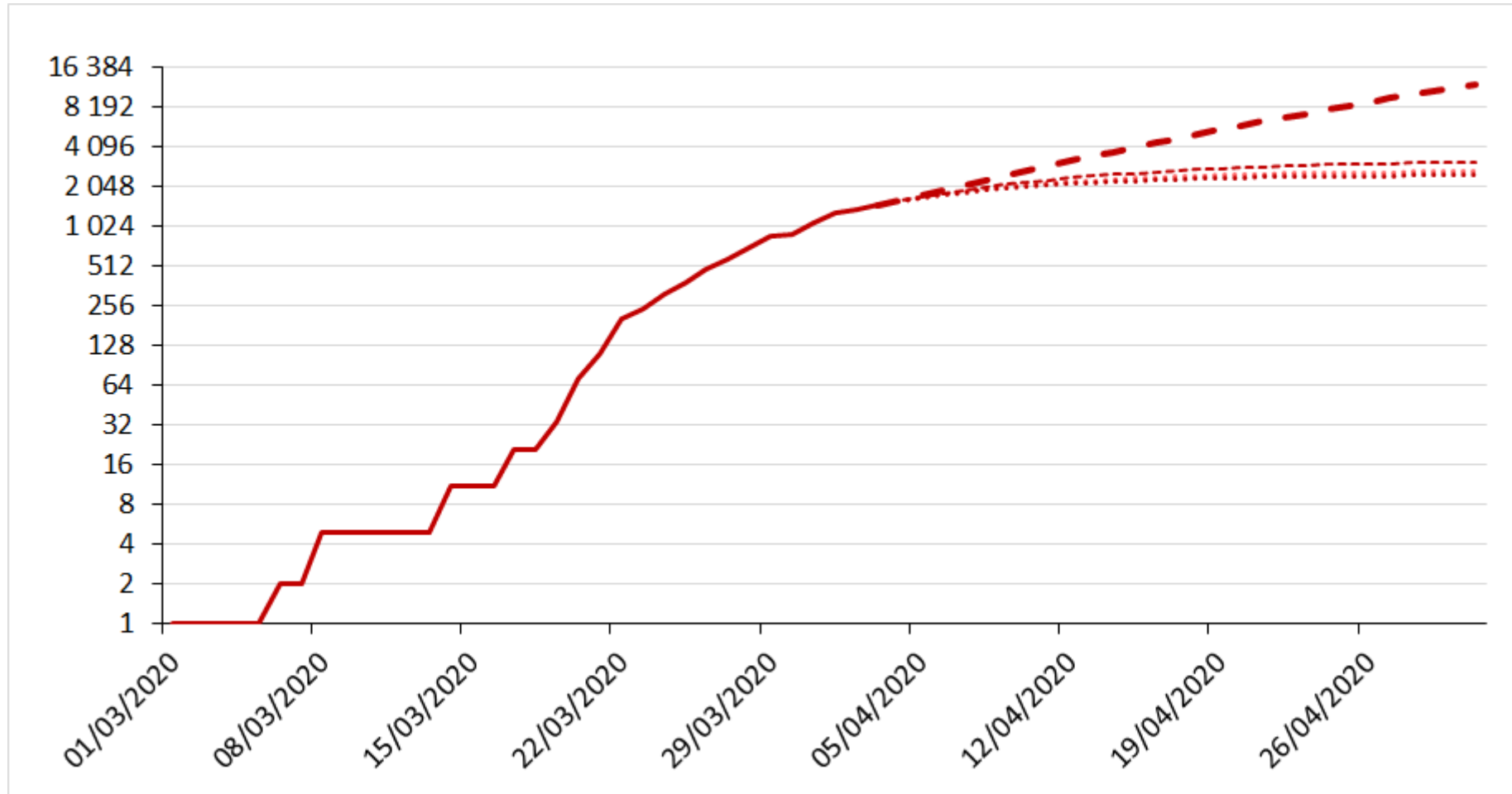
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Data: The Johns Hopkins University, Politolog.com

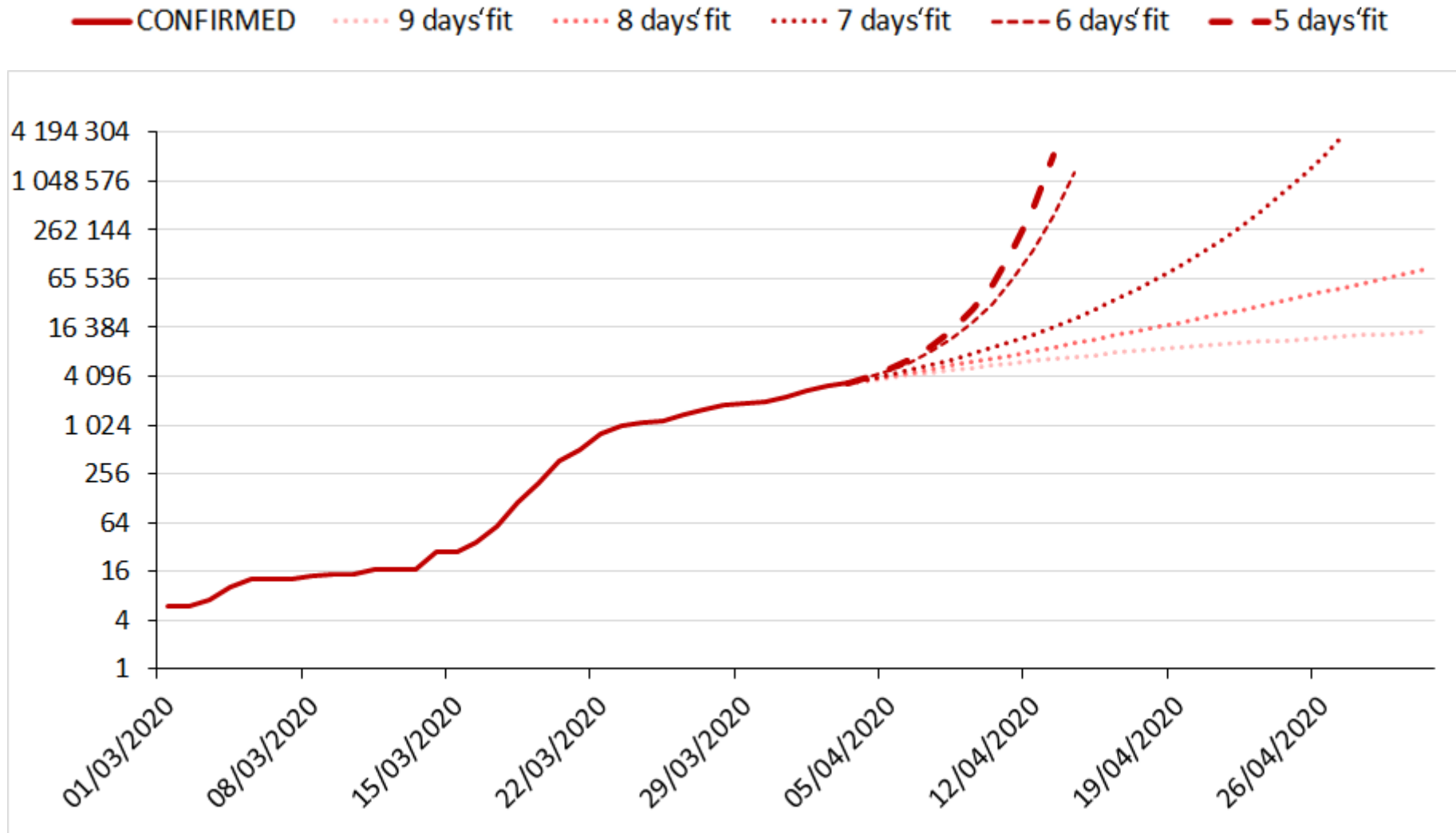
Dominican Republic

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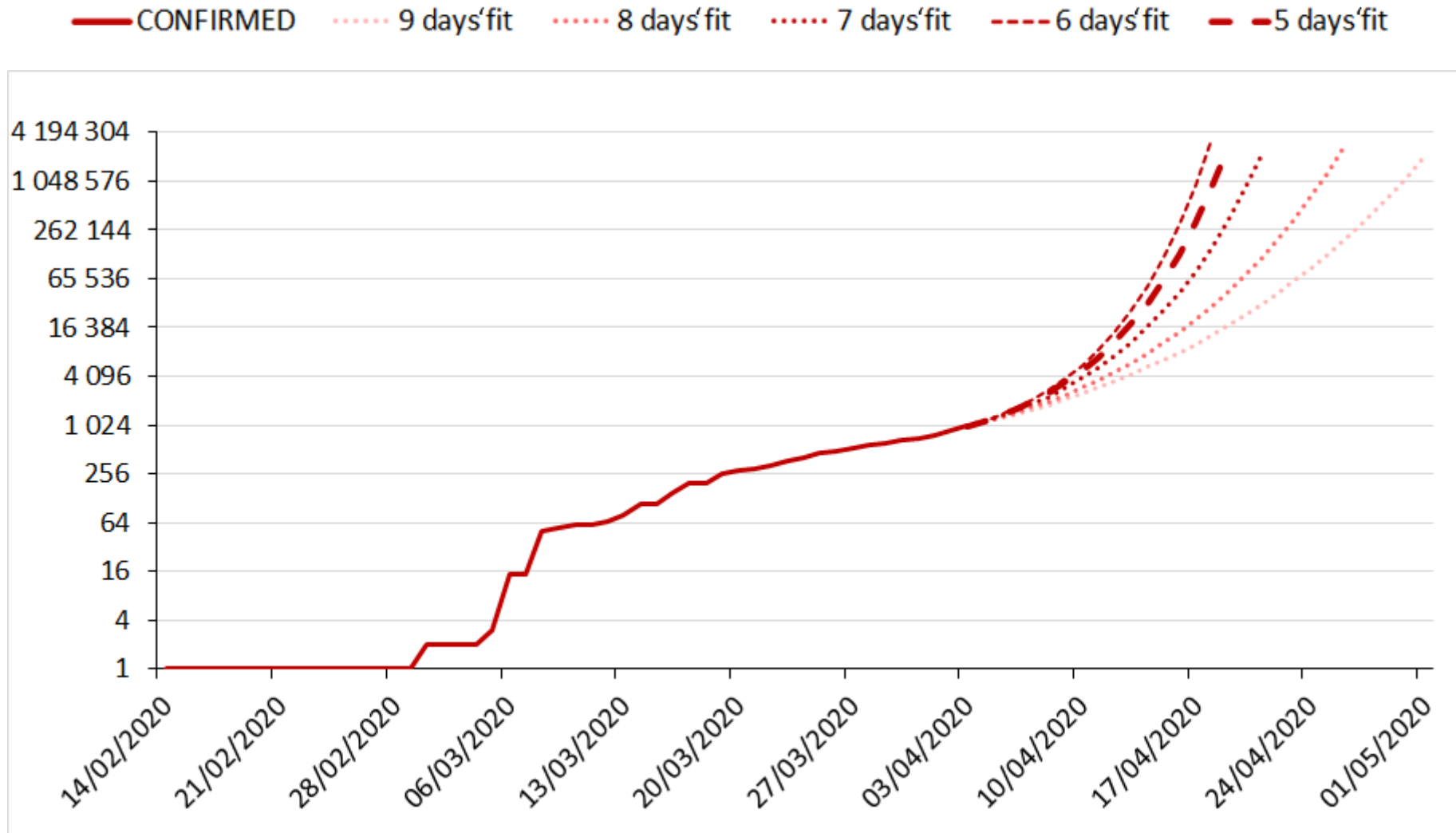
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Ecuador



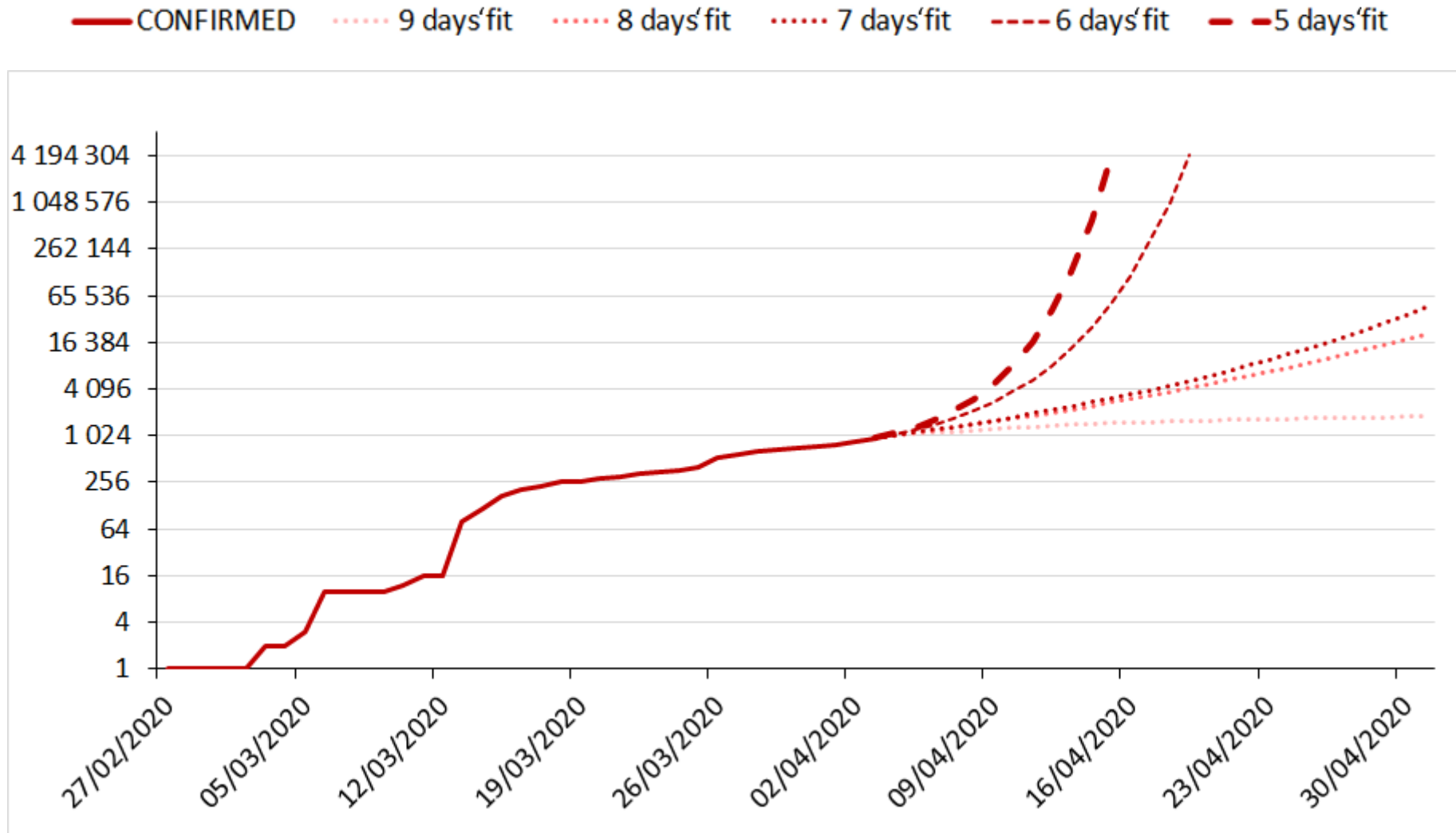
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Egypt



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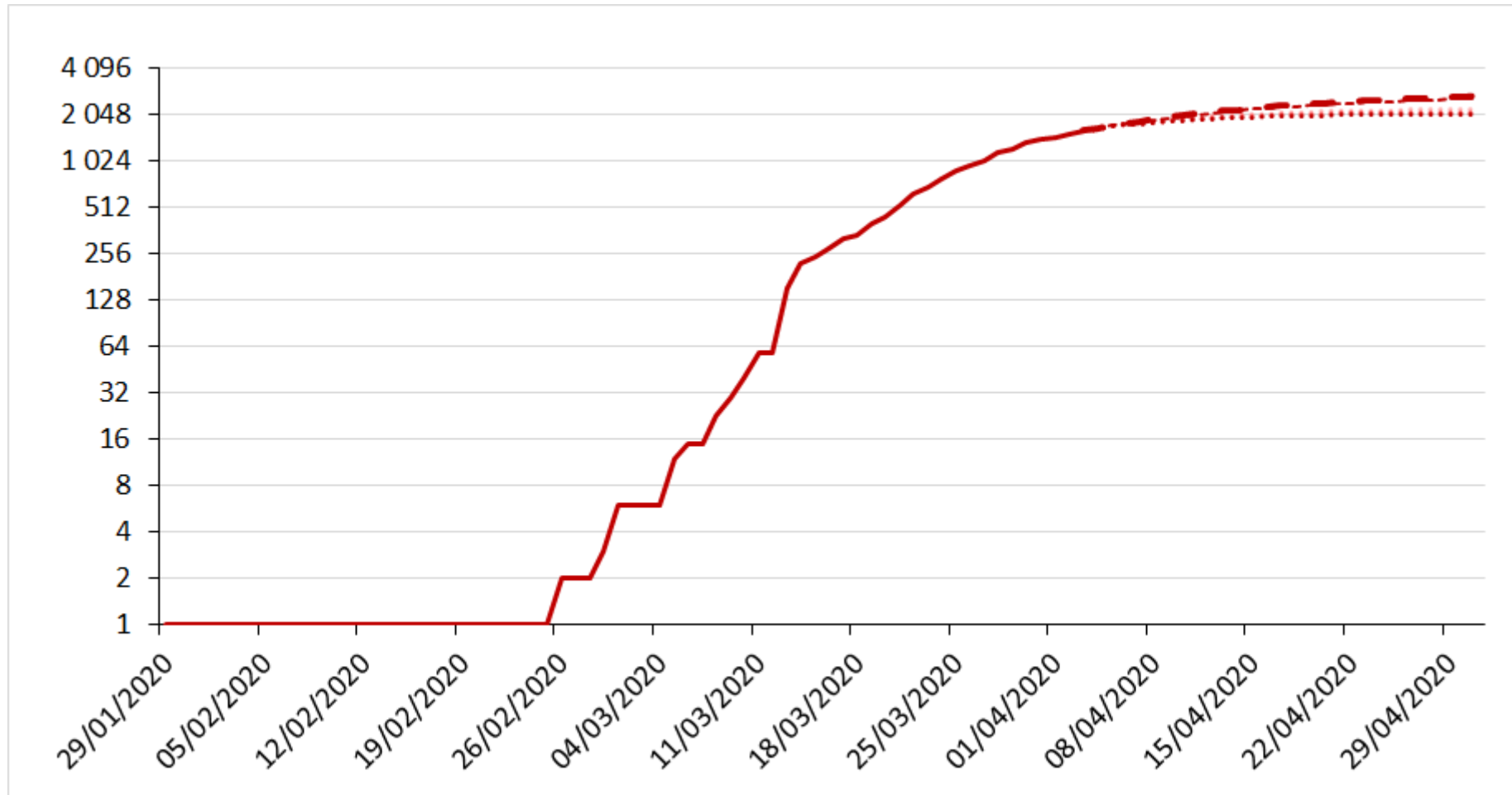
Estonia



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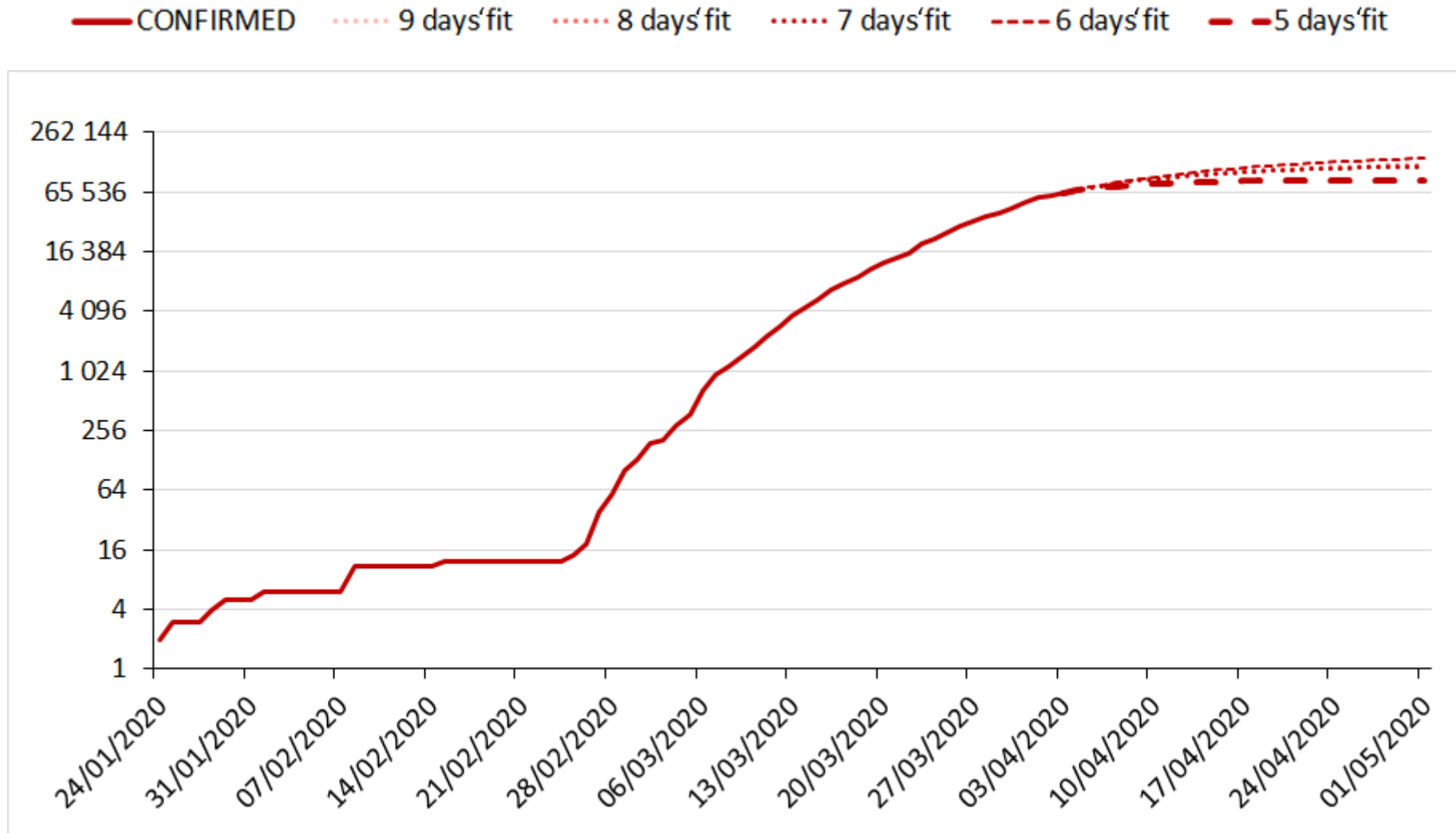
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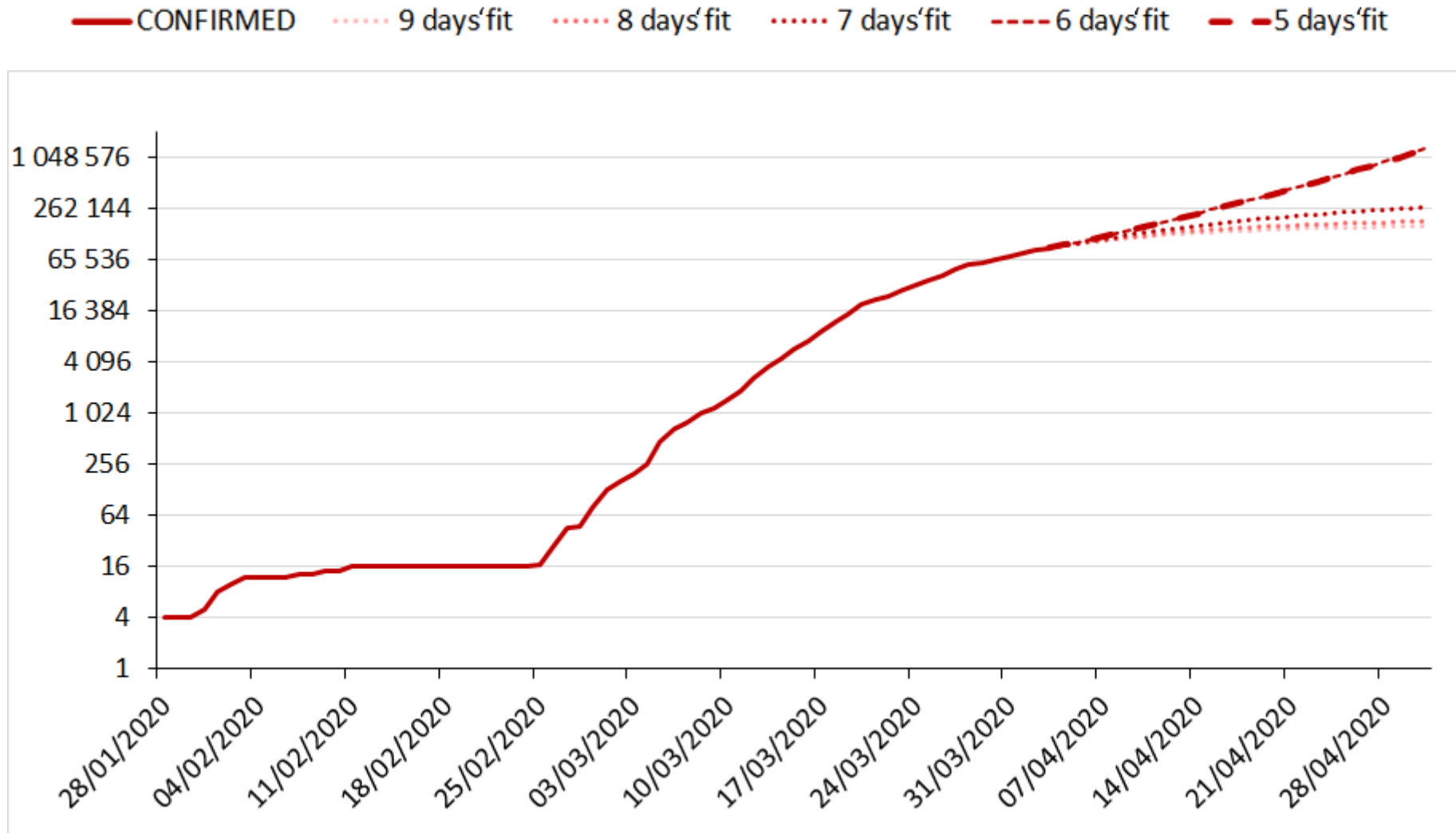
Data: The Johns Hopkins University, Politolog.com

France



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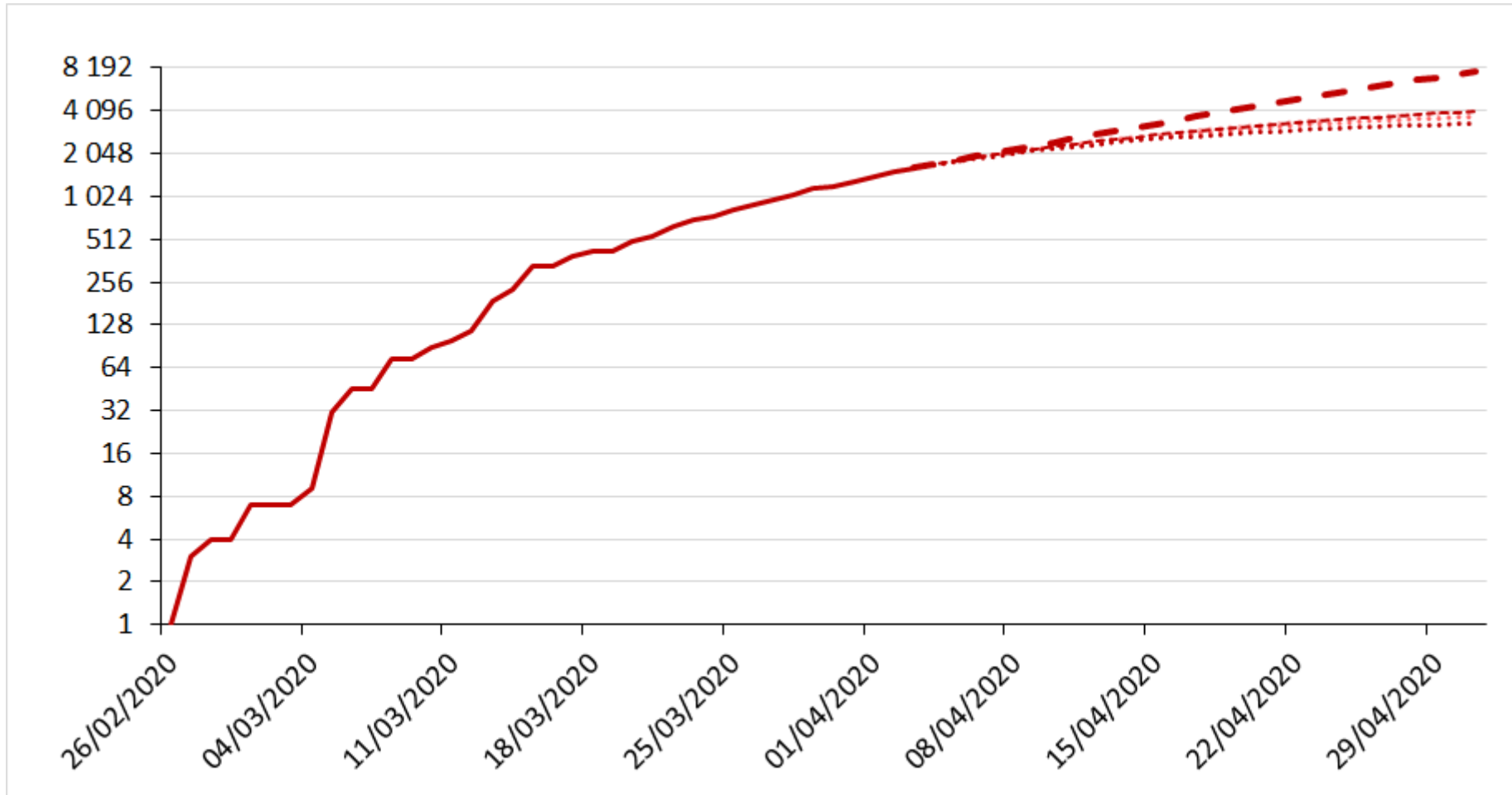
Germany



