

28 March 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.

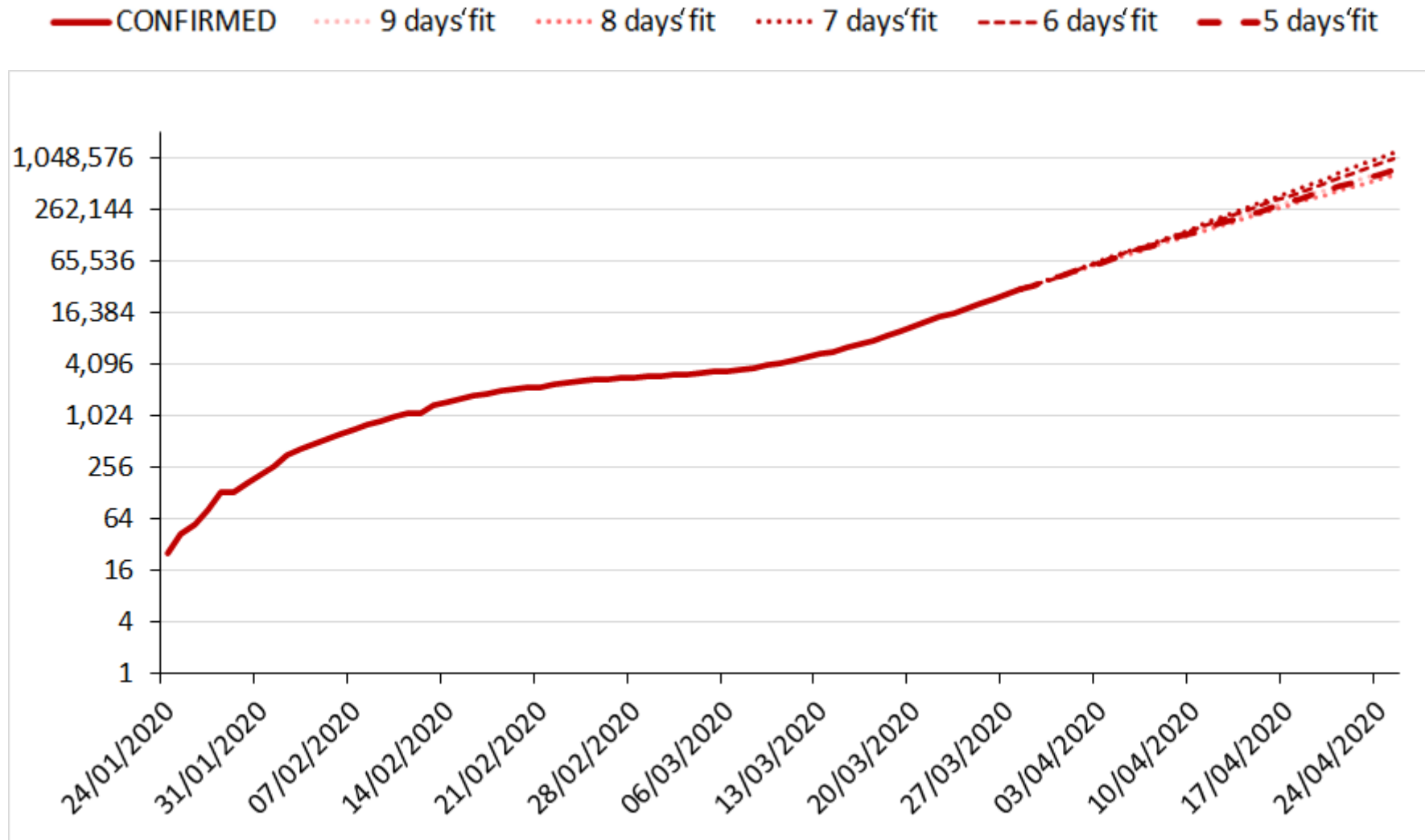
The jolt is fitted with an exponential function over, respectively, the previous 5, 6, 7, 8 and 9 days. Large numbers are truncated to facilitate the reading of the charts.

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.

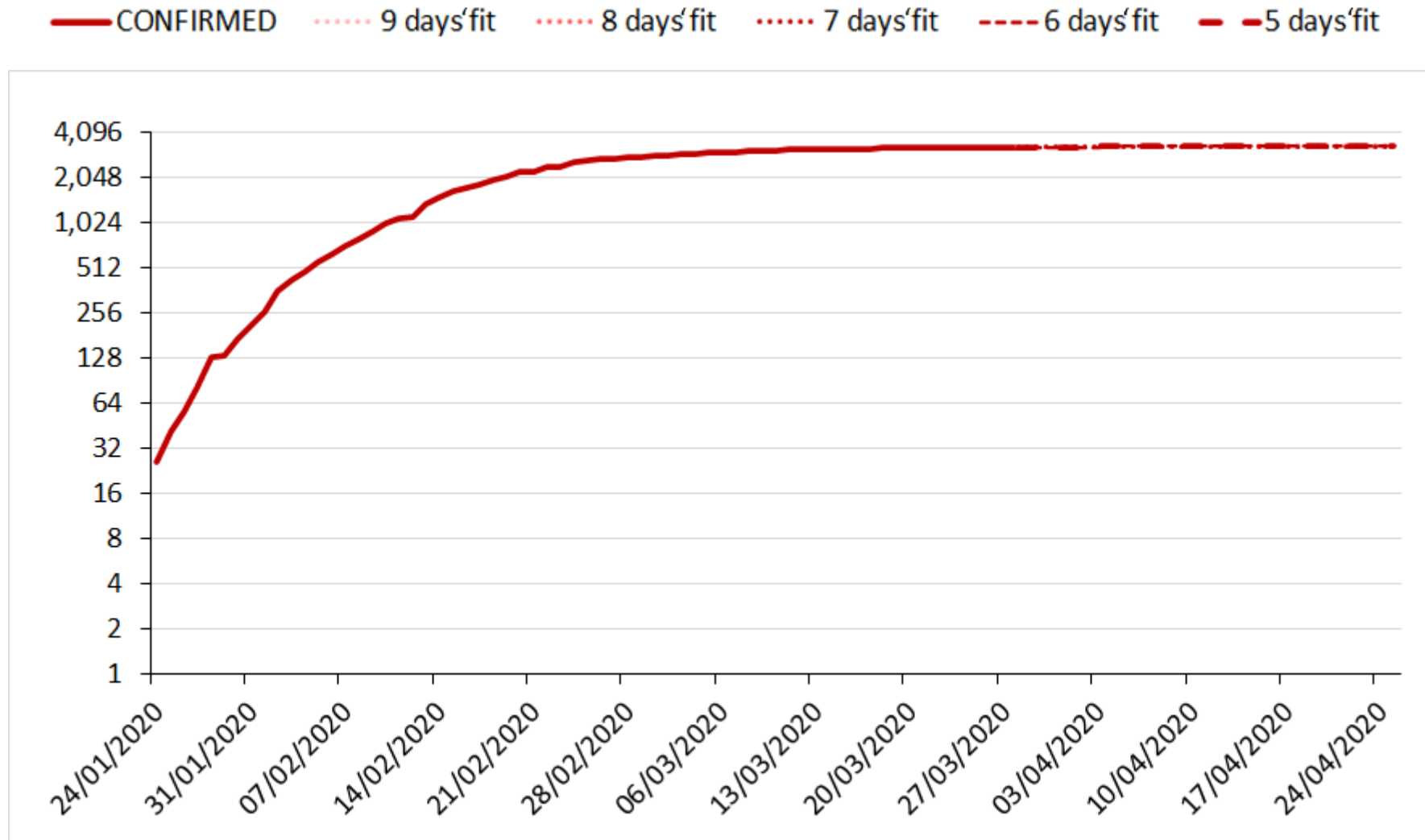
DEATHS - PROJECTIONS

World



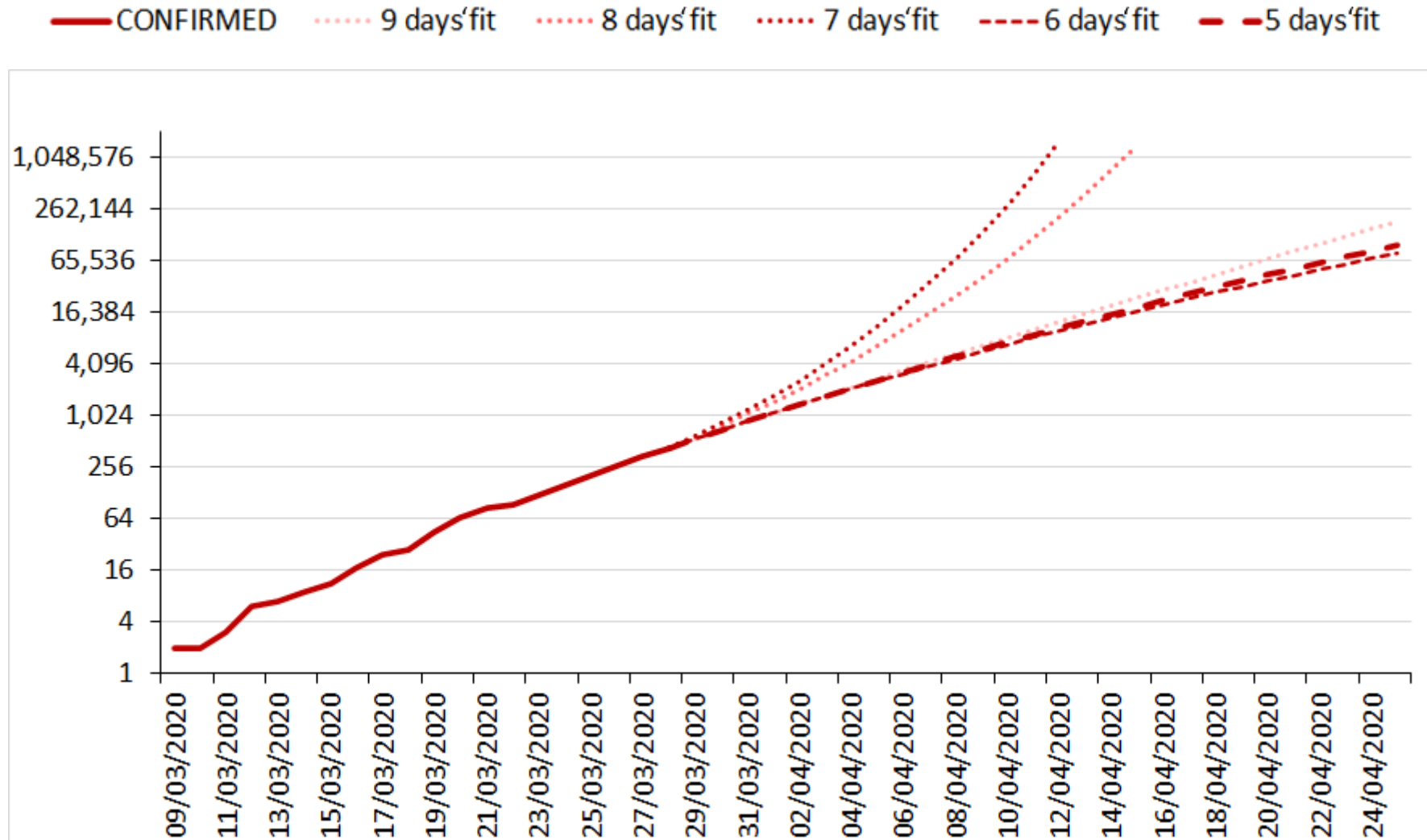
Data: The Johns Hopkins University, Politolog.com

China



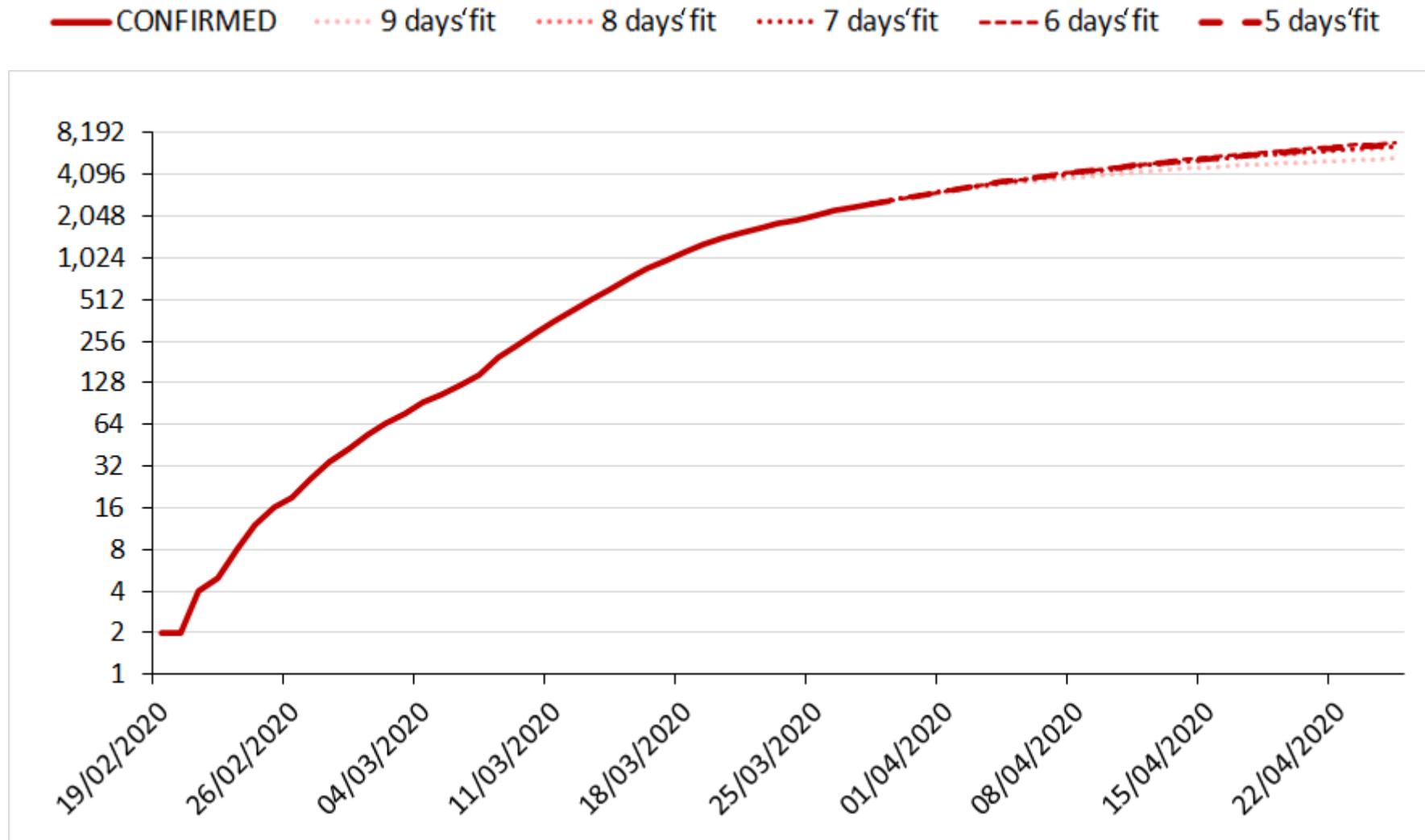
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Germany



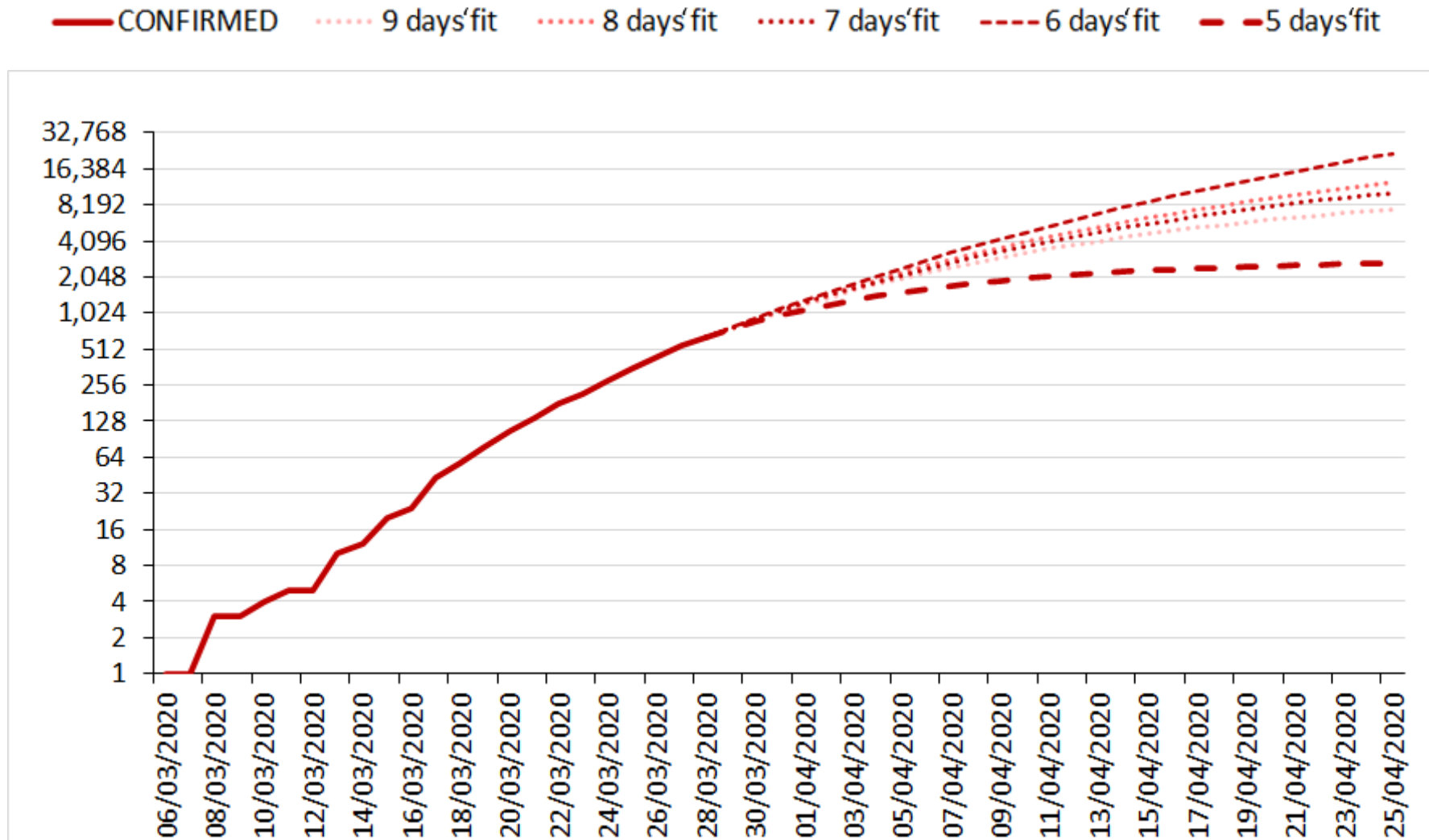
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Iran



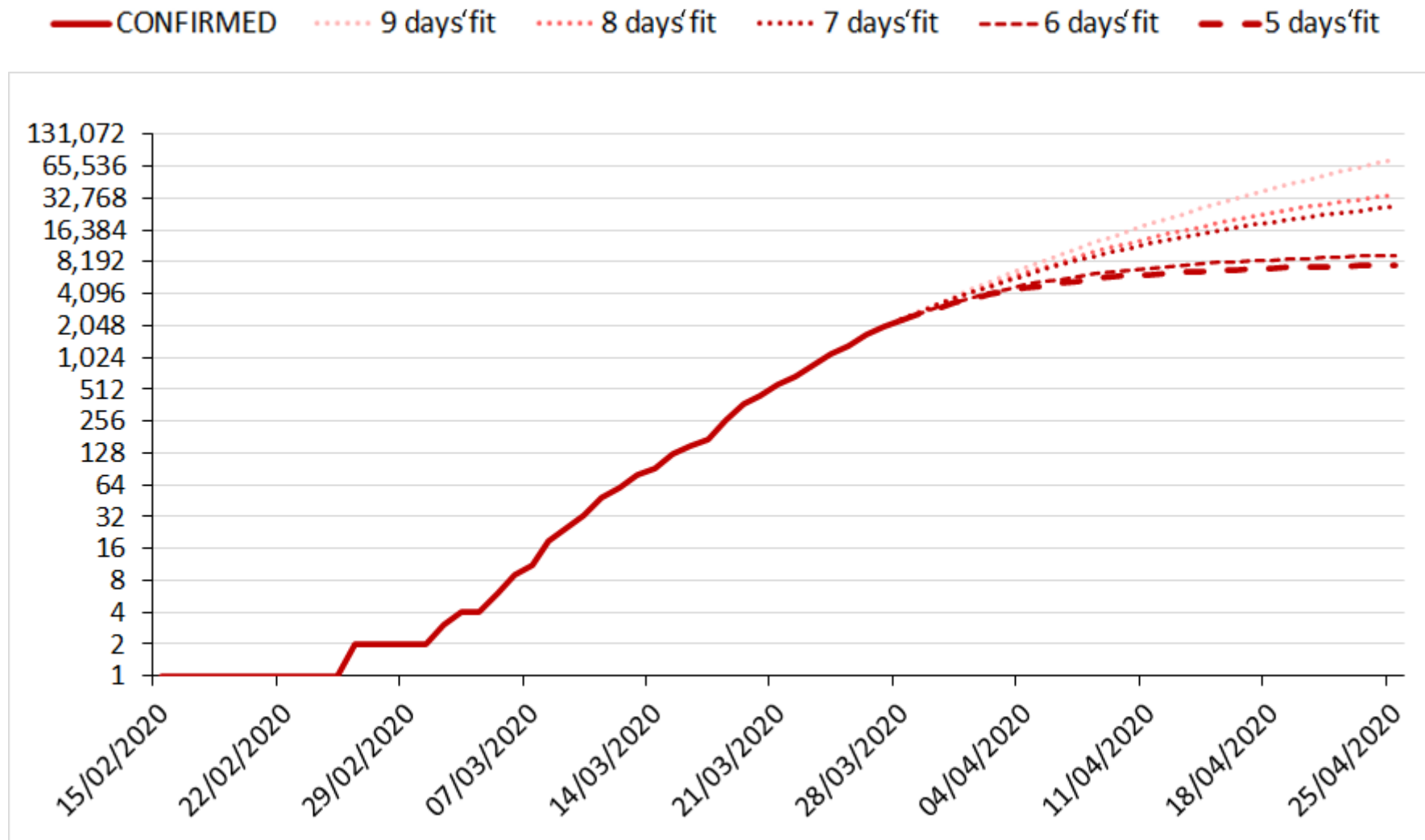
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Netherlands



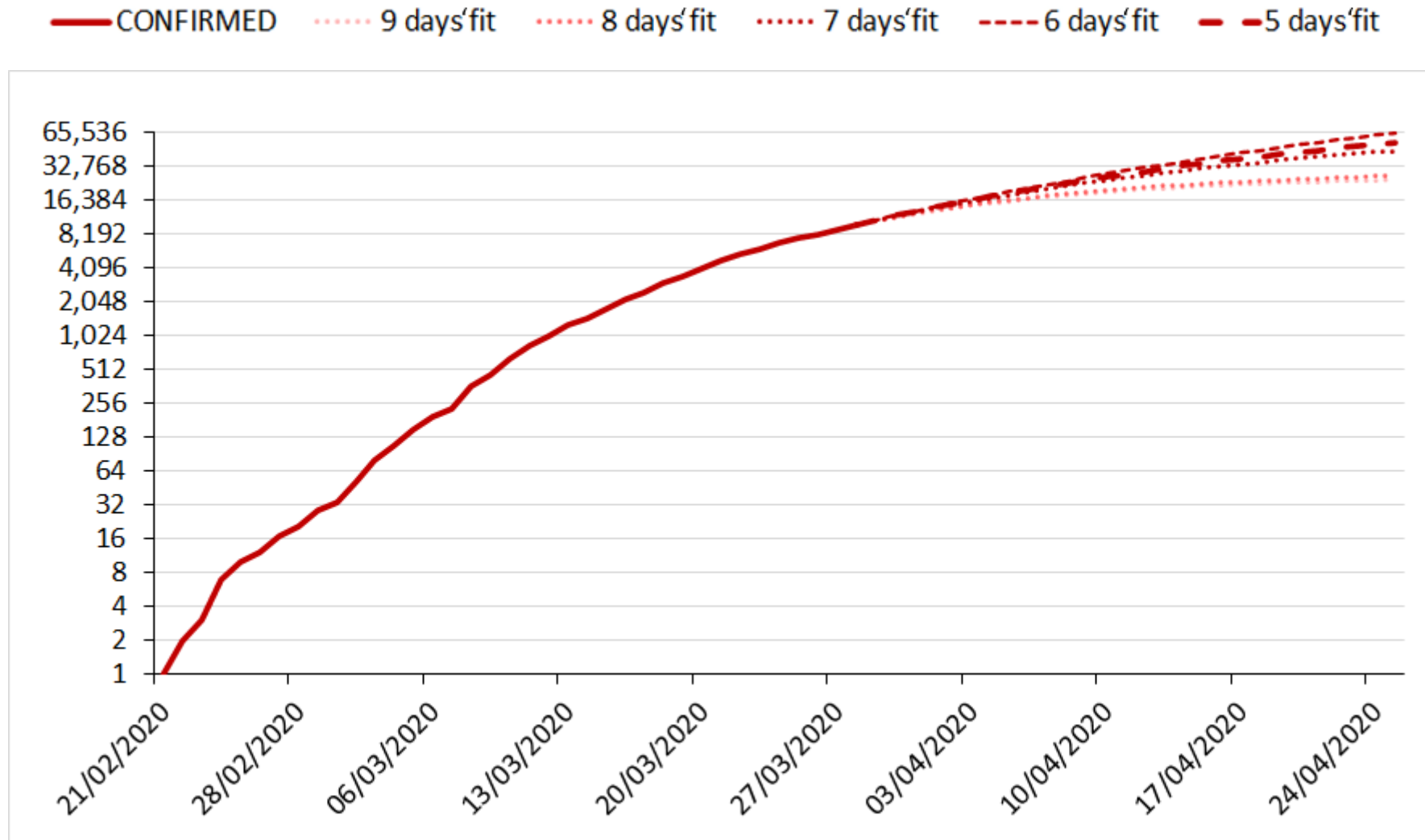
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France



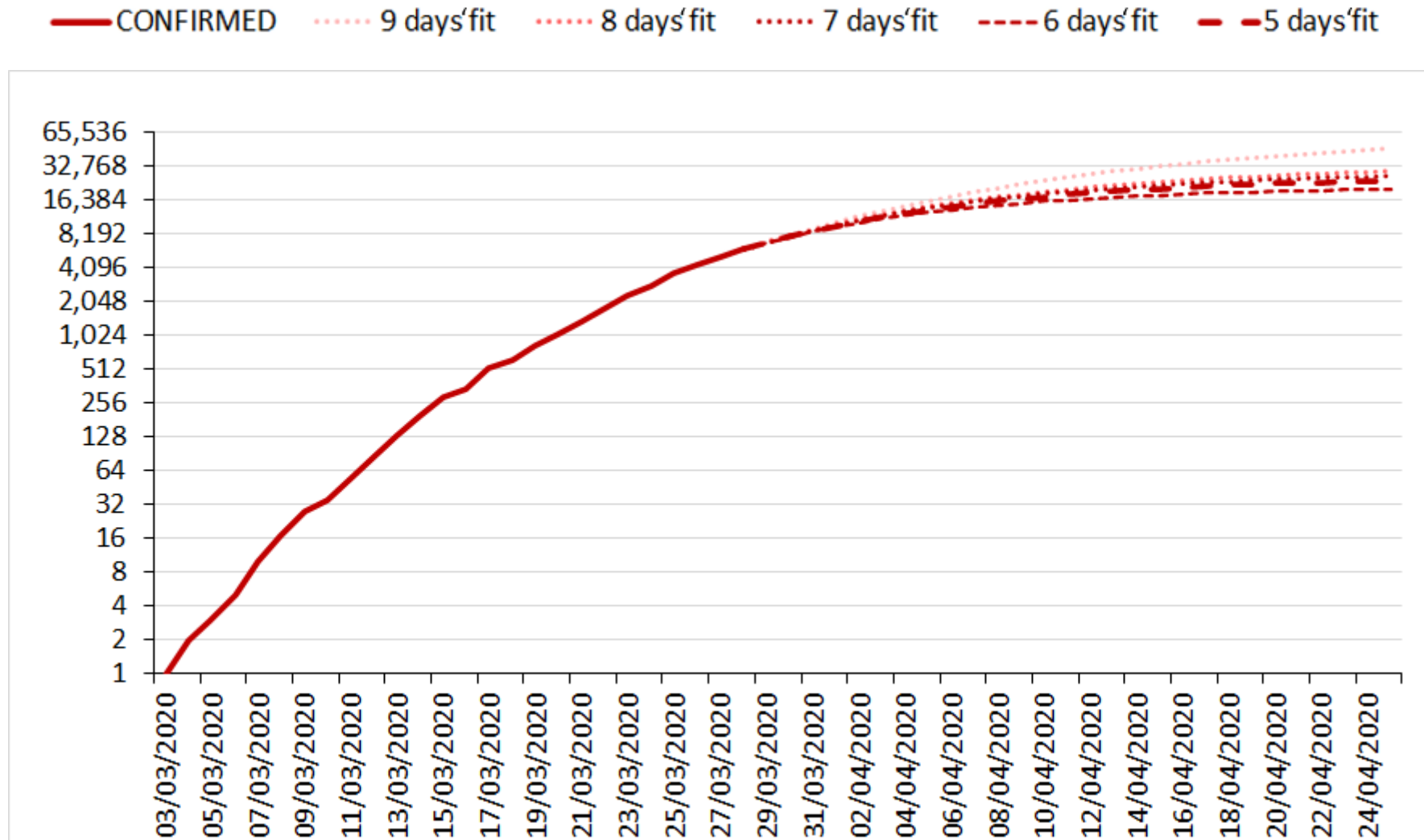
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Italy



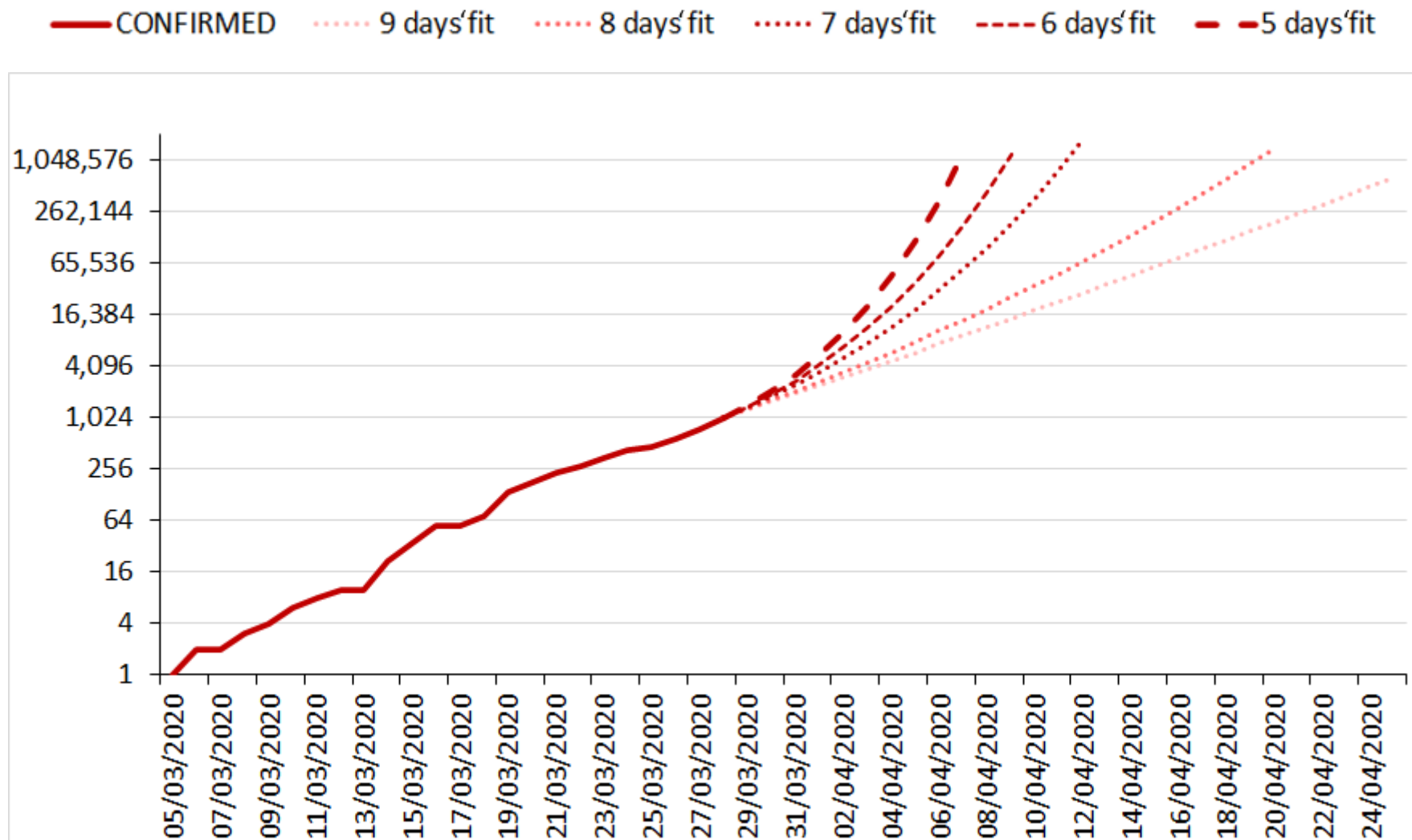
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Spain



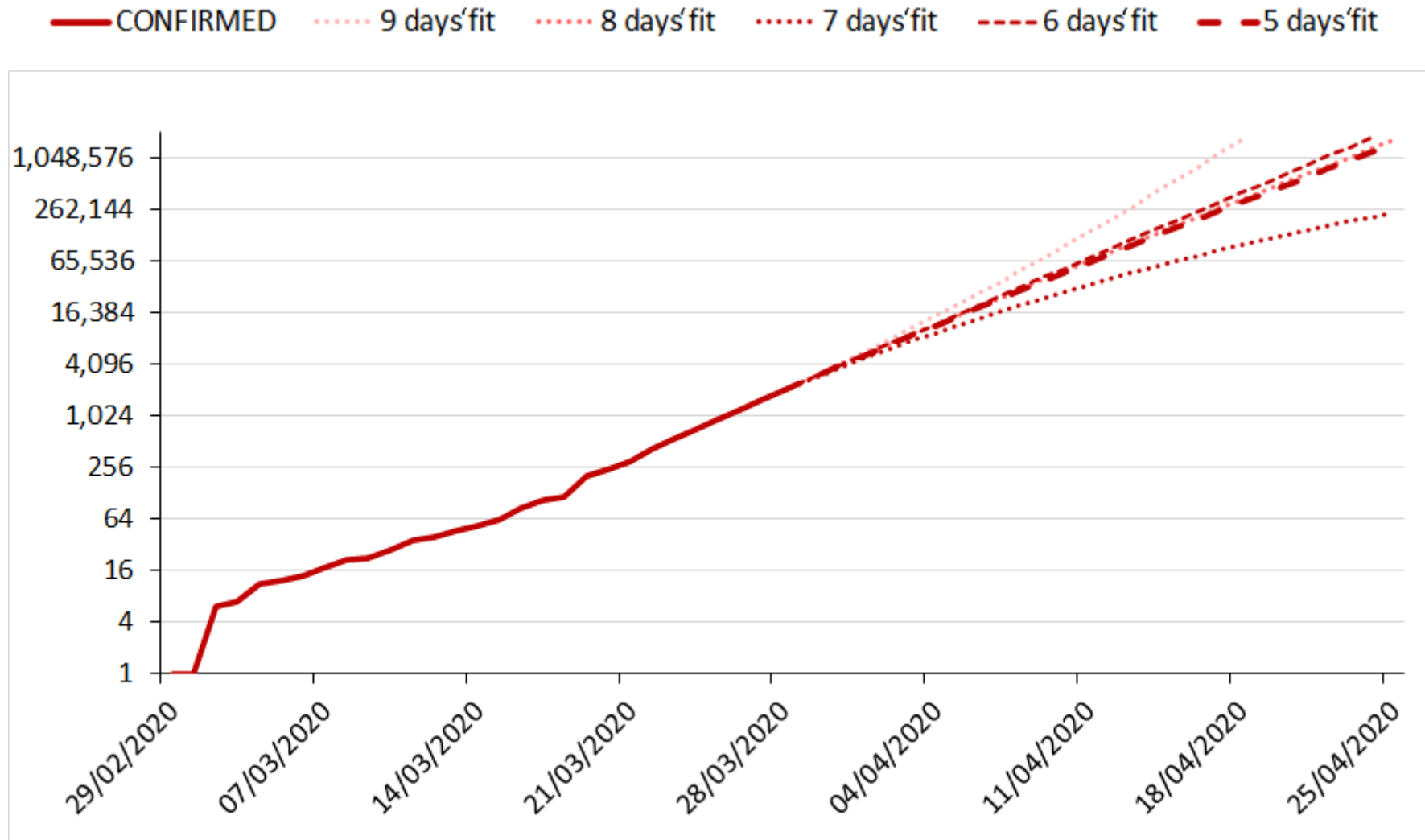
Data: The Johns Hopkins University, Politolog.com

United Kingdom



Data: The Johns Hopkins University, Politolog.com

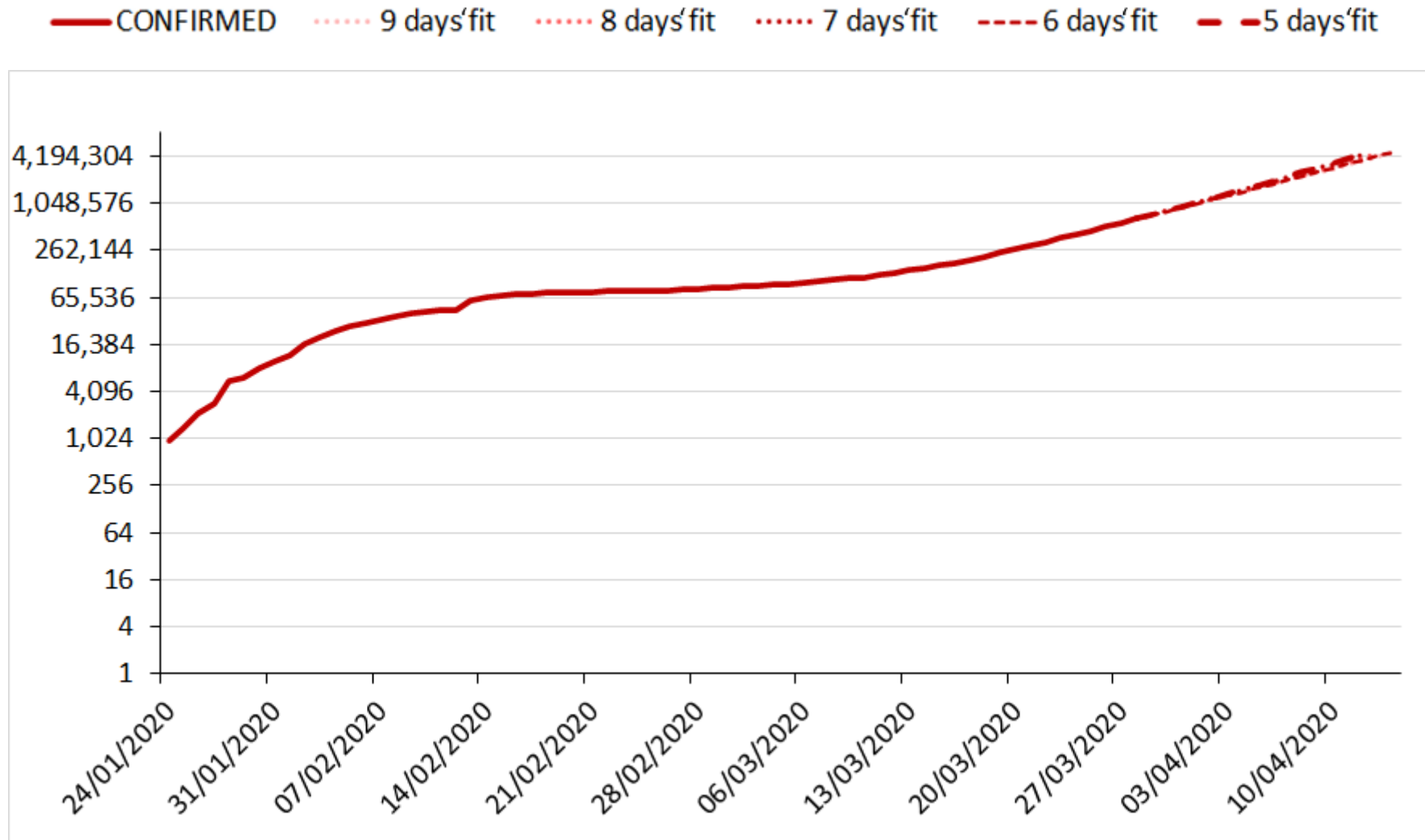
USA



Data: The Johns Hopkins University, Politolog.com

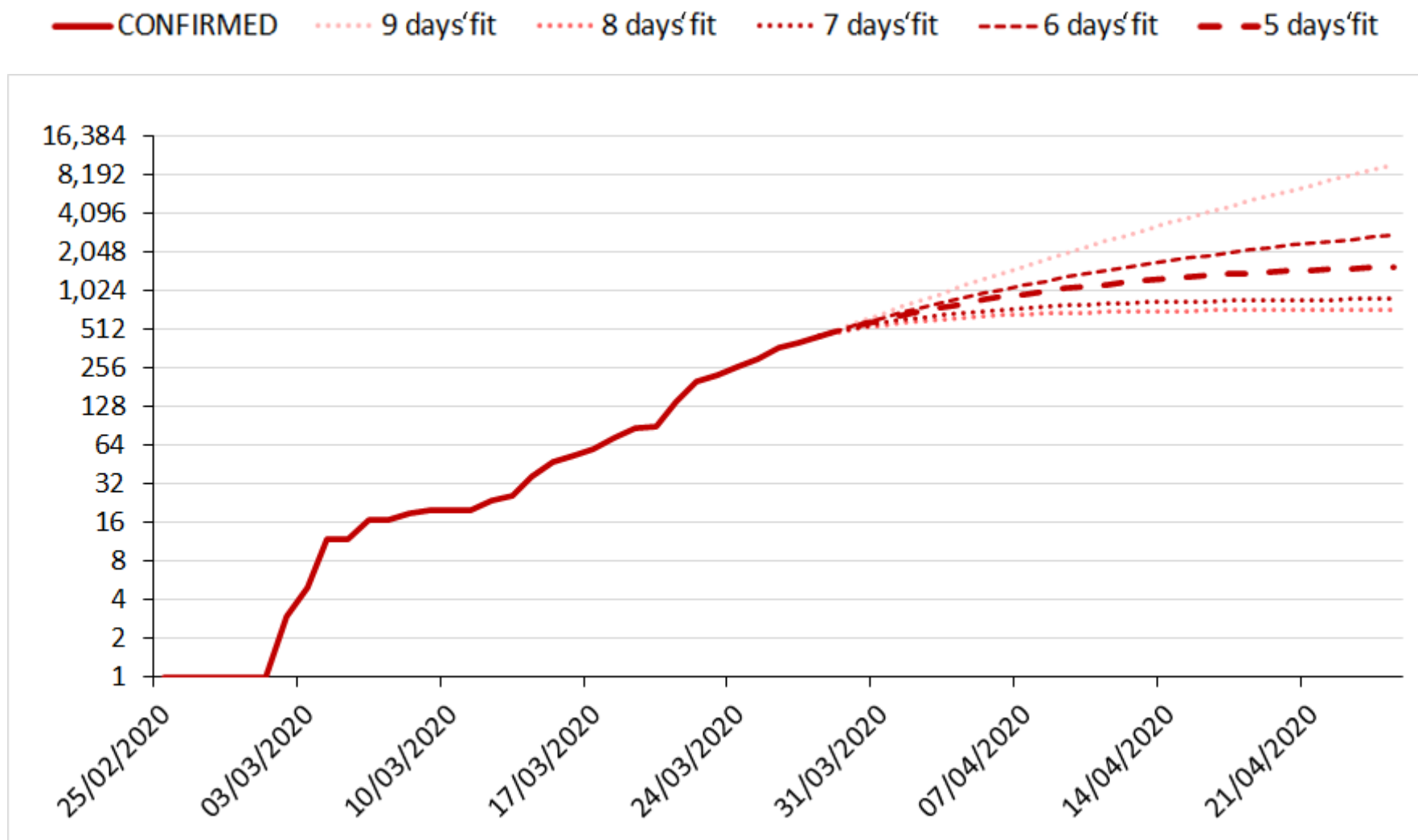
CUMULATED CASES - PROJECTIONS

World



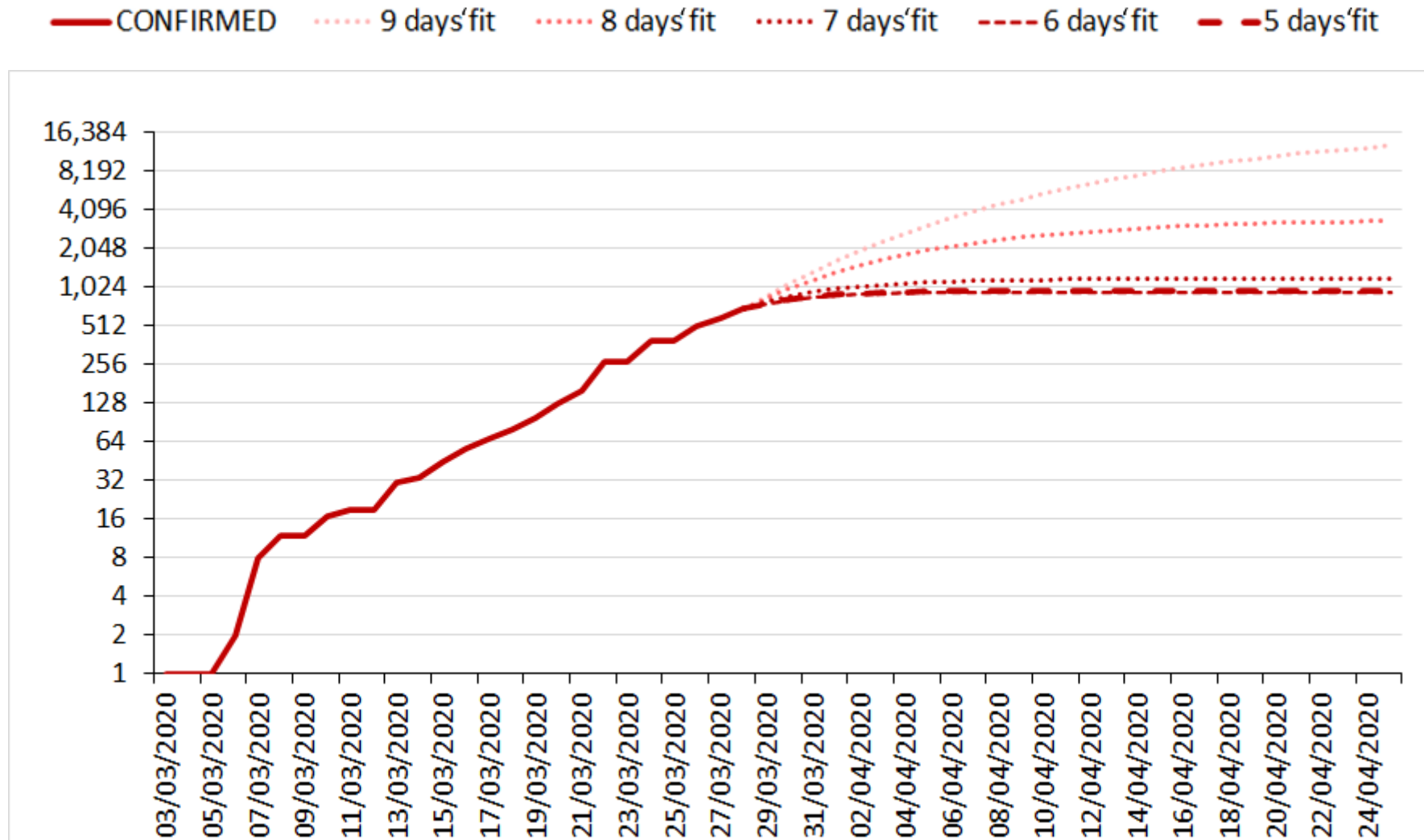
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Algeria



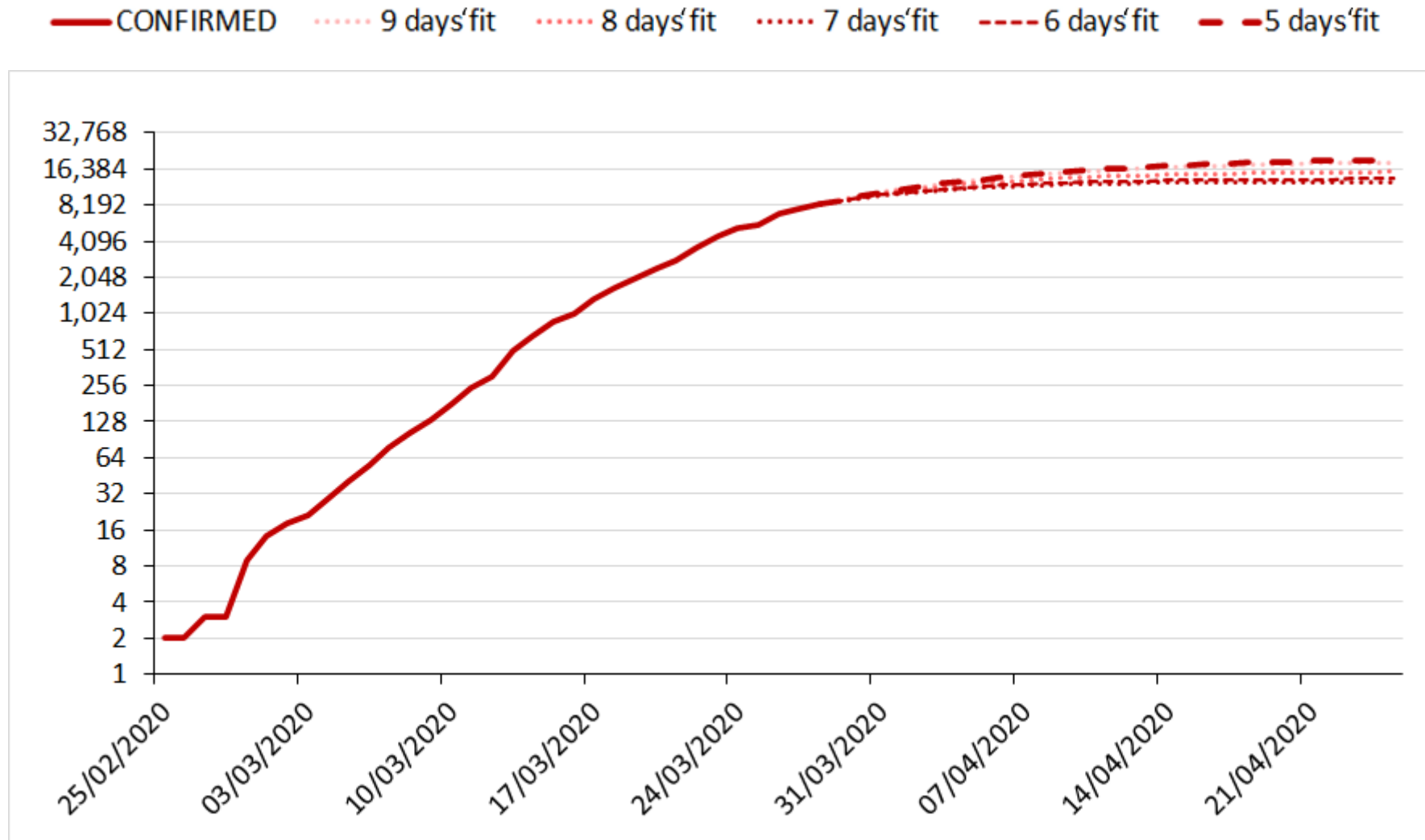
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Argentina



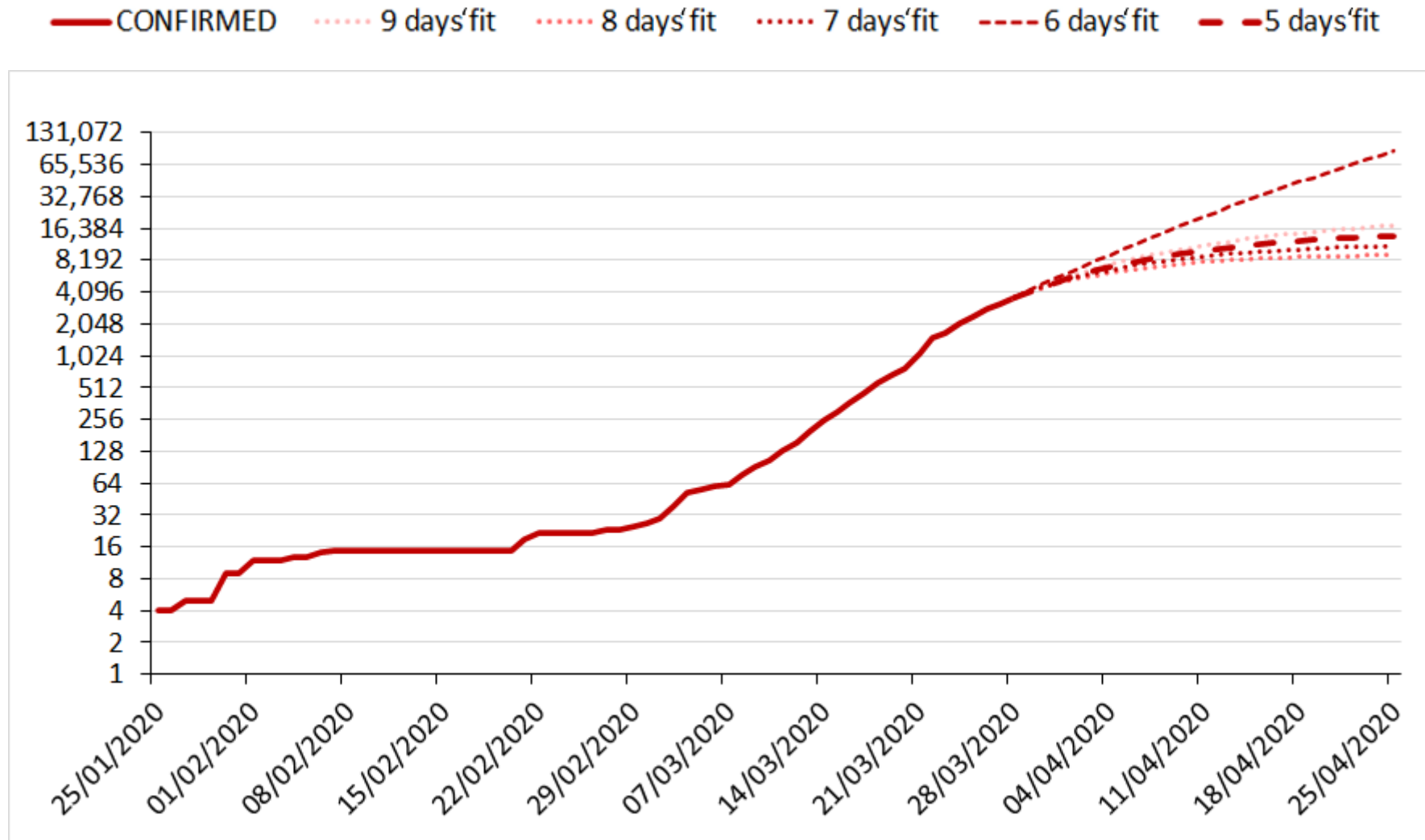
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Austria



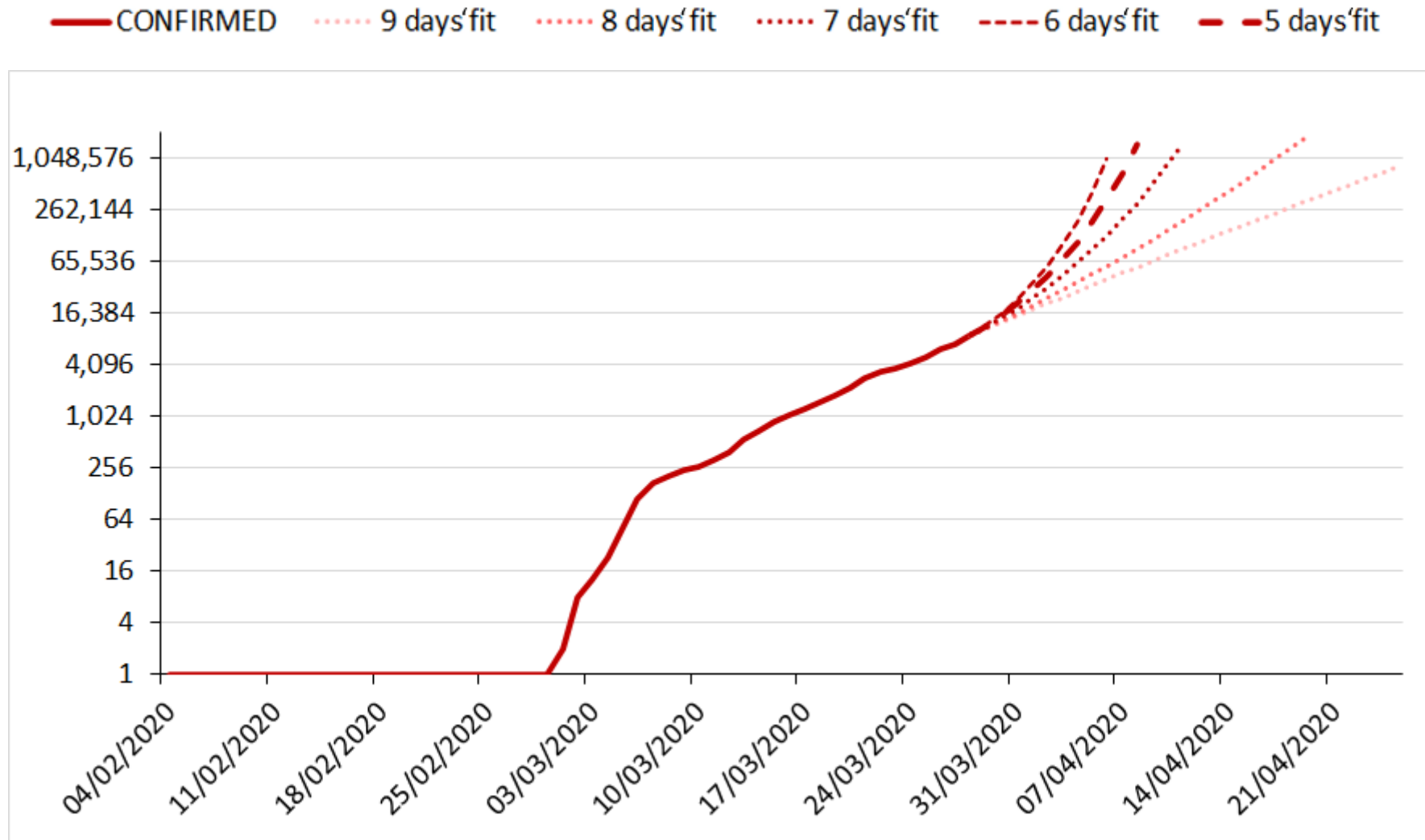
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Australia