Data: The Johns Hopkins University, Politolog.com

Greece

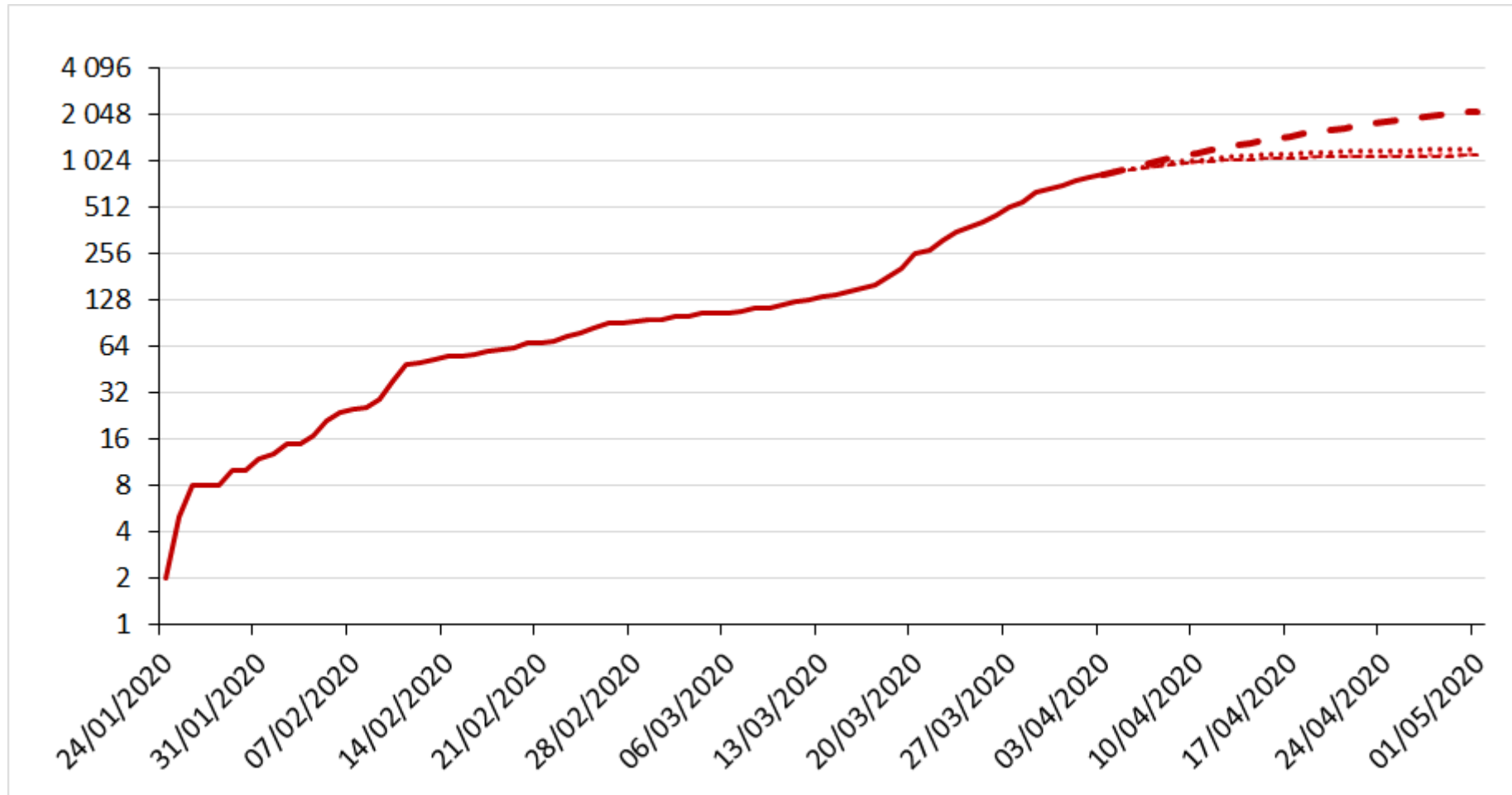
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Hong Kong

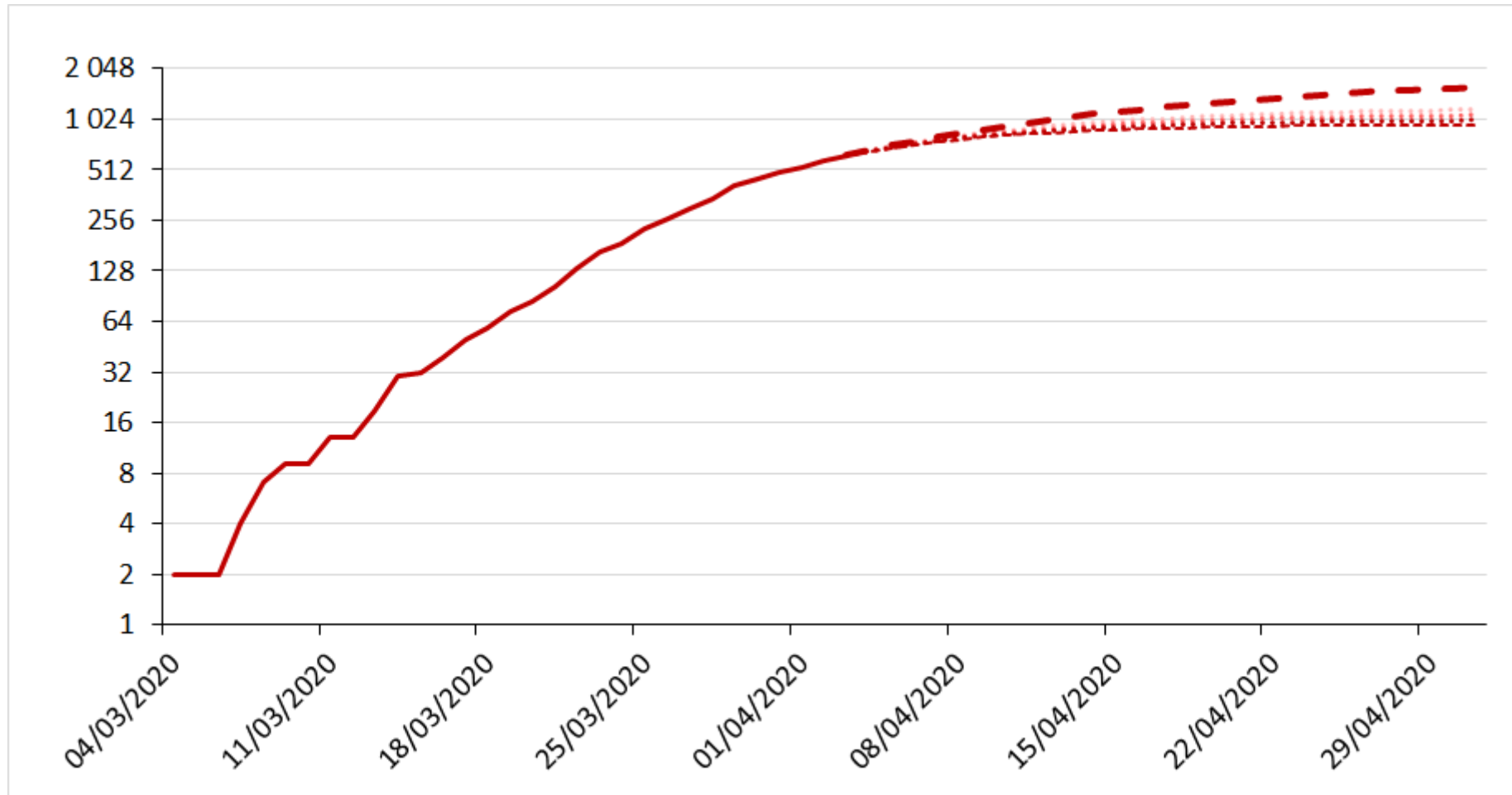
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Data: The Johns Hopkins University, Politolog.com

Hungary

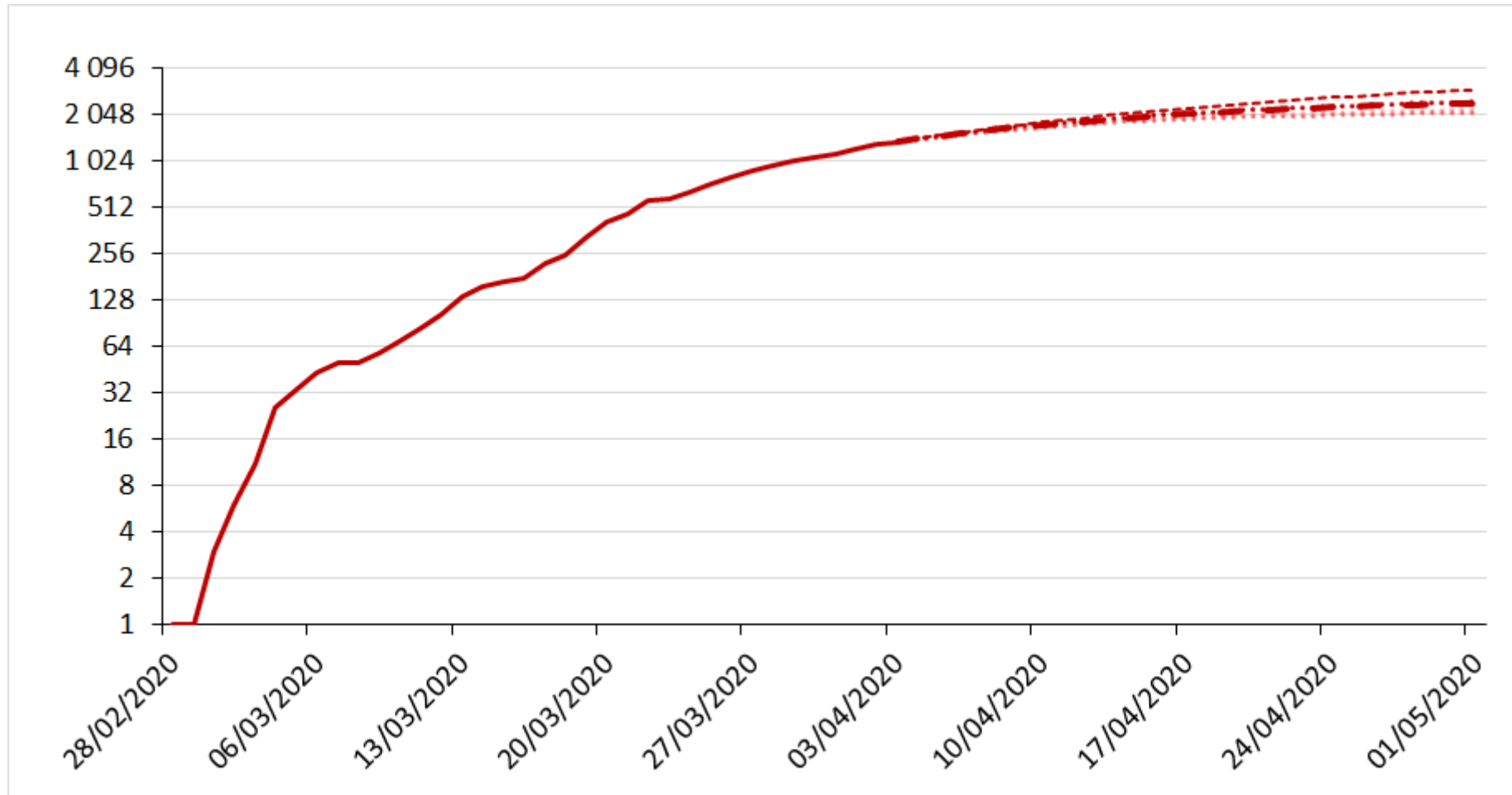
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Data: The Johns Hopkins University, Politolog.com

Iceland

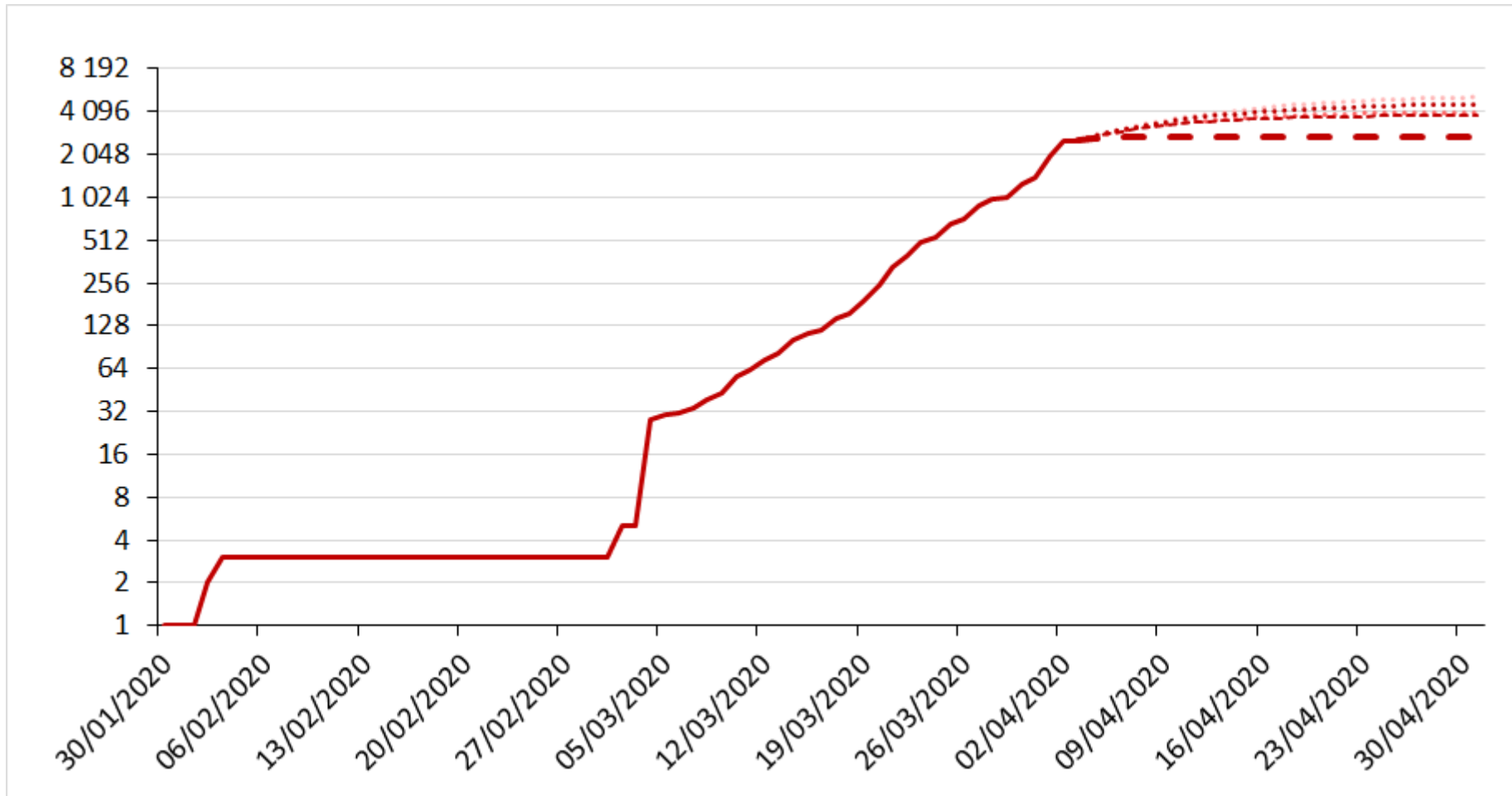
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India

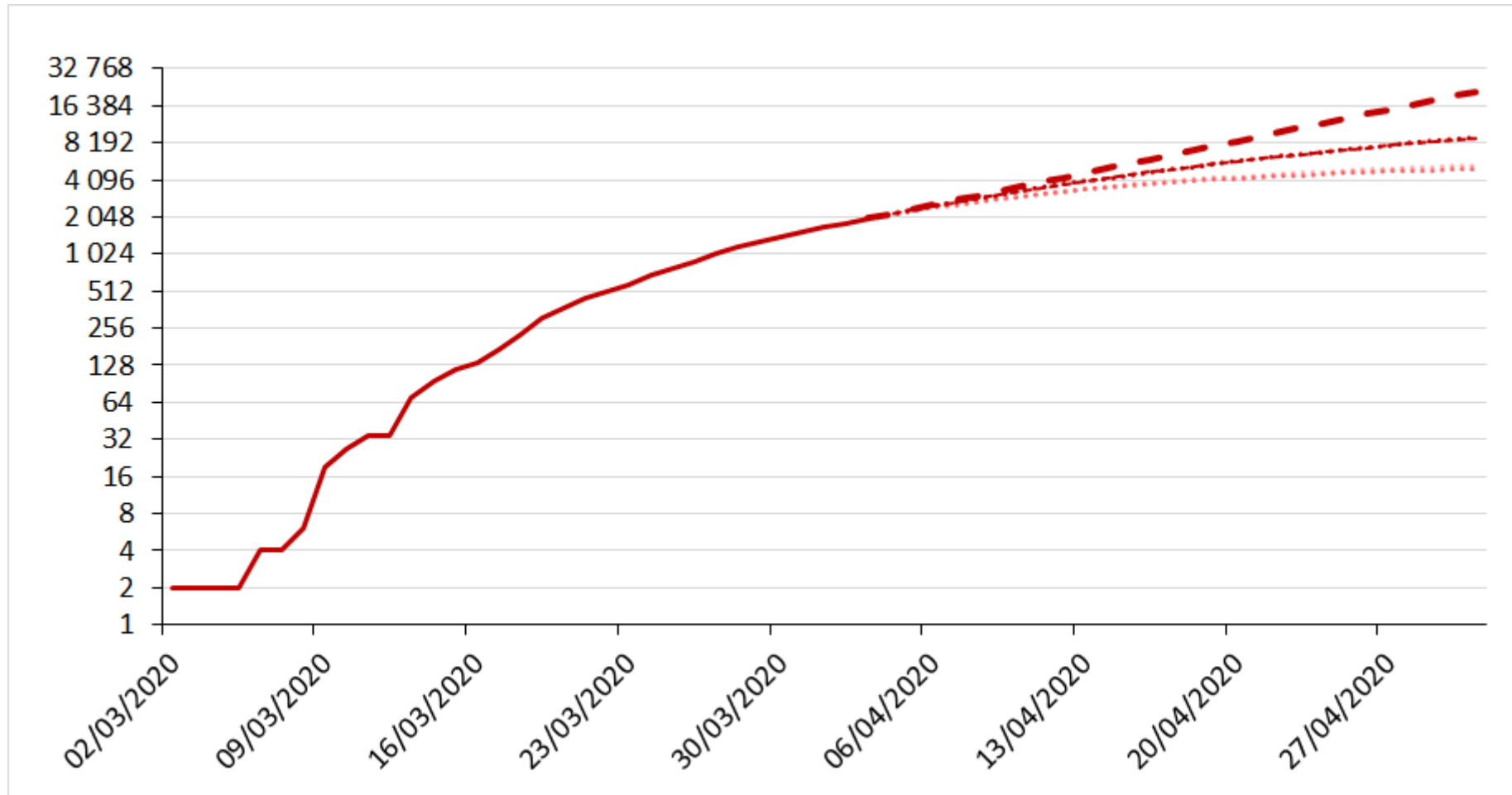
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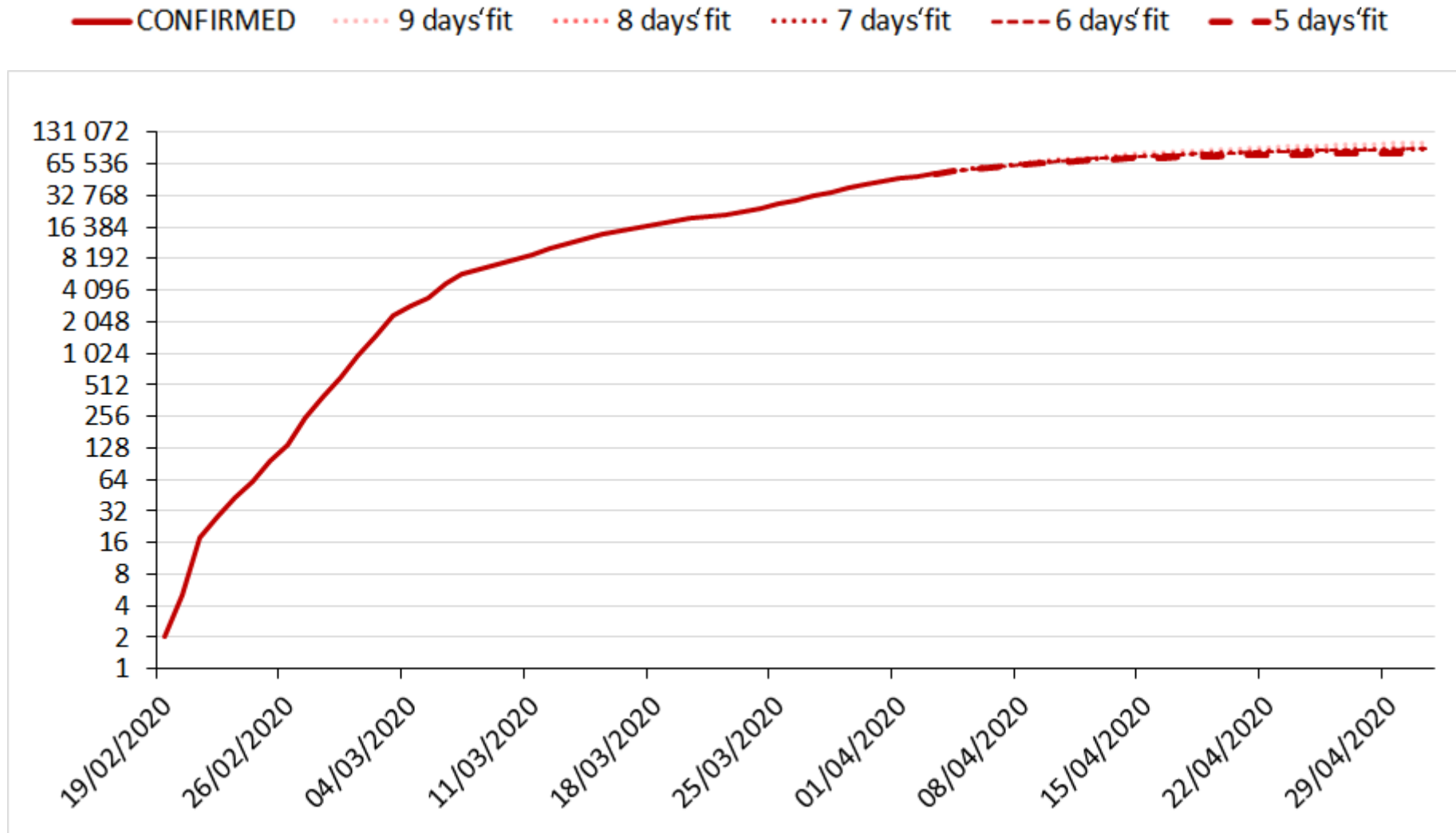
Indonesia

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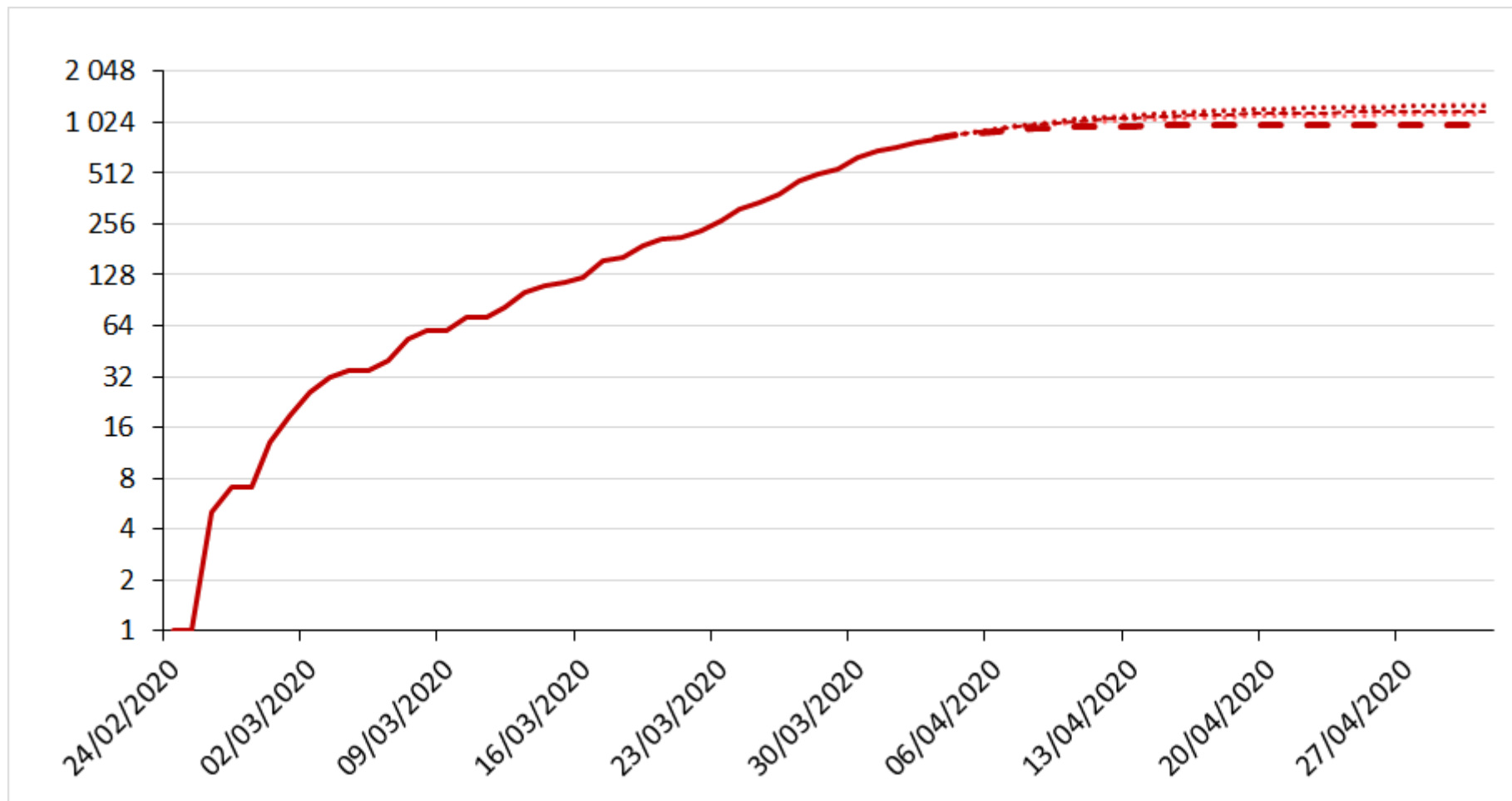
Iran