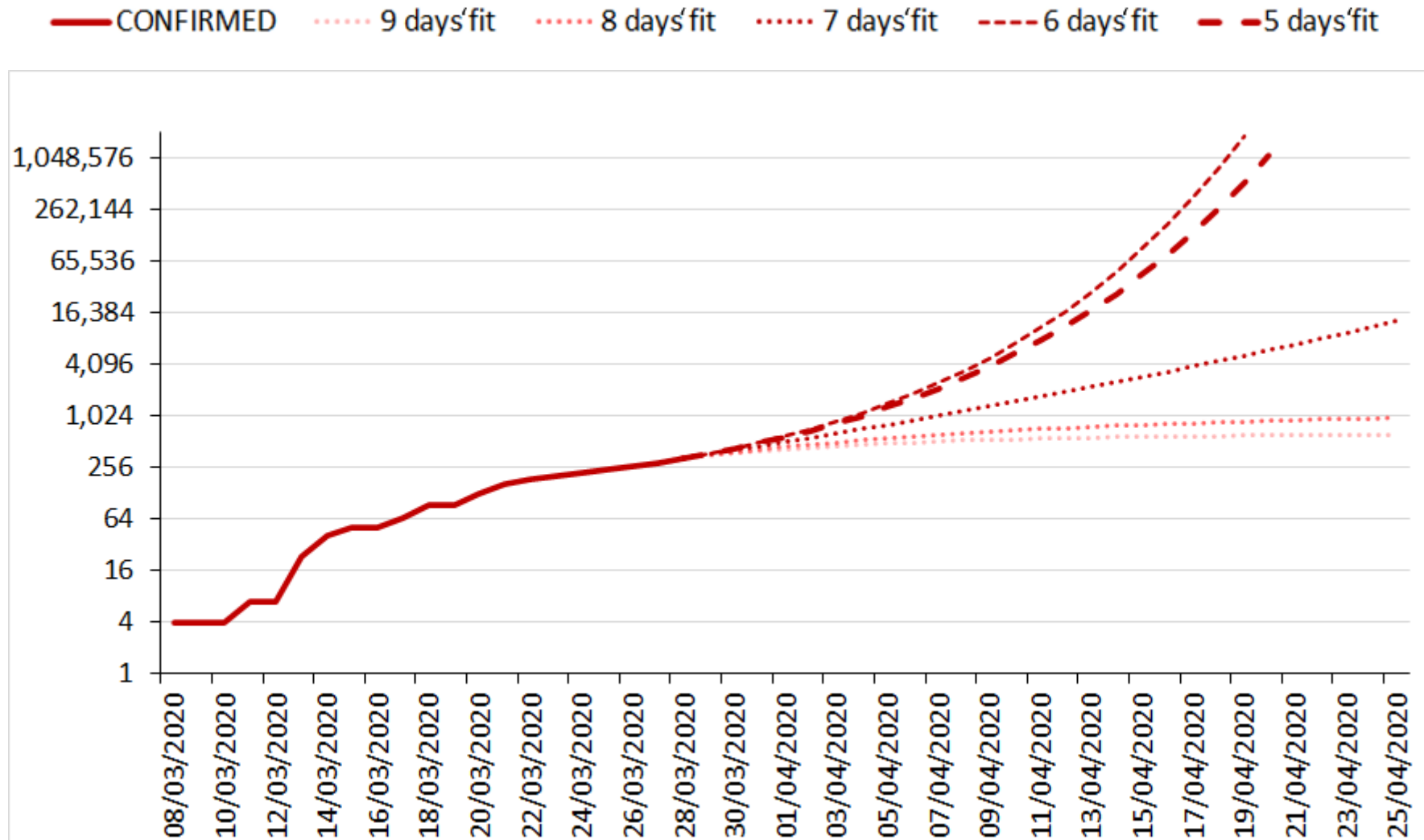
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Belgium



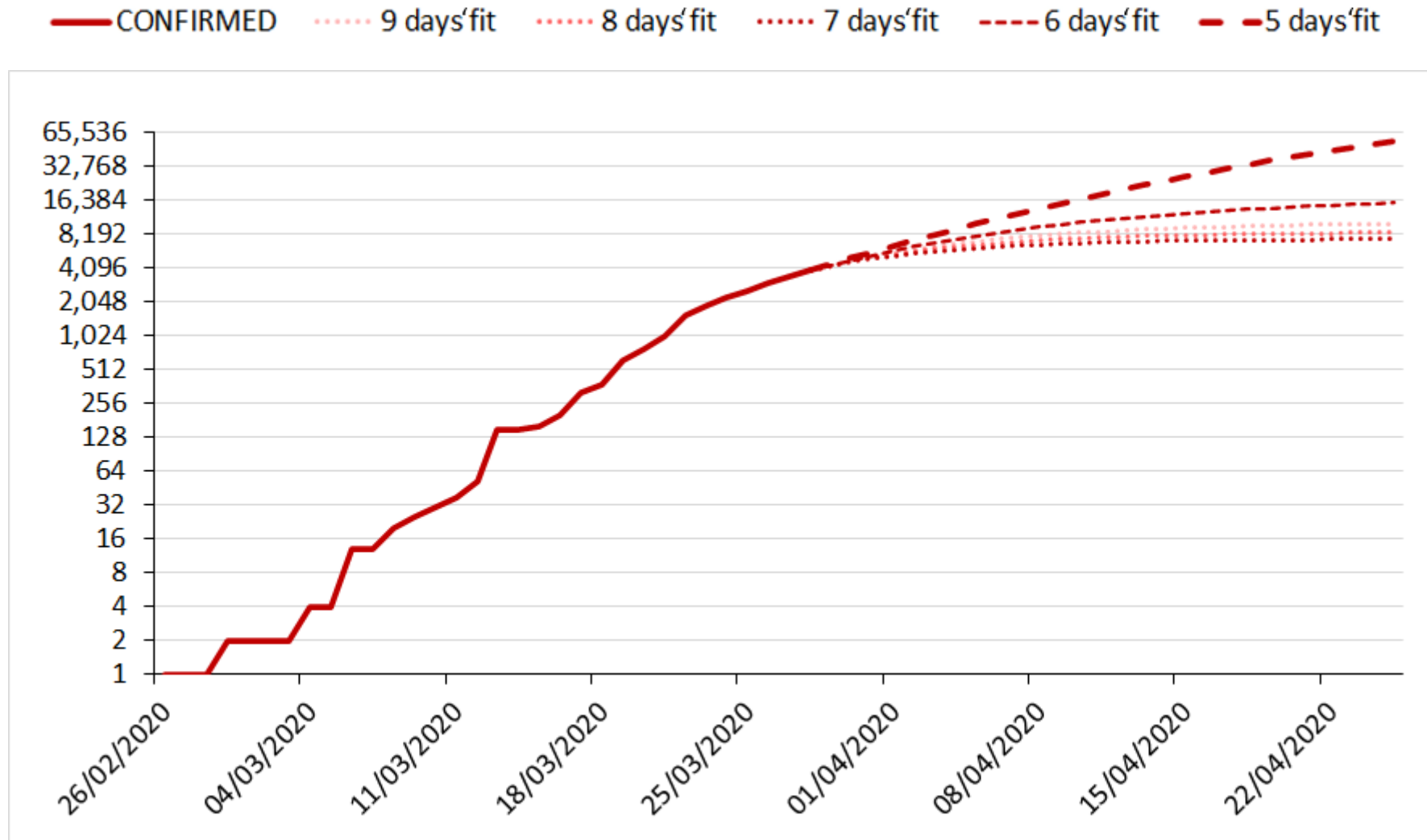
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Bulgaria



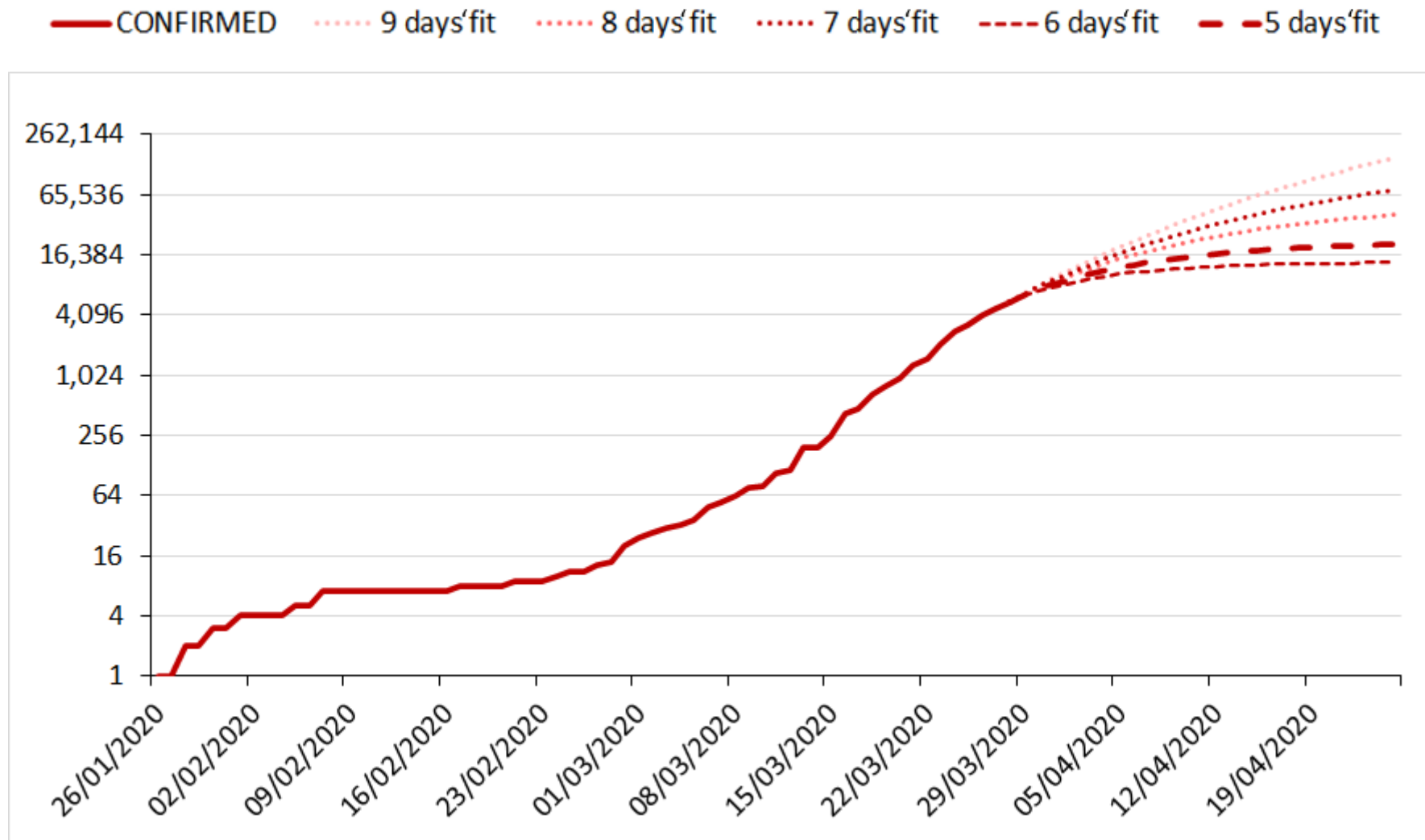
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Brazil



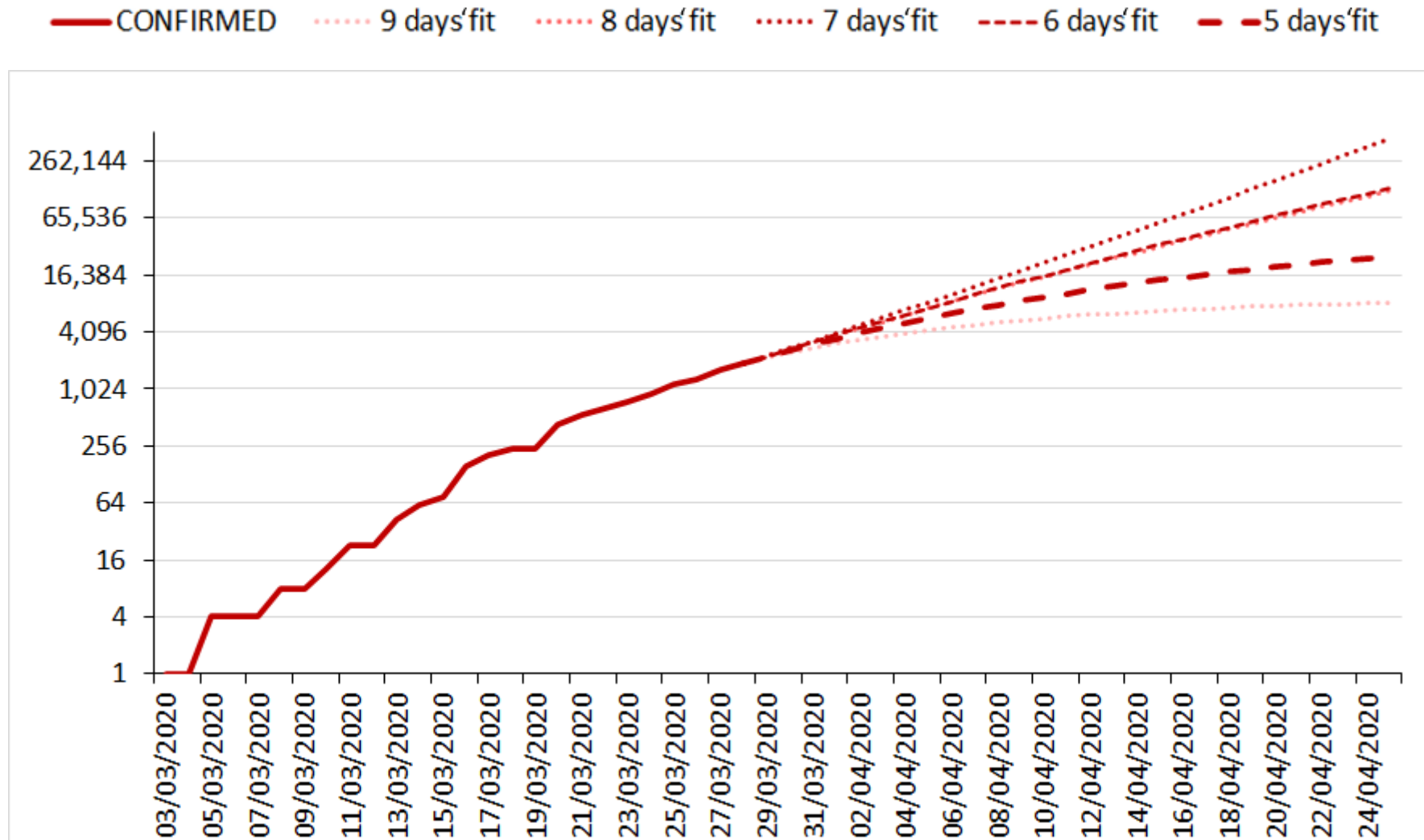
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Canada



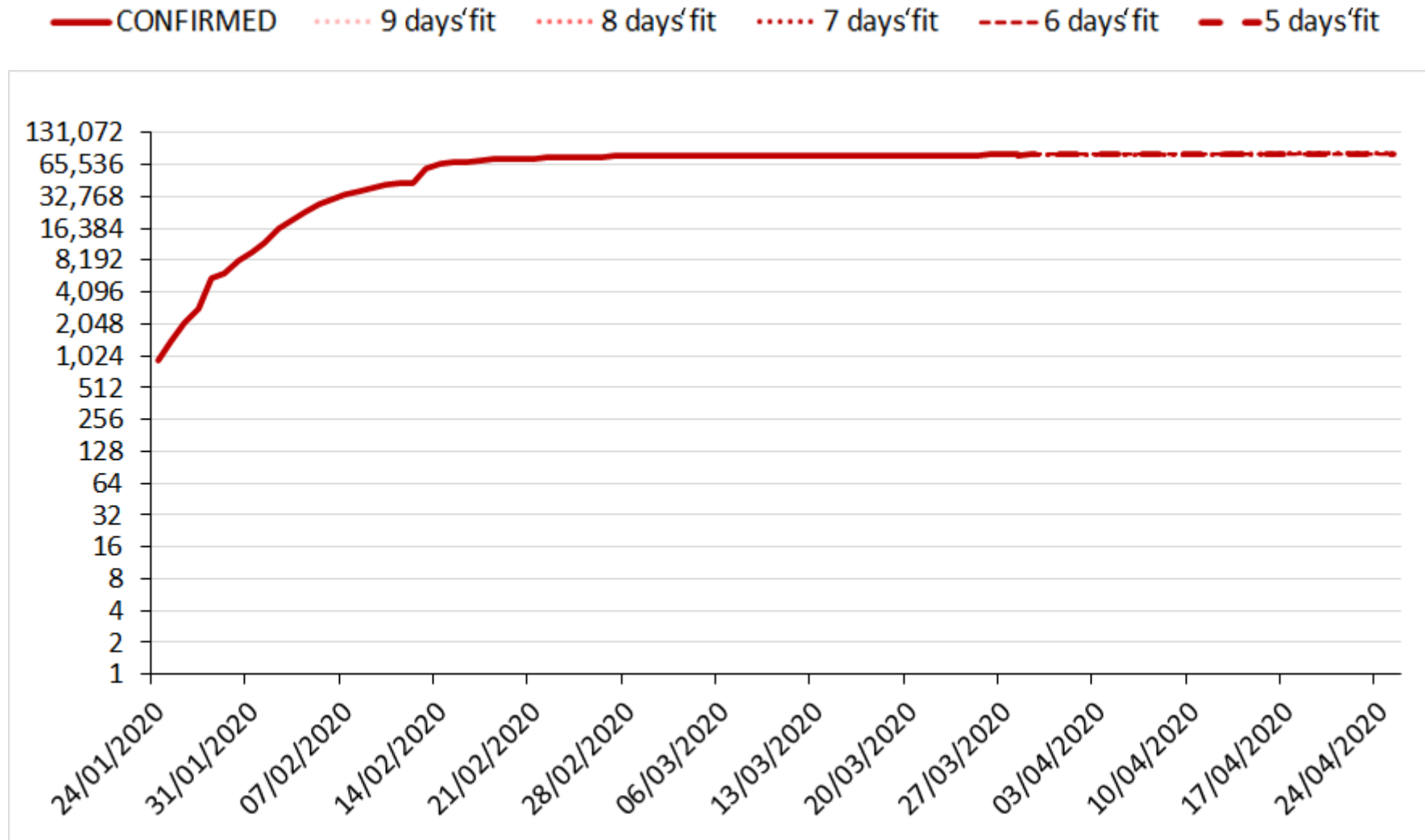
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Chile



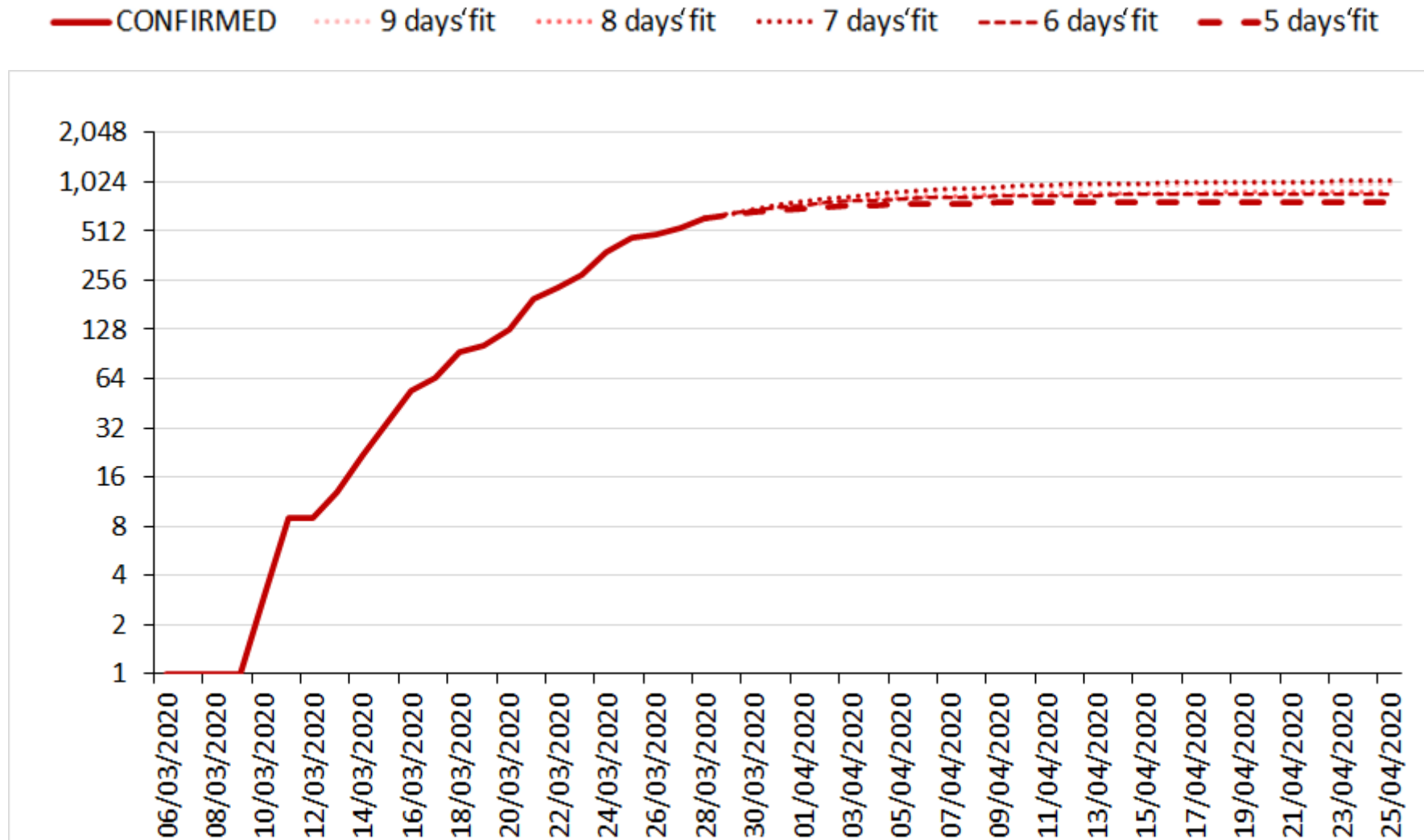
Data: The Johns Hopkins University, Politolog.com

China



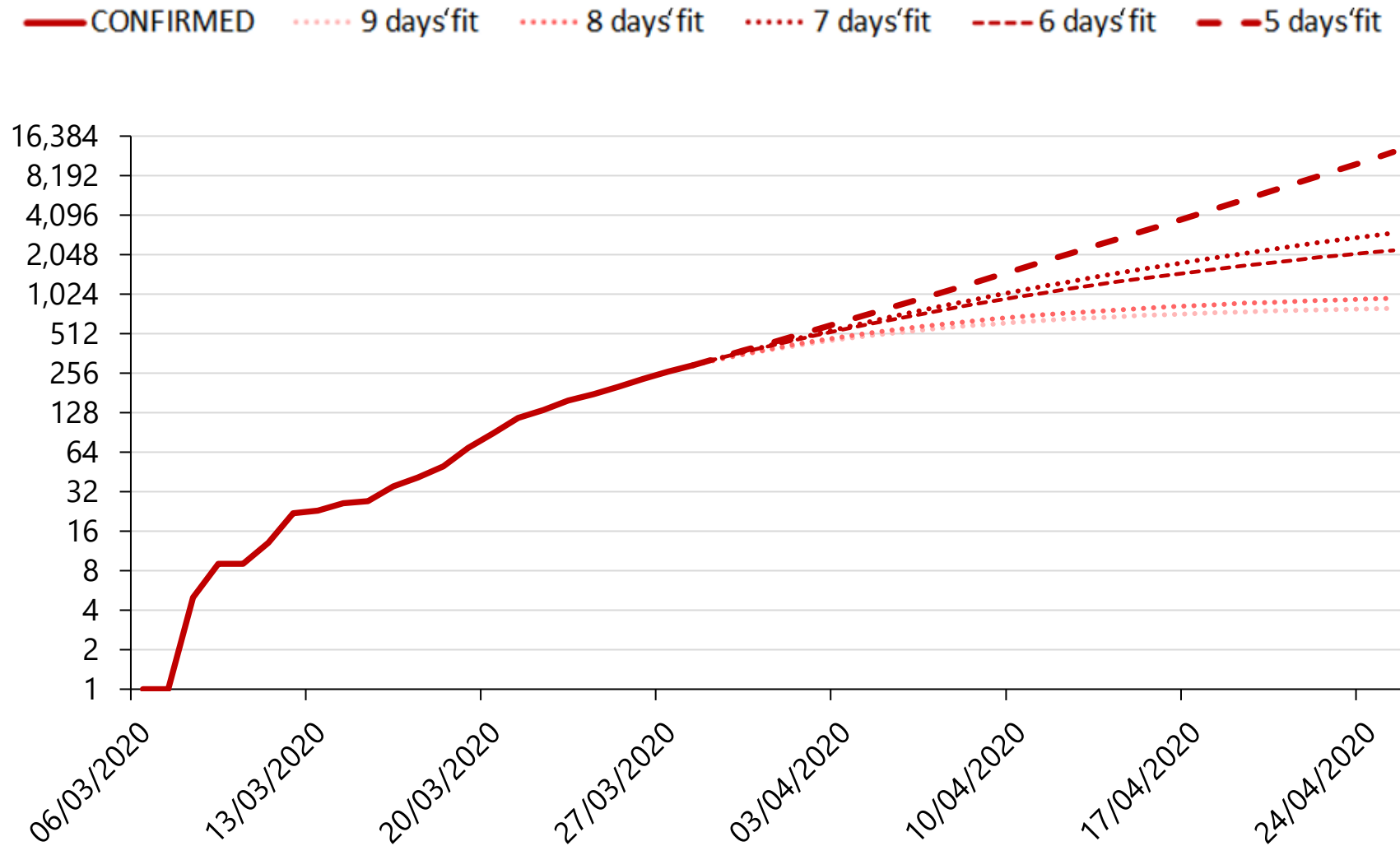
Data: The Johns Hopkins University, Politolog.com

Colombia



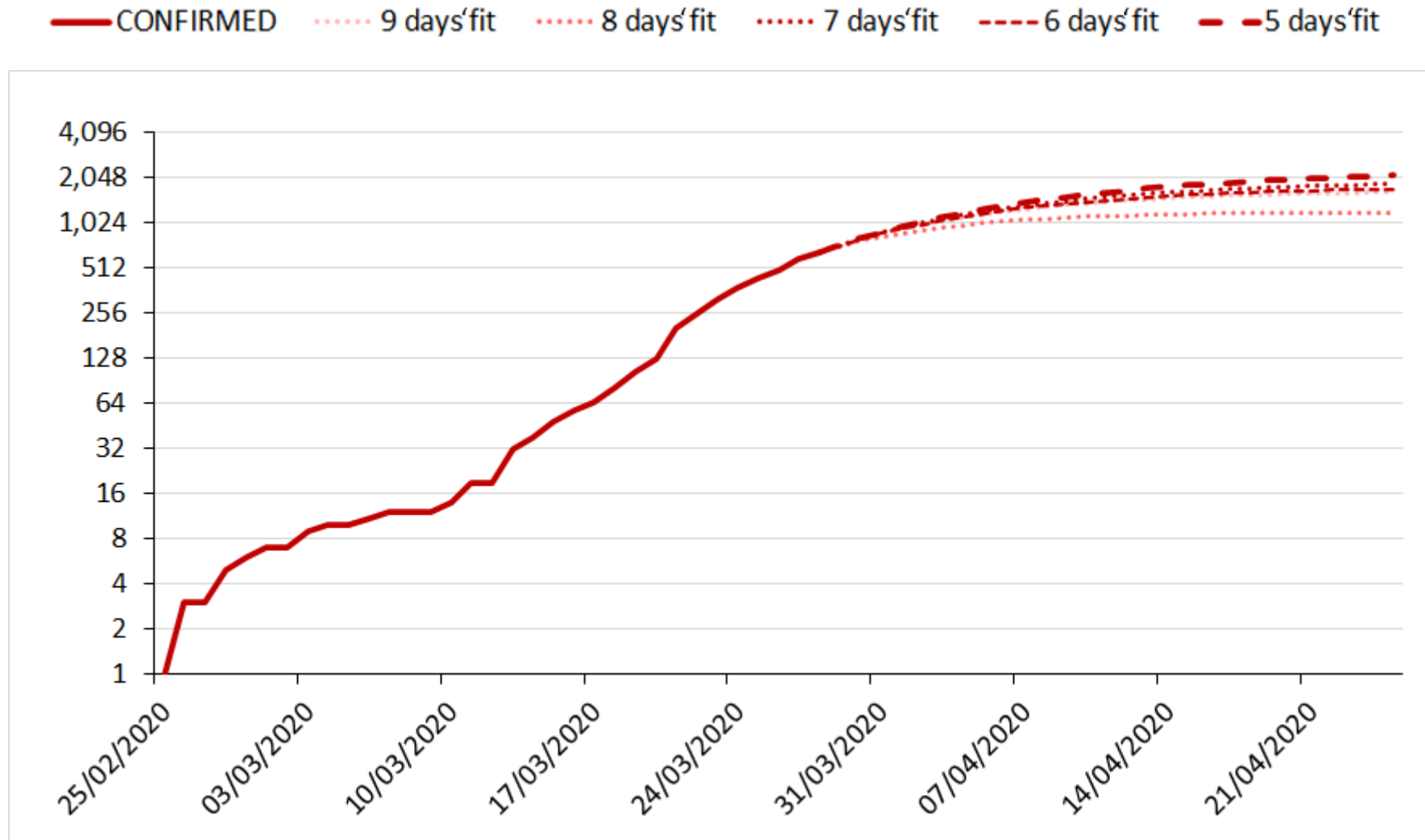
Data: The Johns Hopkins University, Politolog.com

Costa Rica



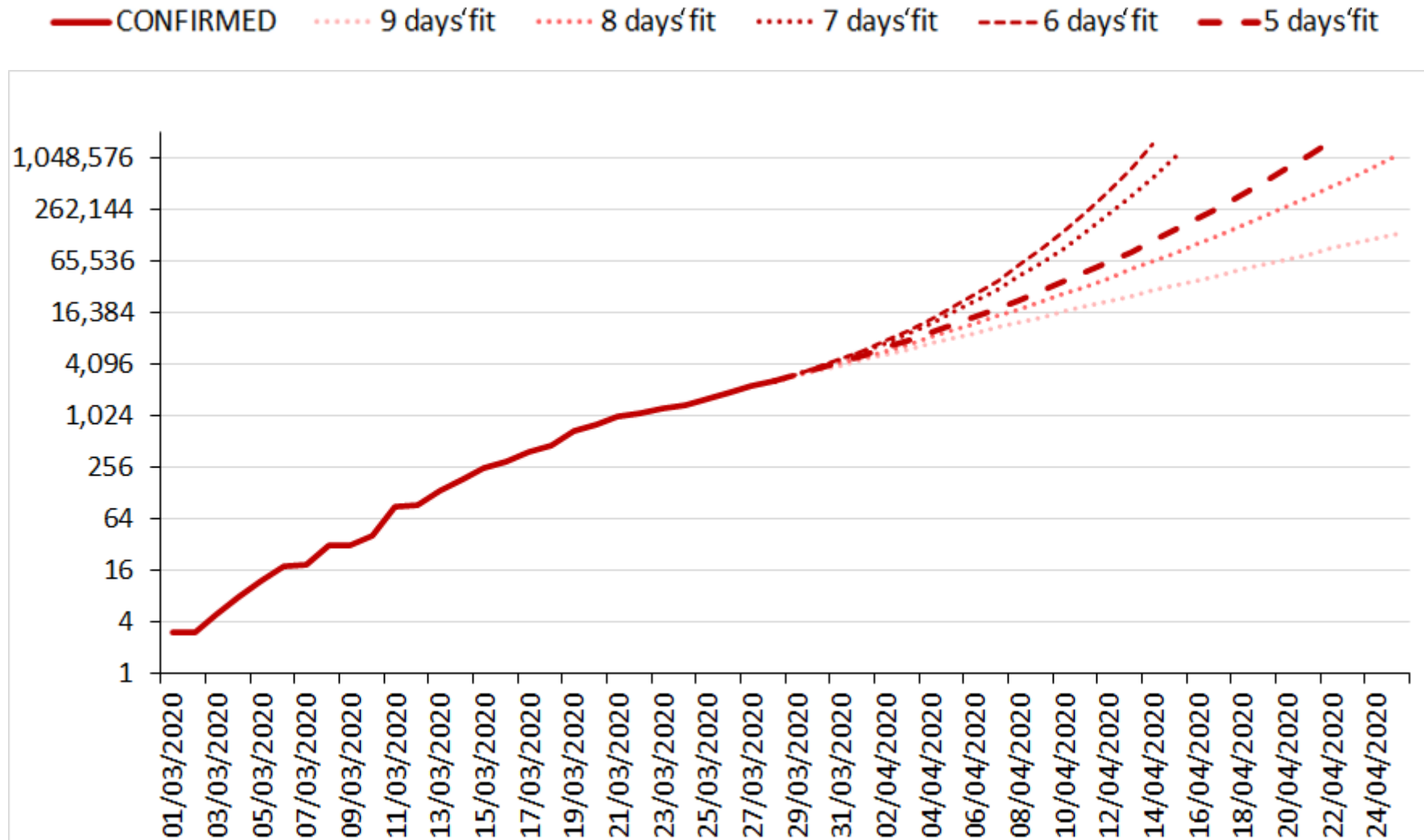
Data: The Johns Hopkins University, Politolog.com

Croatia



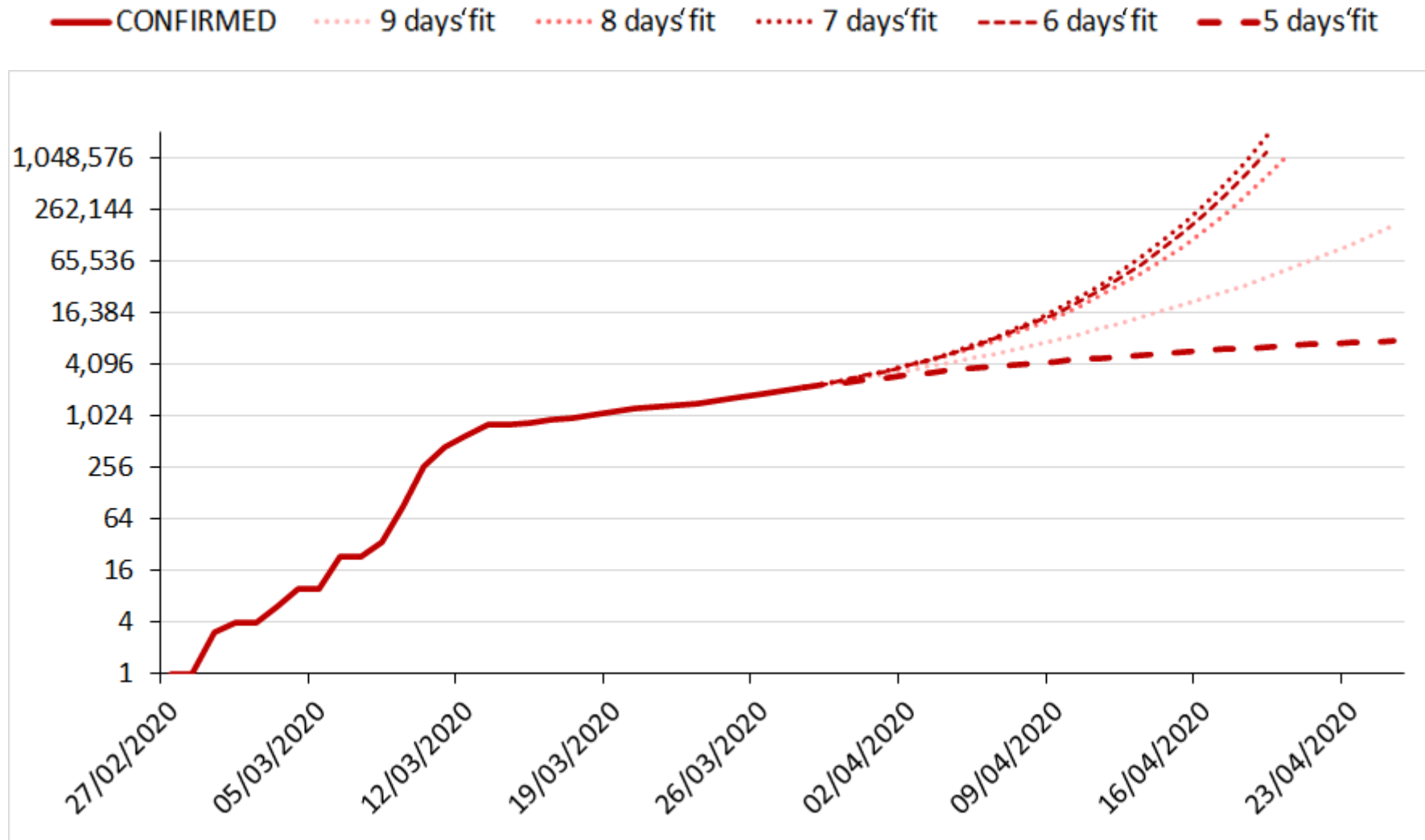
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Czech Republic



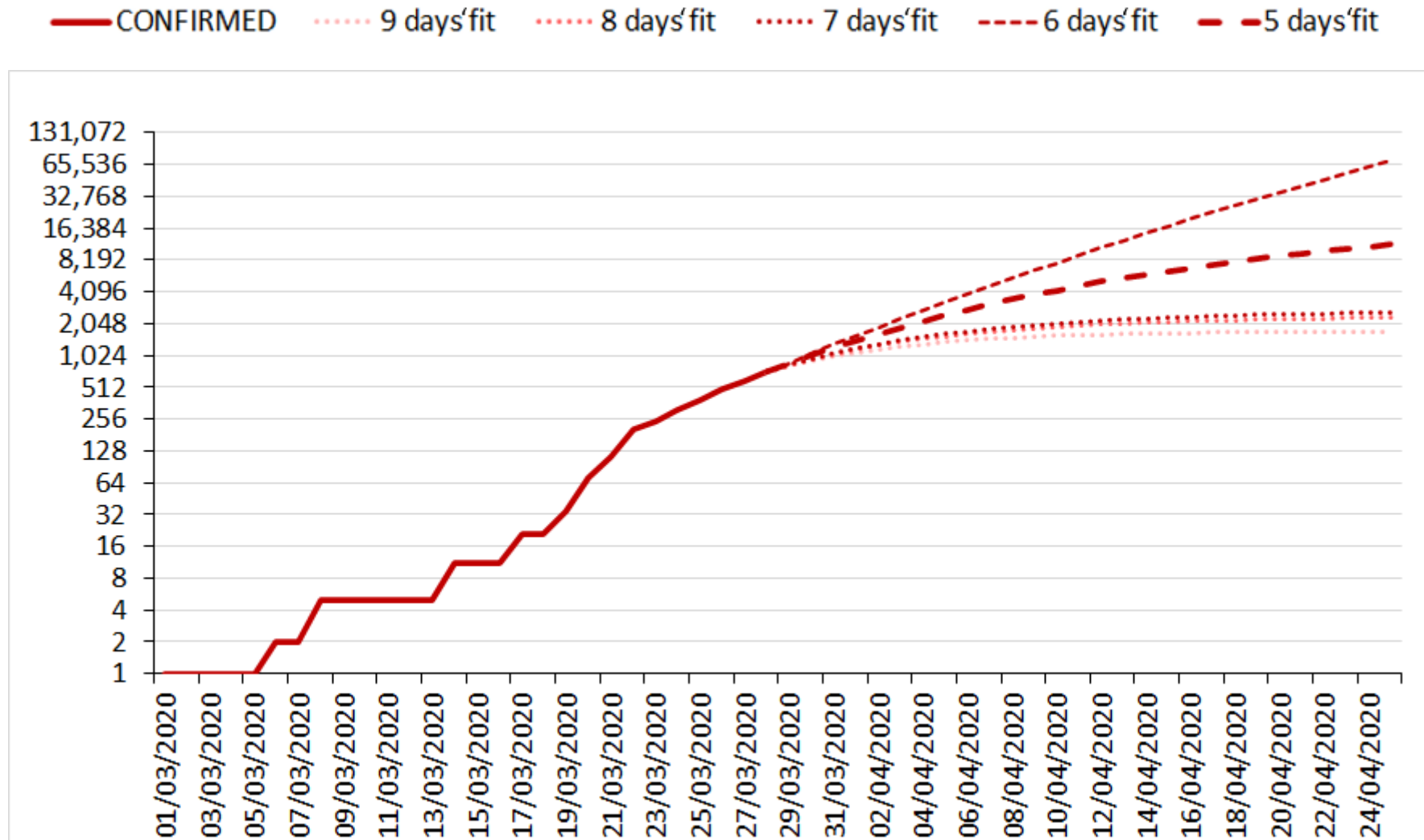
Data: The Johns Hopkins University, Politolog.com

Denmark



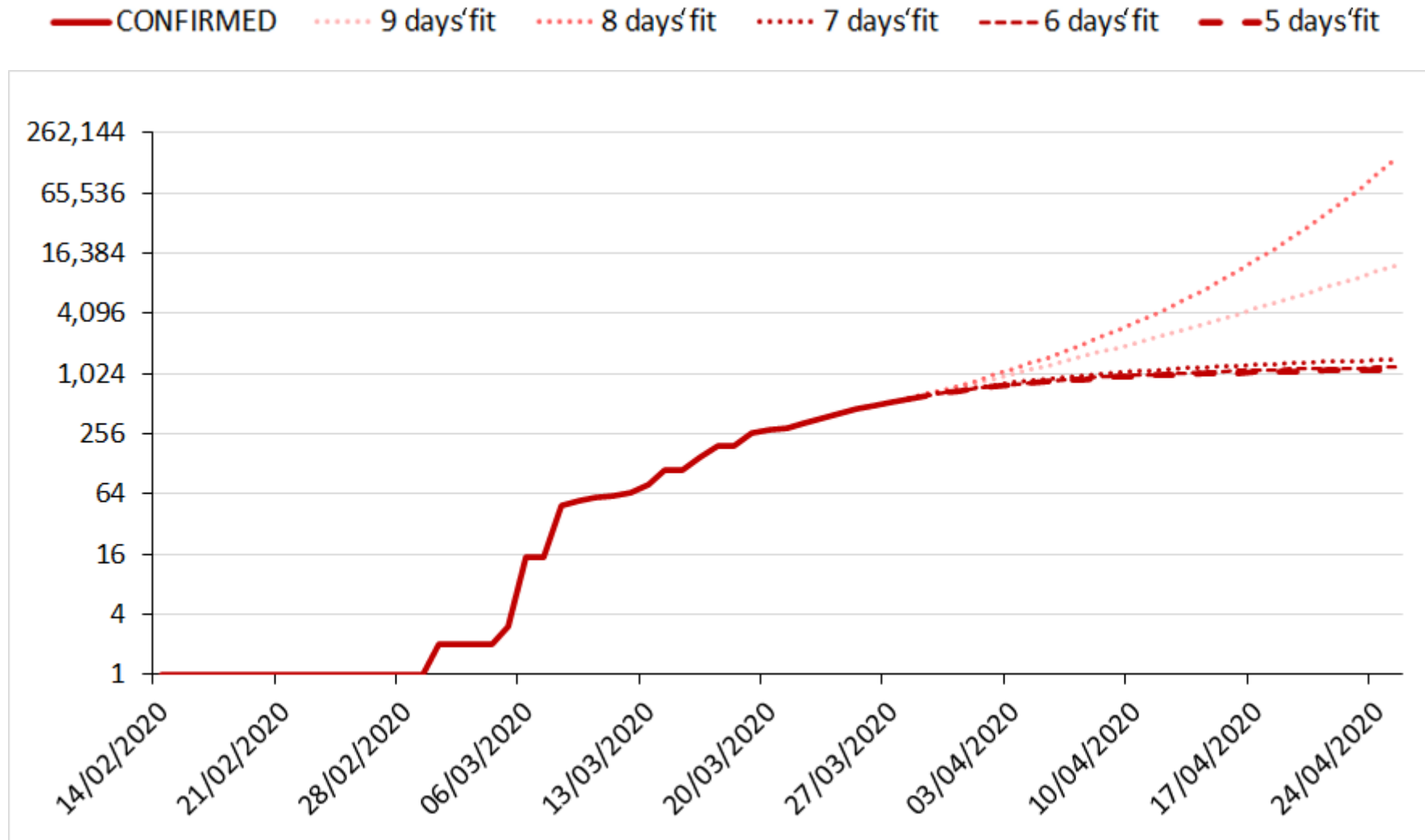
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Dominican Republic



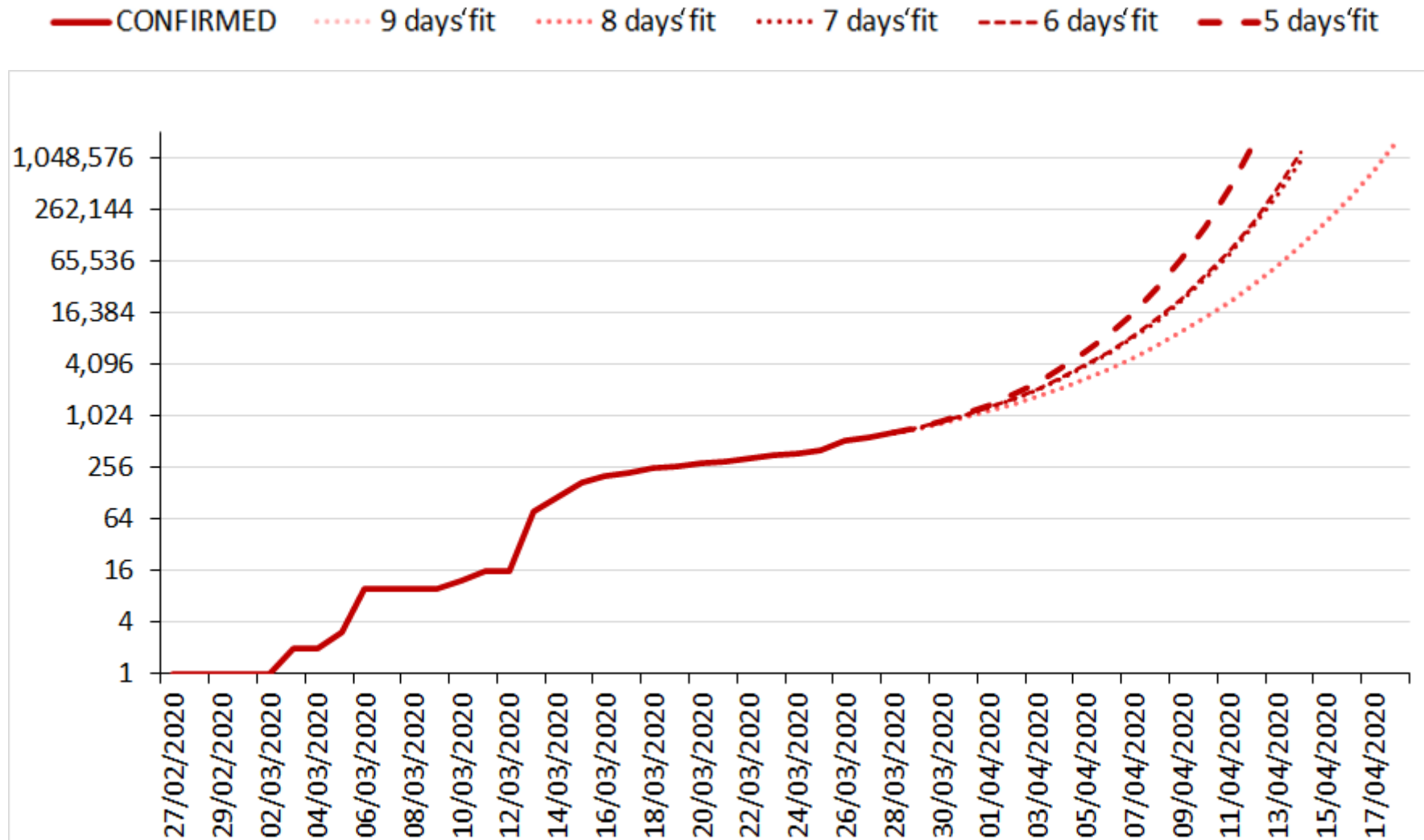
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Egypt



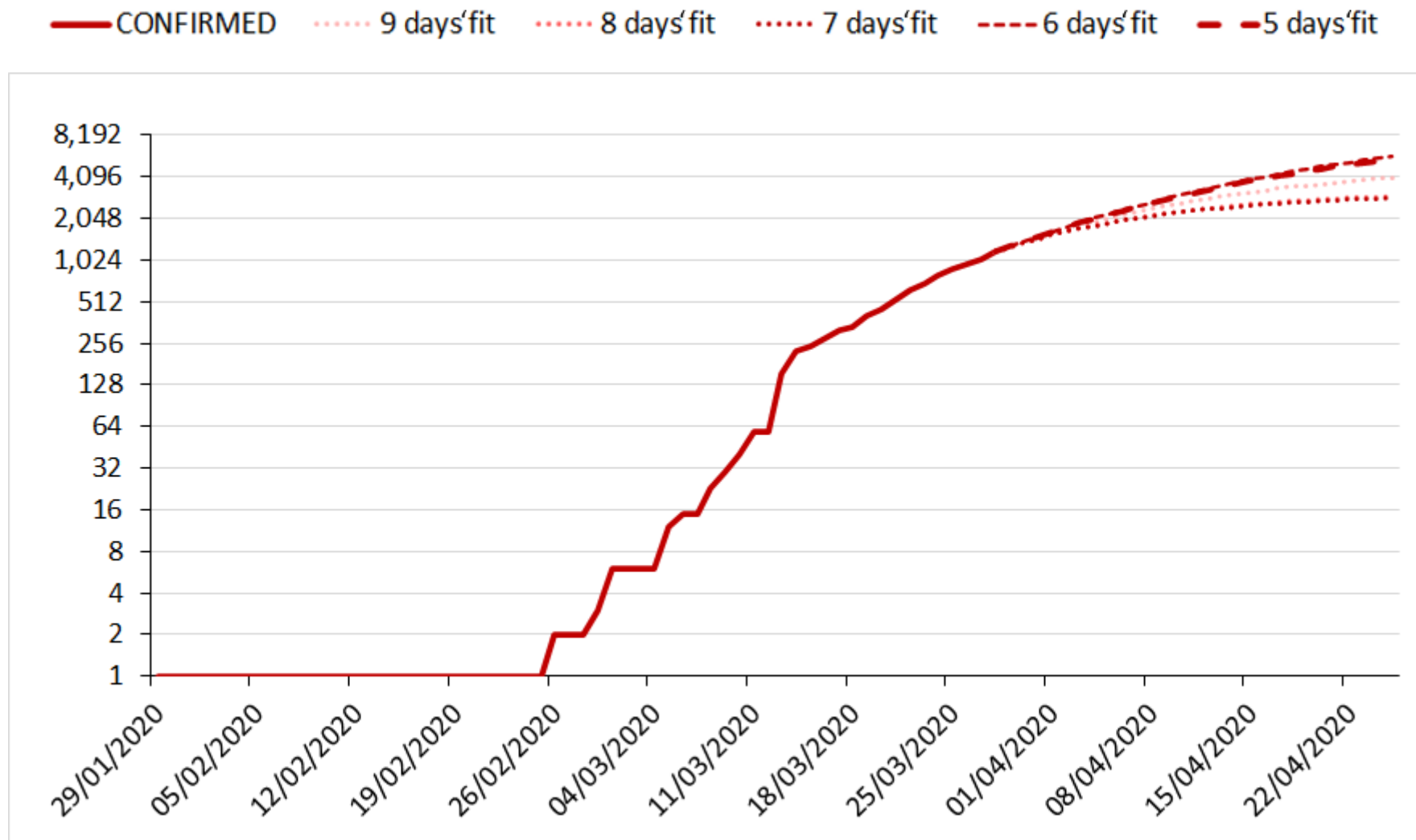
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Estonia



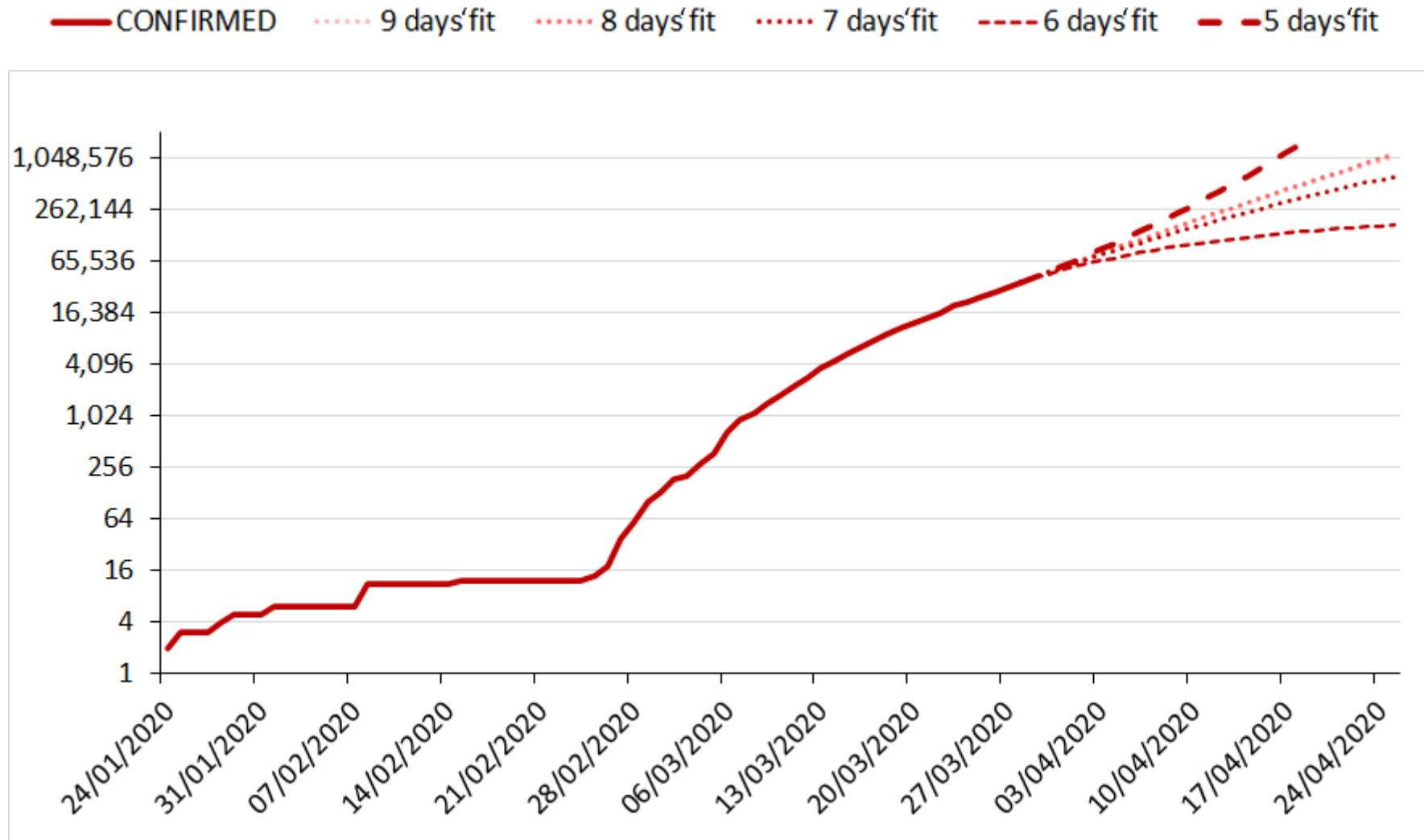
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Finland



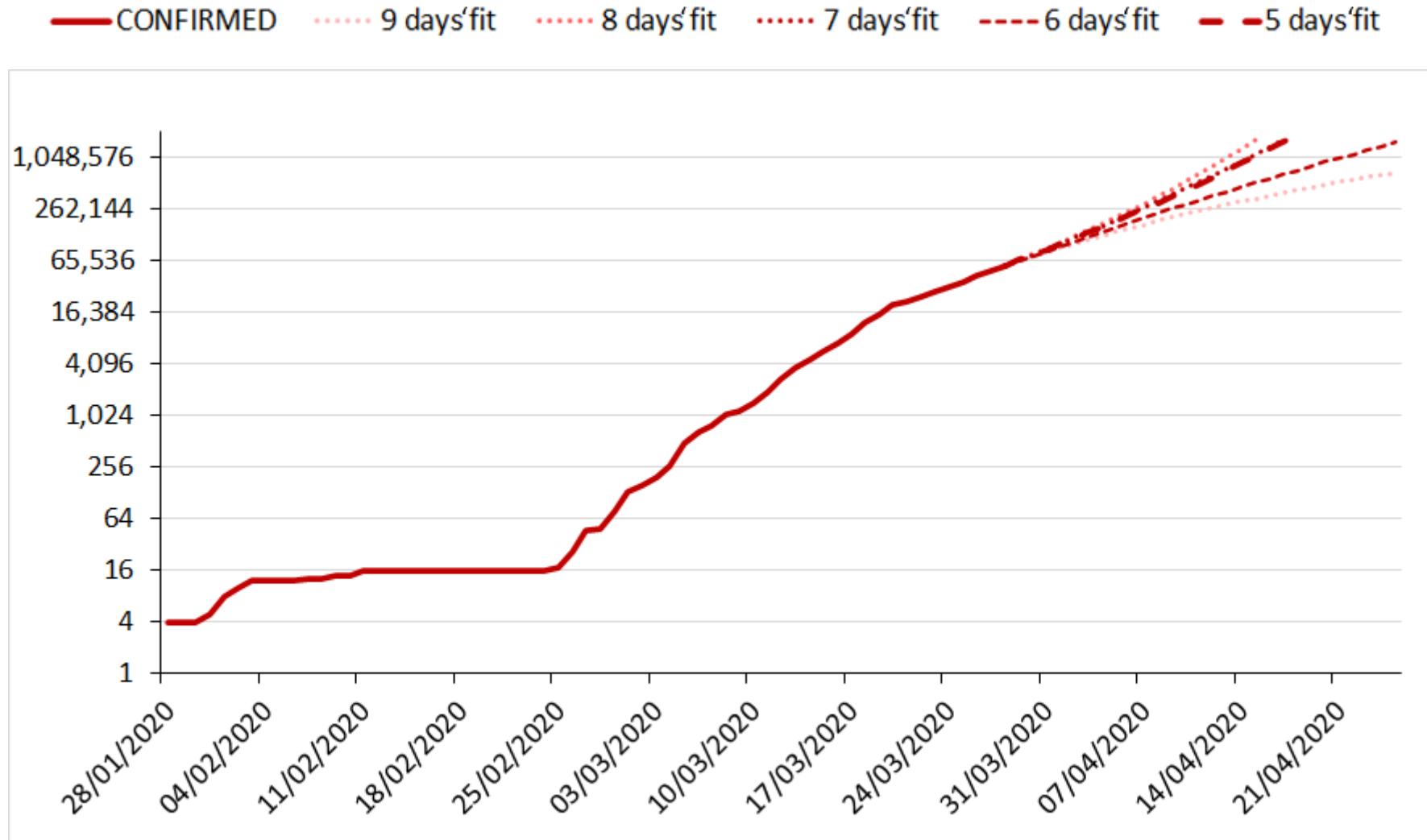
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France



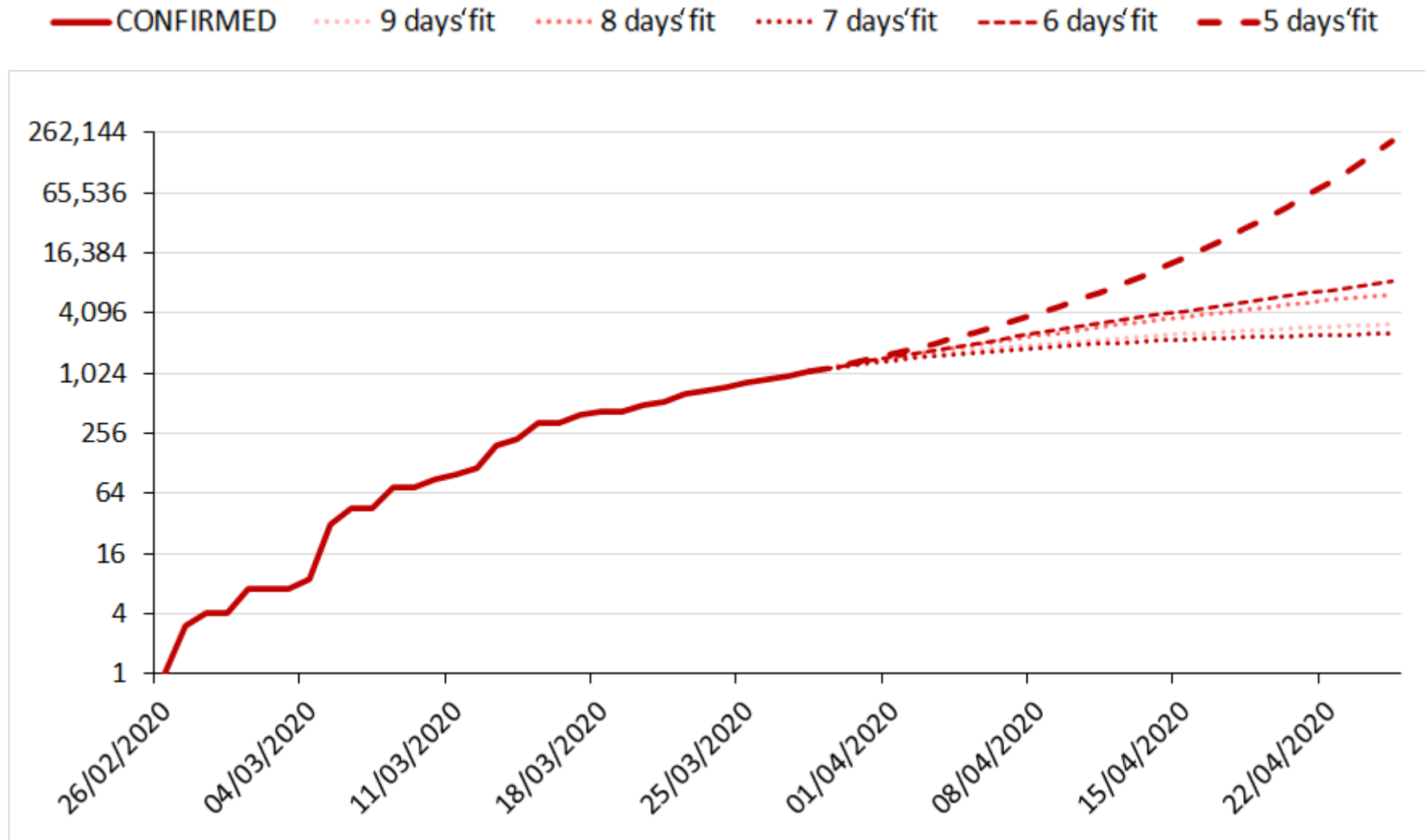
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Germany