Data: The Johns Hopkins University, Politolog.com

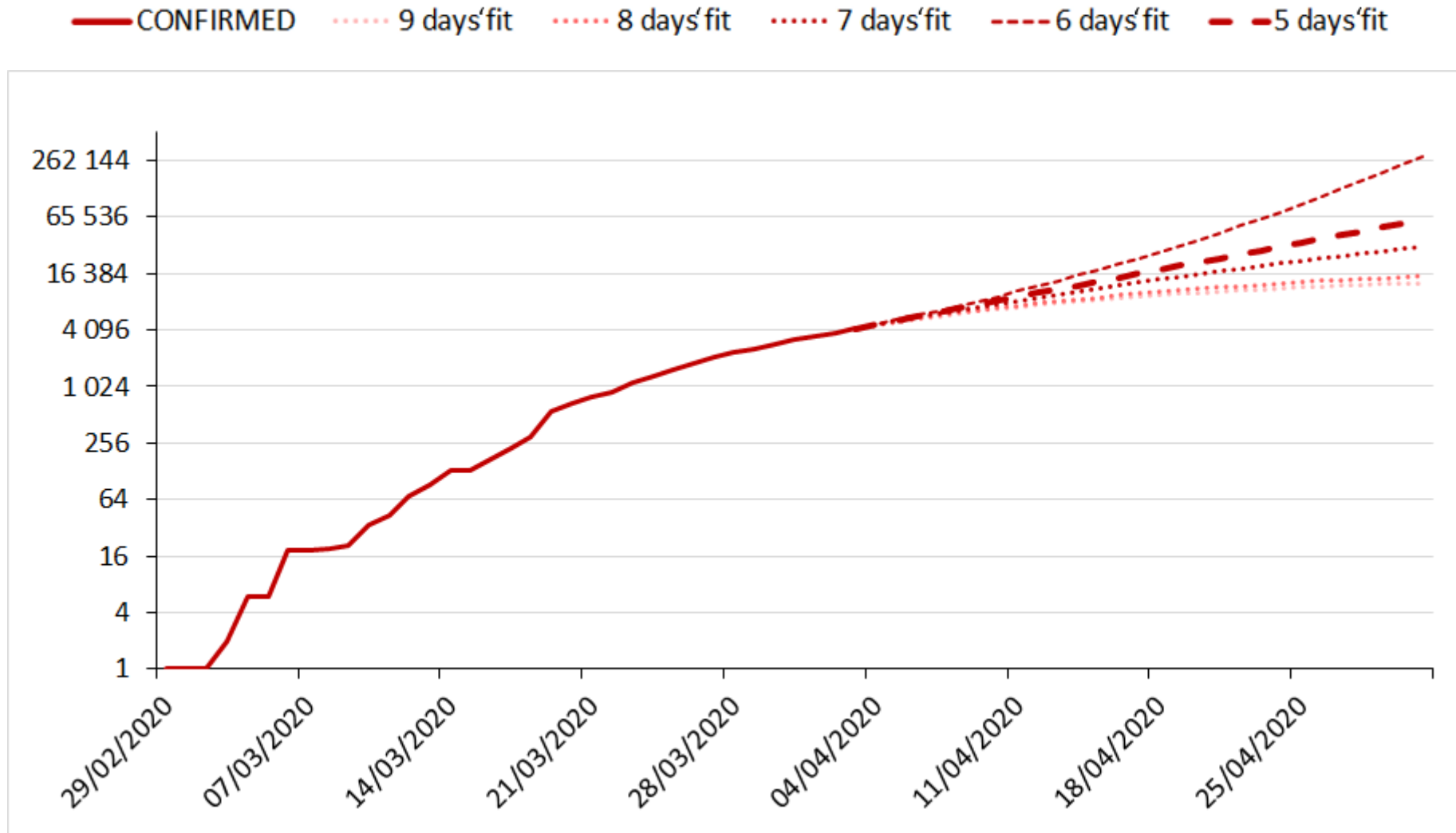
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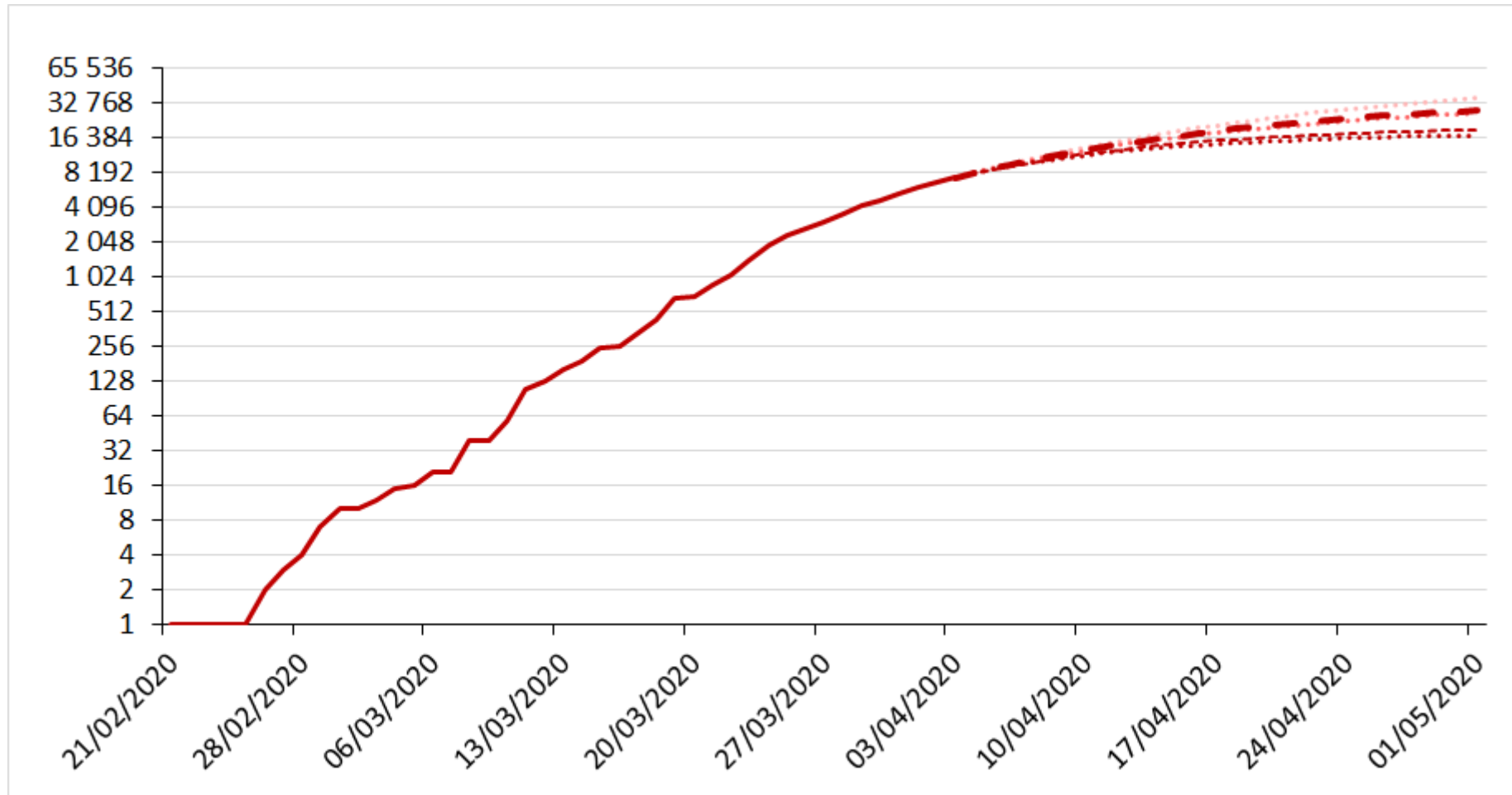
Ireland



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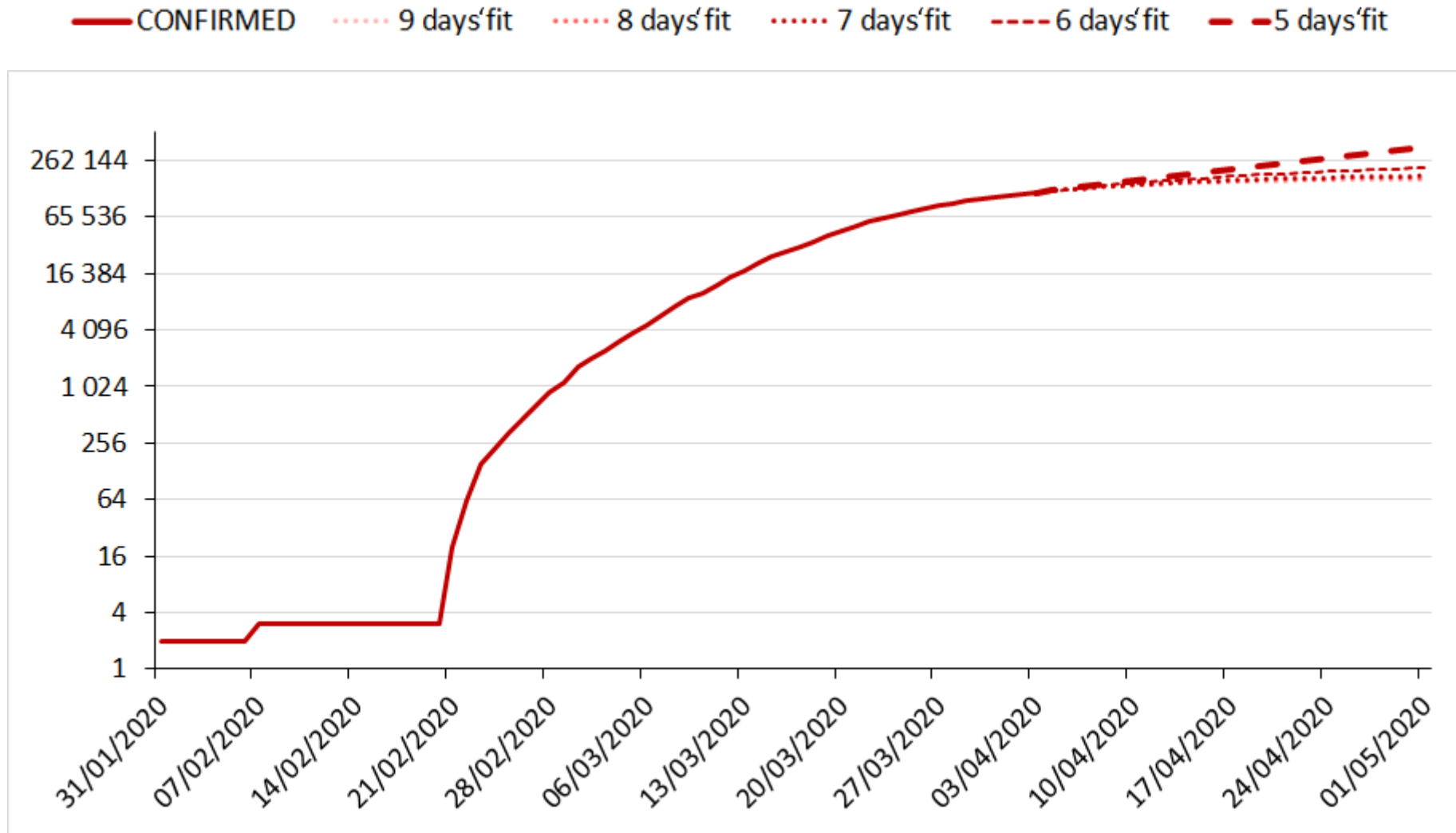
Israel

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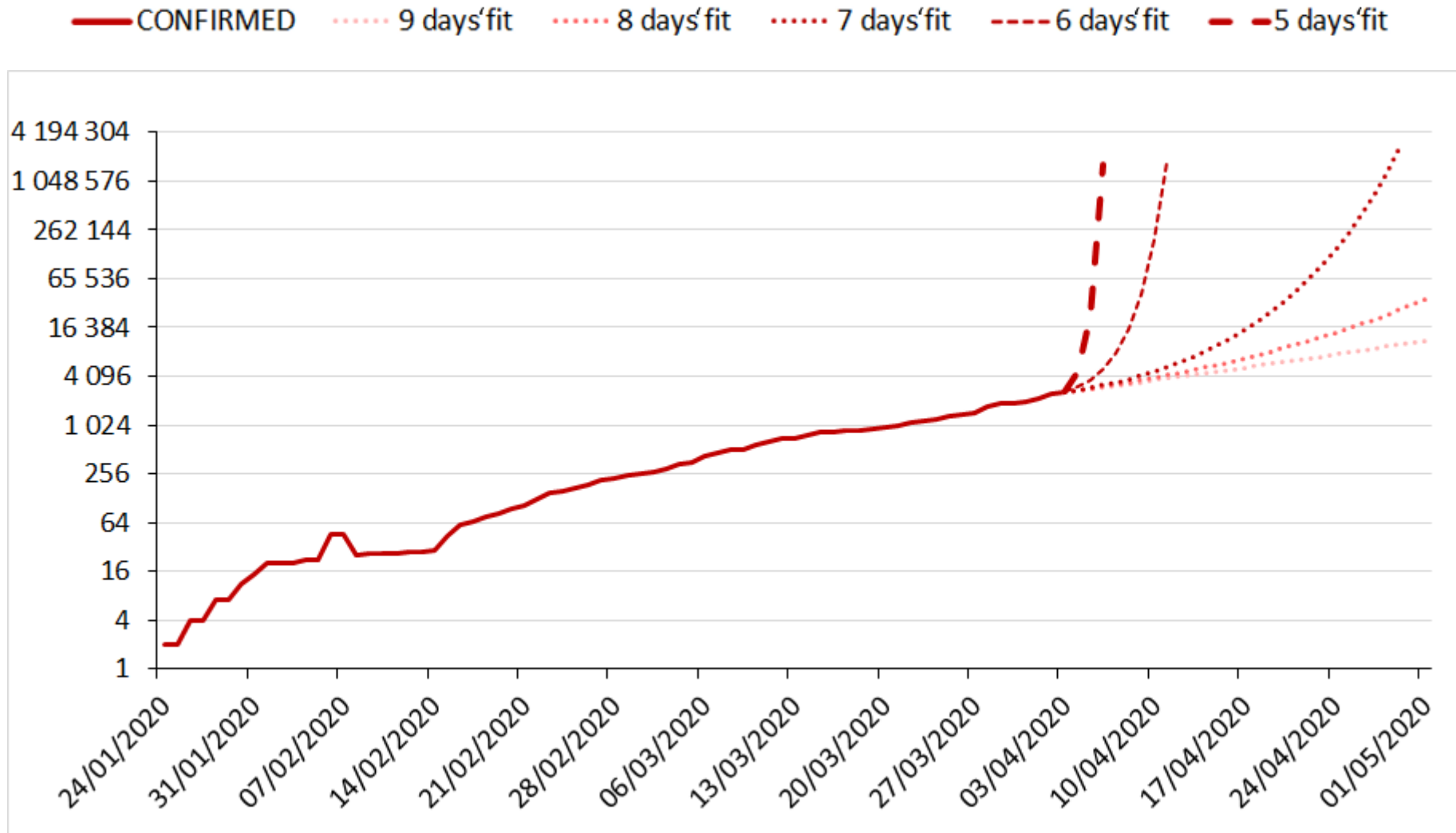
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Italy



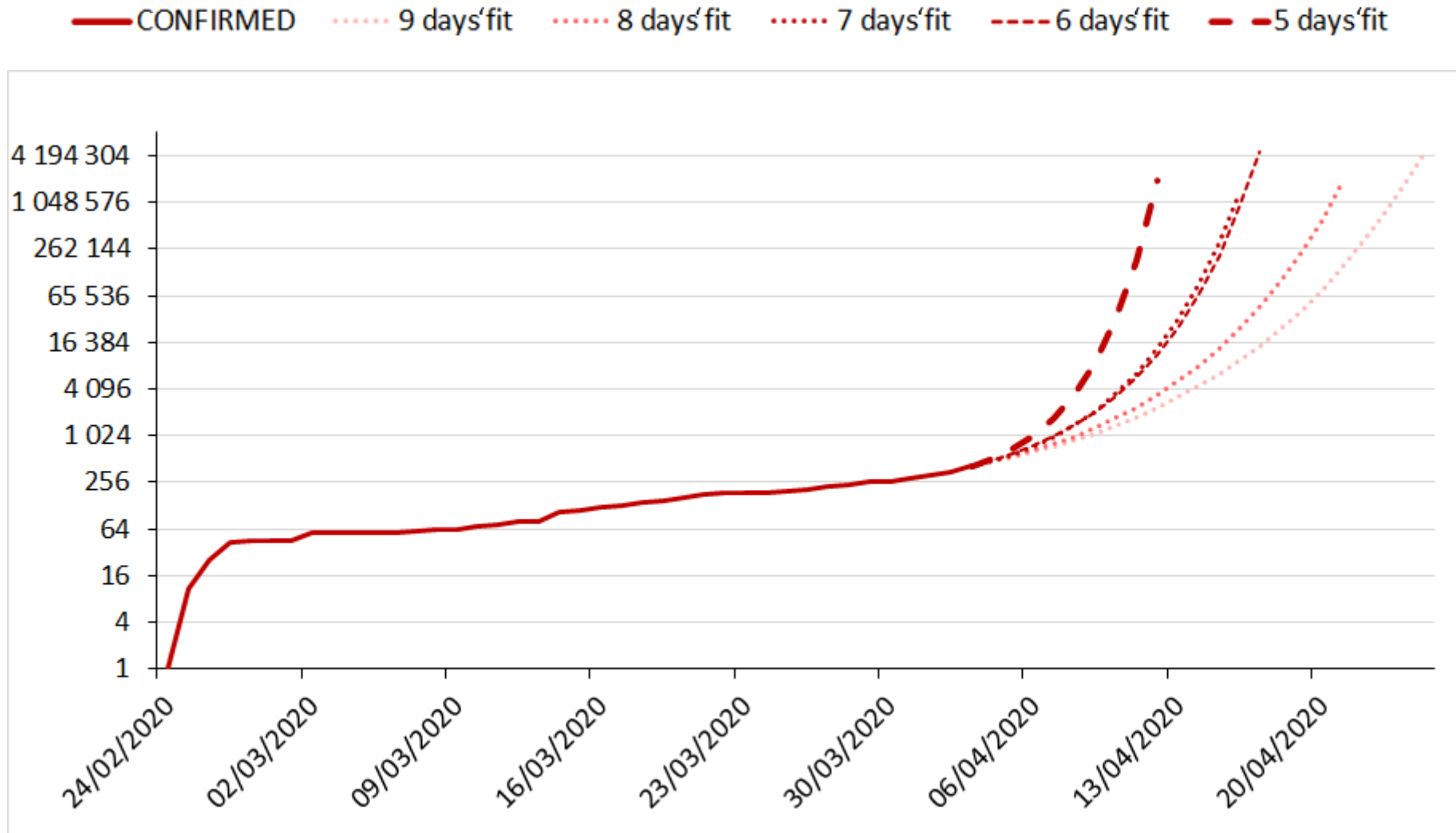
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Japan



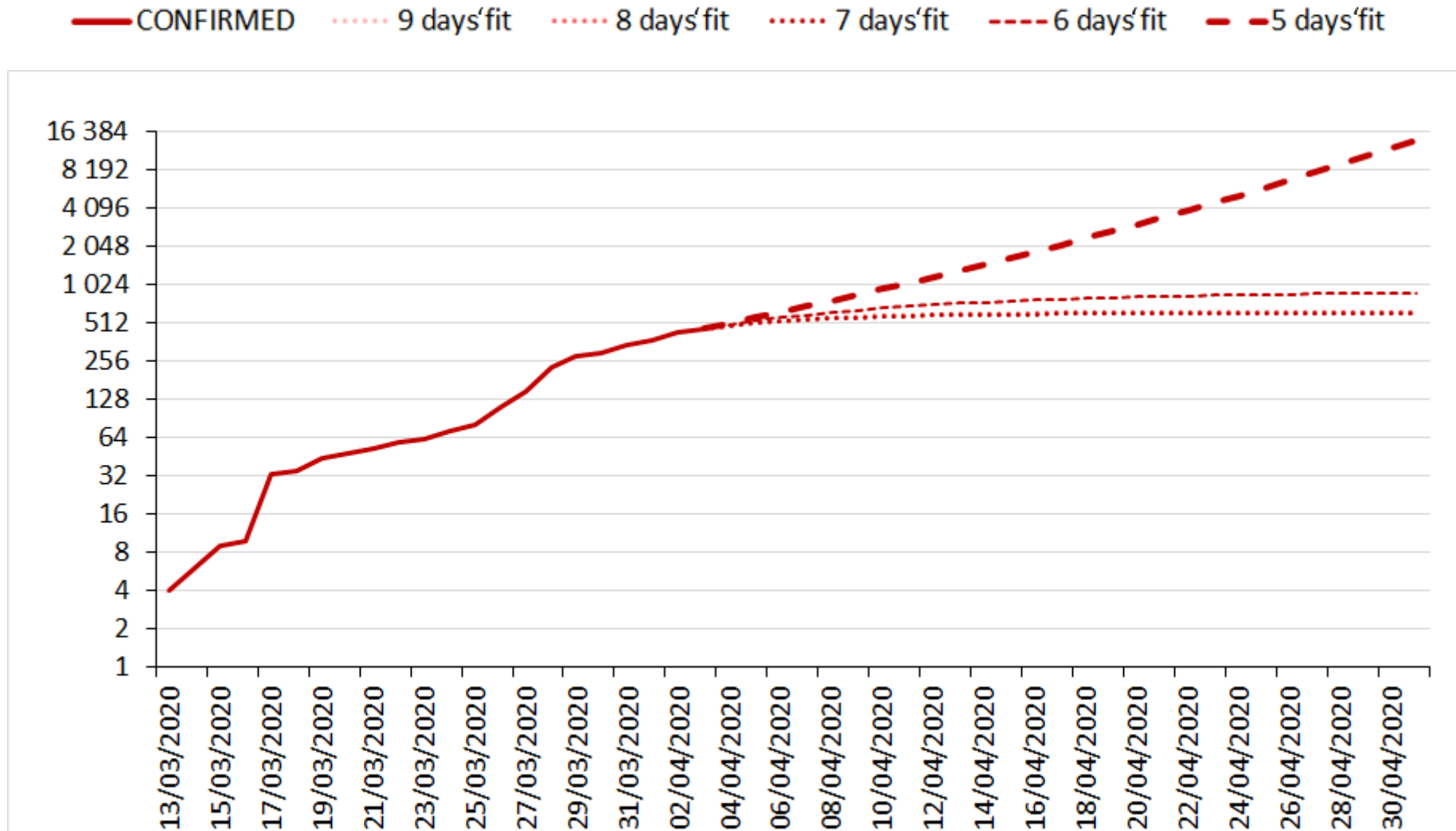
Data: The Johns Hopkins University, Politolog.com

Kuwait



Data: The Johns Hopkins University, Politolog.com

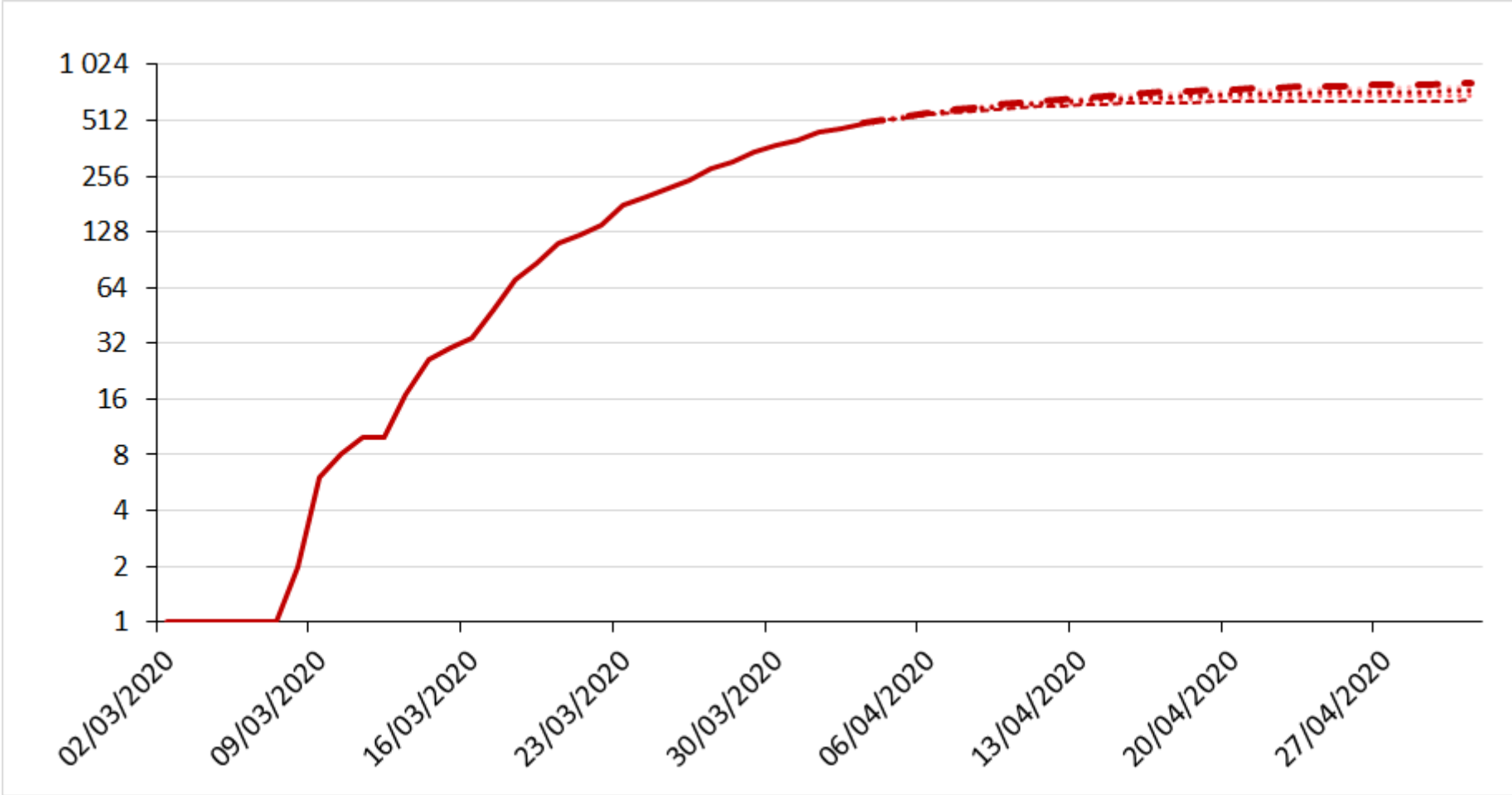
Kazakhstan



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Latvia

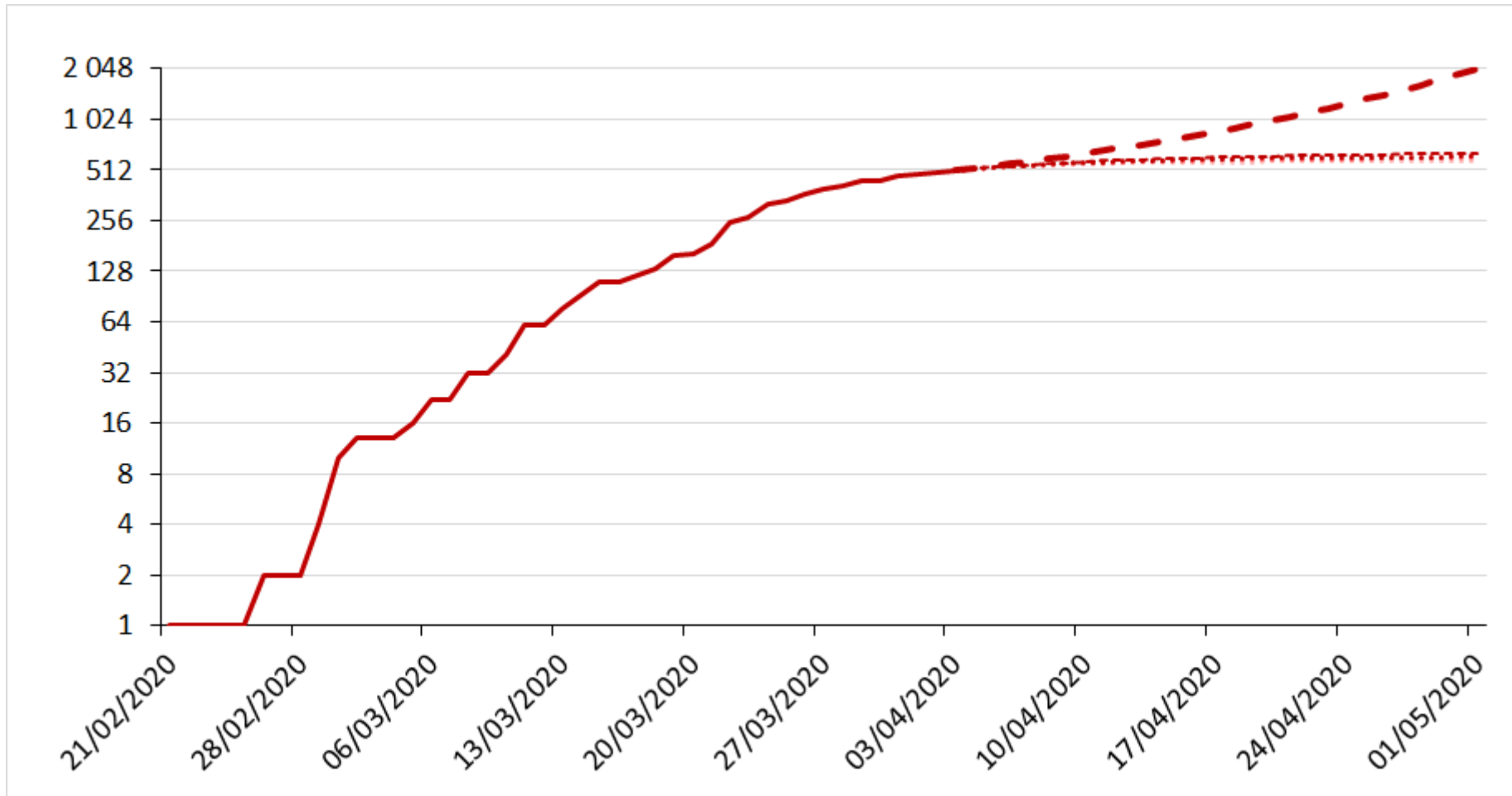
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Lebanon