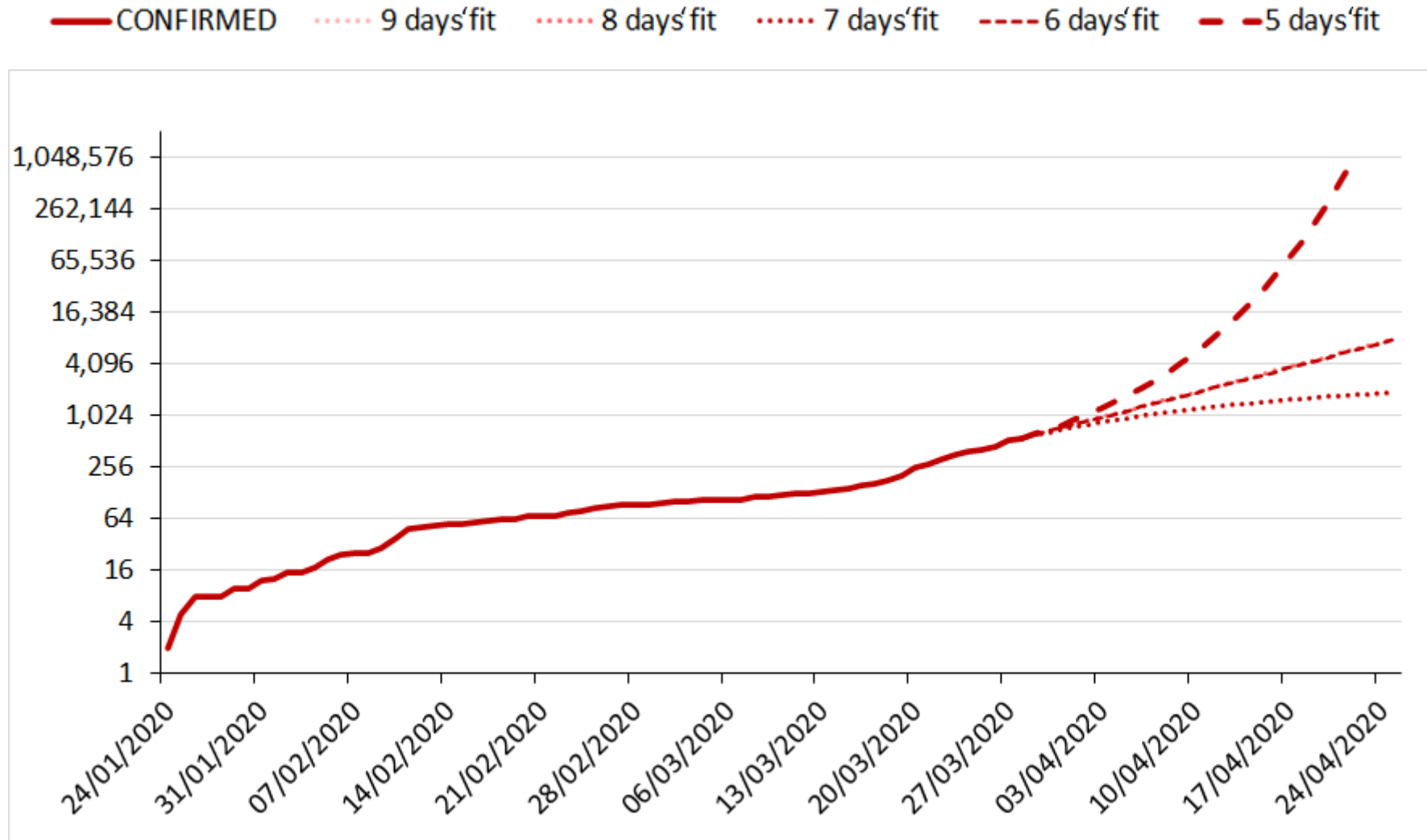
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Greece



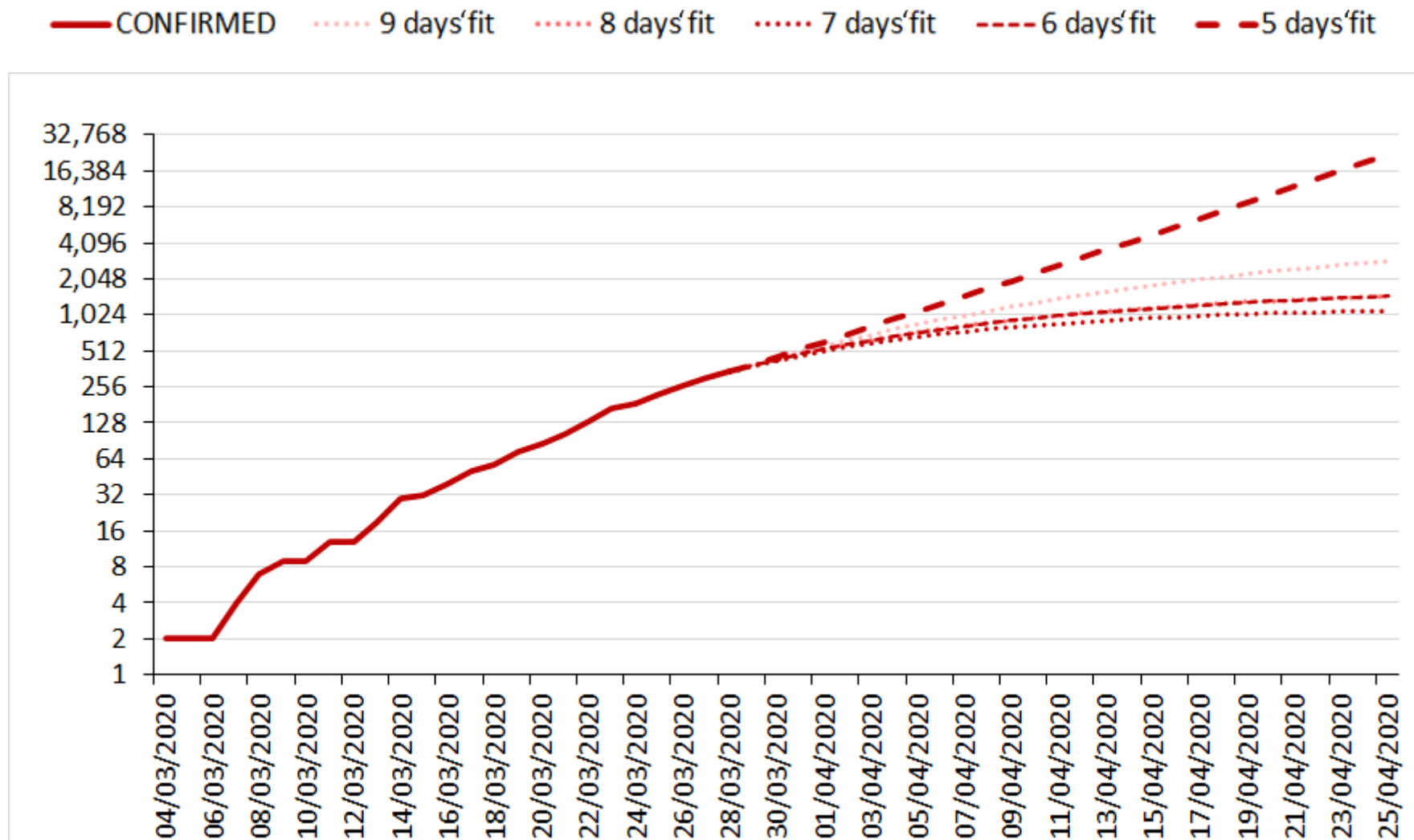
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Hong Kong



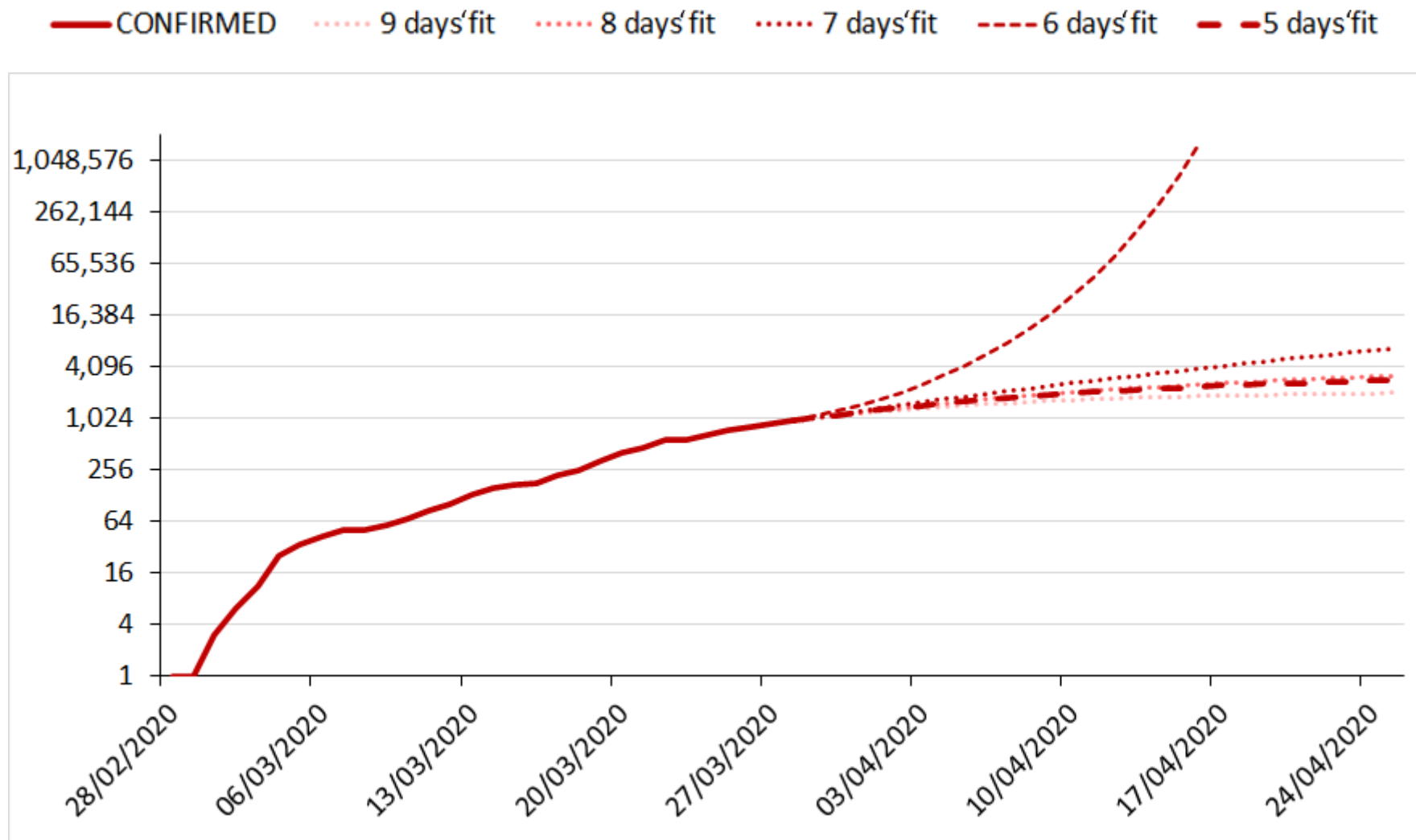
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Hungary



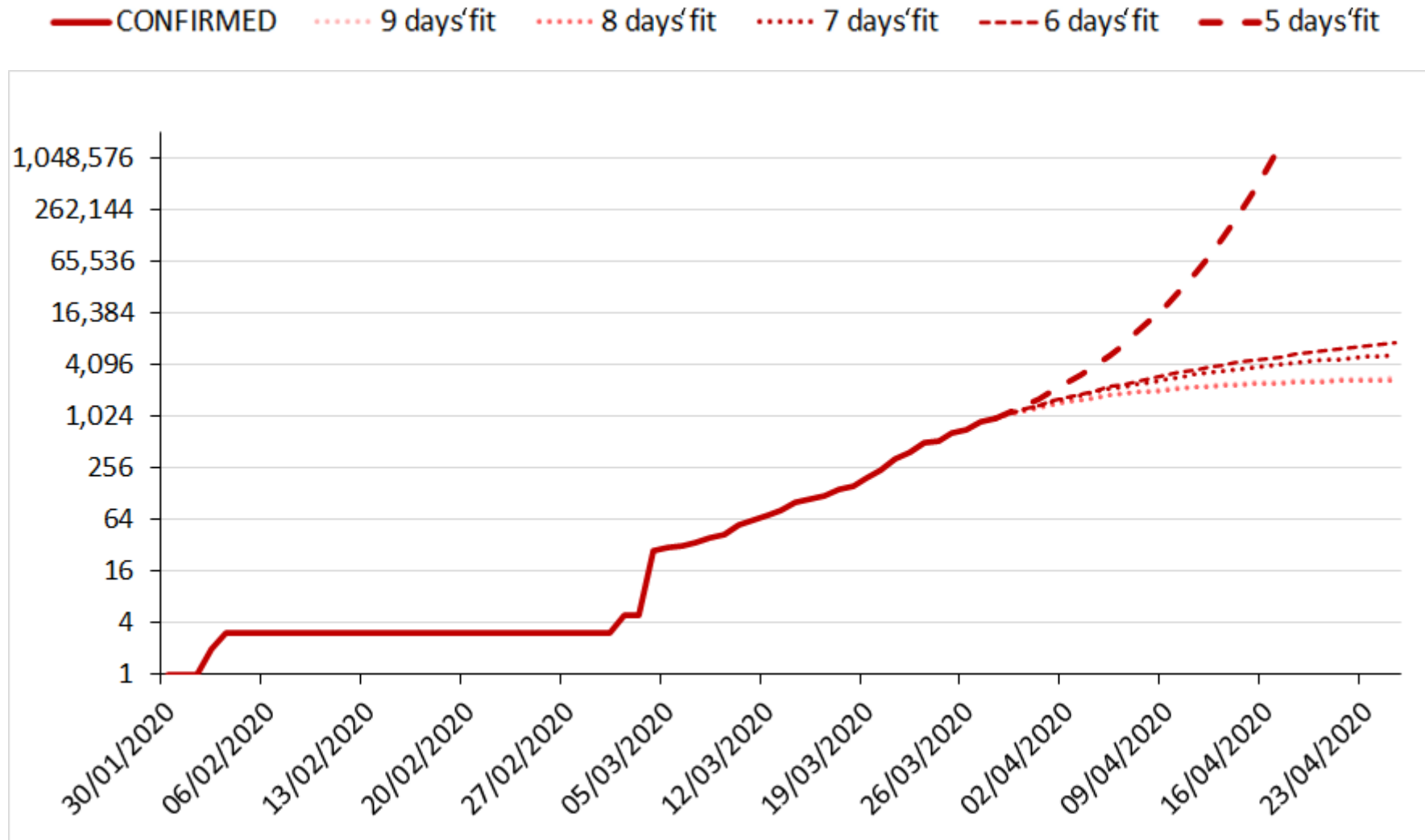
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Iceland



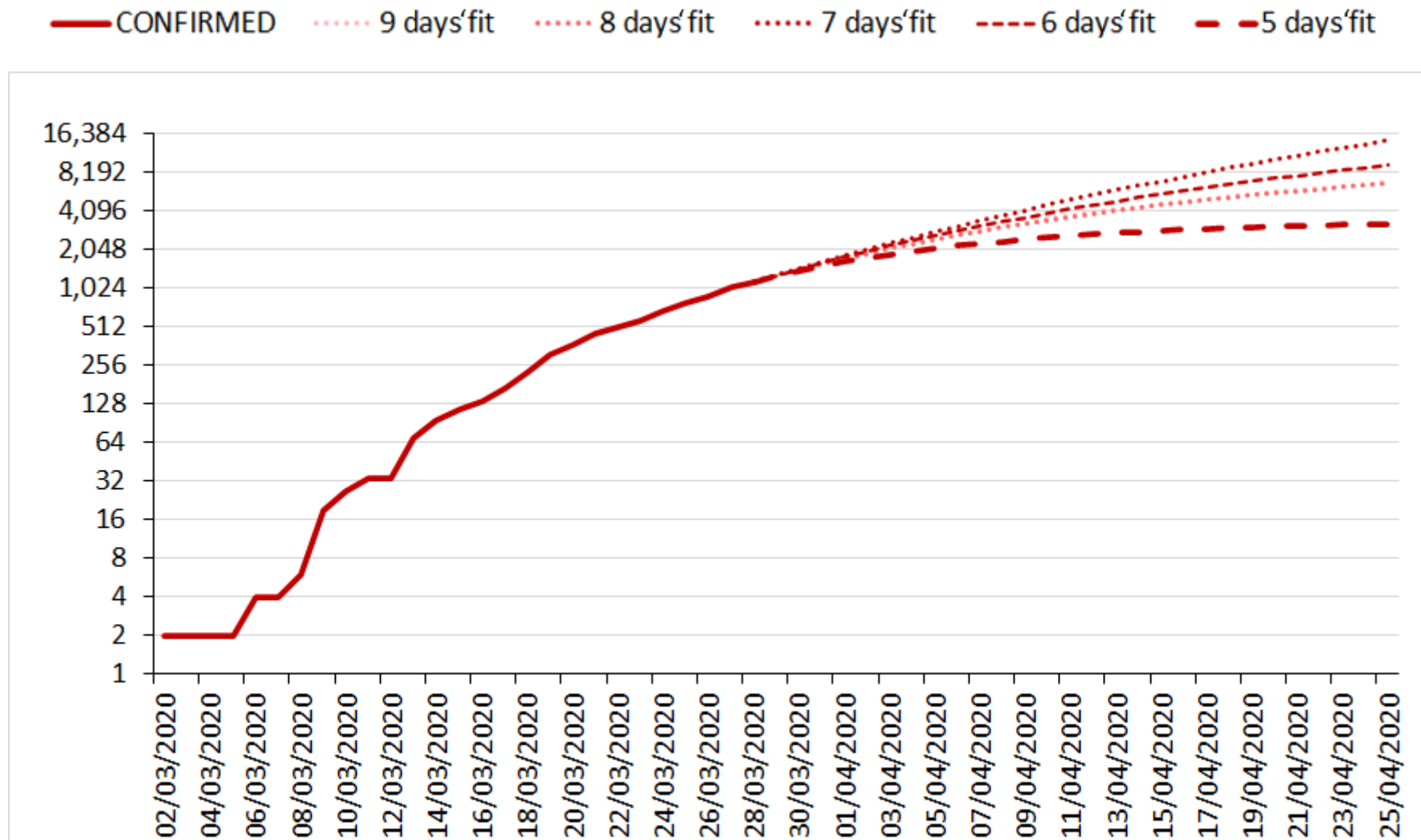
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India



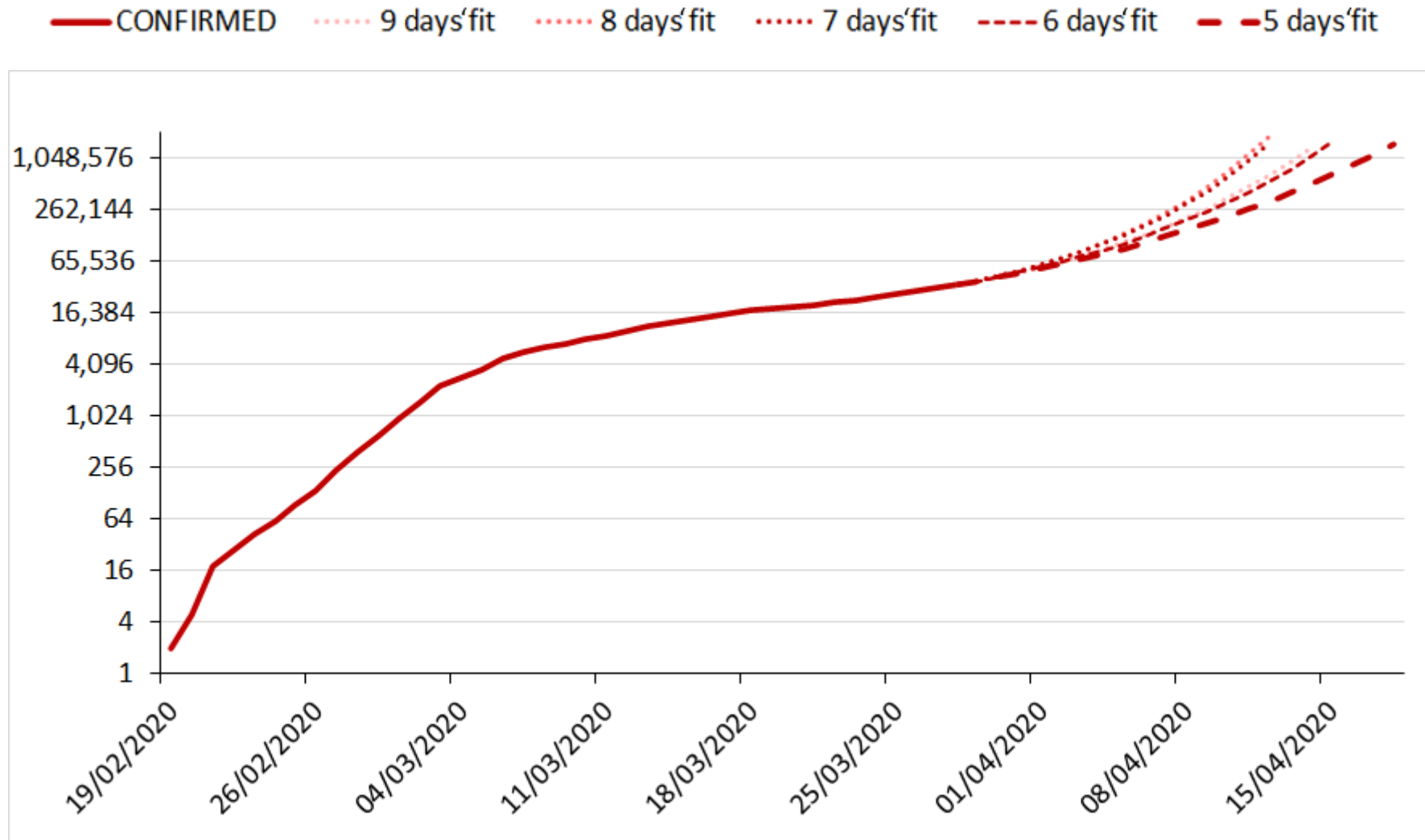
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Indonesia



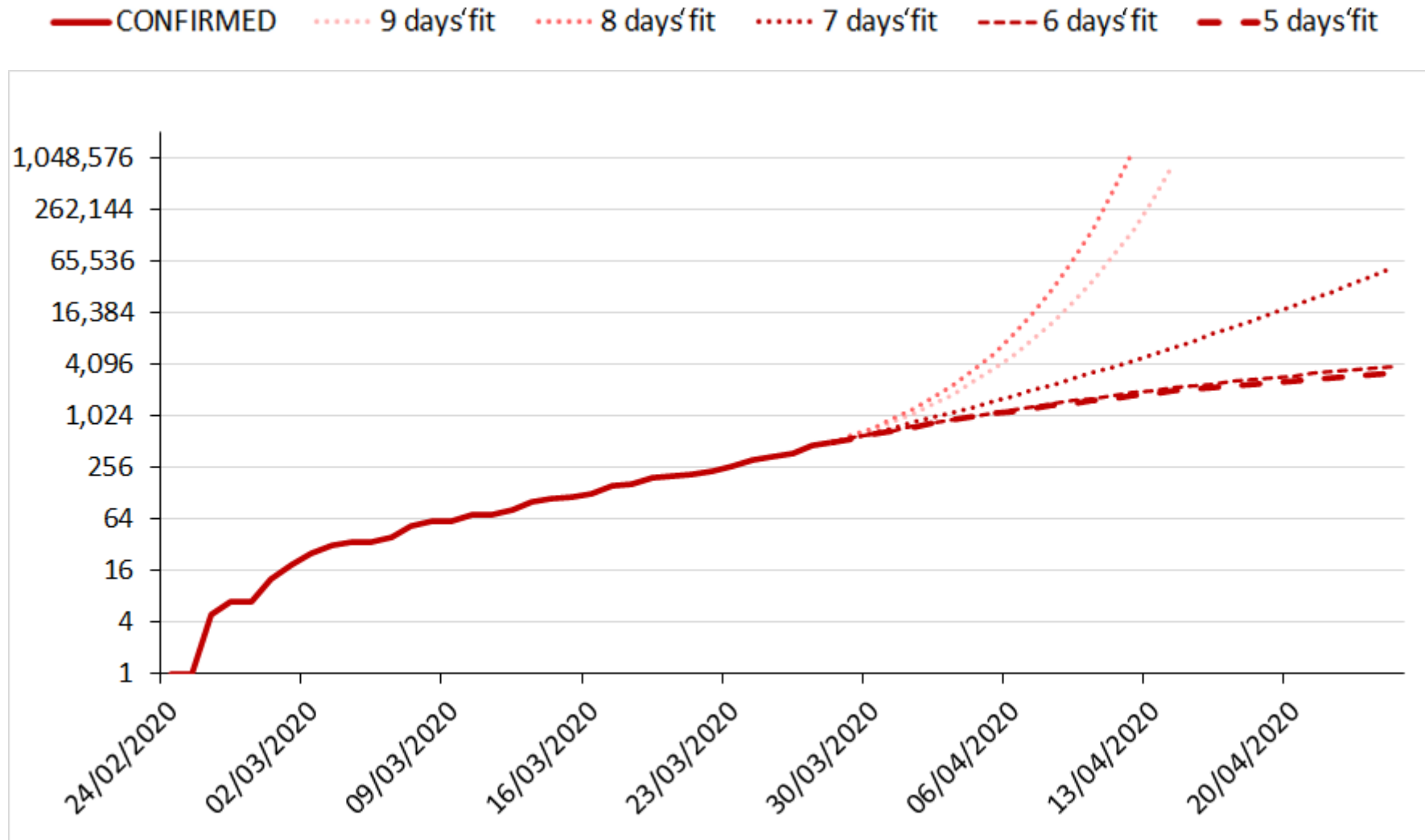
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Iran



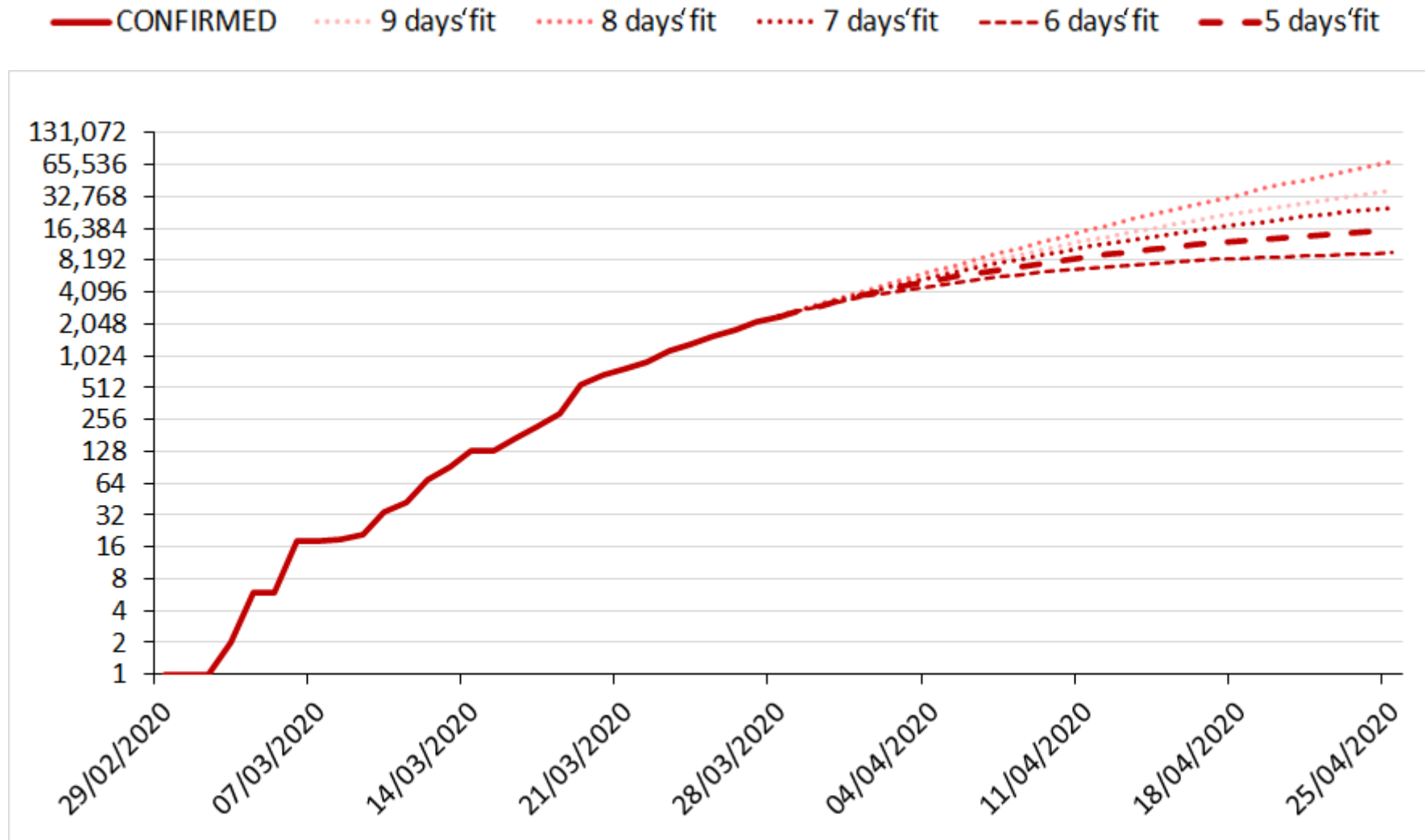
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Iraq