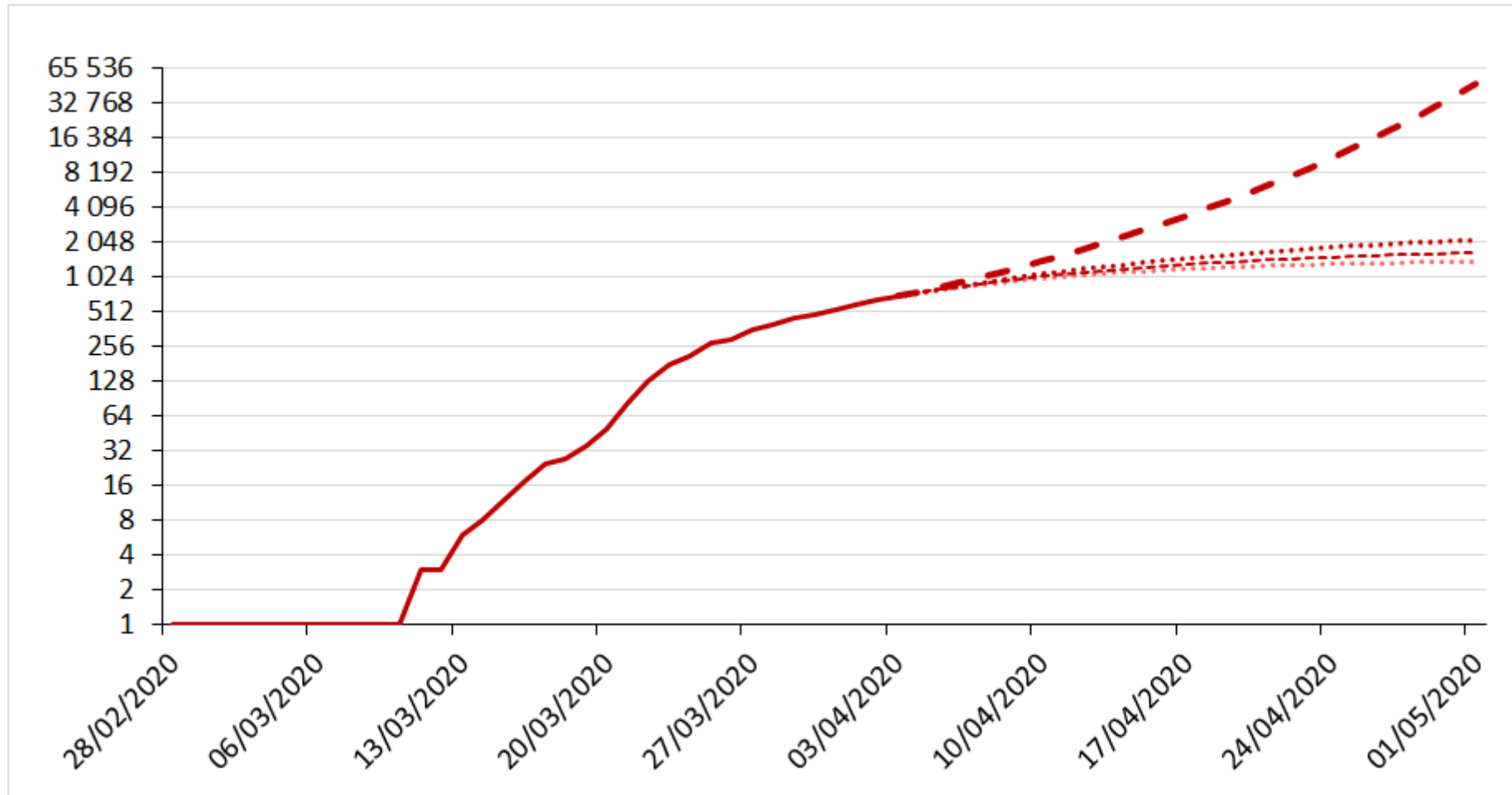
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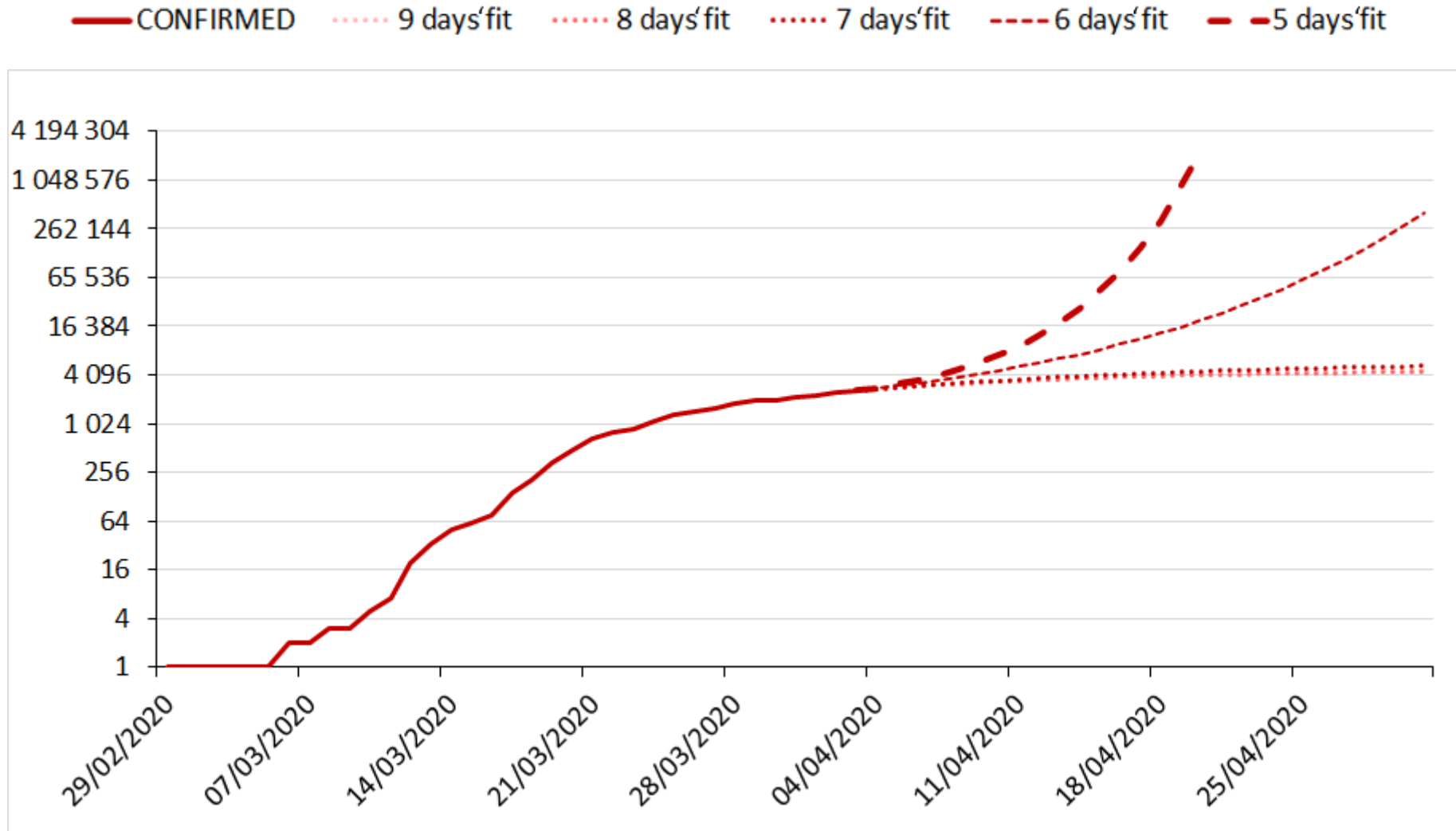
Lithuania

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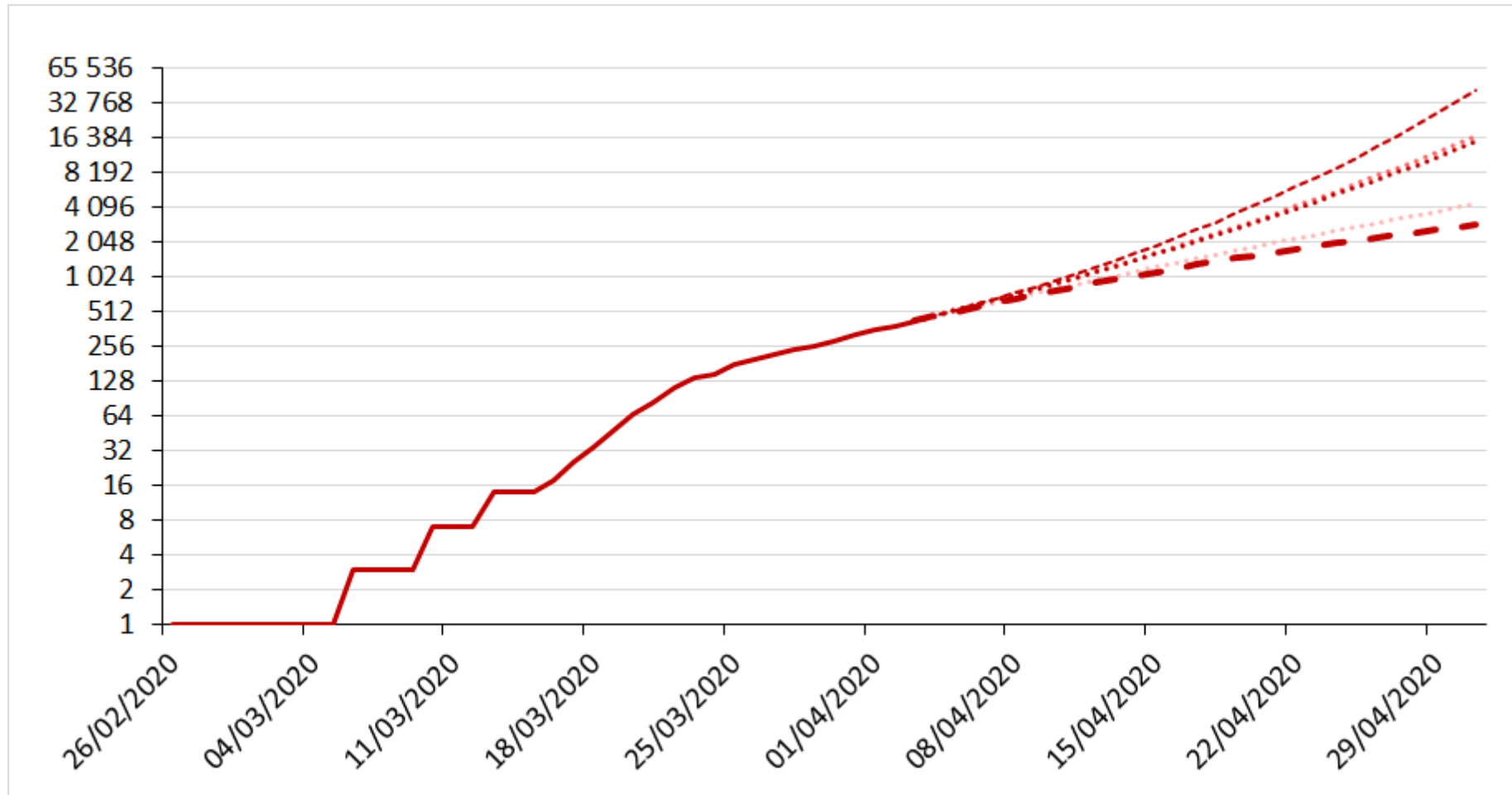
Luxembourg



Data: The Johns Hopkins University, Politolog.com

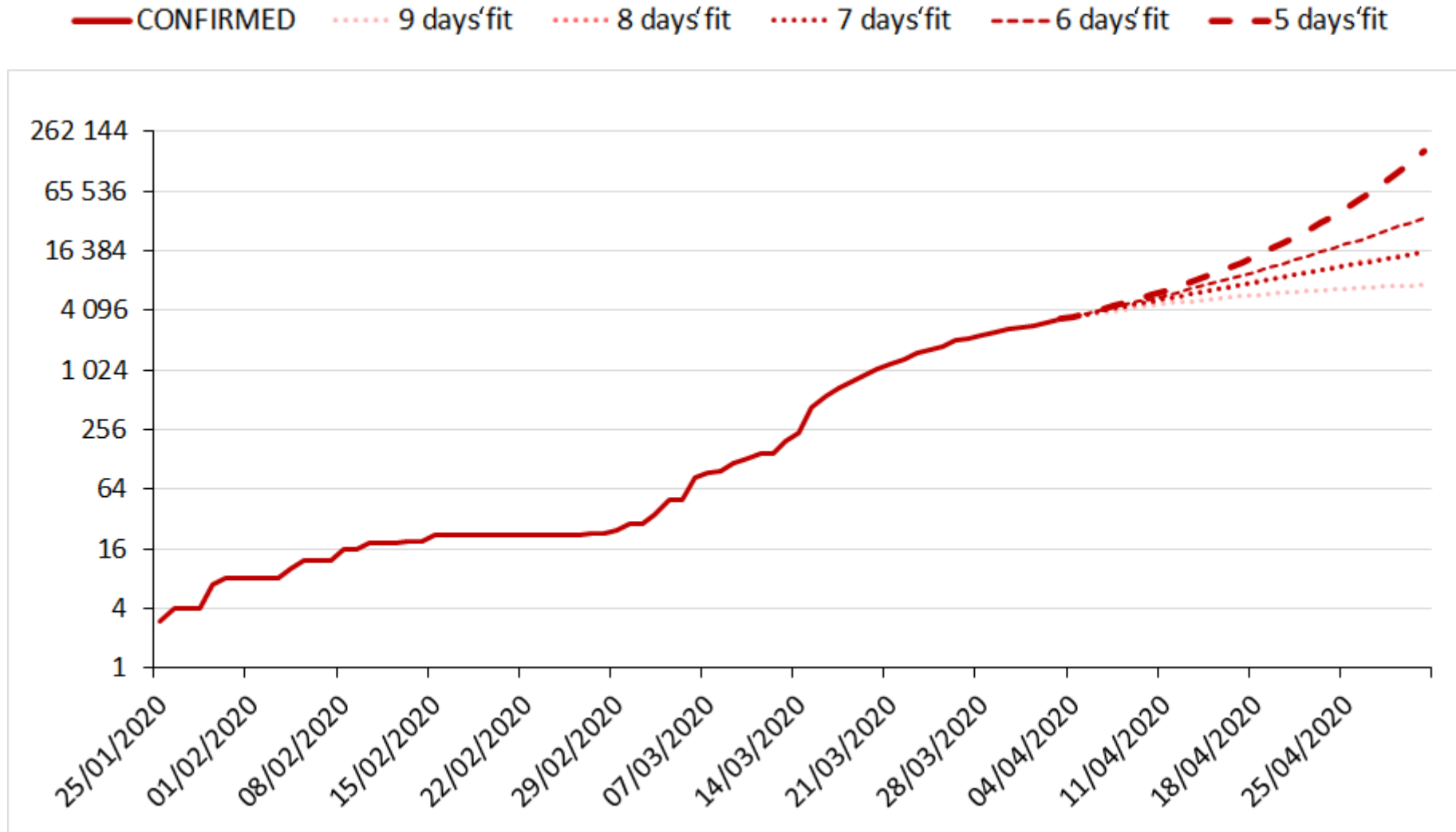
Macedonia

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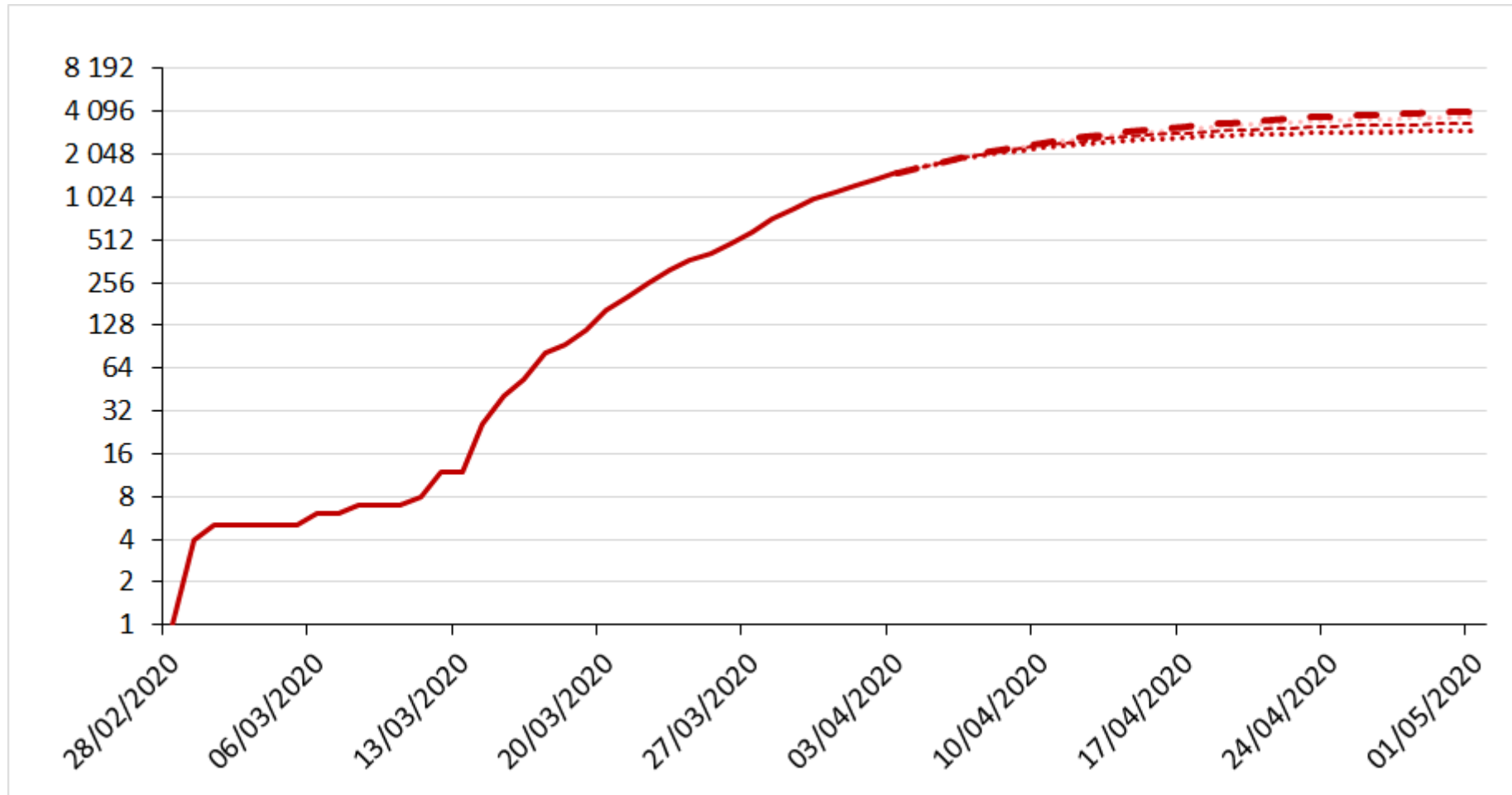
Malaysia



Data: The Johns Hopkins University, Politolog.com

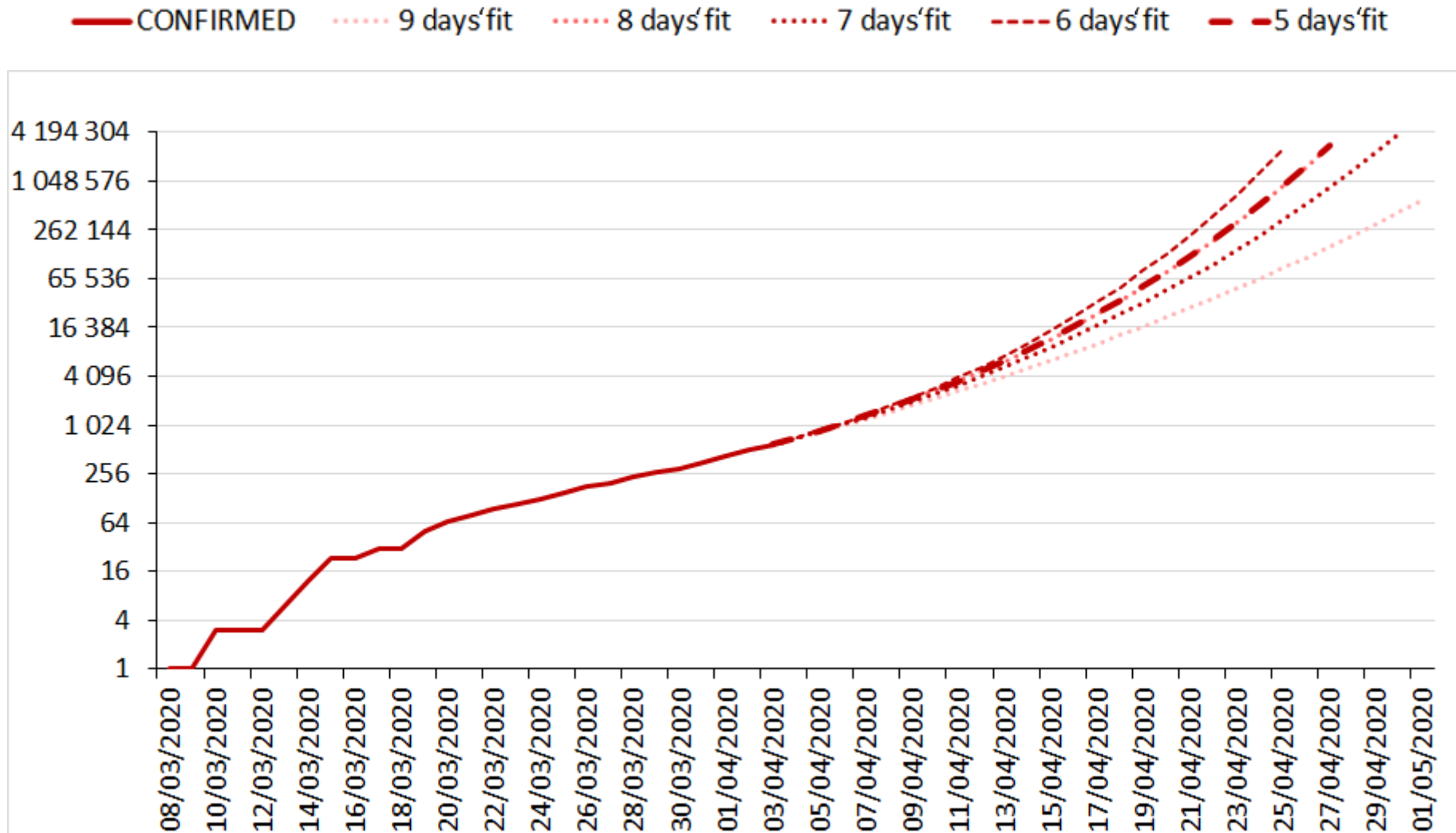
Mexico

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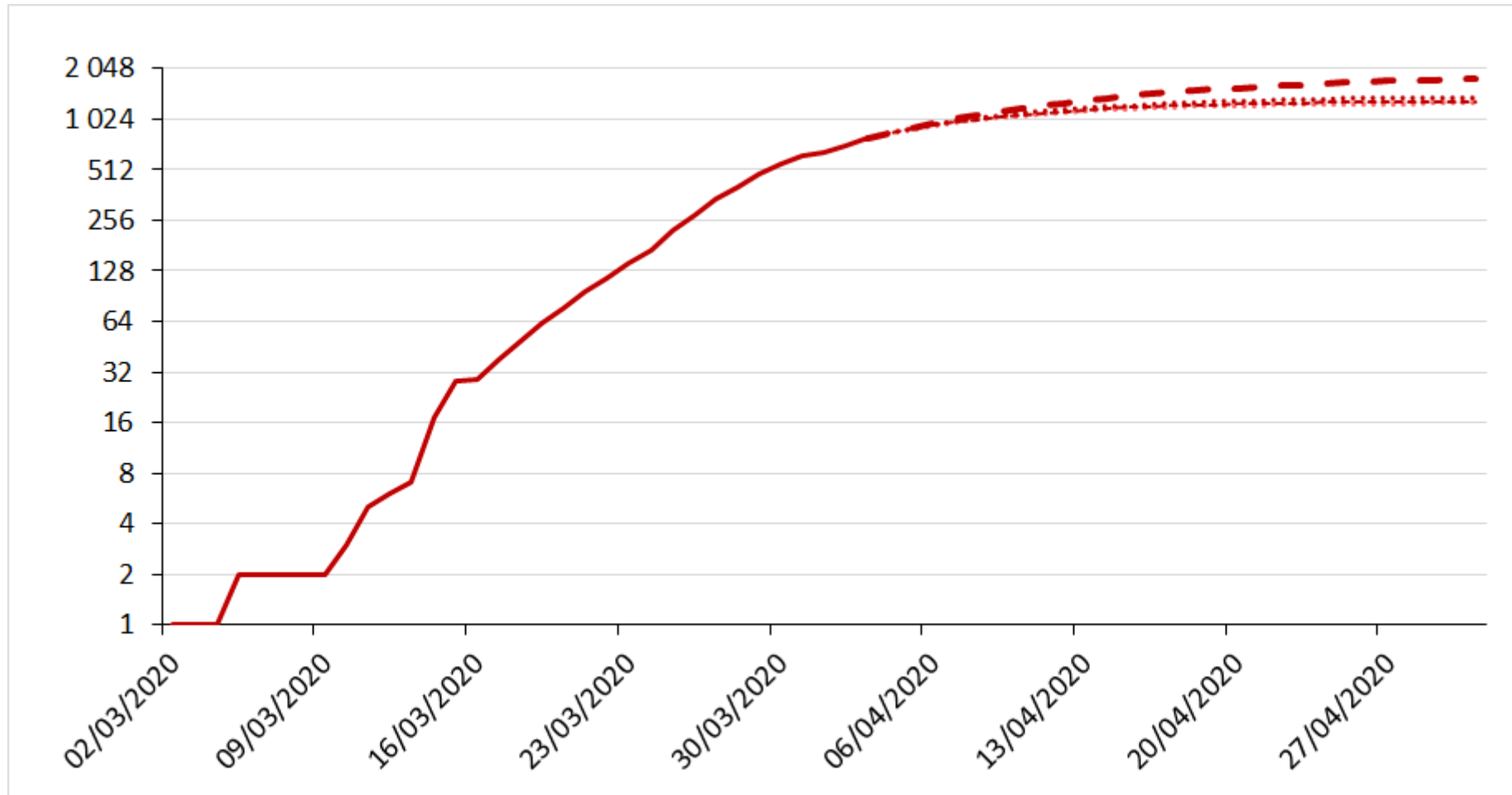
Moldova