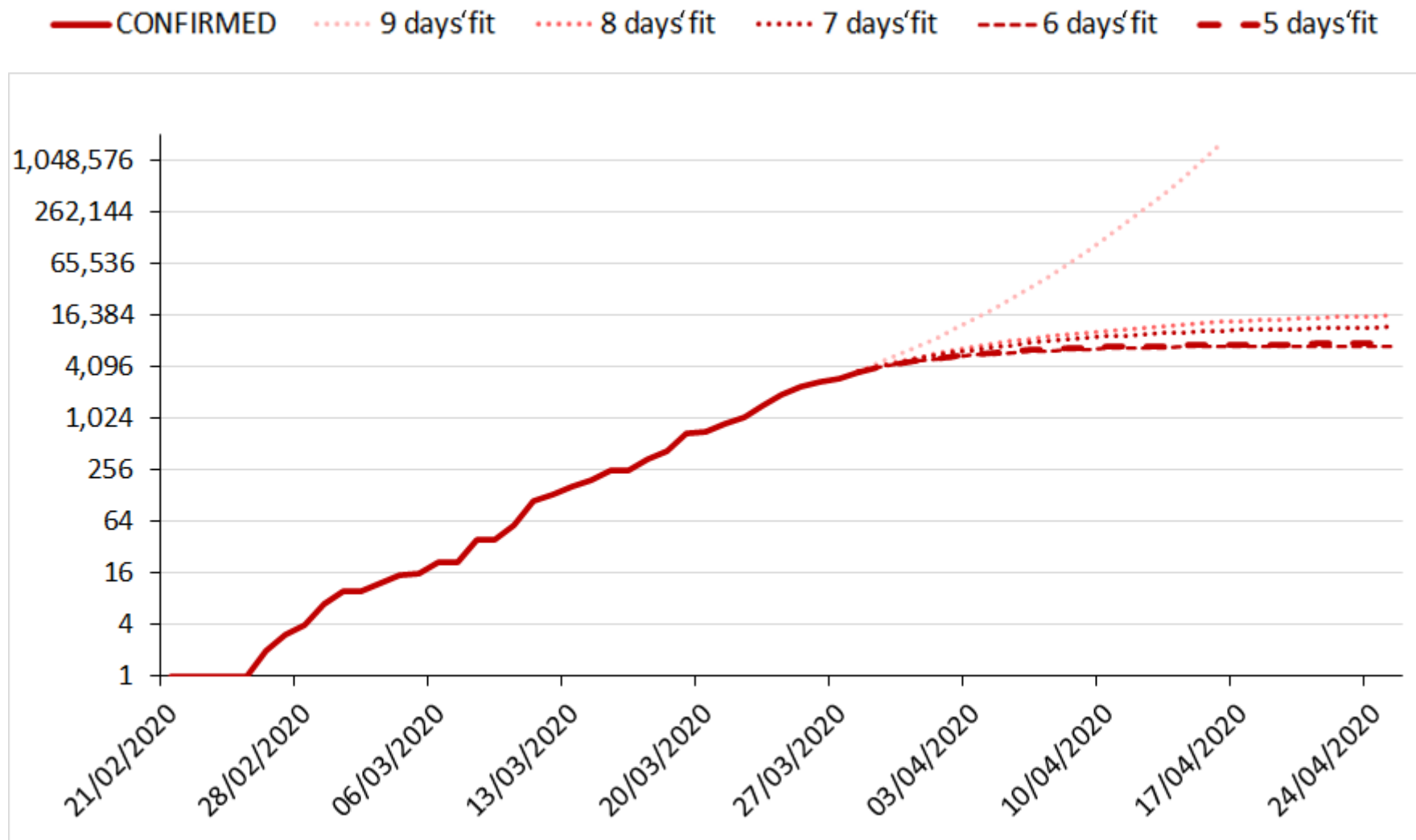
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Ireland



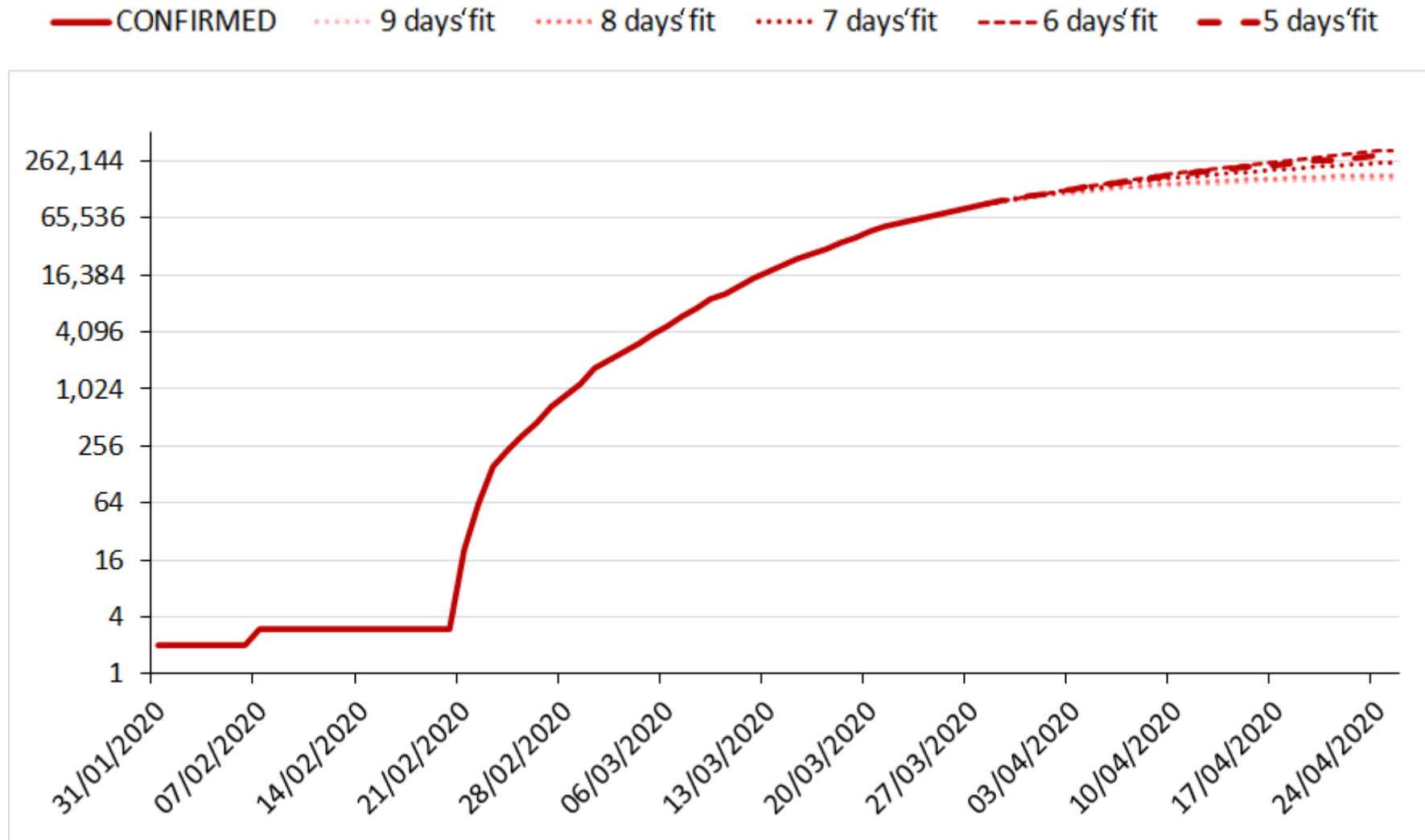
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Israel



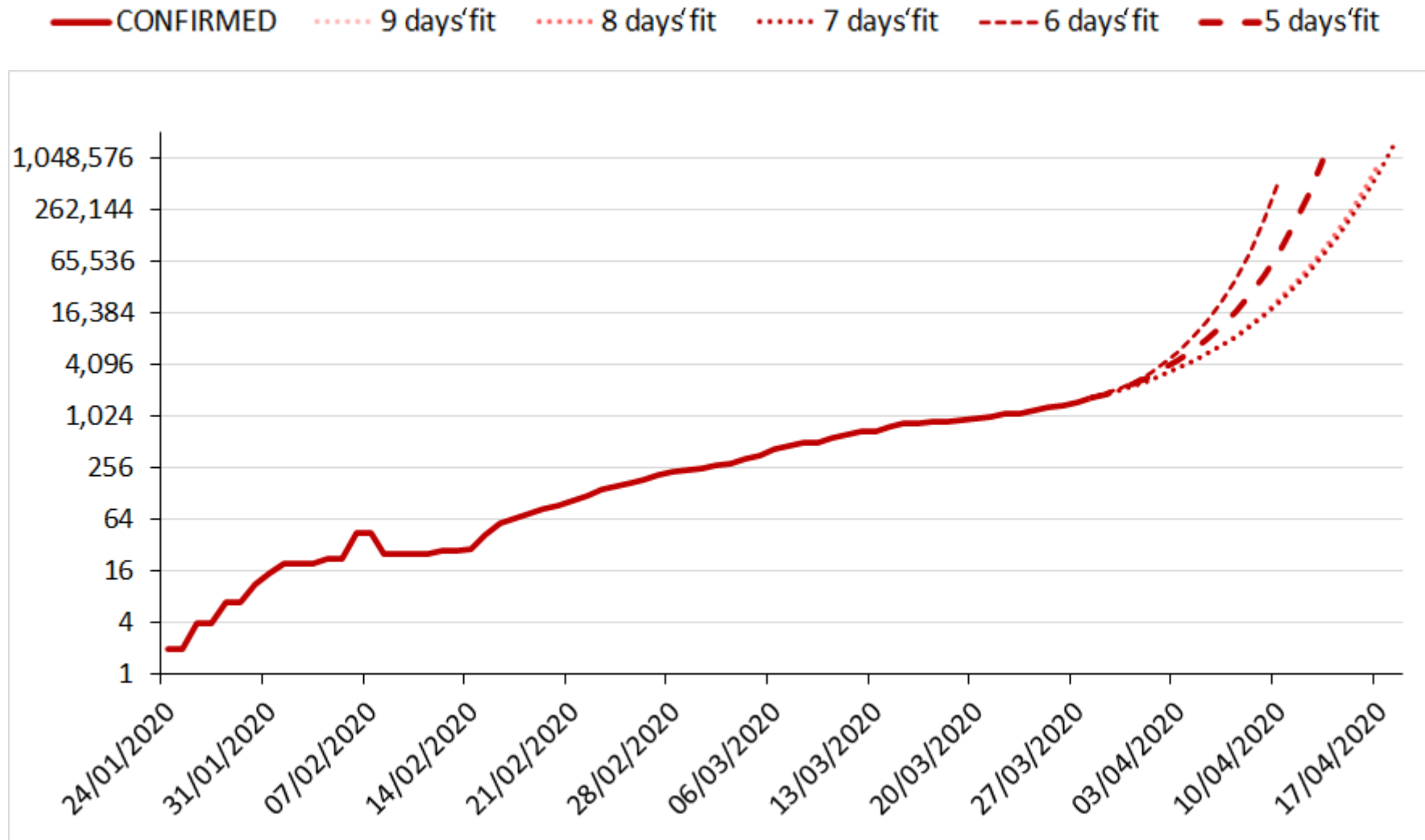
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Italy



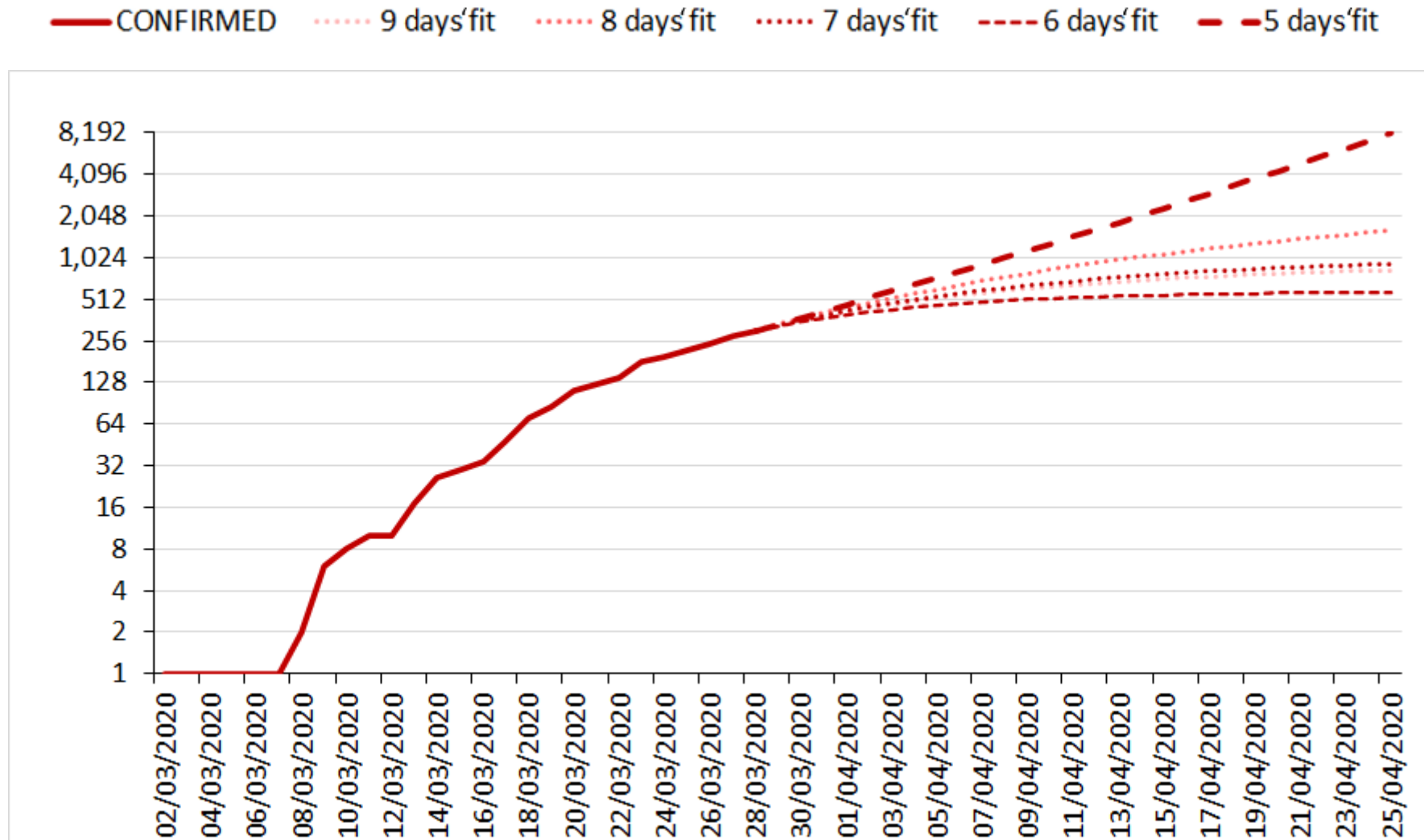
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Japan



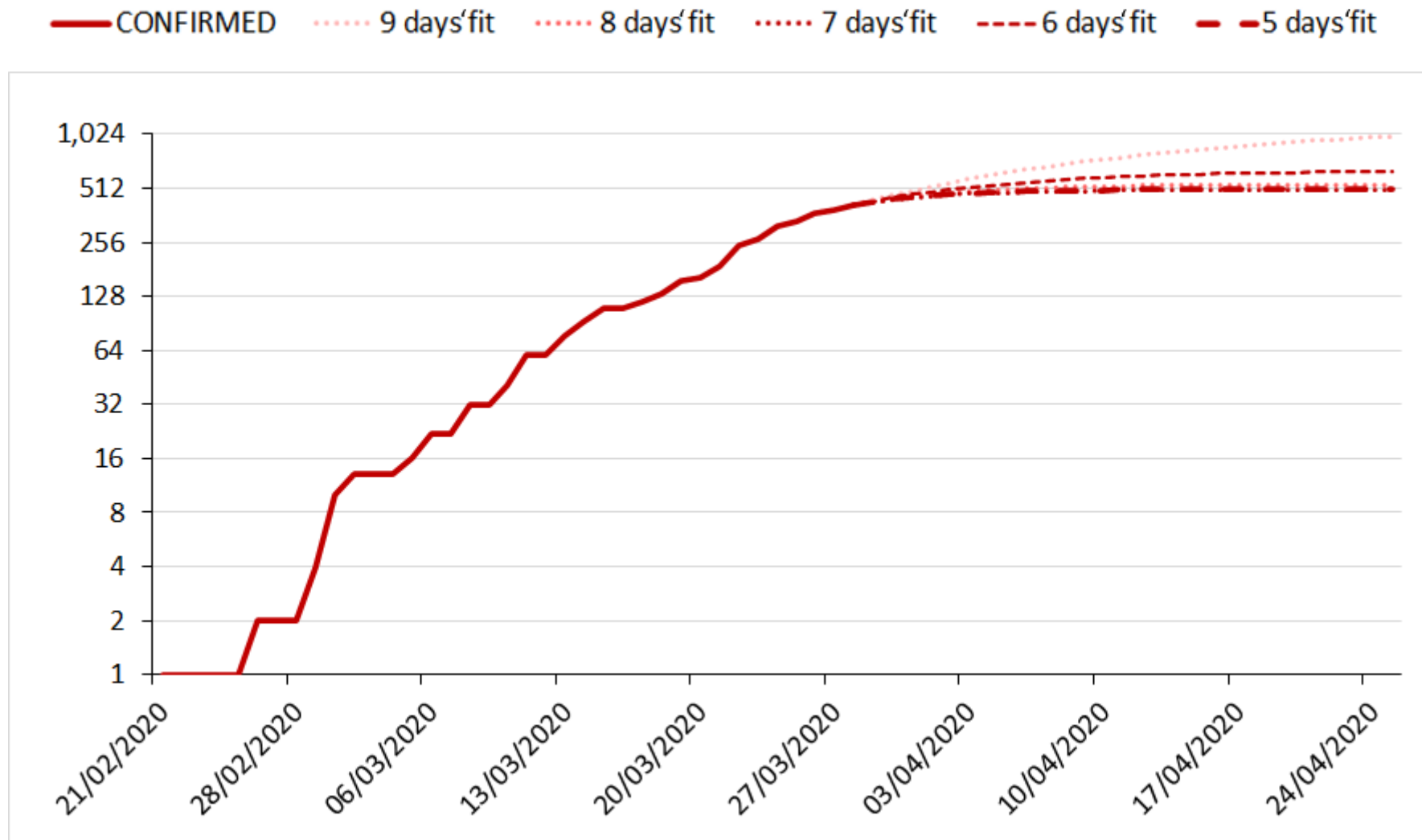
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Latvia



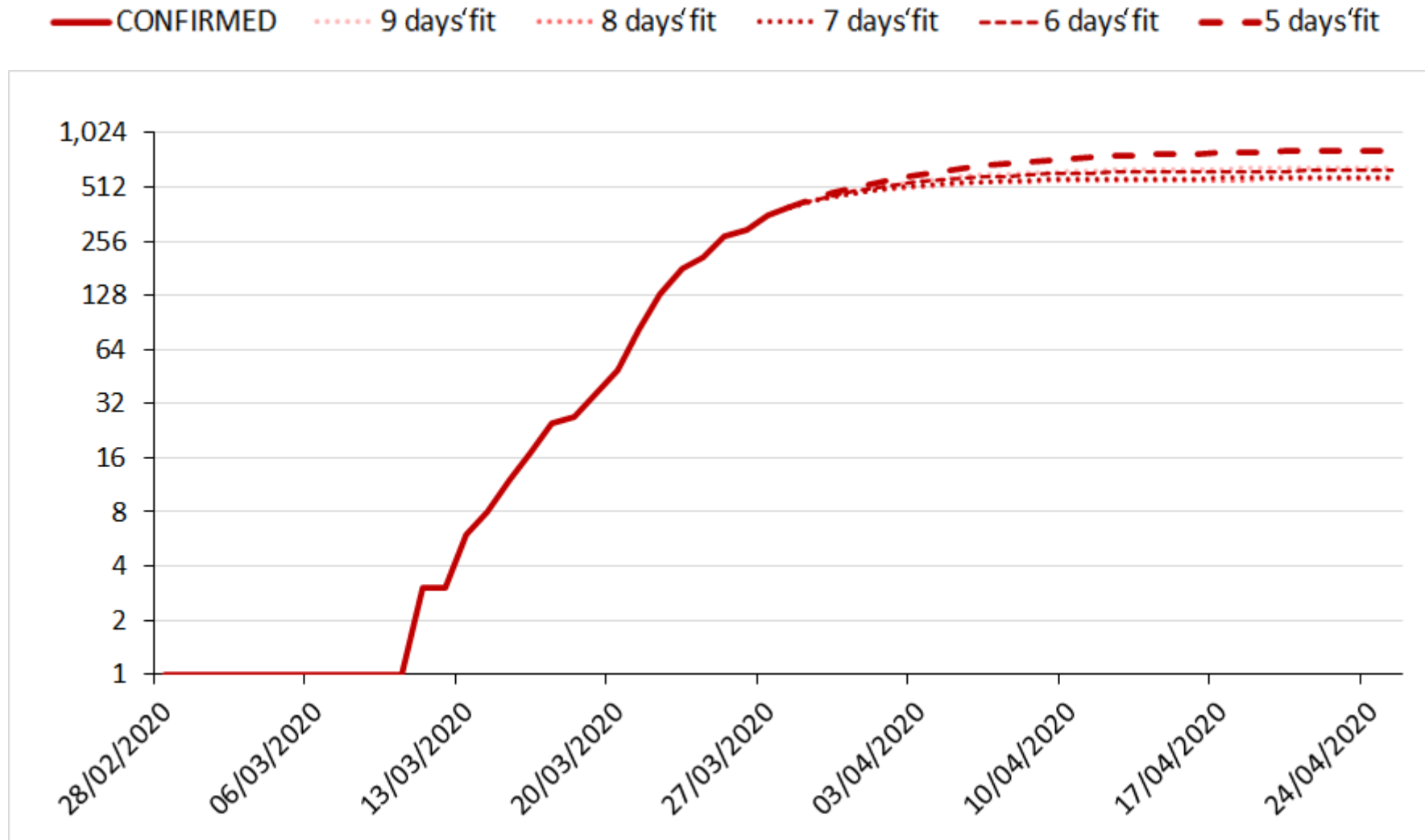
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Lebanon



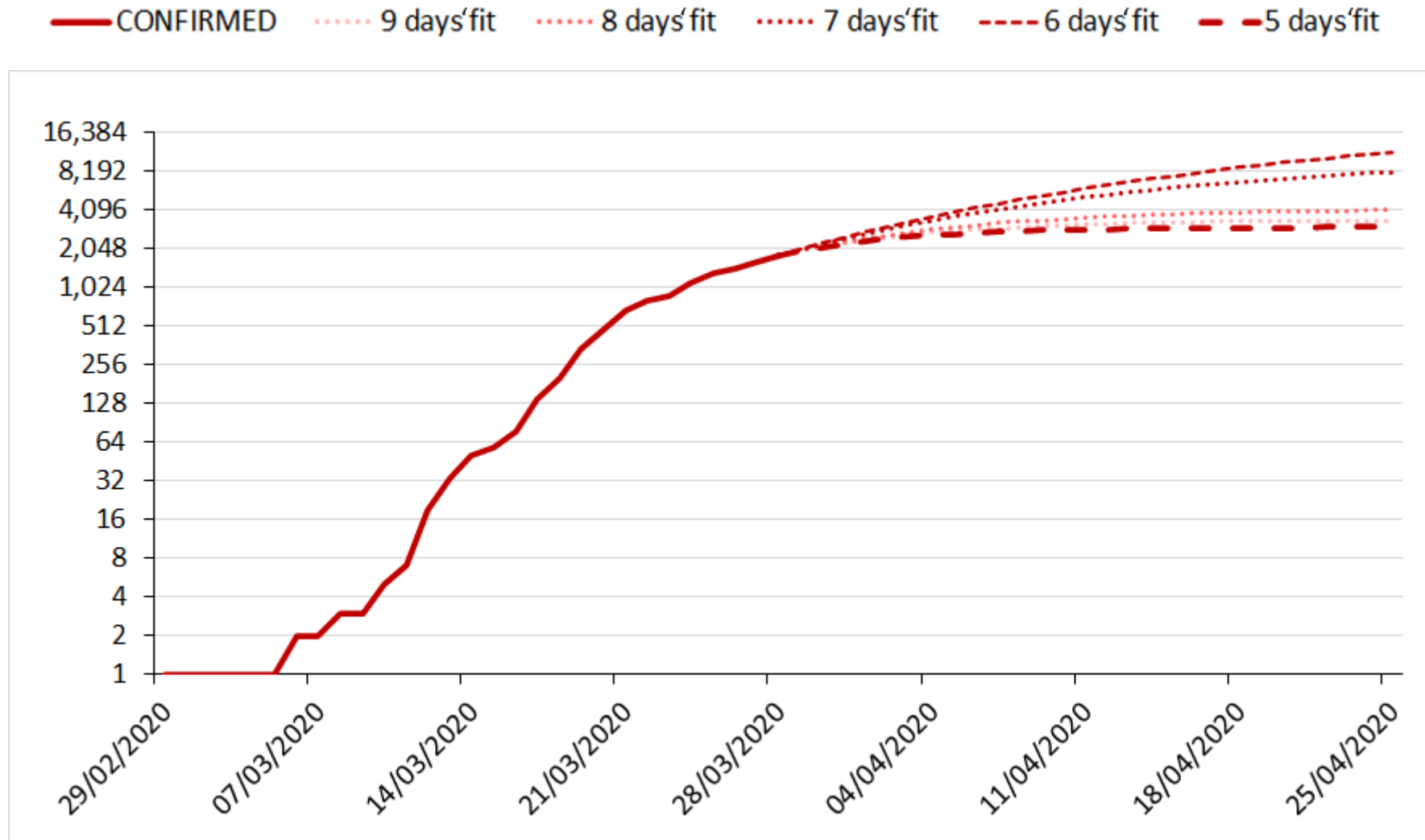
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Lithuania



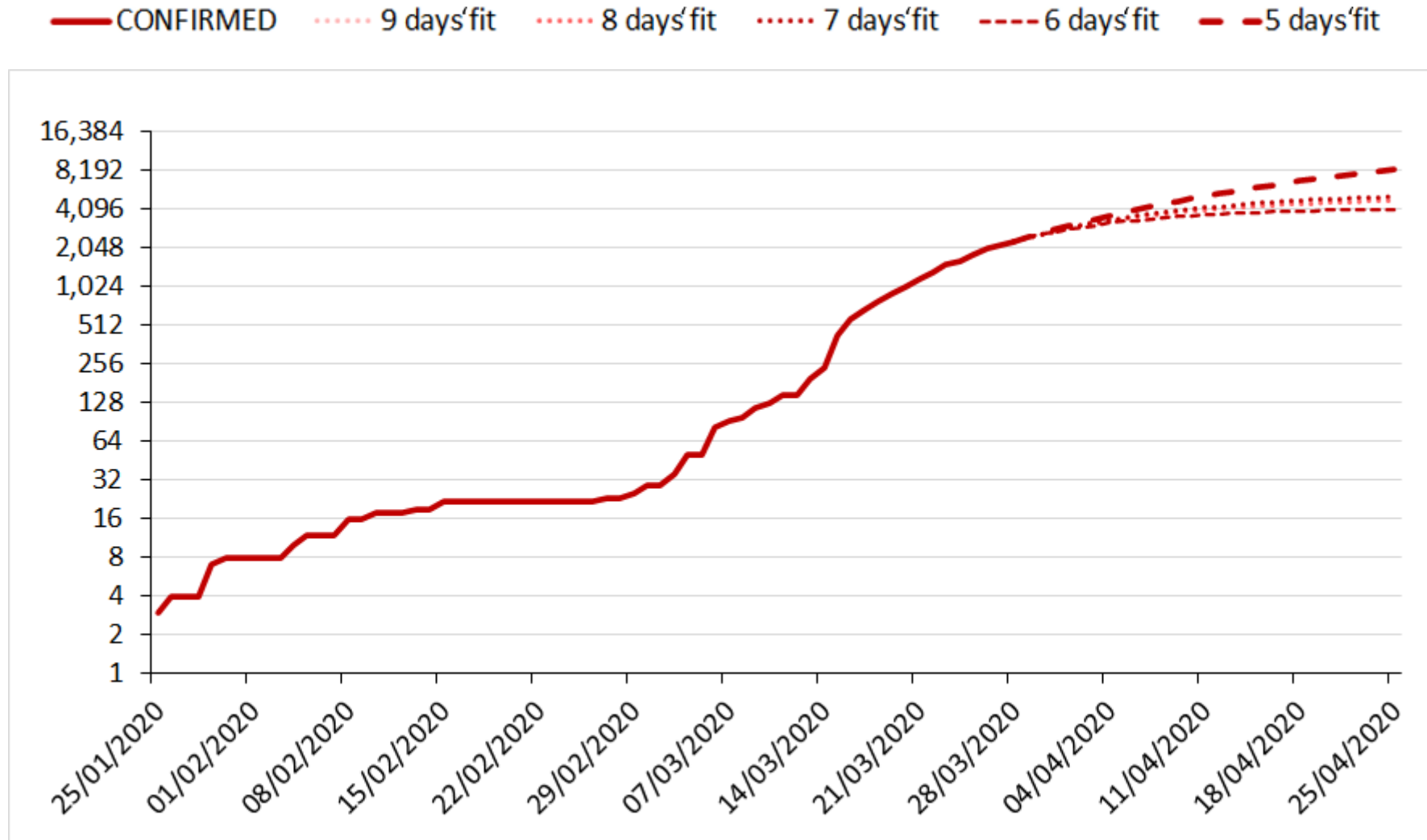
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Luxembourg



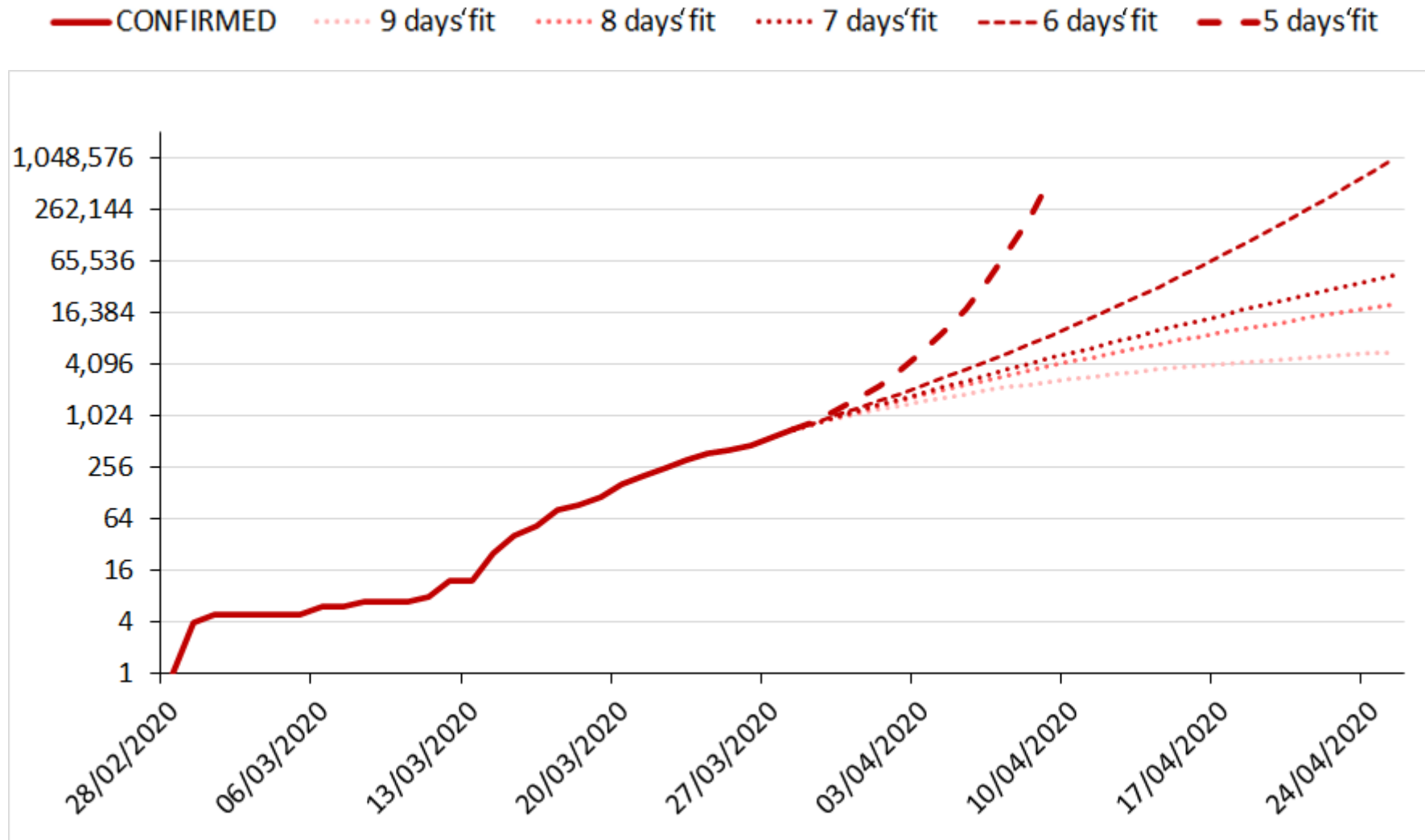
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Malaysia



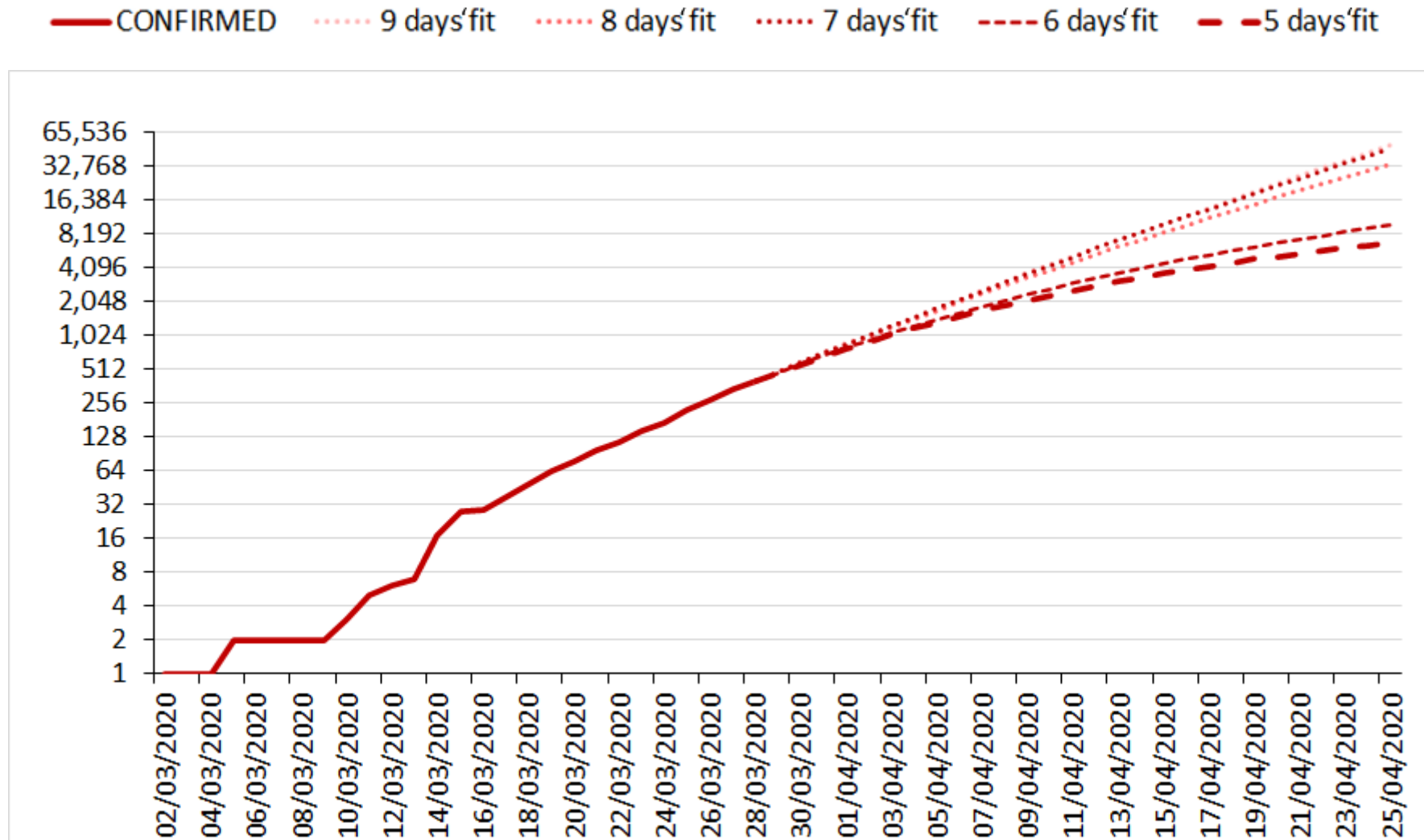
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Mexico



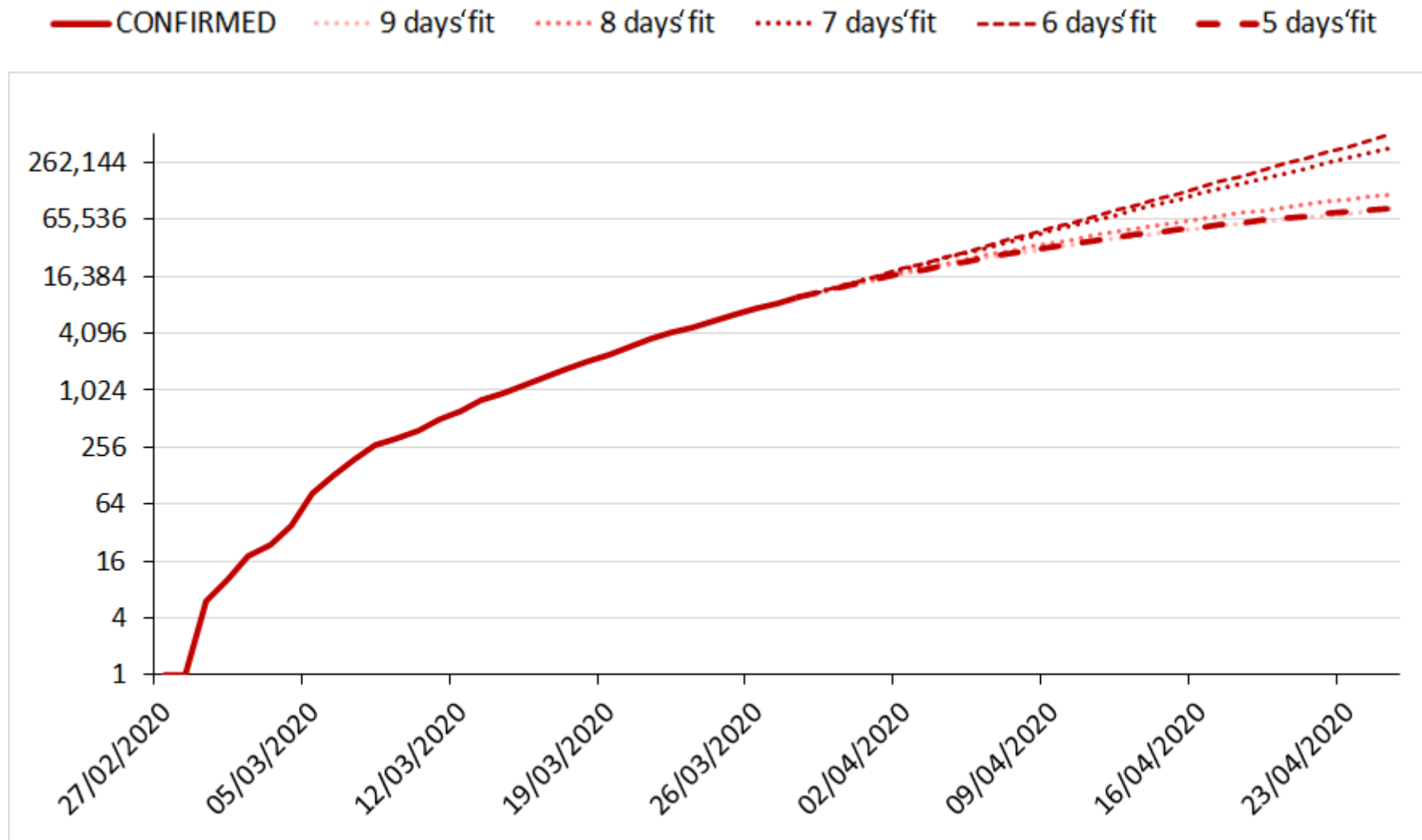
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Morocco



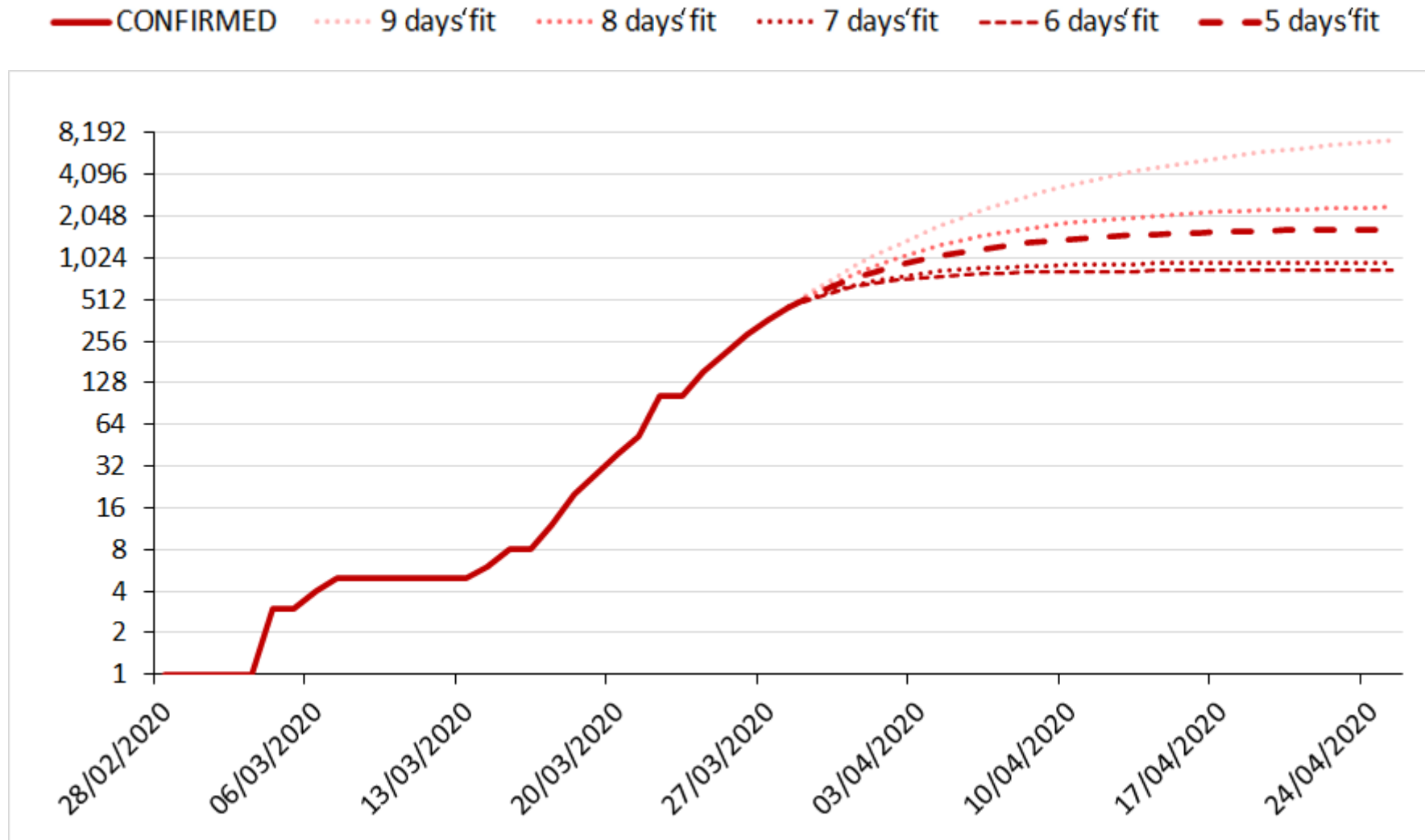
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Netherlands



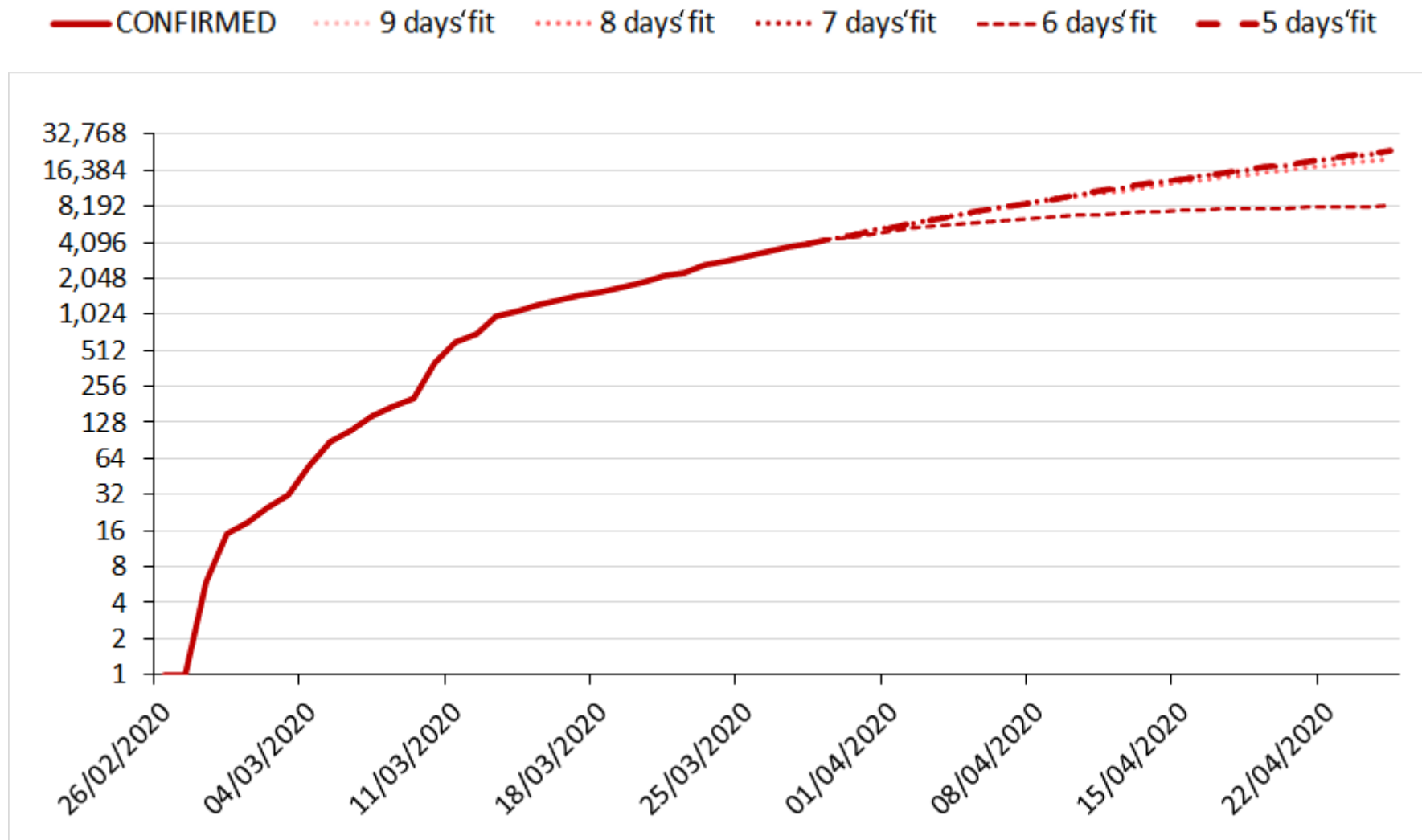
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New Zealand



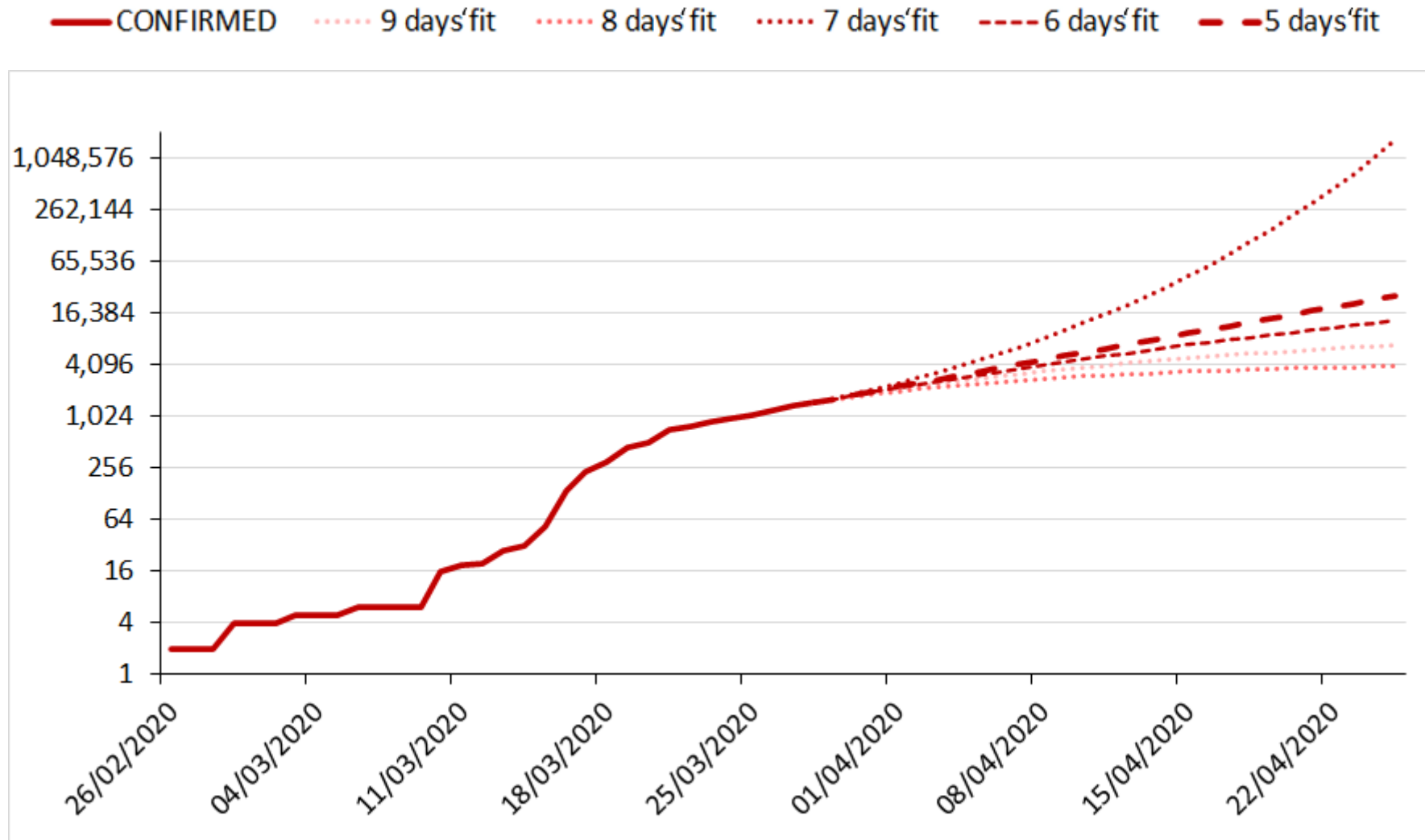
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Norway



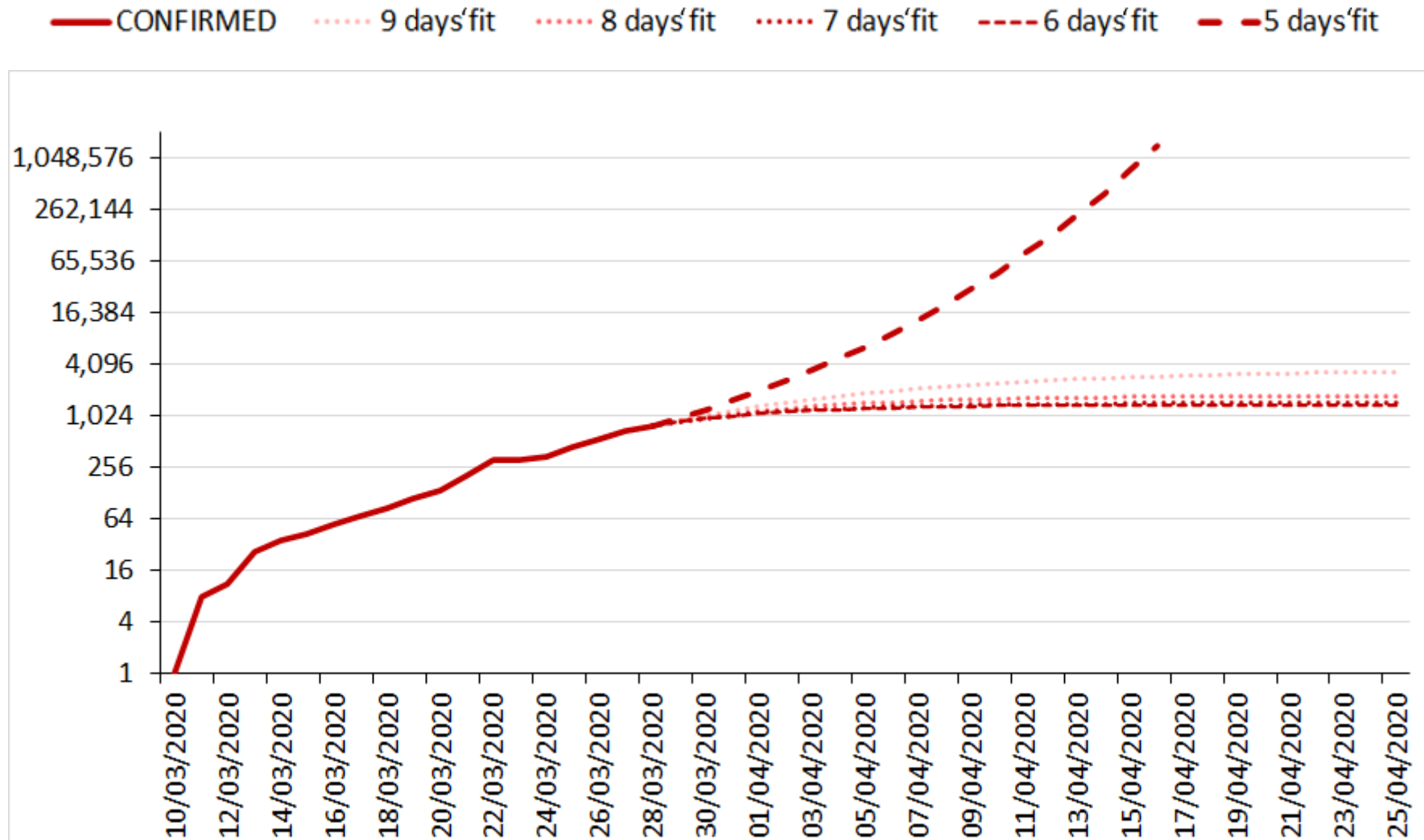
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Pakistan



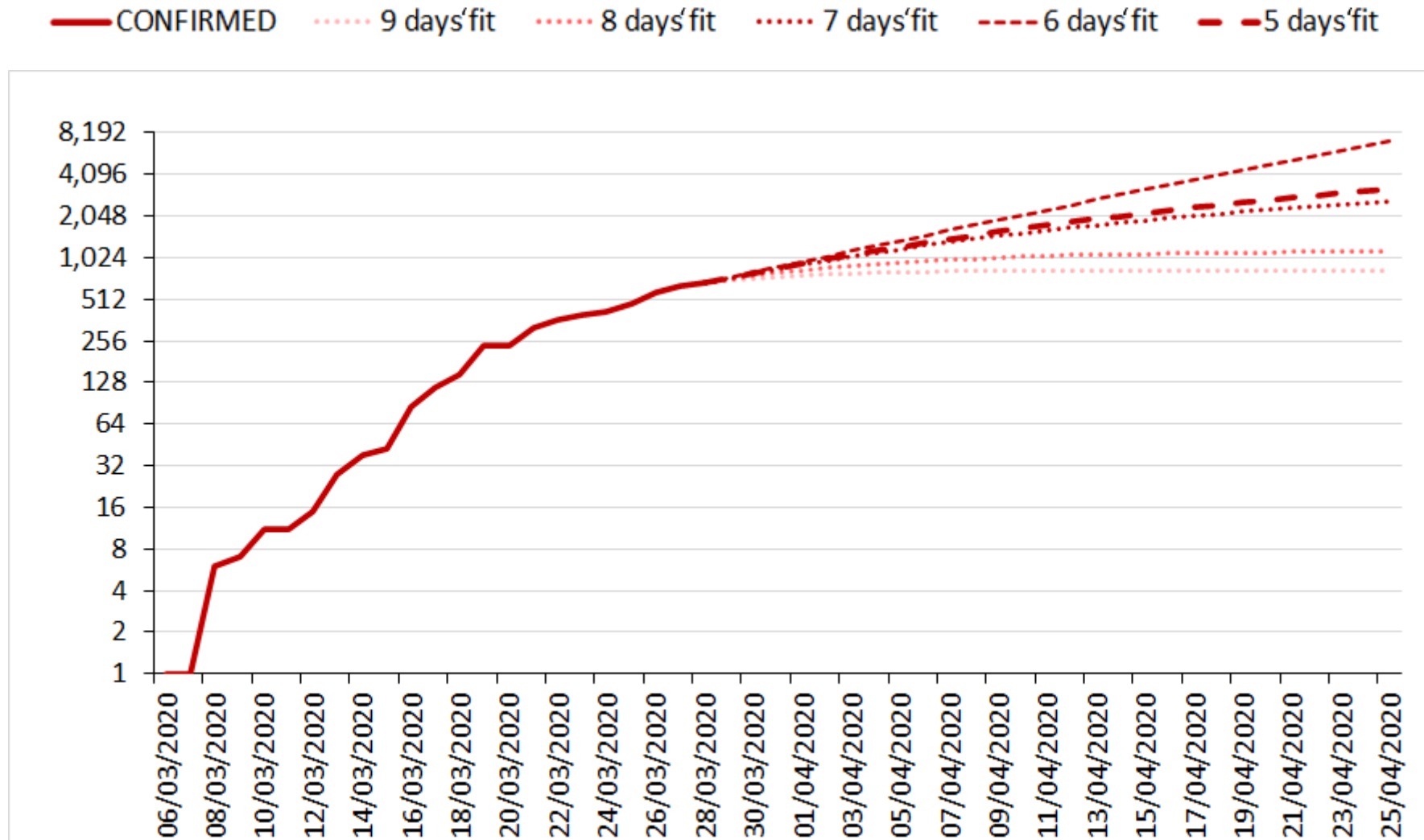
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Panama



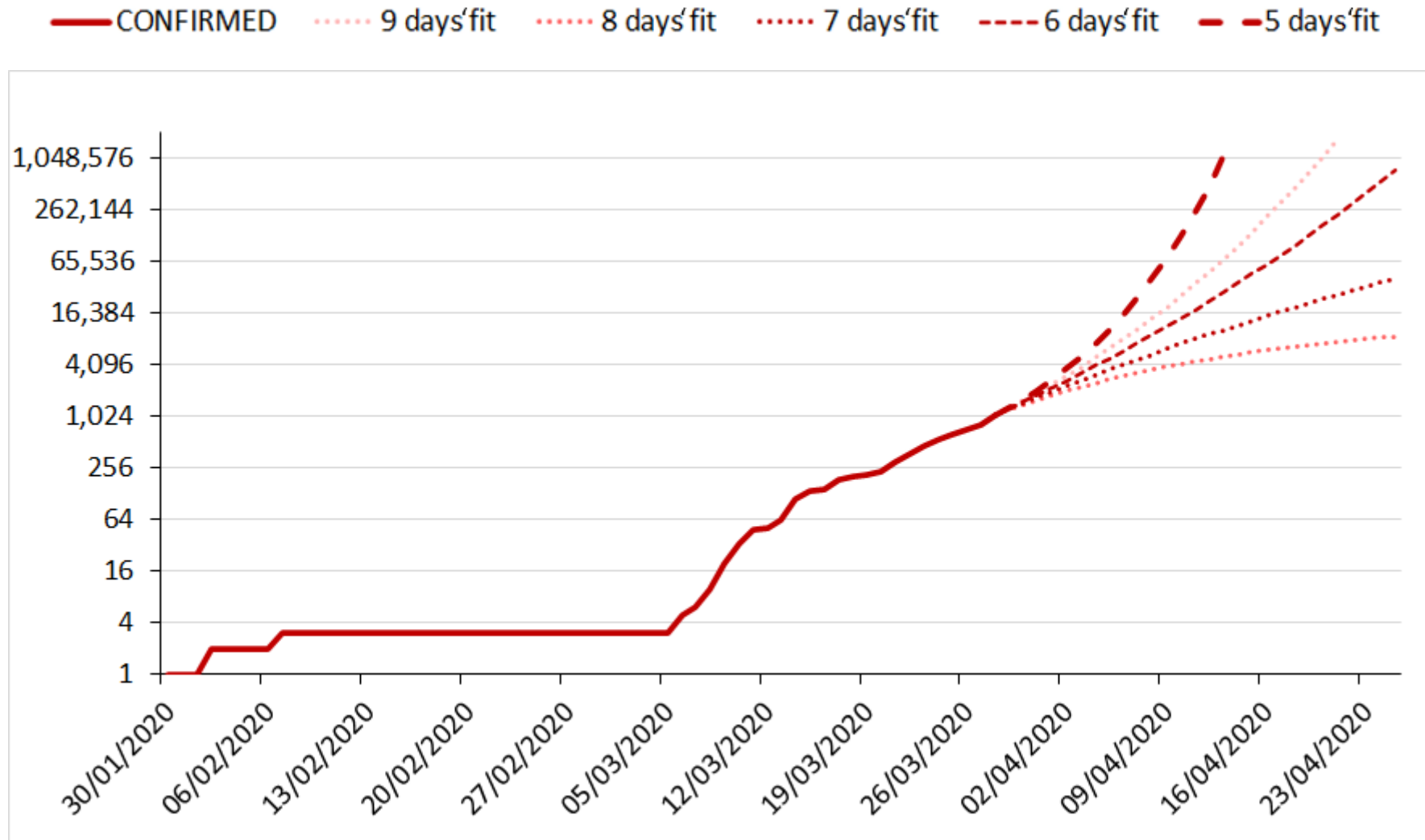
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Peru