Data: The Johns Hopkins University, Politolog.com

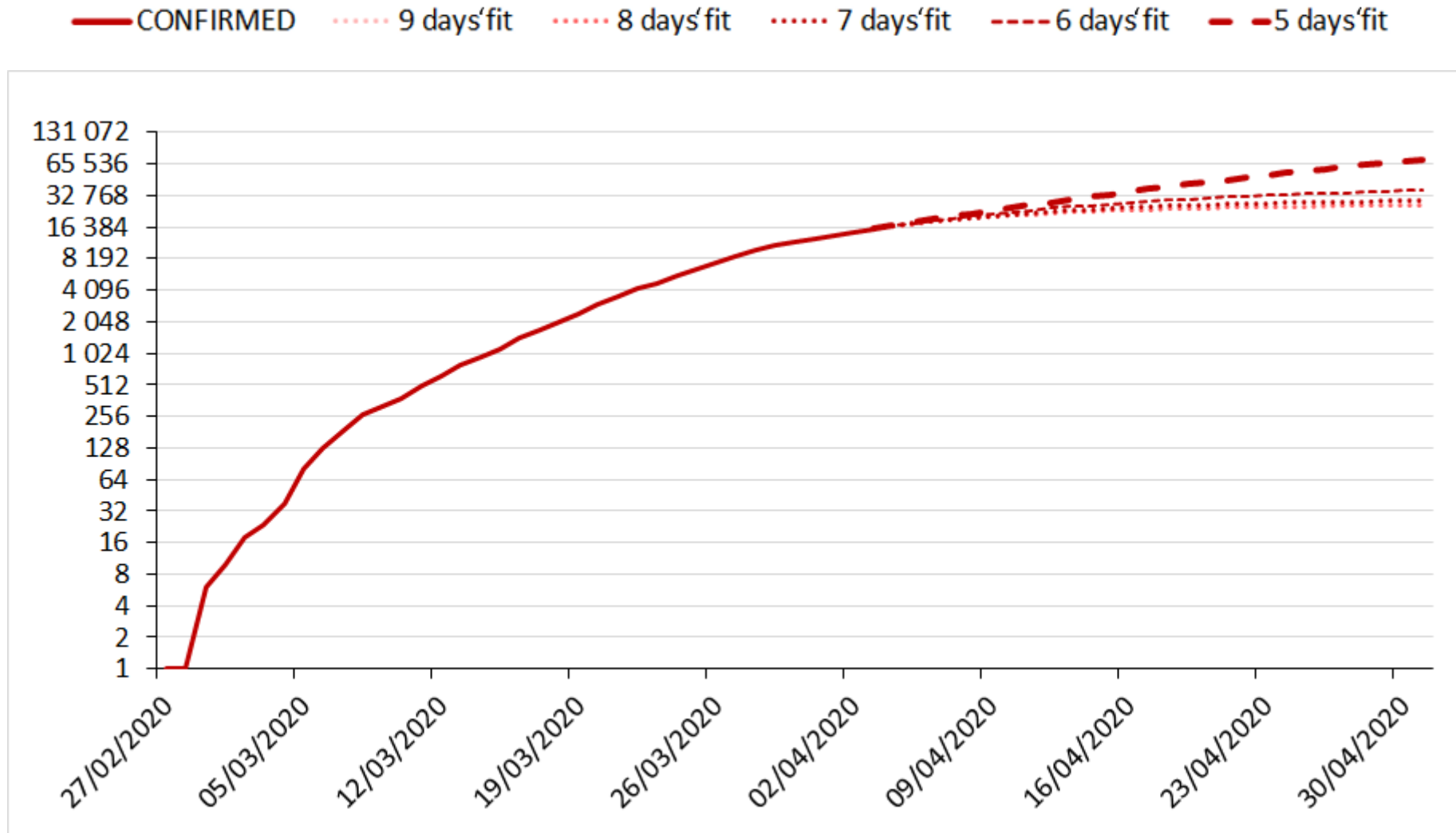
Morocco

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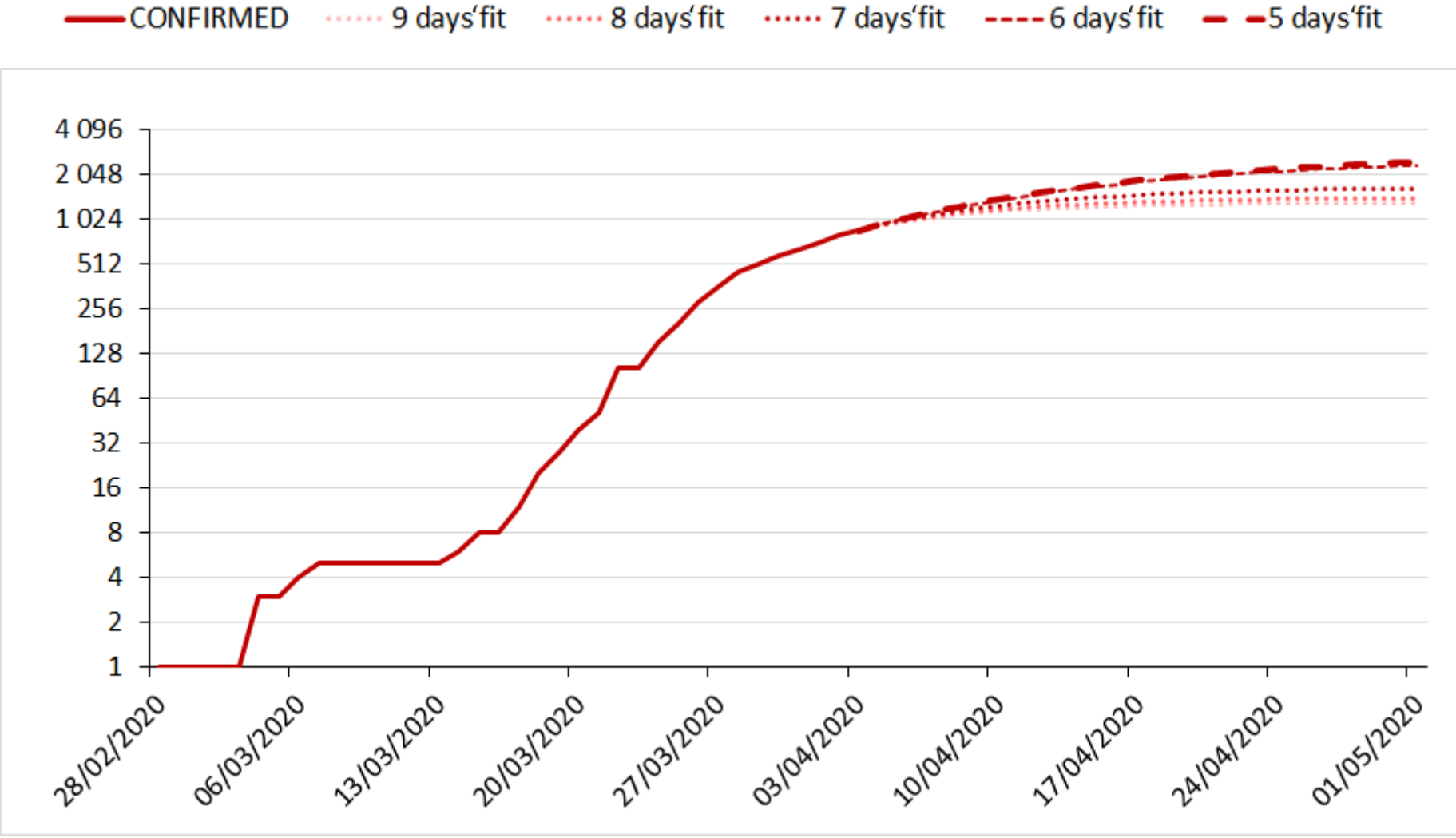
Data: The Johns Hopkins University, Politolog.com

Netherlands



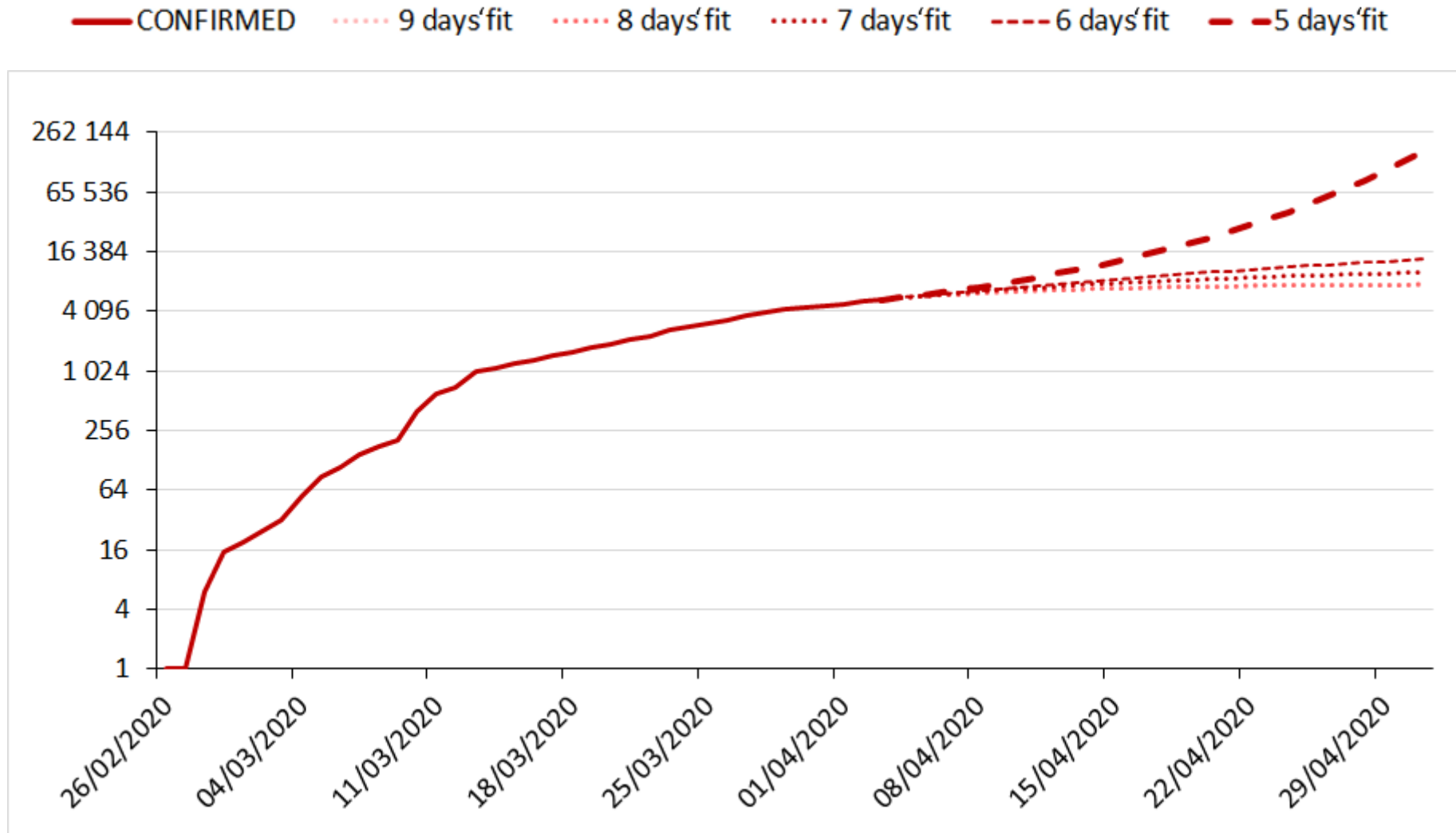
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New Zealand



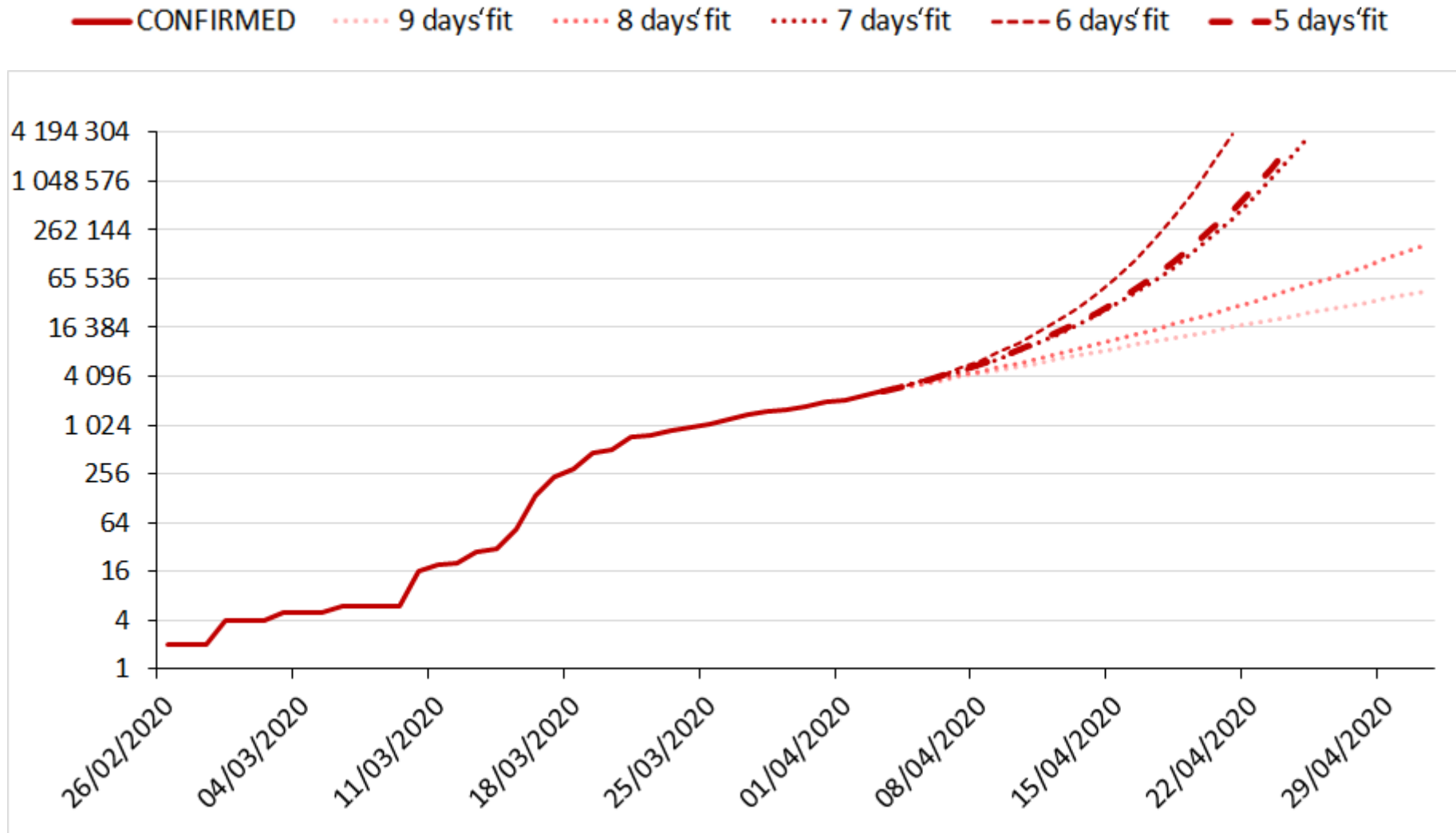
Data: The Johns Hopkins University, Politolog.com

Norway



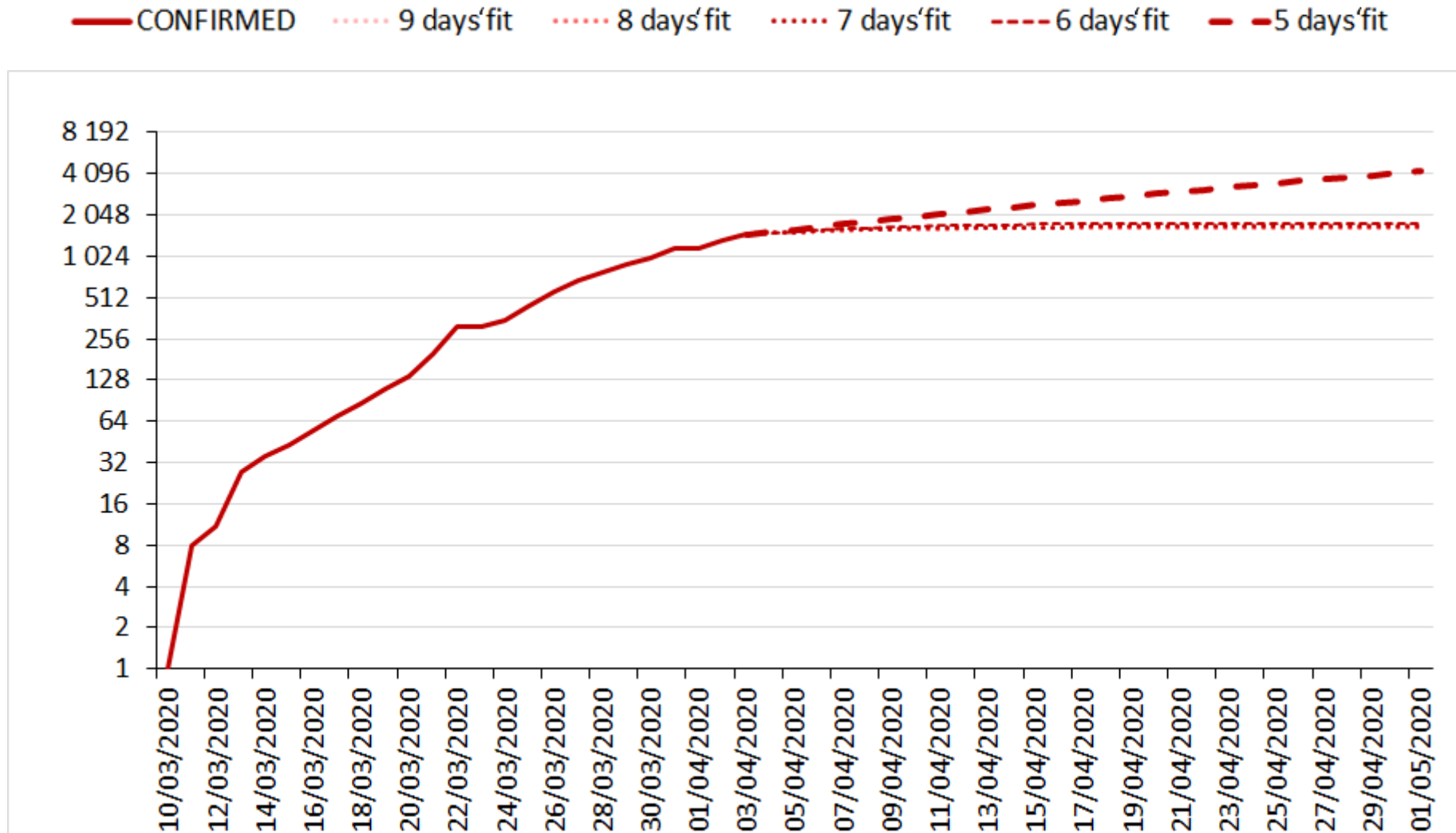
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Pakistan



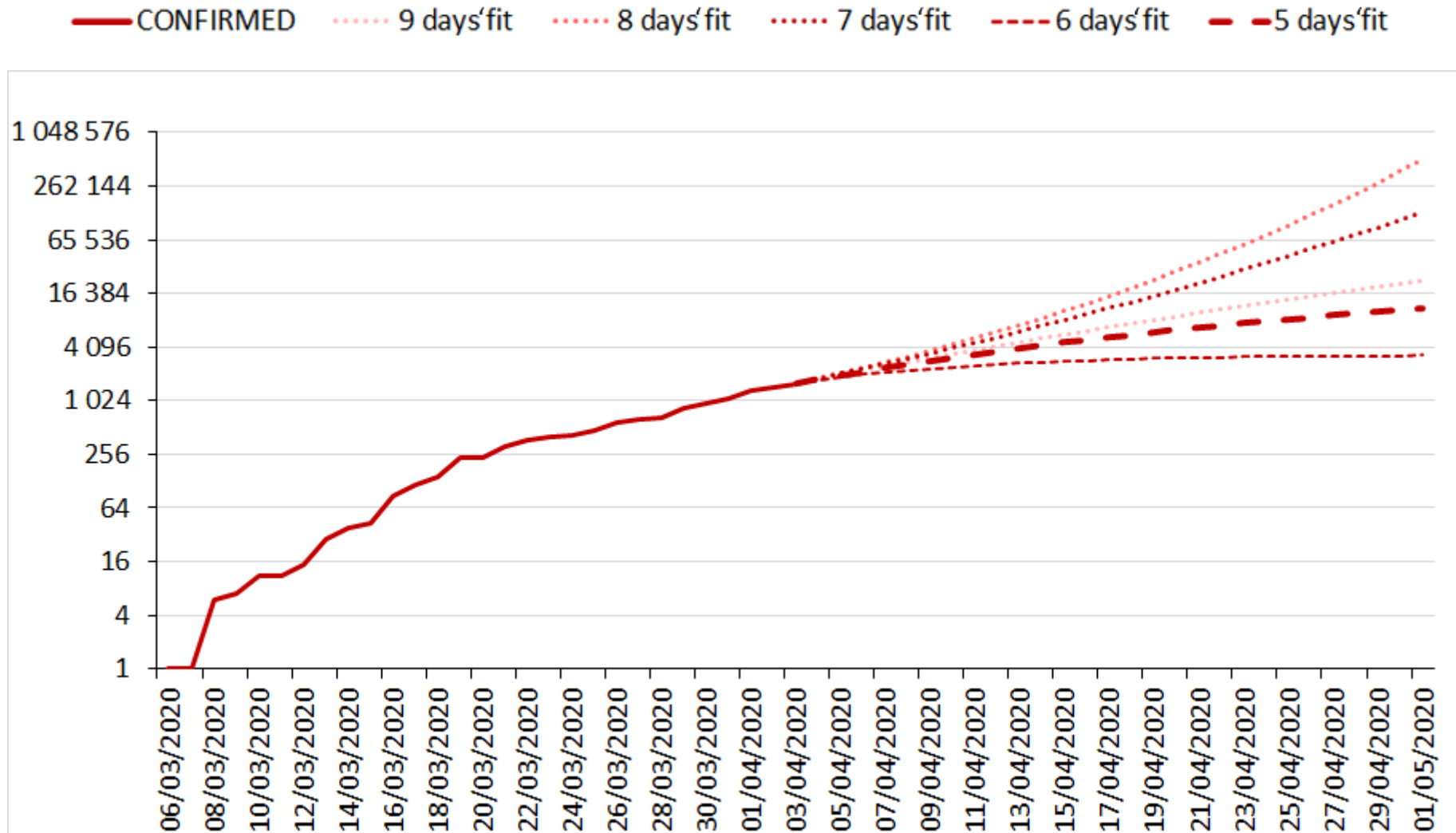
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Panama



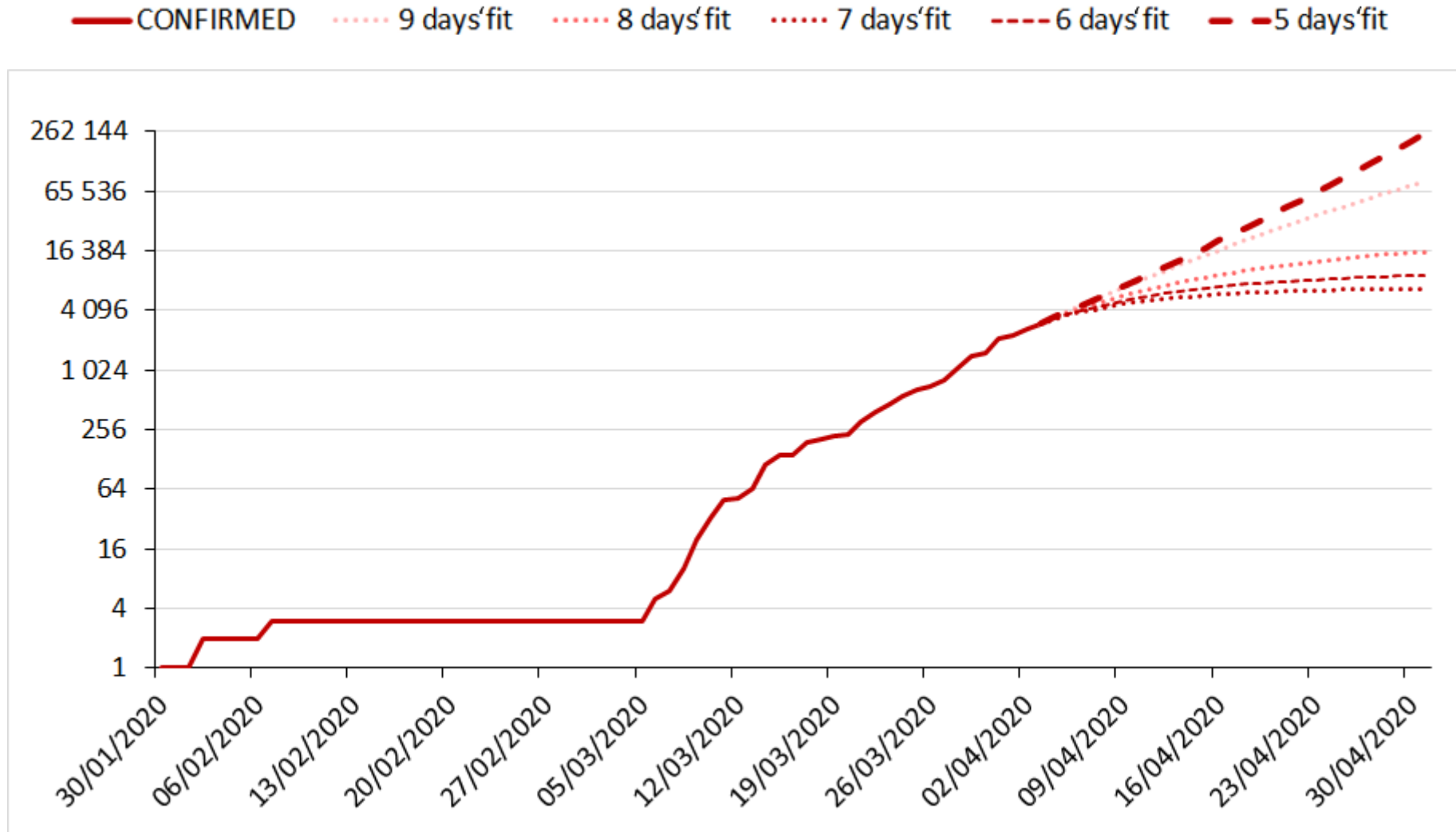
Data: The Johns Hopkins University, Politolog.com

Peru



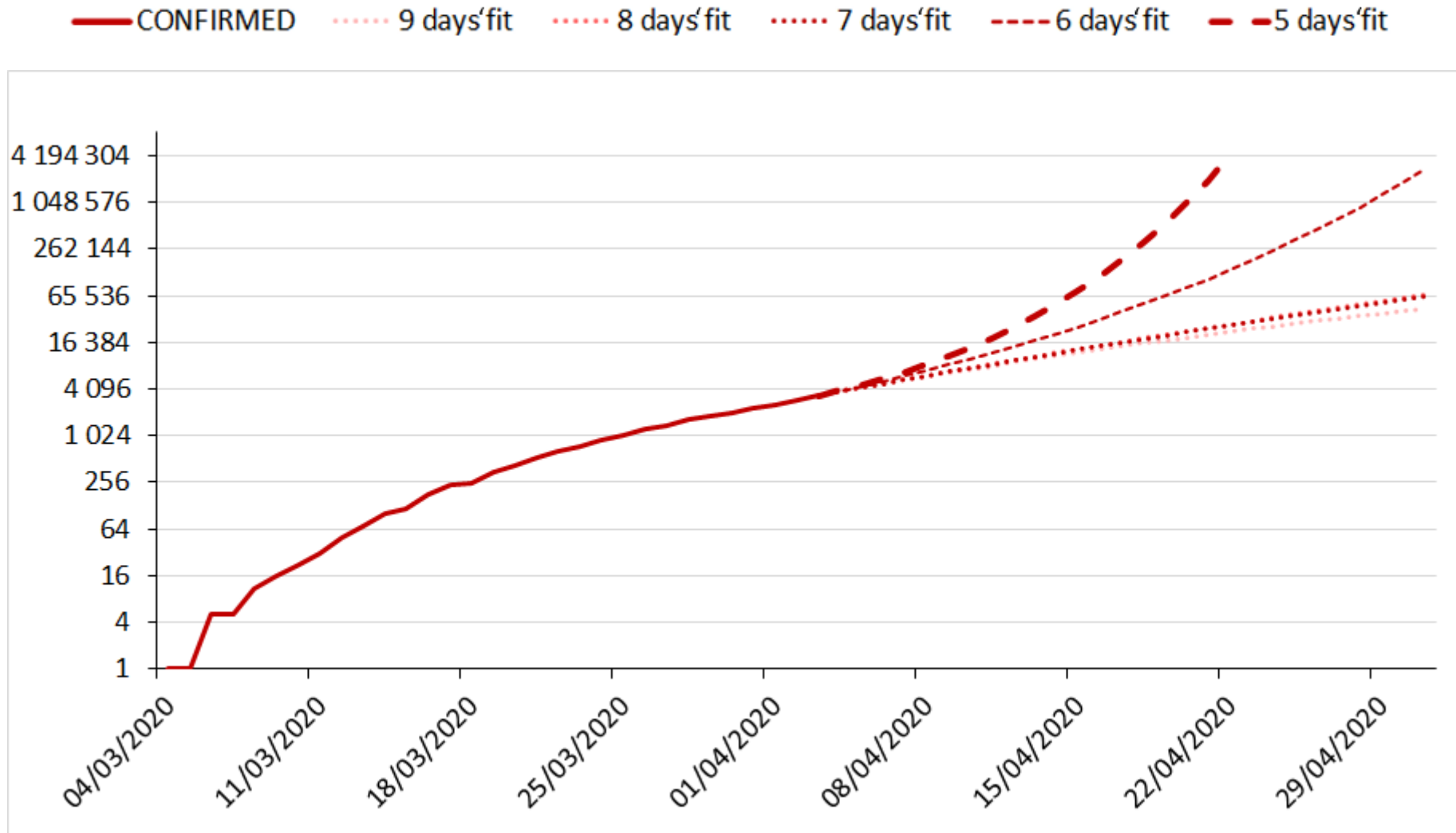
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Philippines



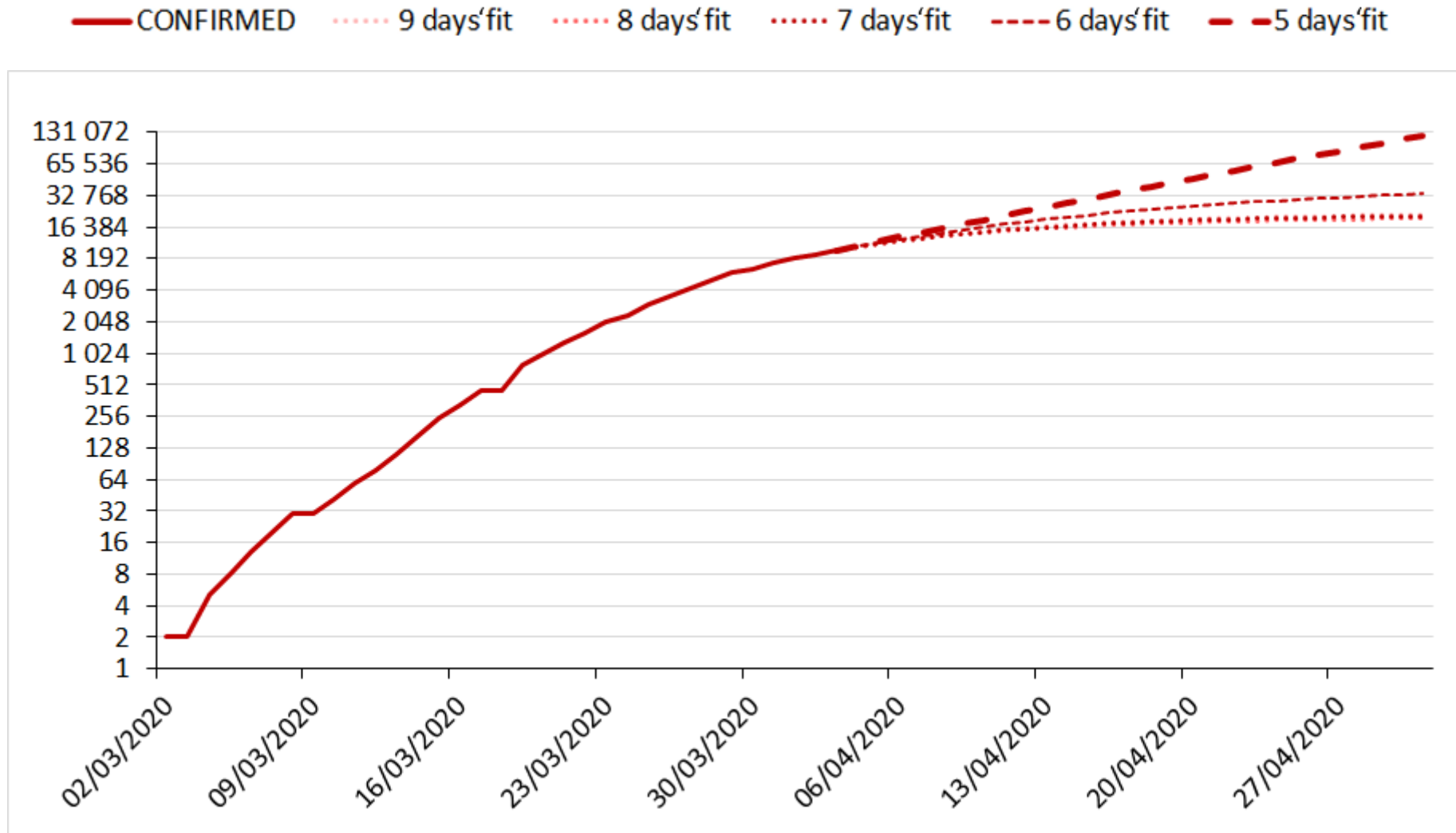
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Poland



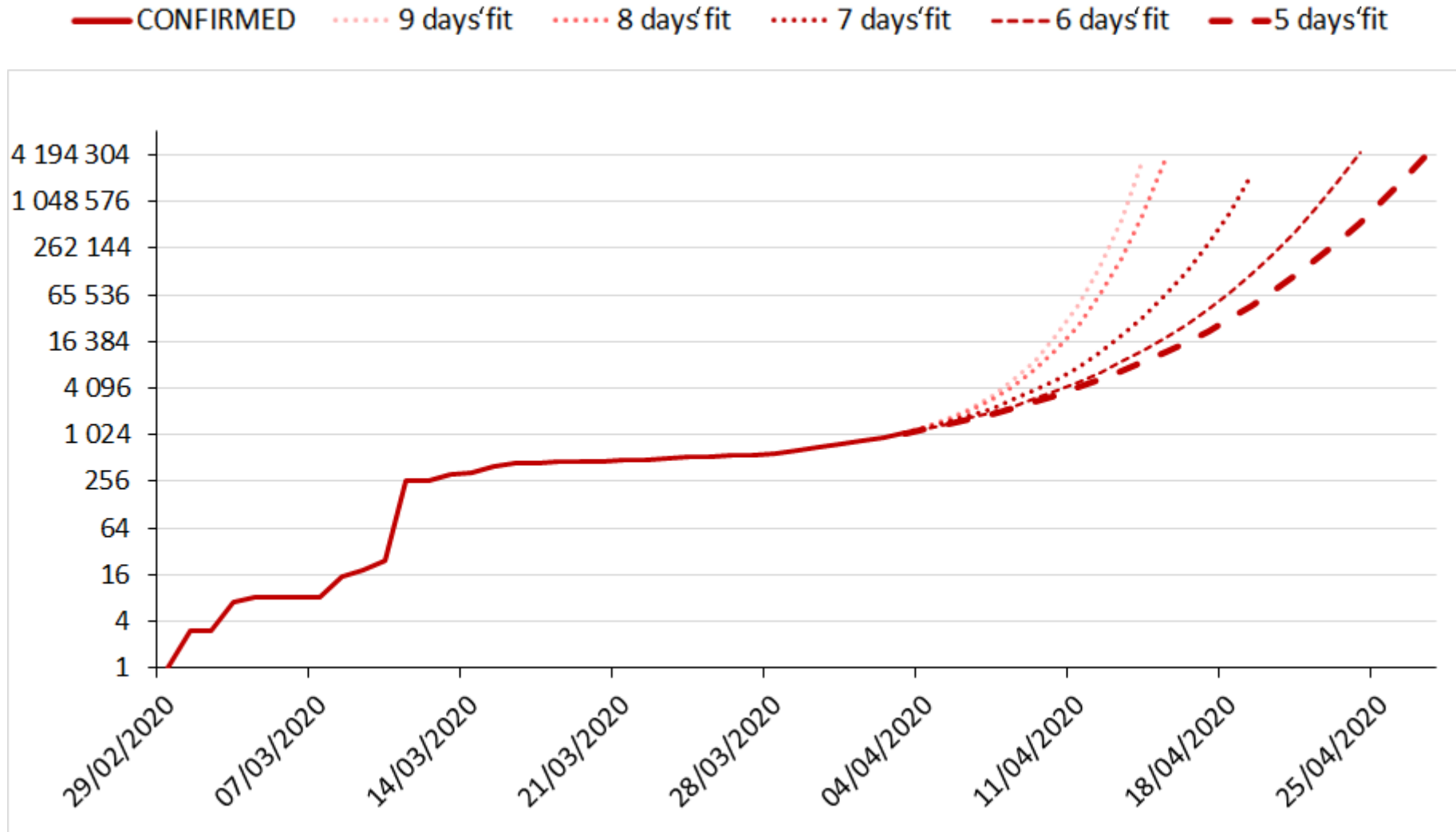
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Portugal



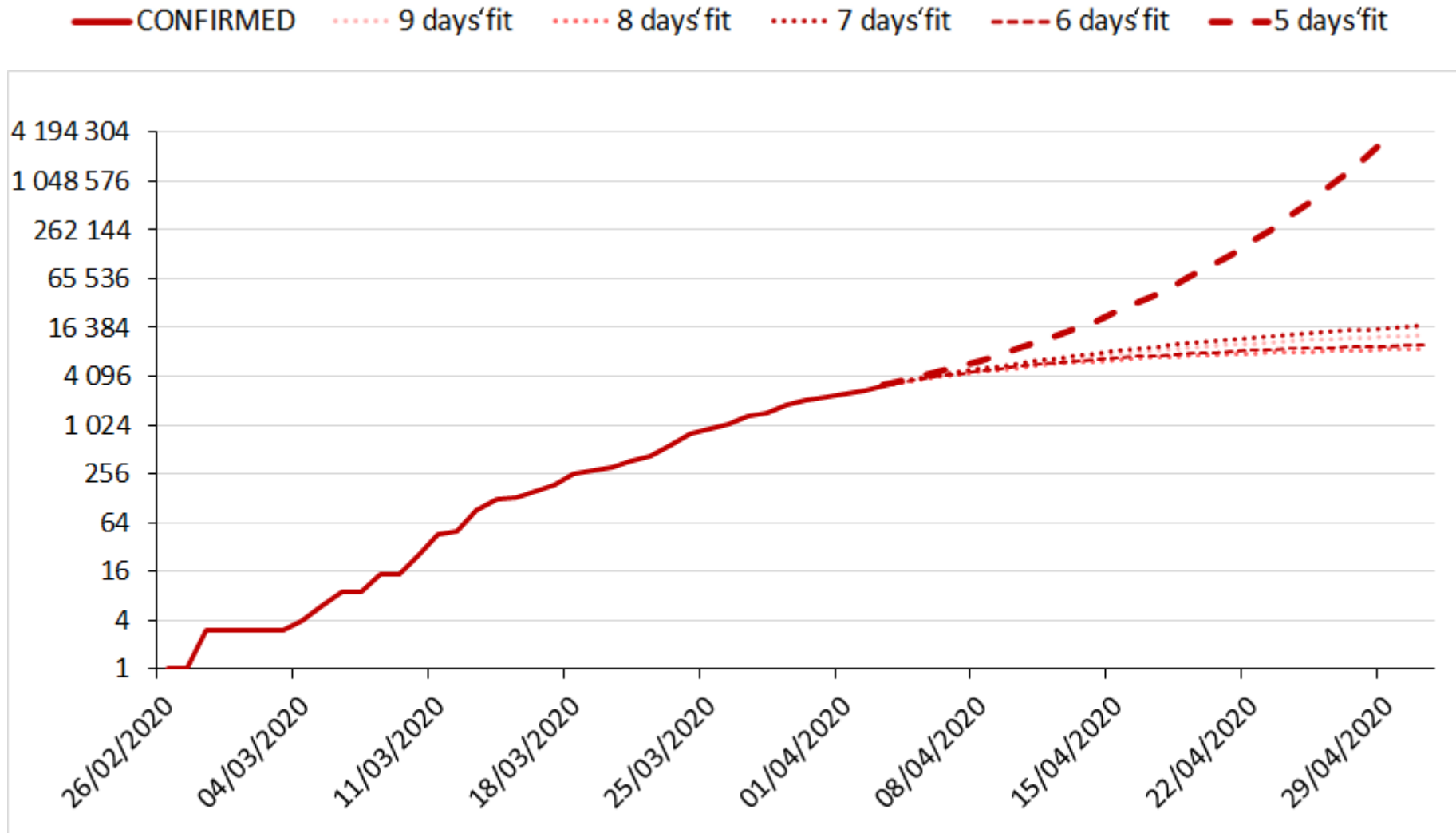
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Qatar



Data: The Johns Hopkins University, Politolog.com

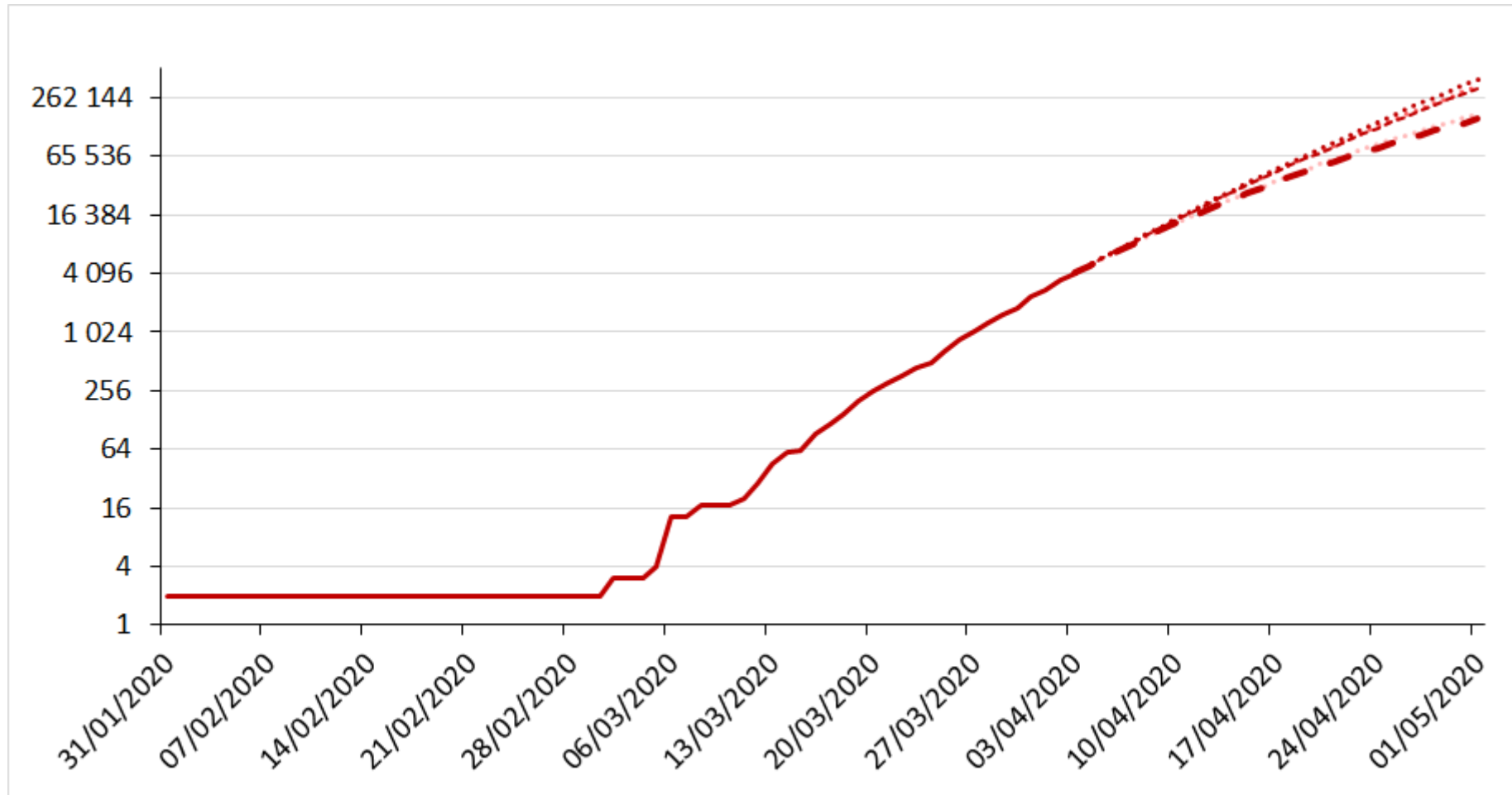
Romania



Data: The Johns Hopkins University, Politolog.com

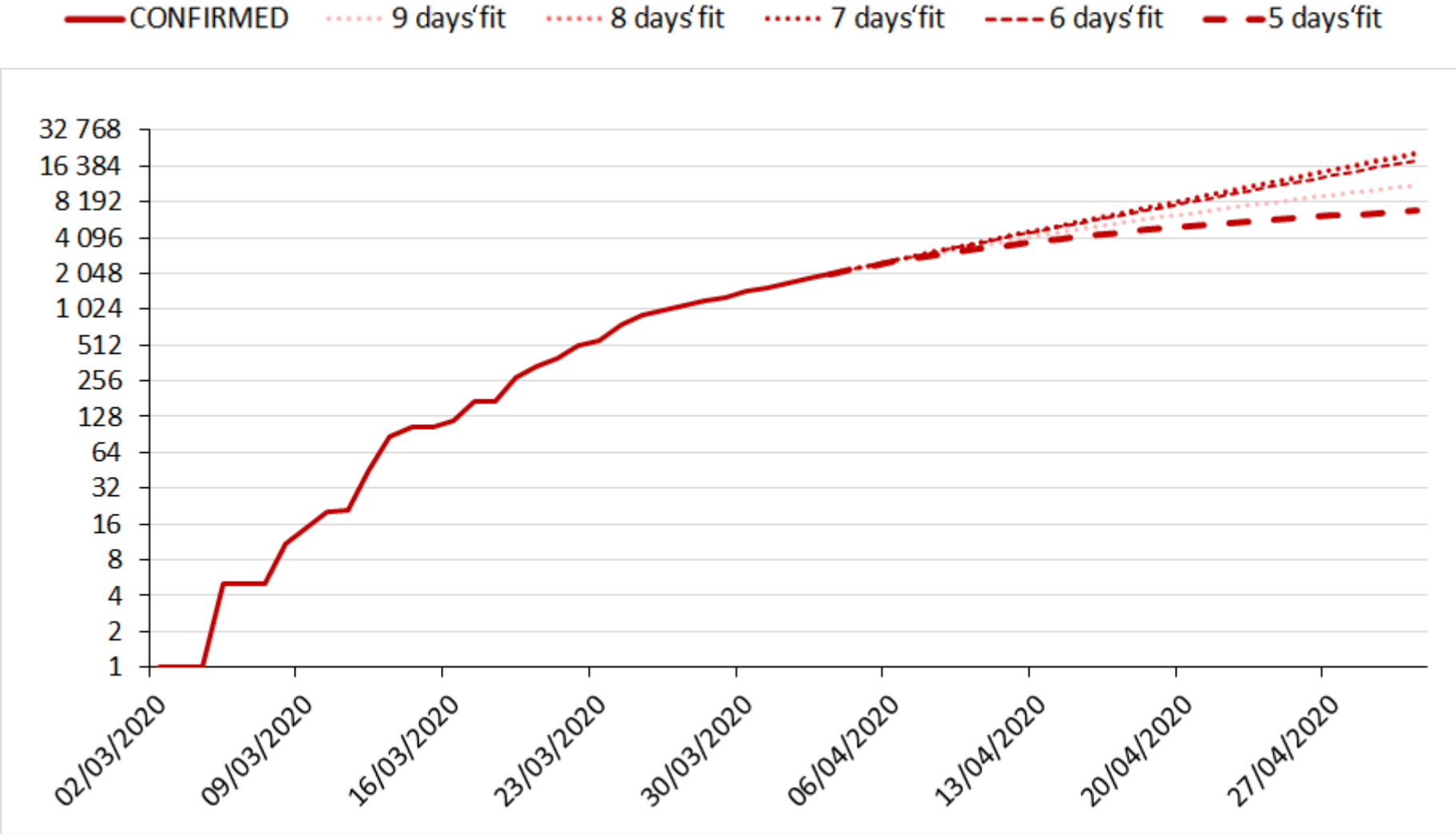
Russia

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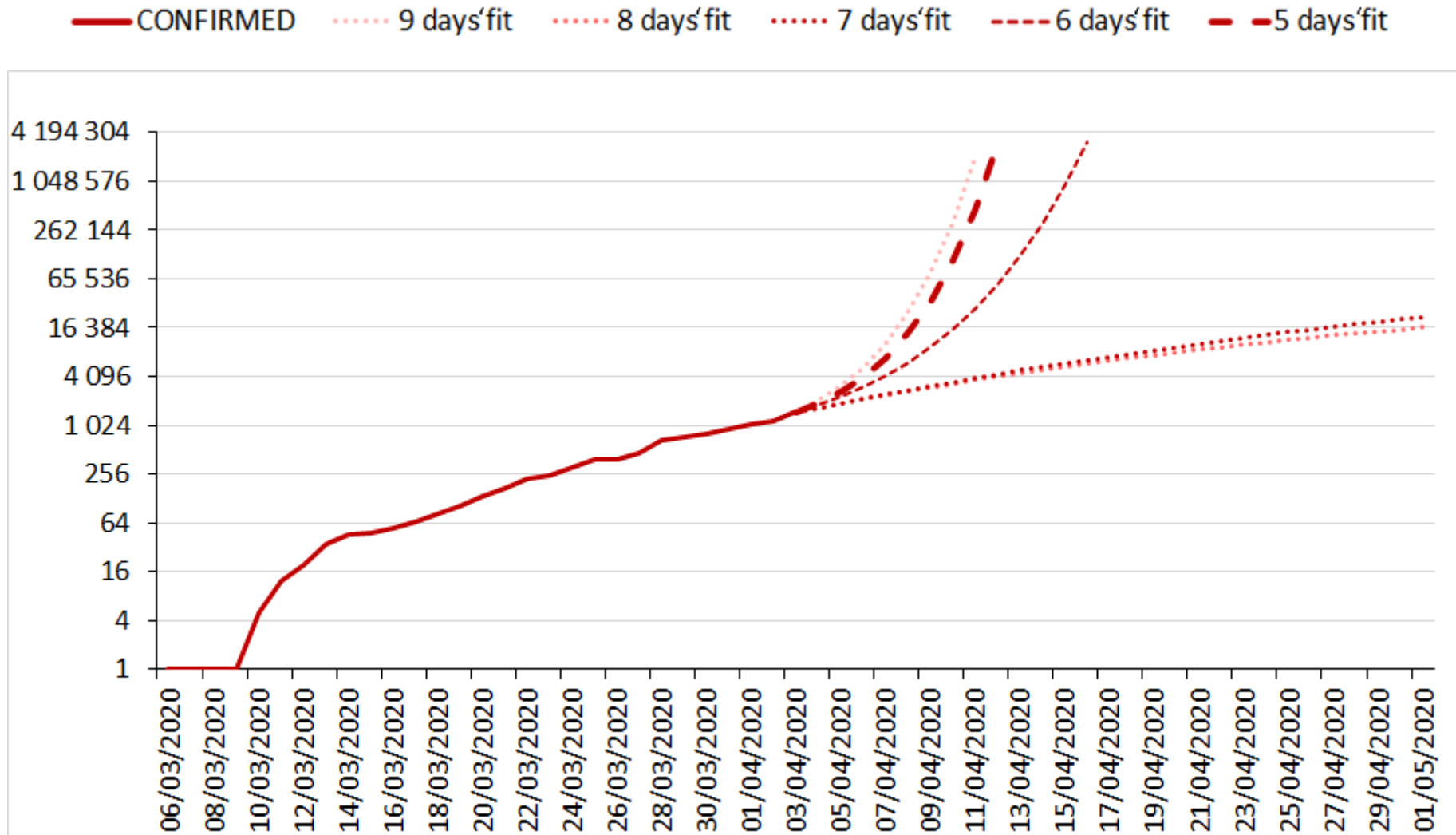
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Saudi Arabia



Data: The Johns Hopkins University, Politolog.com

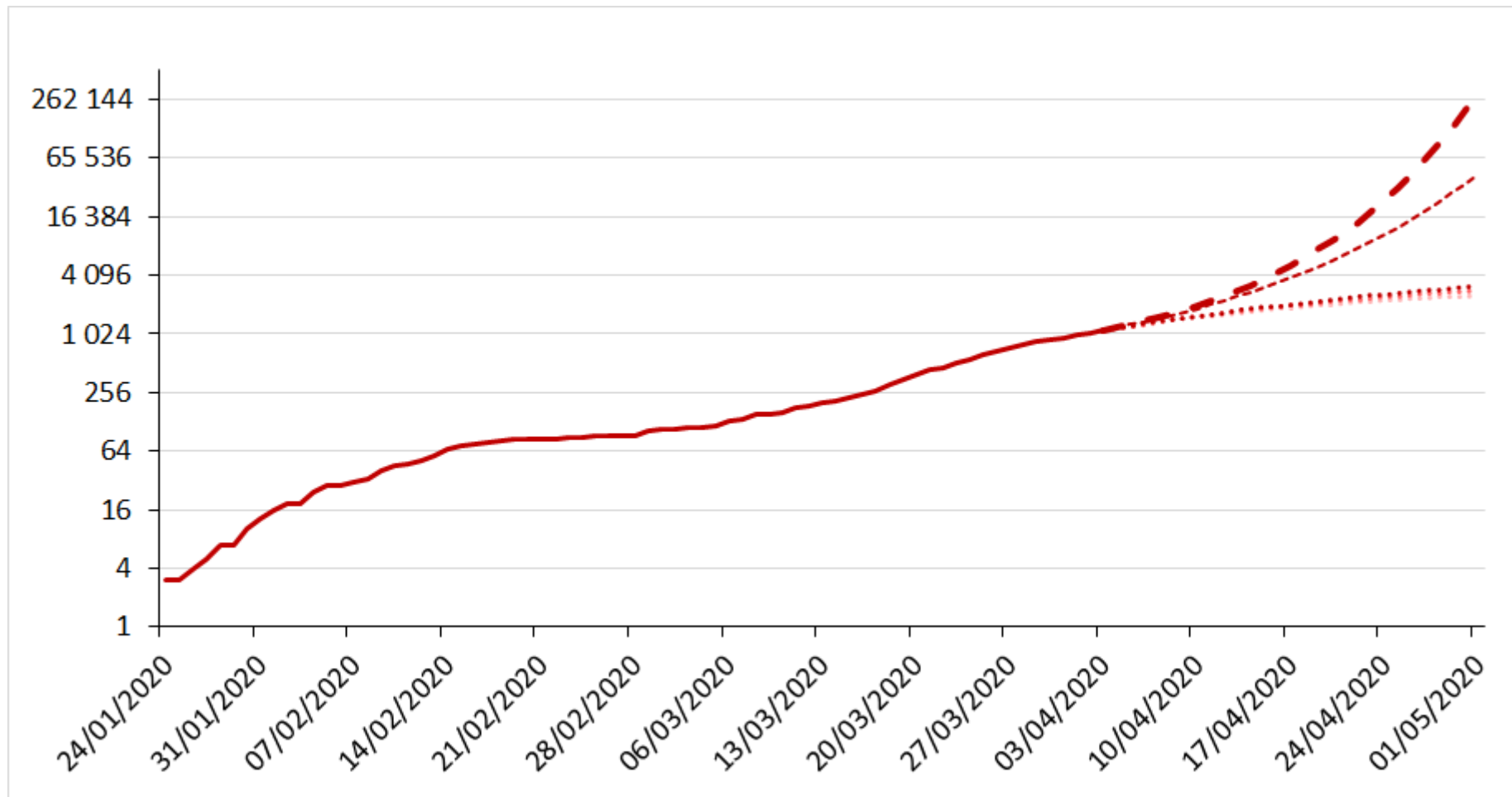
Serbia



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Singapore

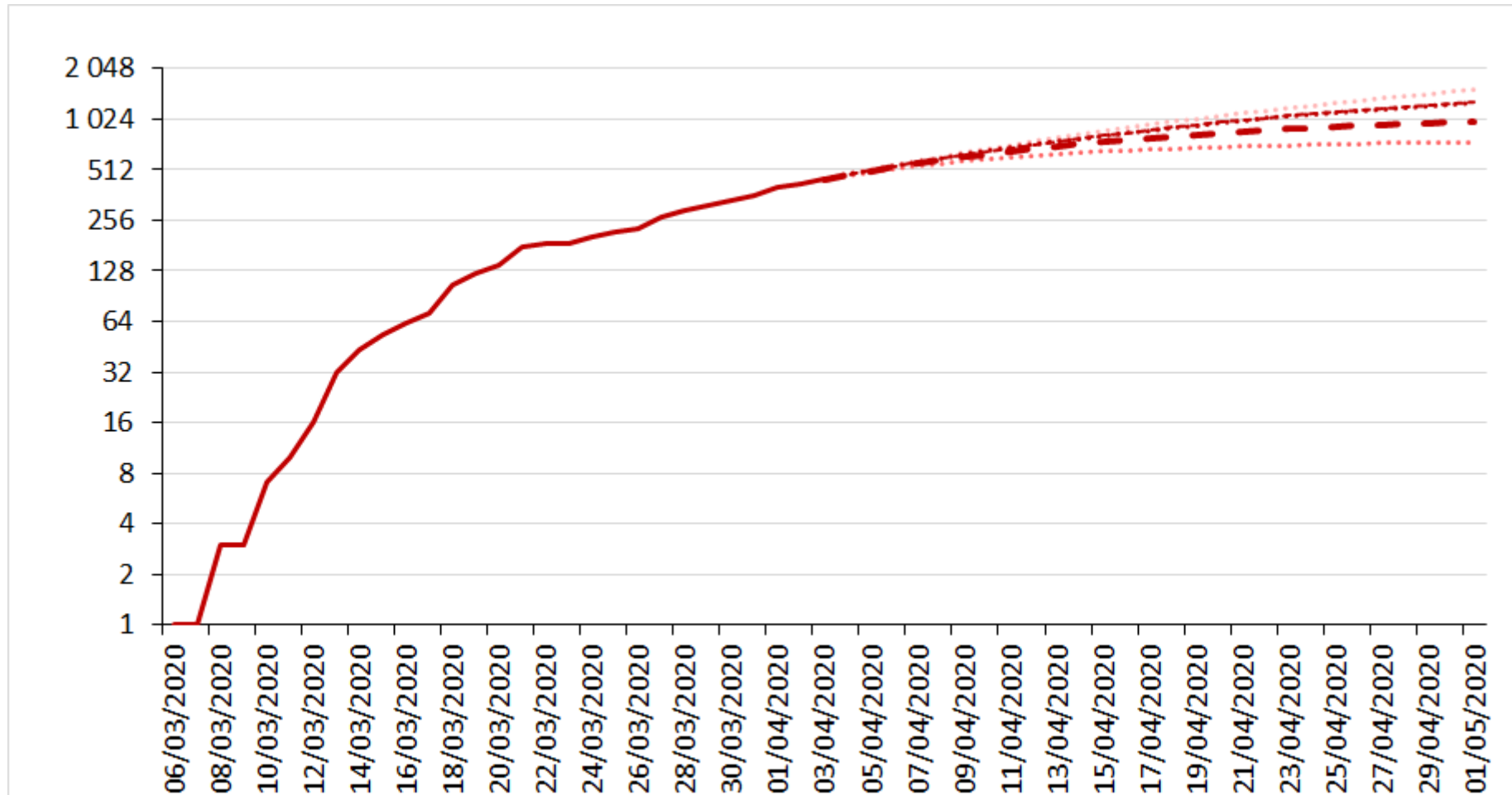
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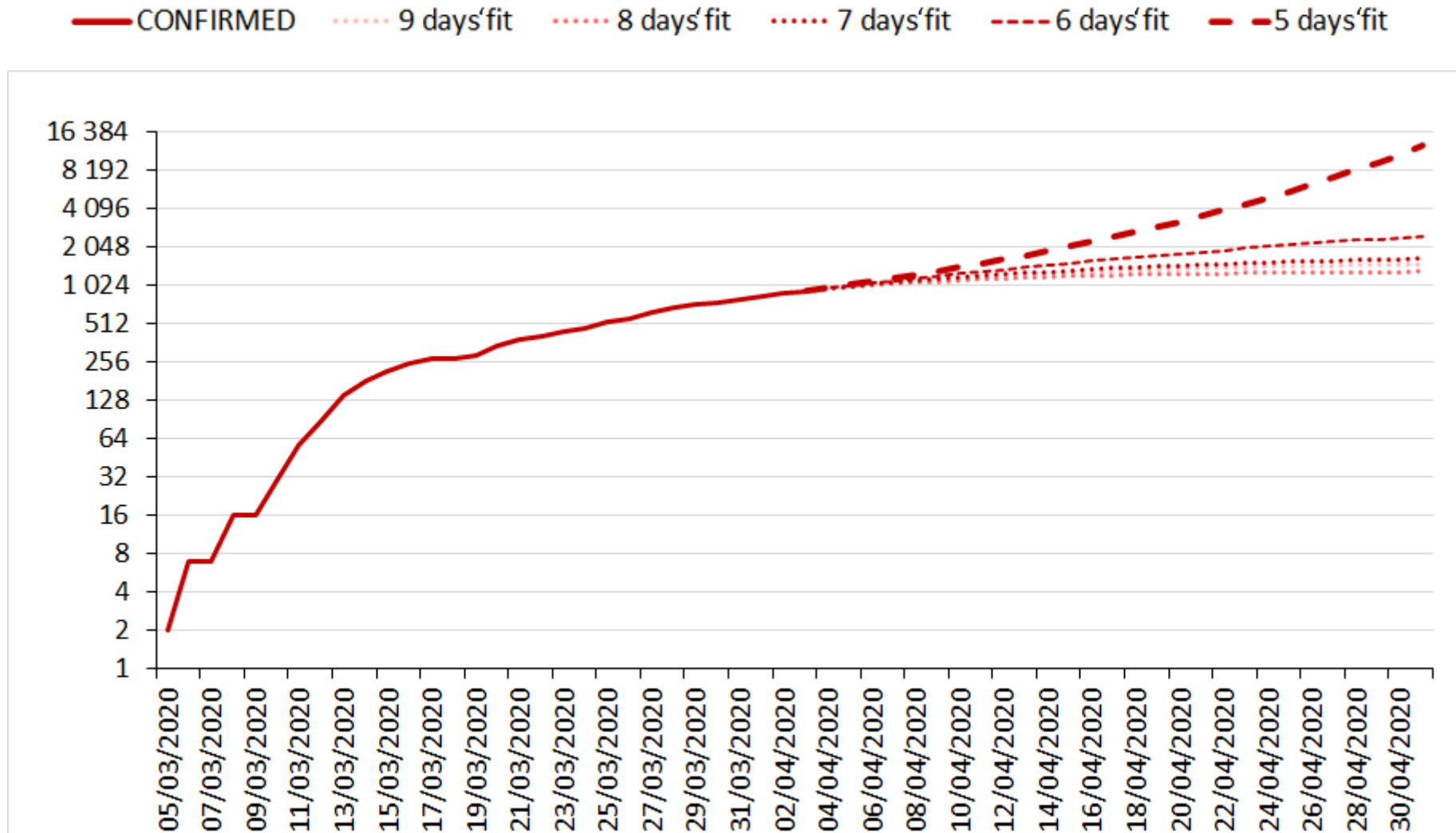
Slovakia

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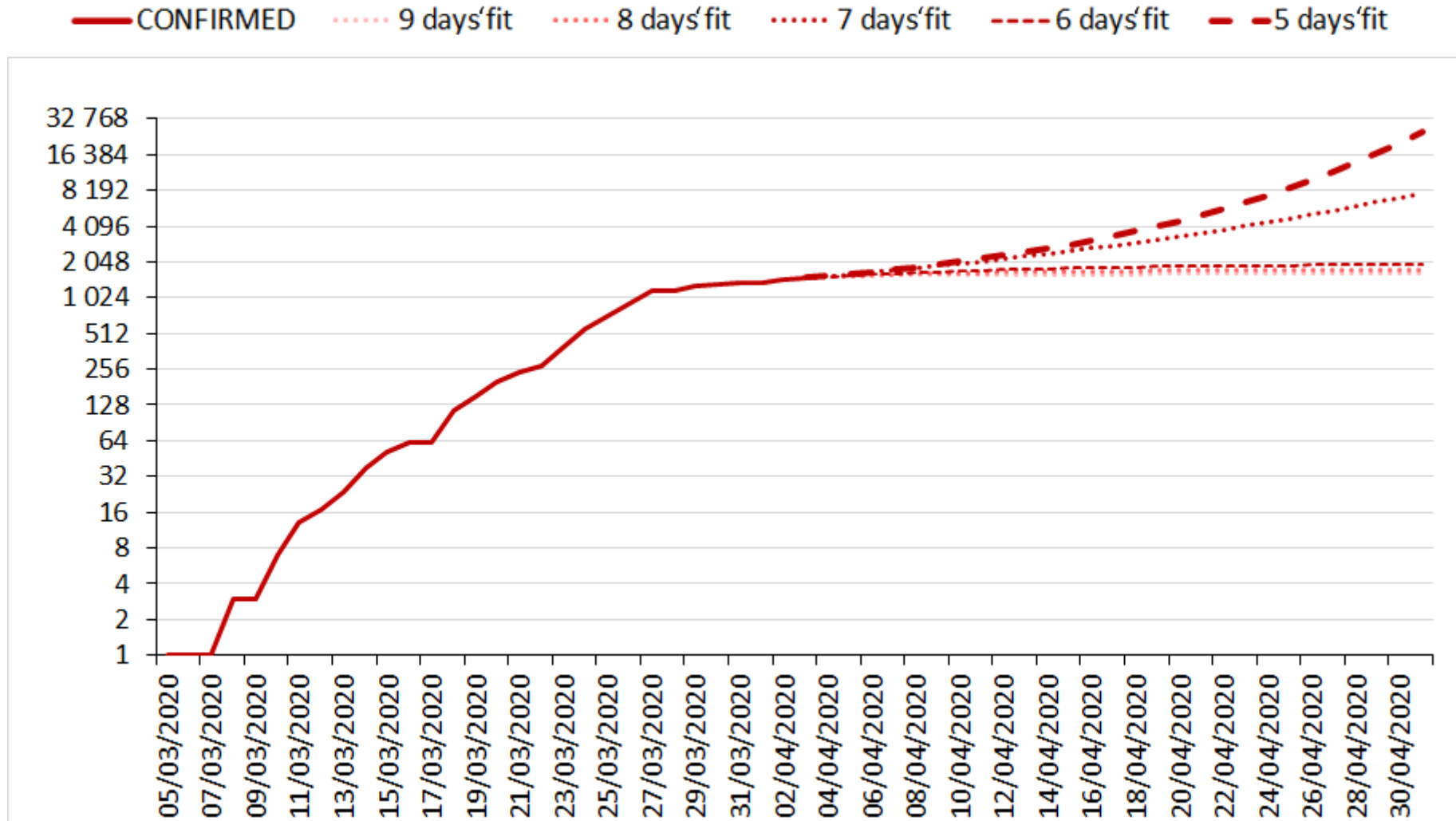
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Slovenia



Data: The Johns Hopkins University, Politolog.com

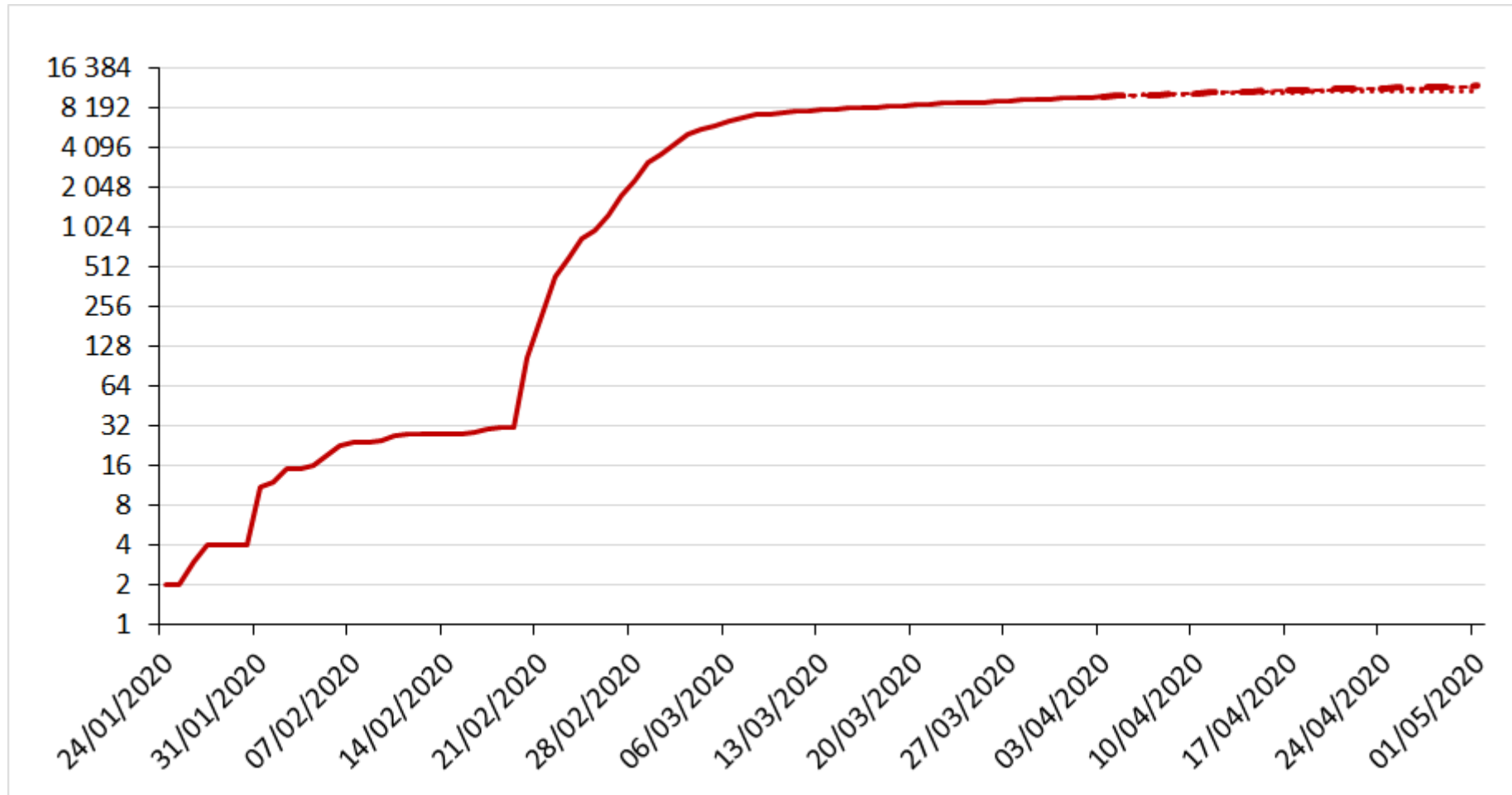
South Africa



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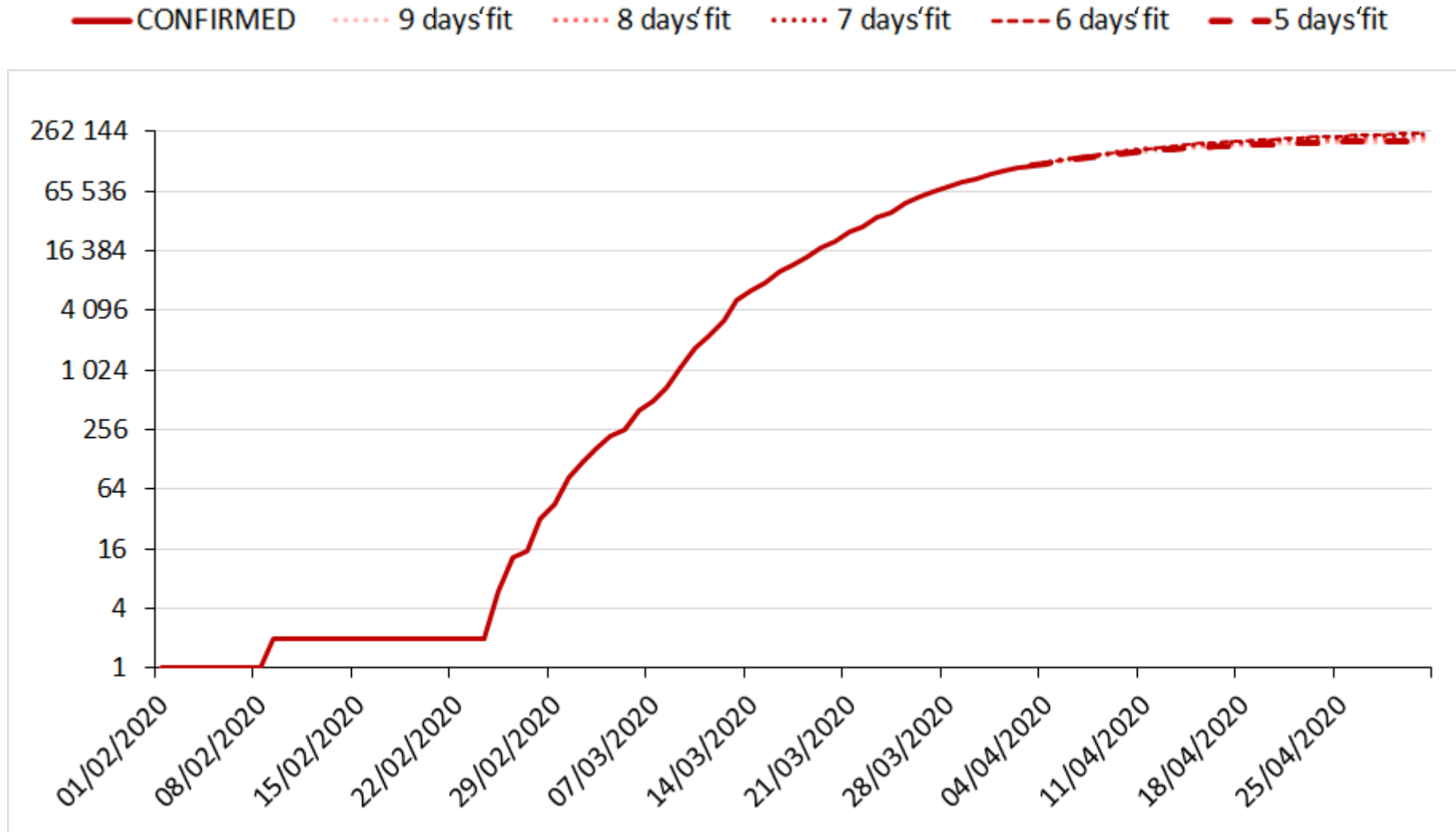
South Korea

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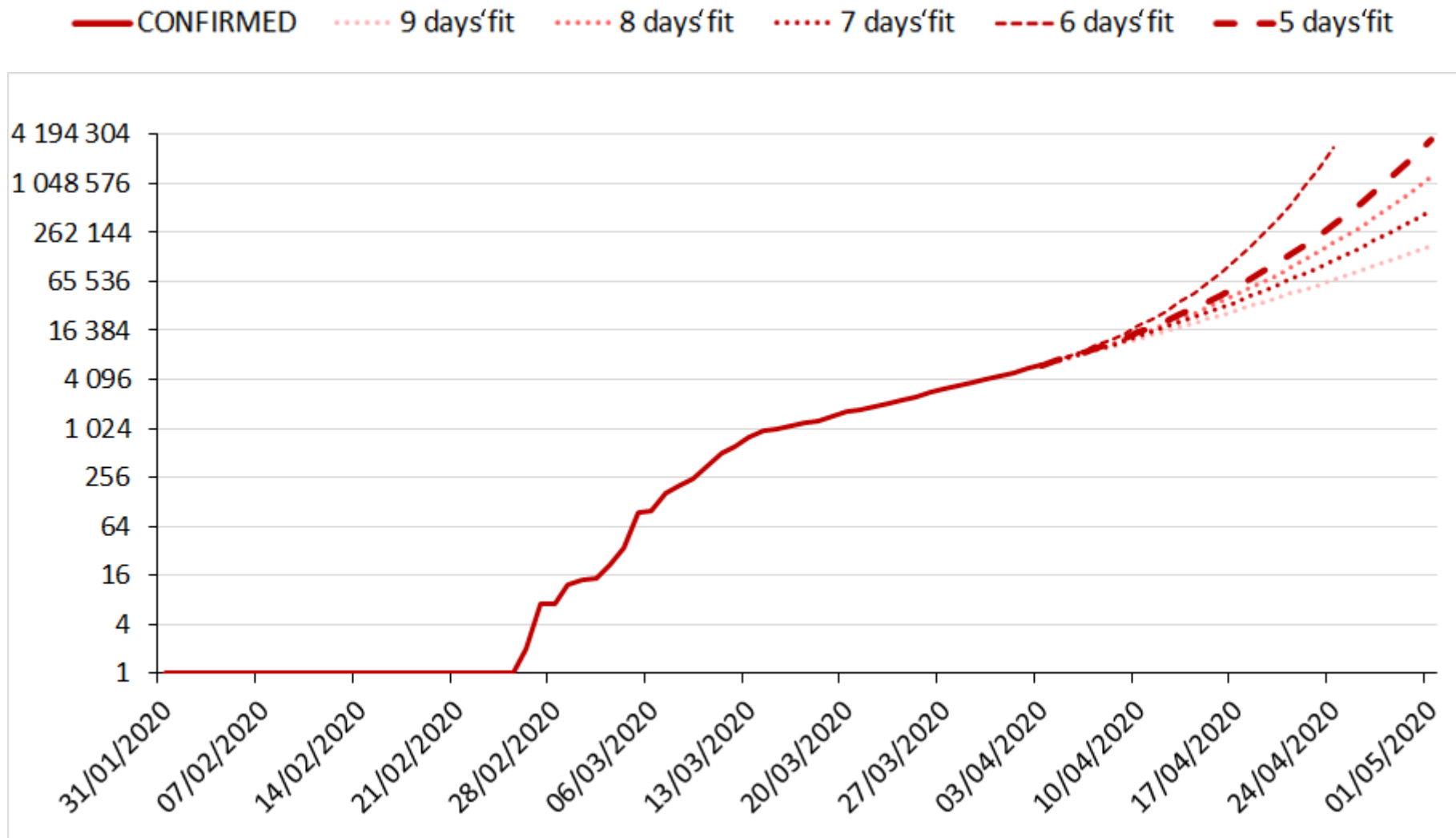
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Spain



Data: The Johns Hopkins University, Politolog.com

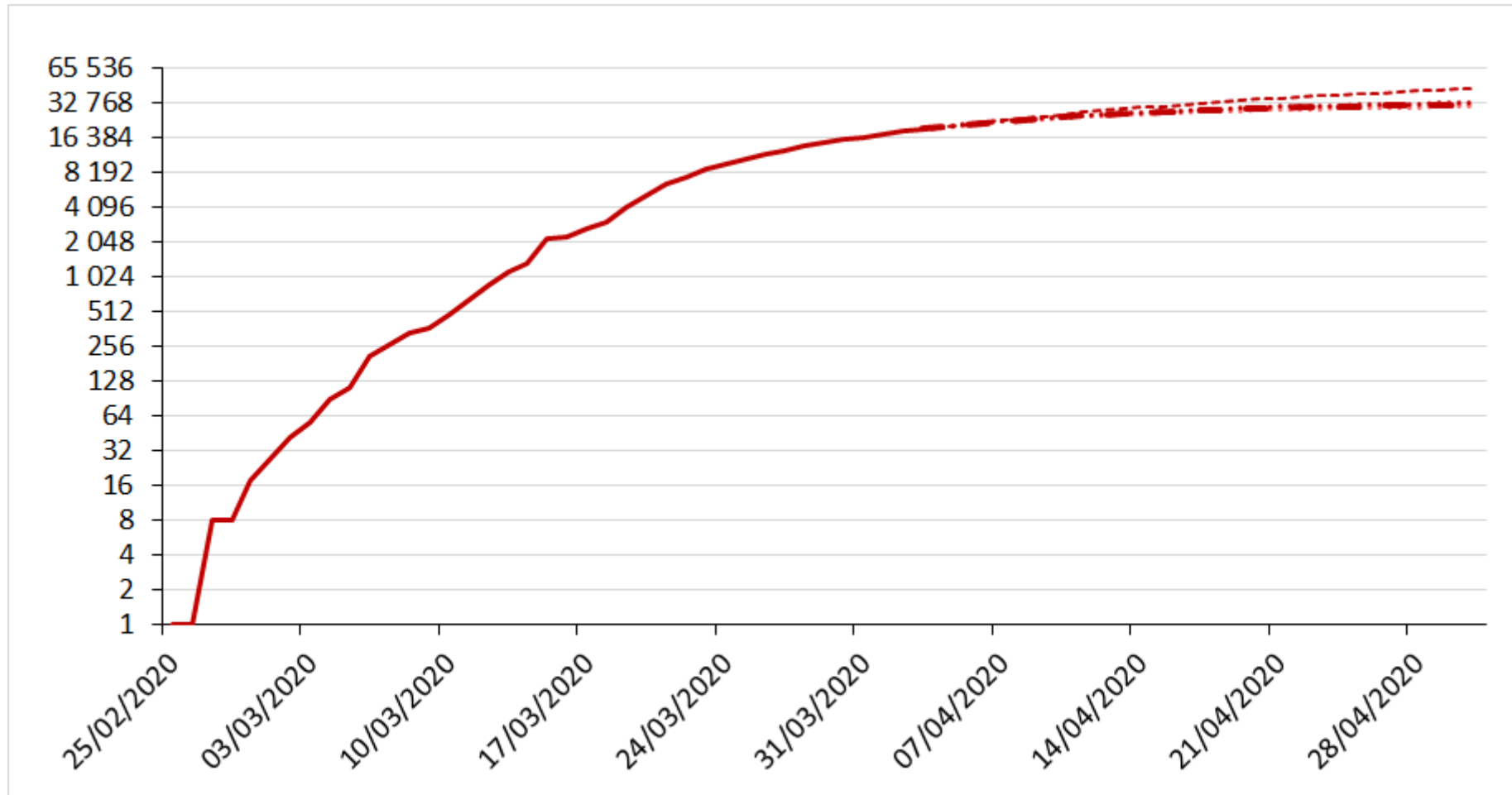
Sweden



Data: The Johns Hopkins University, Politolog.com

Switzerland

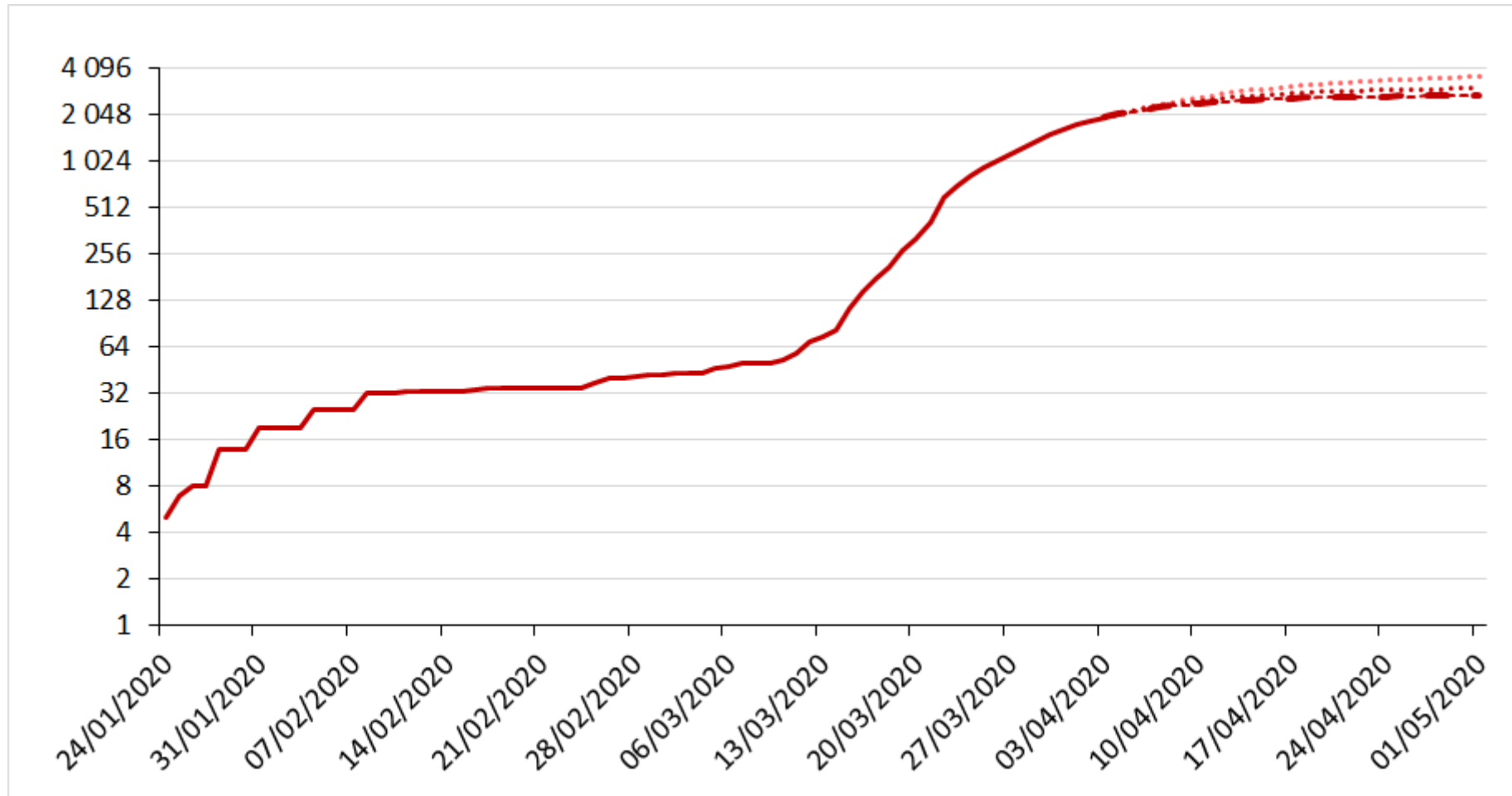
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Thailand

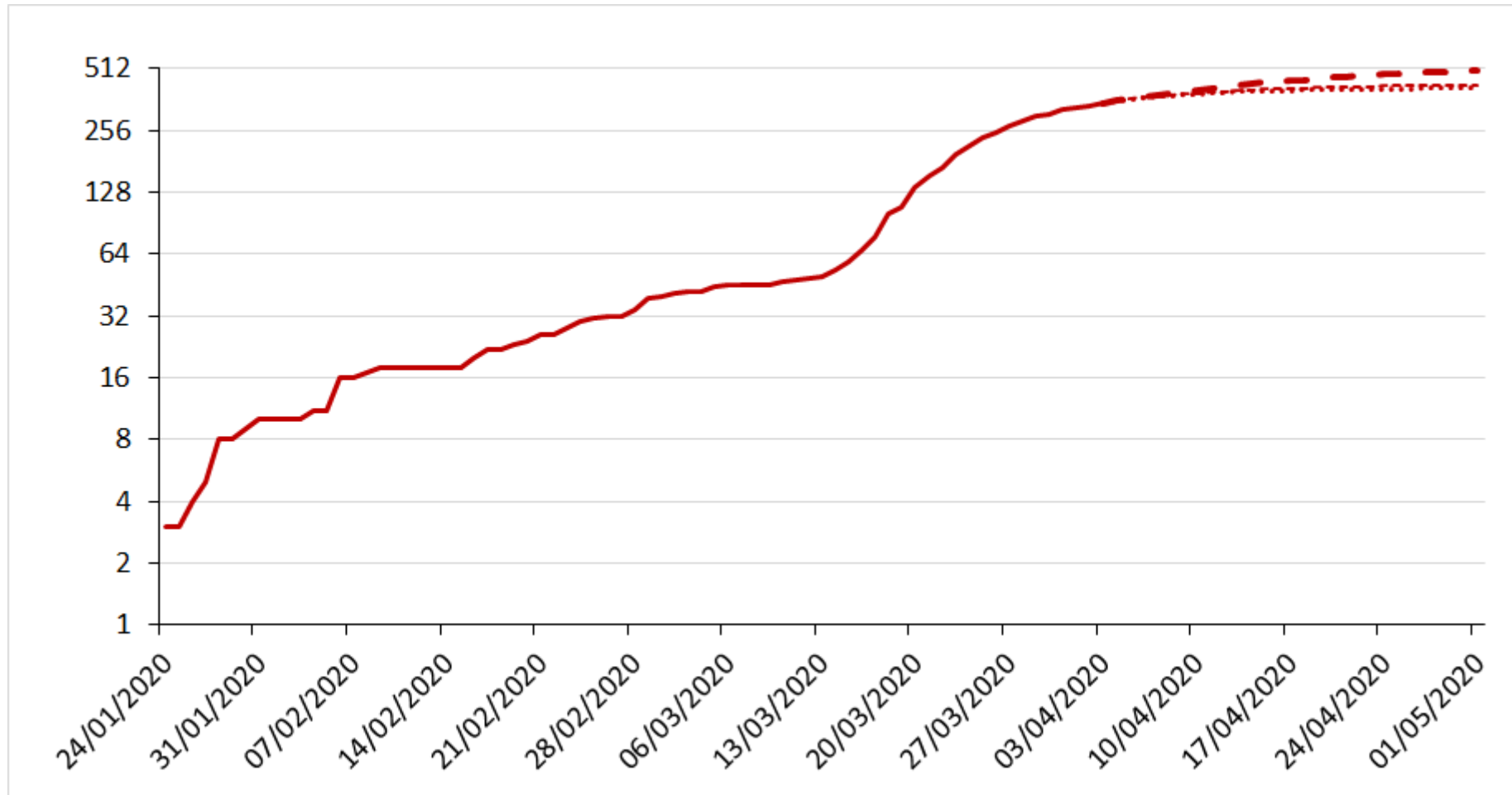
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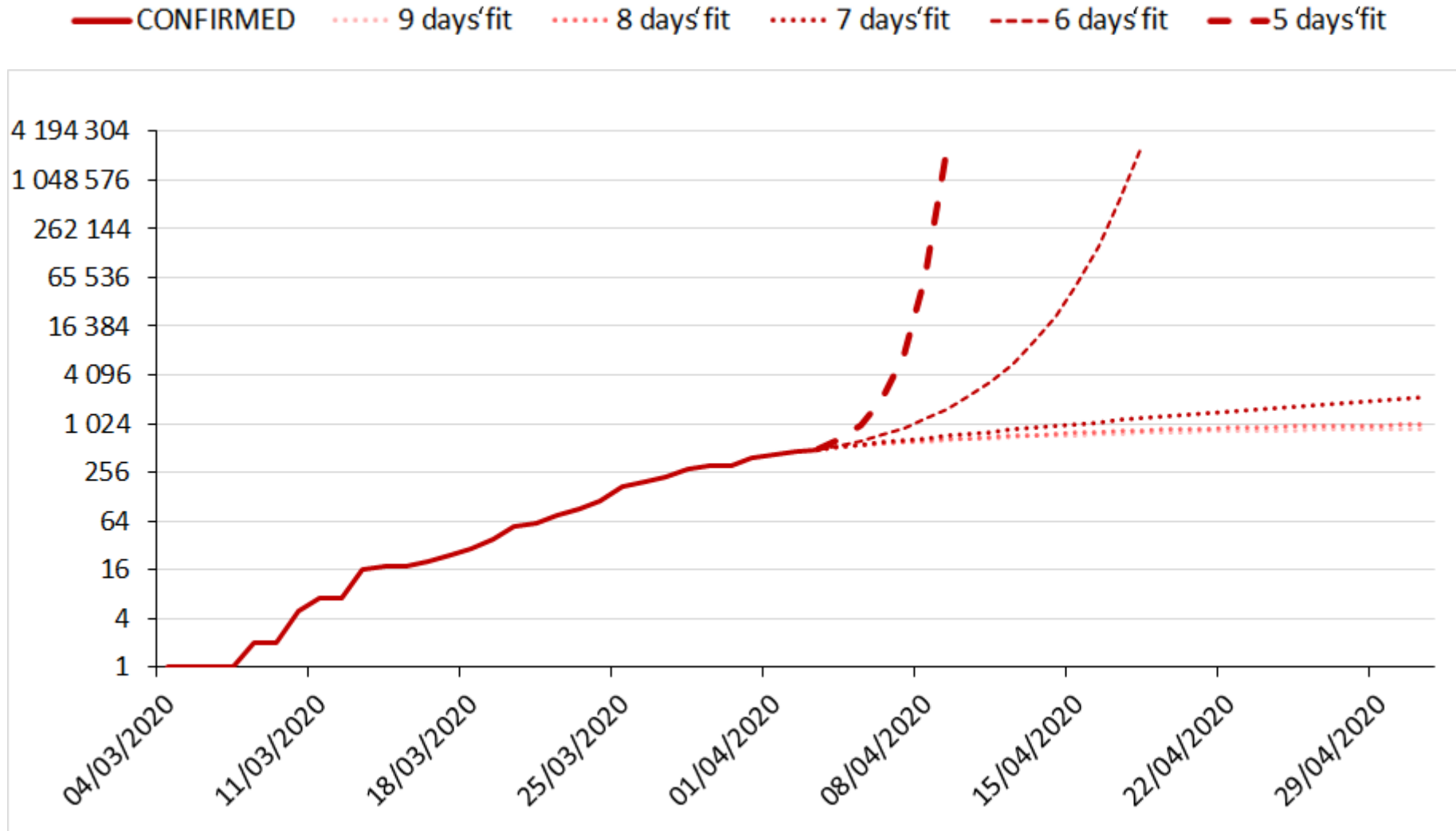
Taiwan

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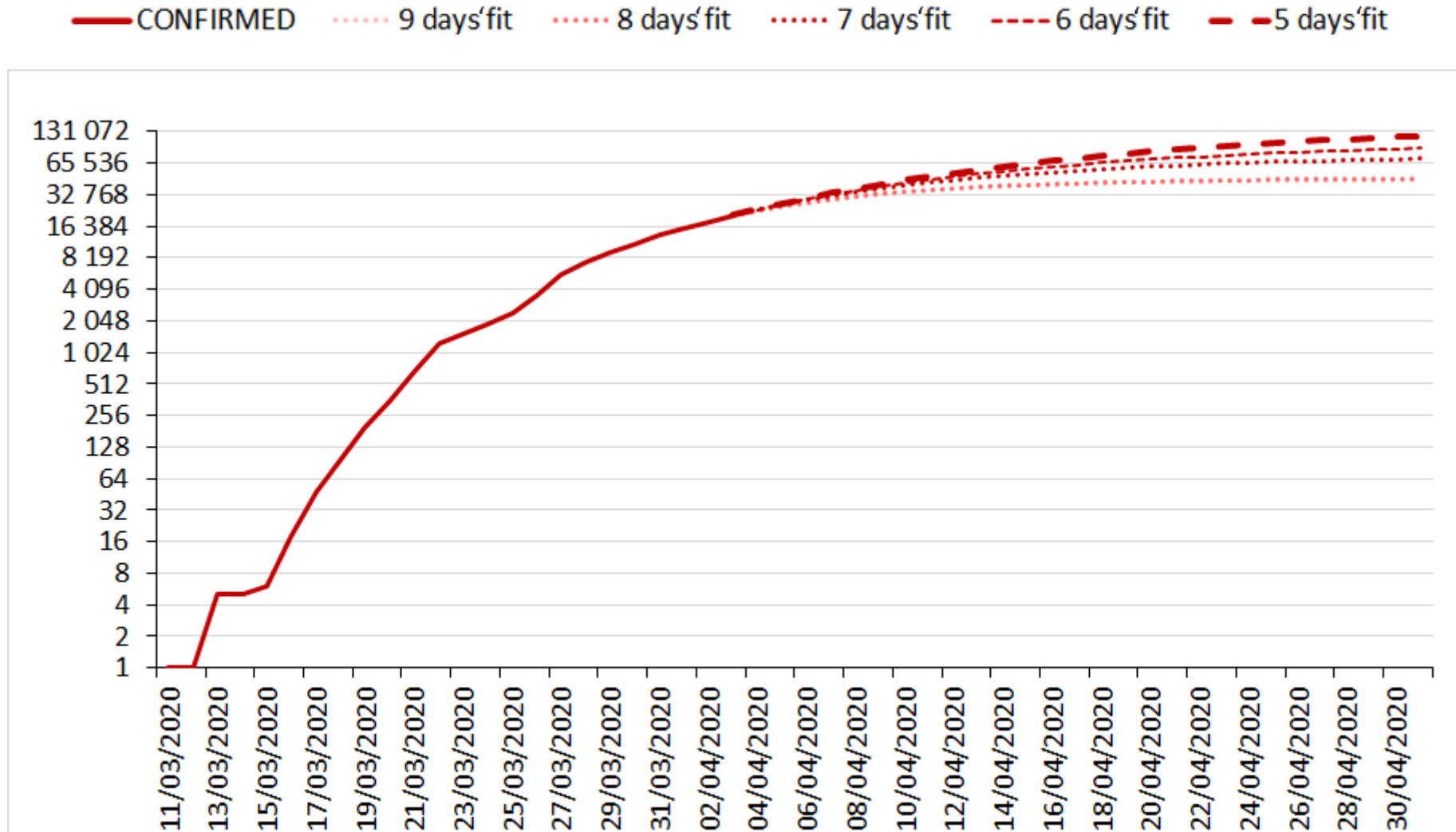
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Tunisia



Data: The Johns Hopkins University, Politolog.com

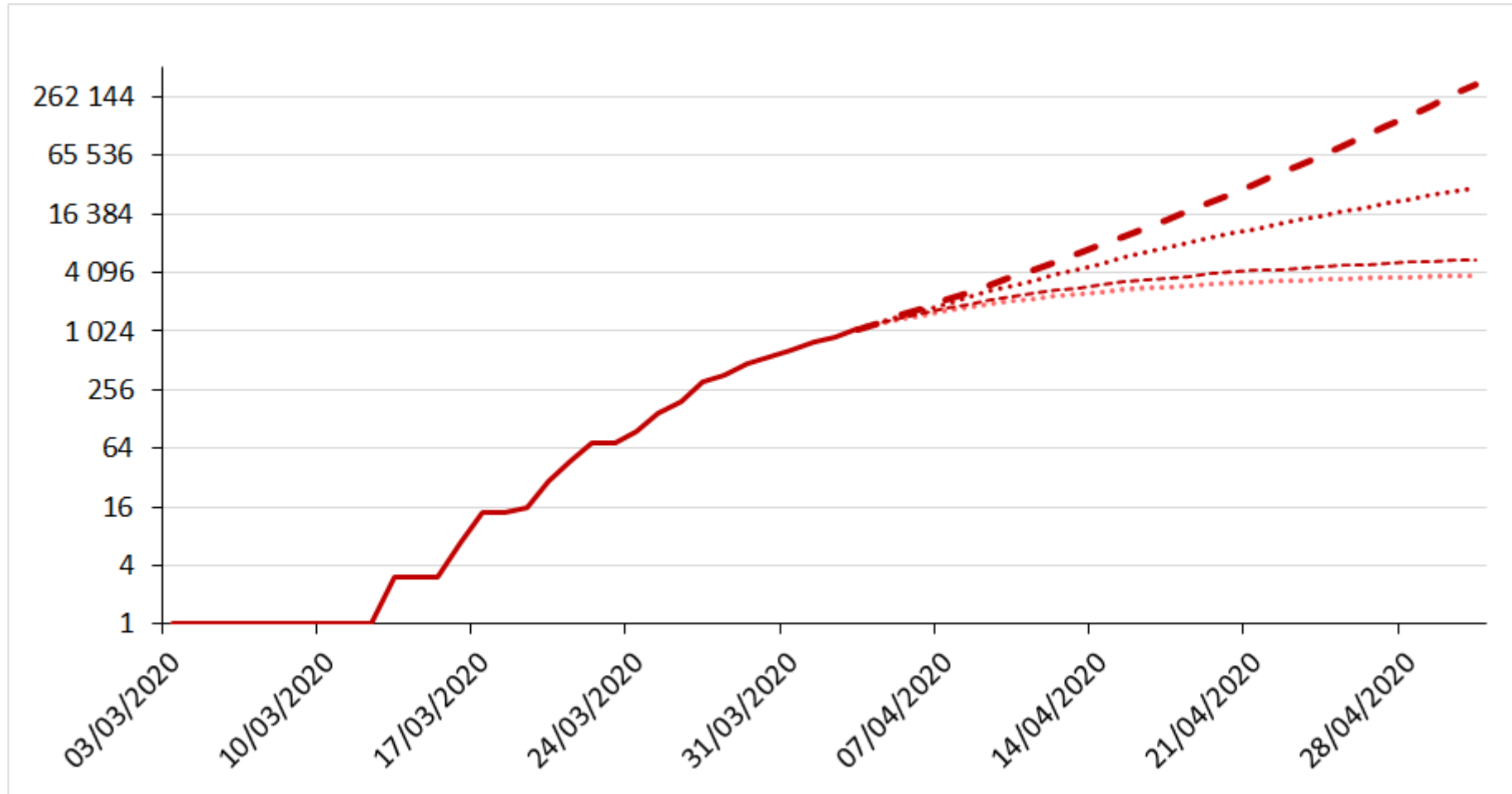
Turkey



Data: The Johns Hopkins University, Politolog.com

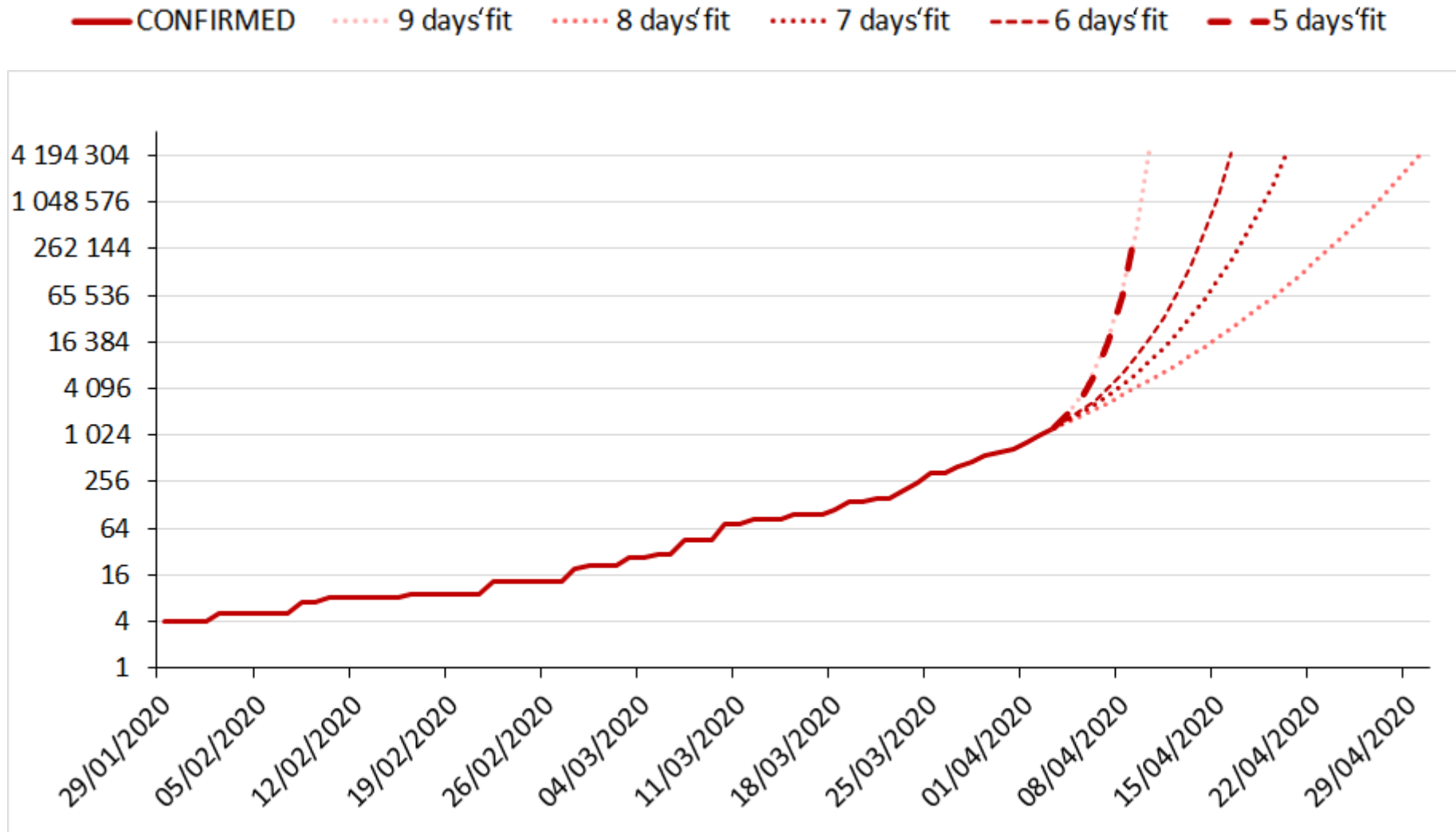
Ukraine

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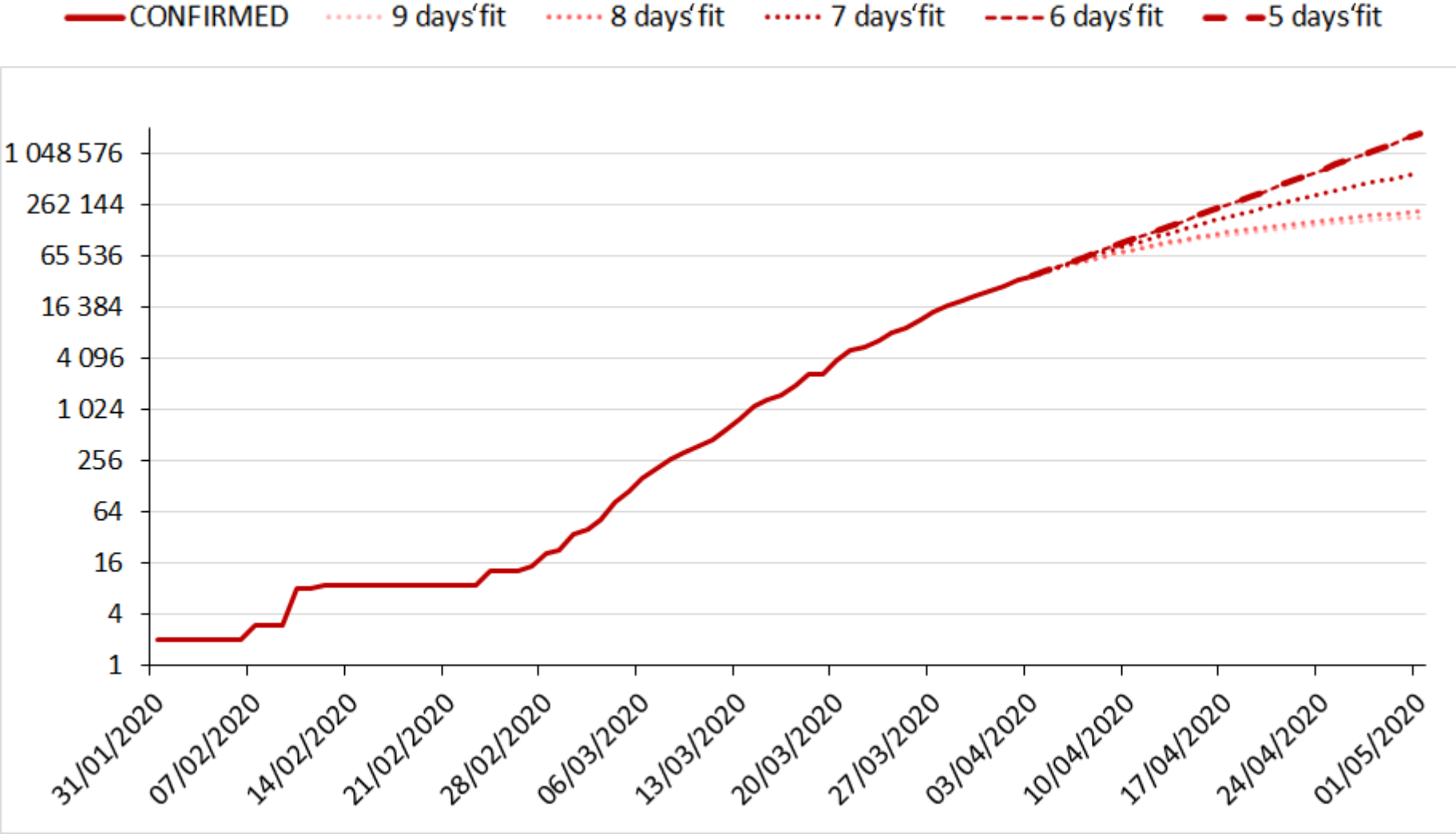
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United Arab Emirates



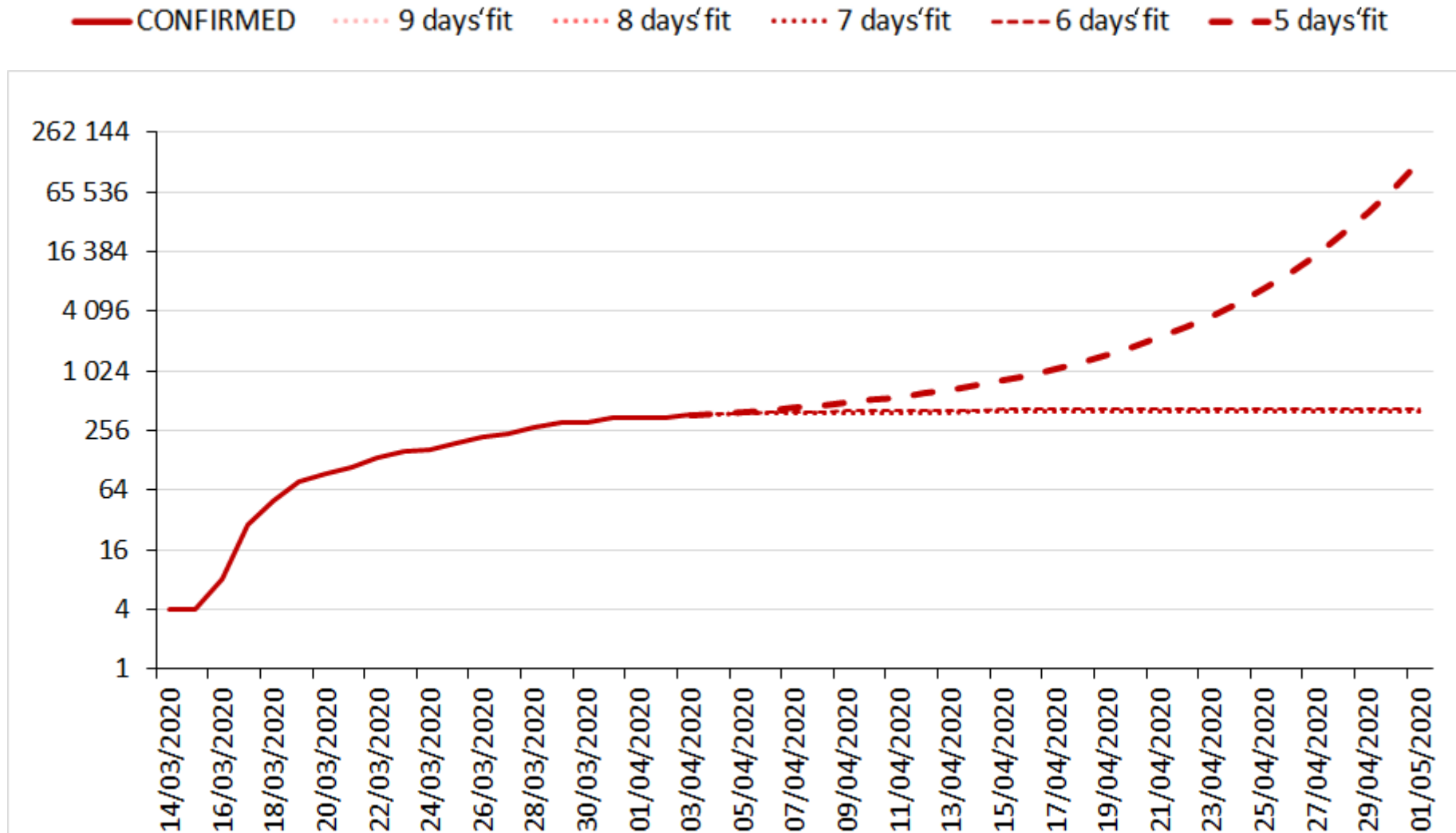
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United Kingdom



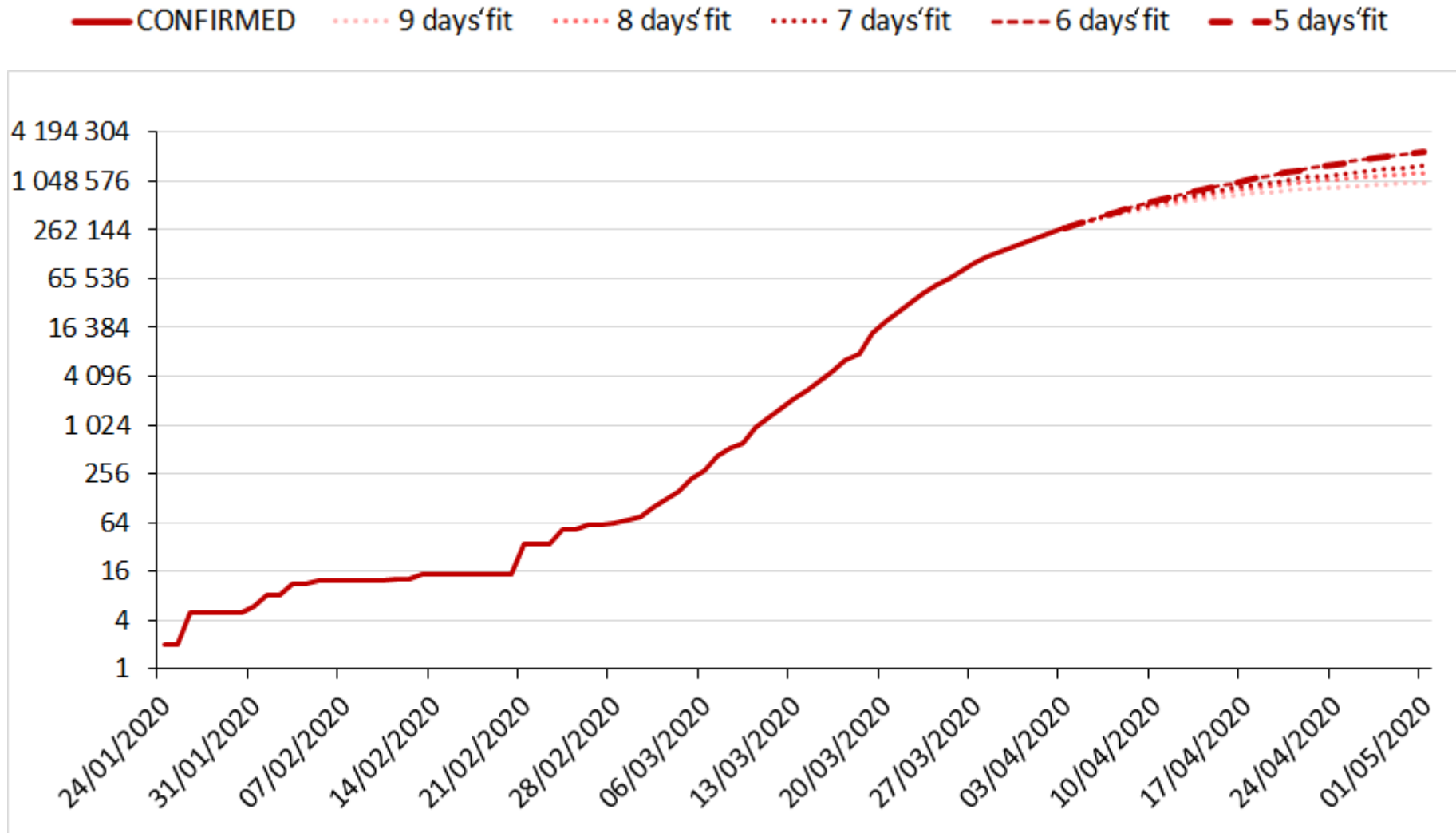
Data: The Johns Hopkins University, Politolog.com

Uruguay



Data: The Johns Hopkins University, Politolog.com

USA



Data: The Johns Hopkins University, Politolog.com



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