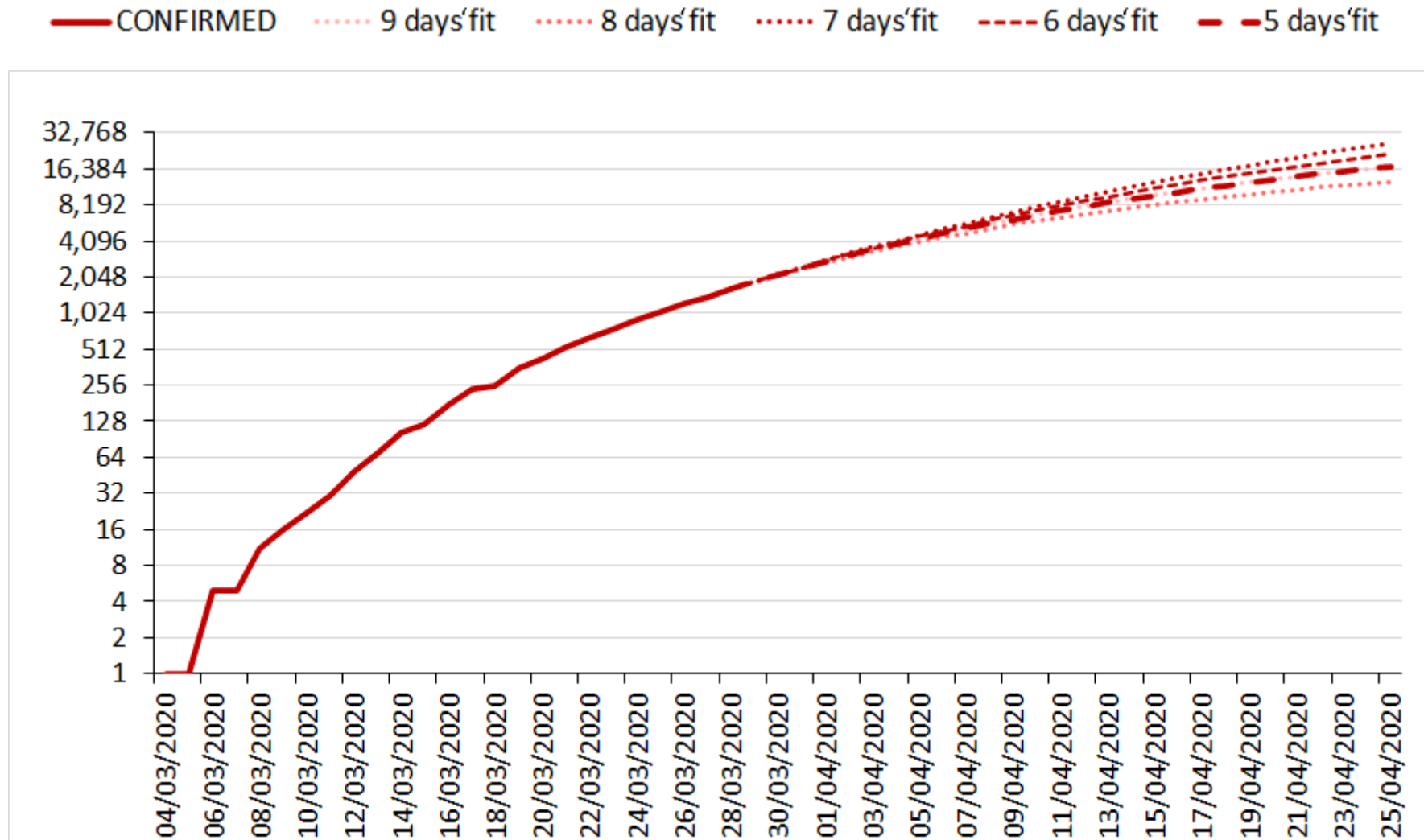
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Philippines



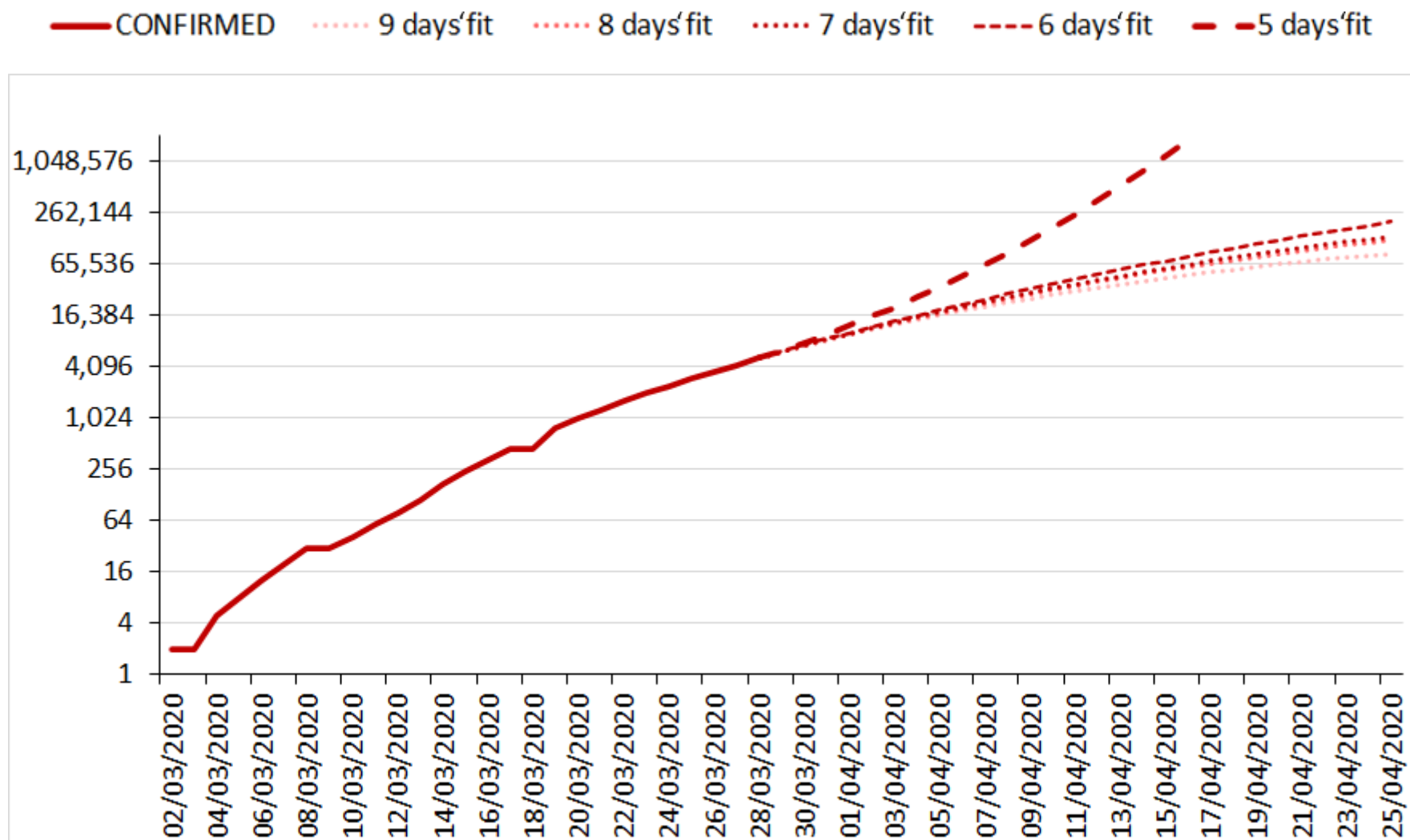
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Poland



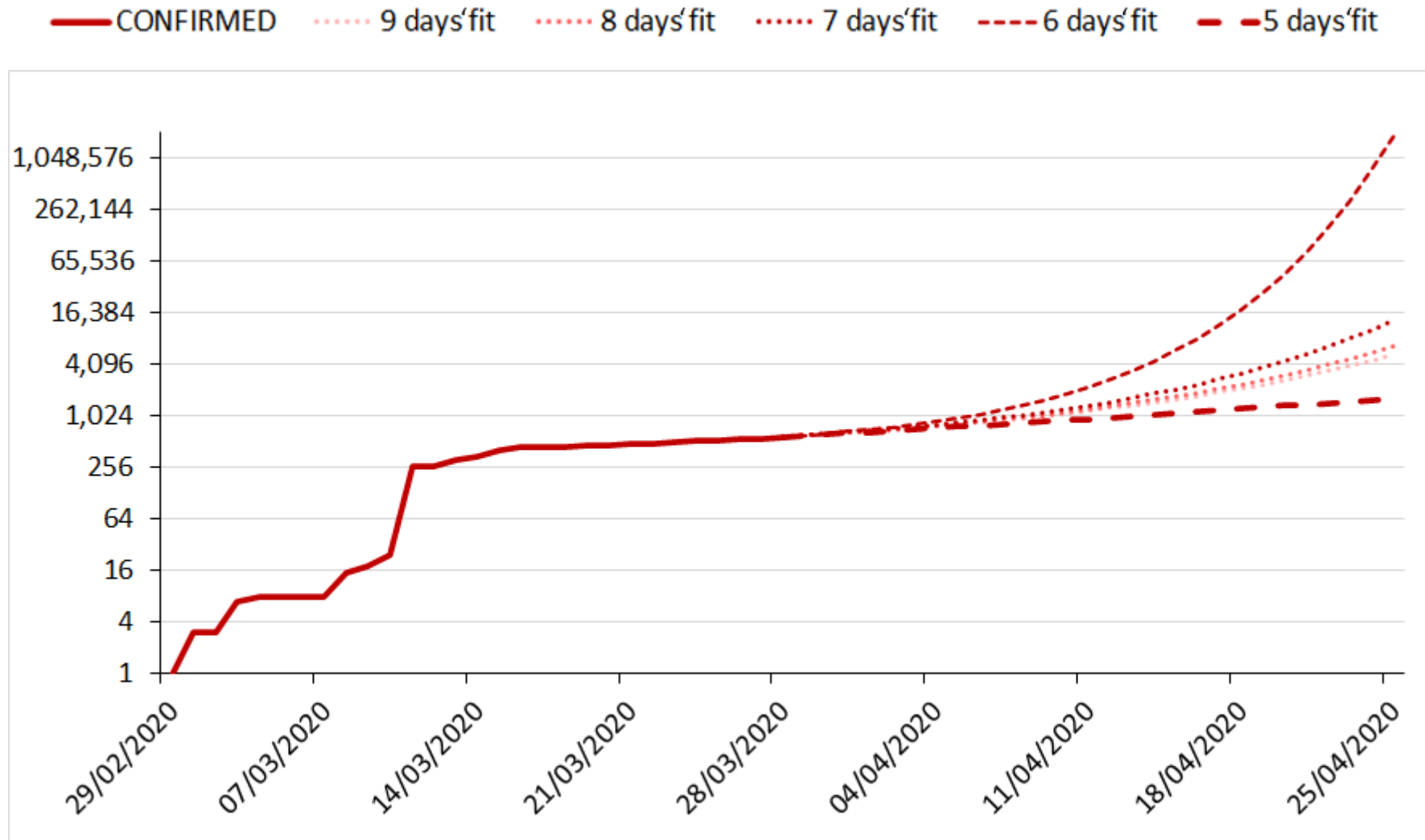
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Portugal



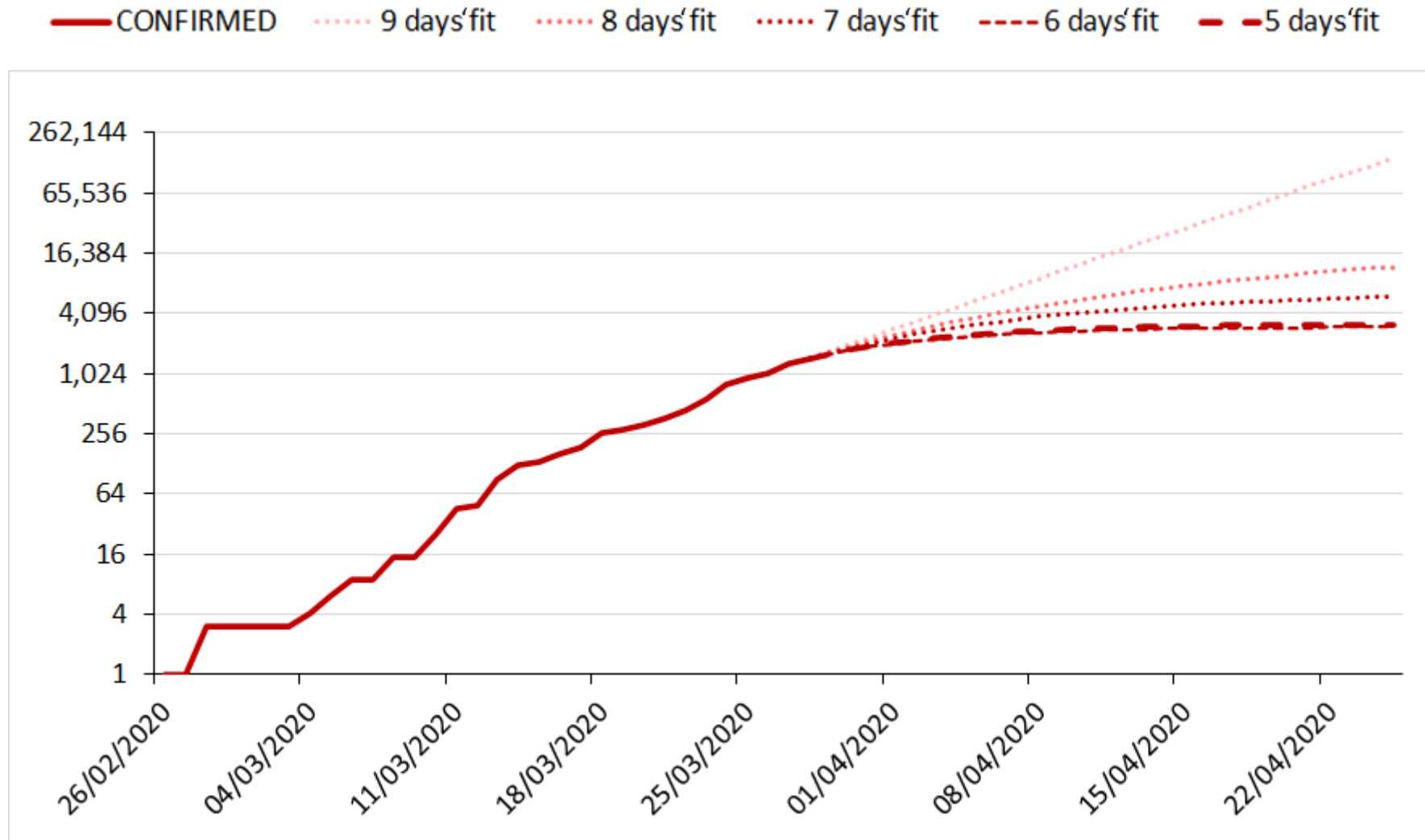
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Qatar



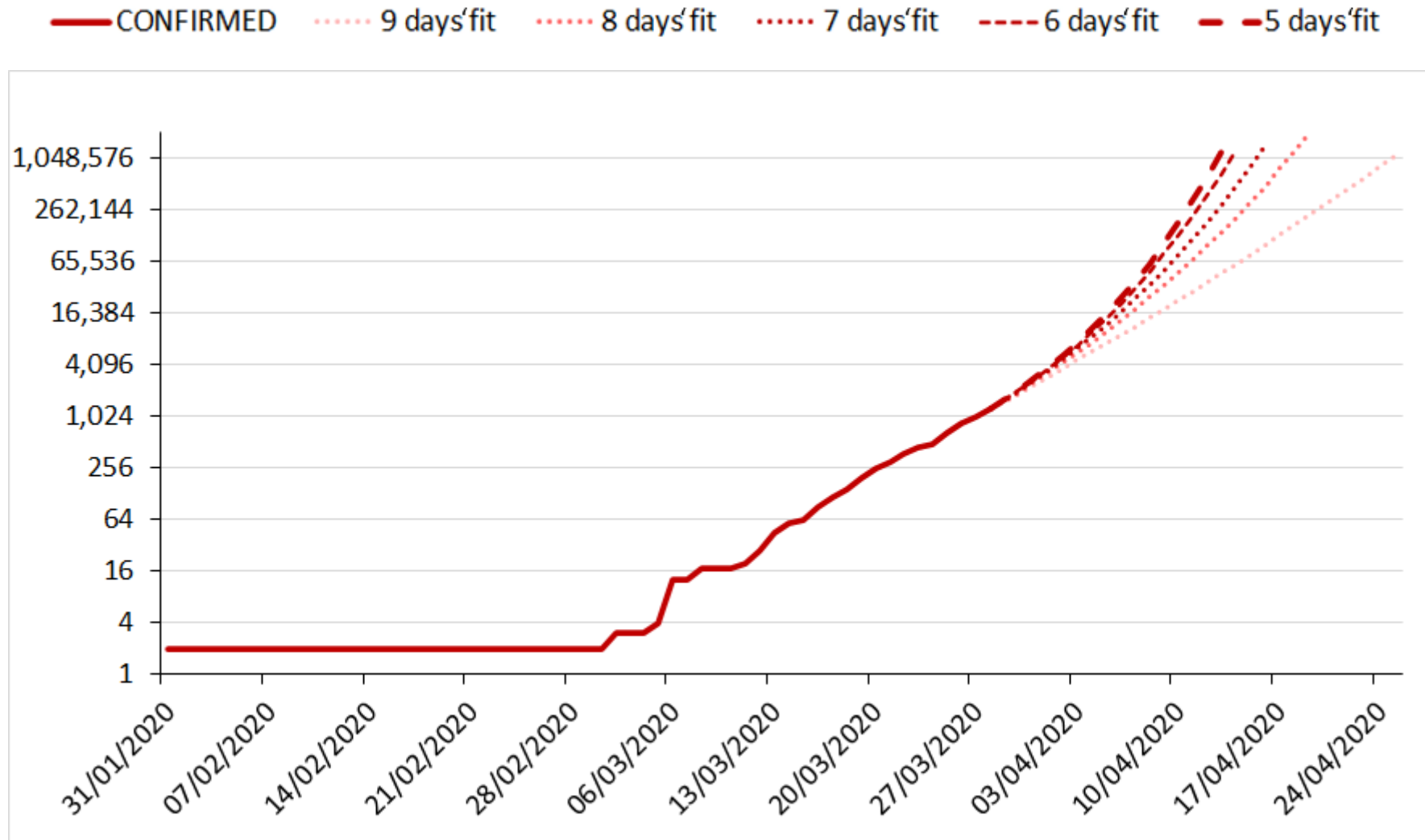
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Romania



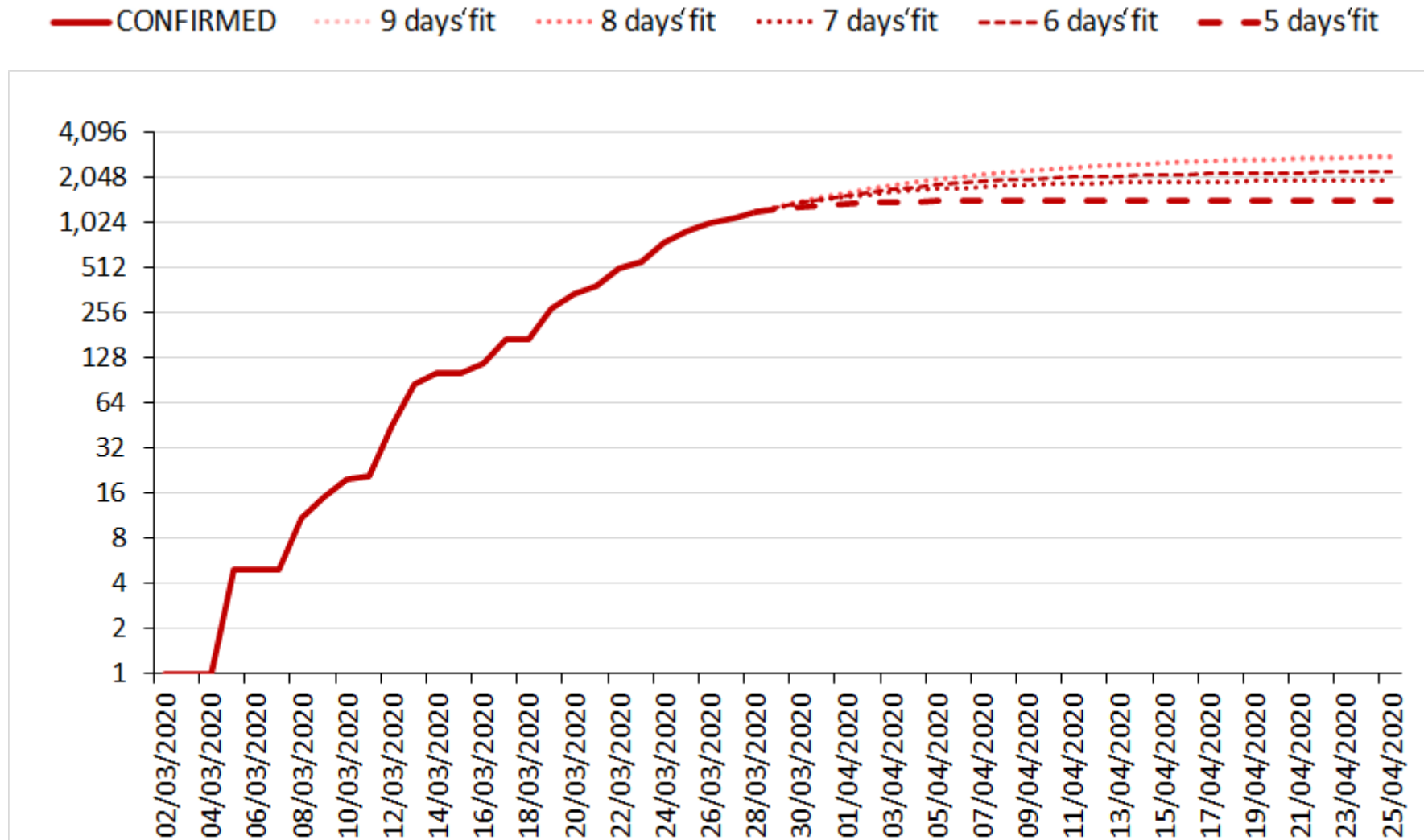
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Russia



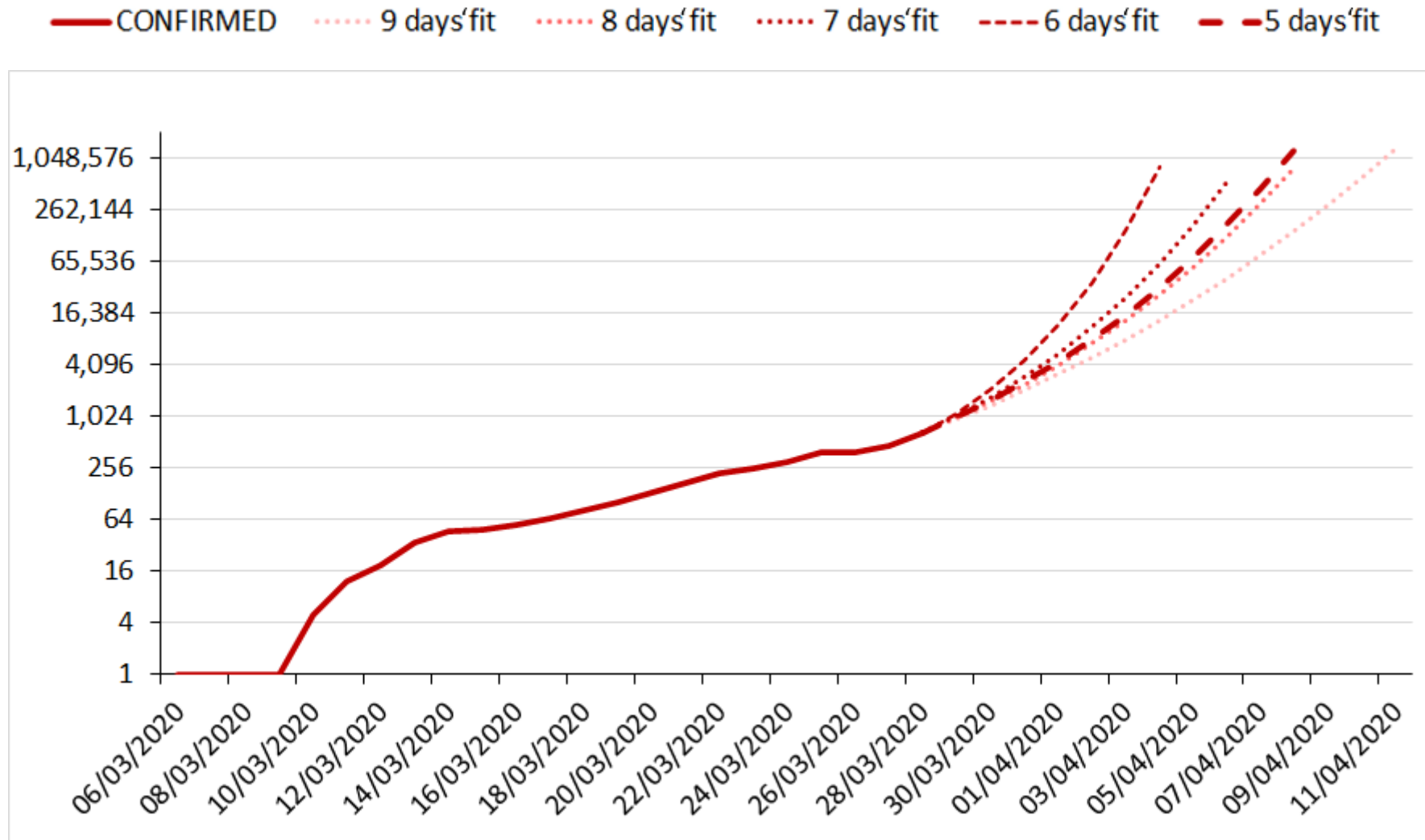
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Saudi Arabia



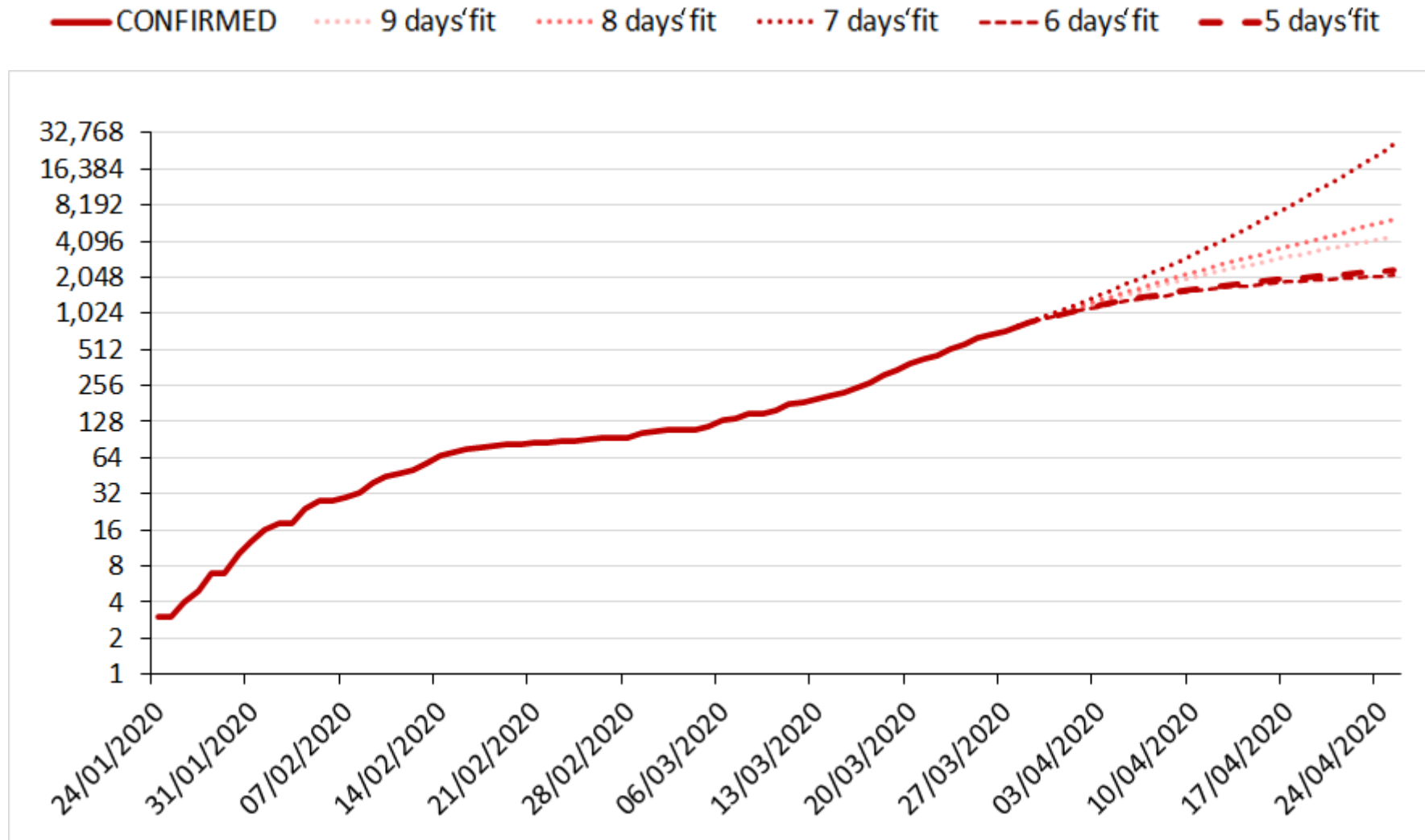
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Serbia



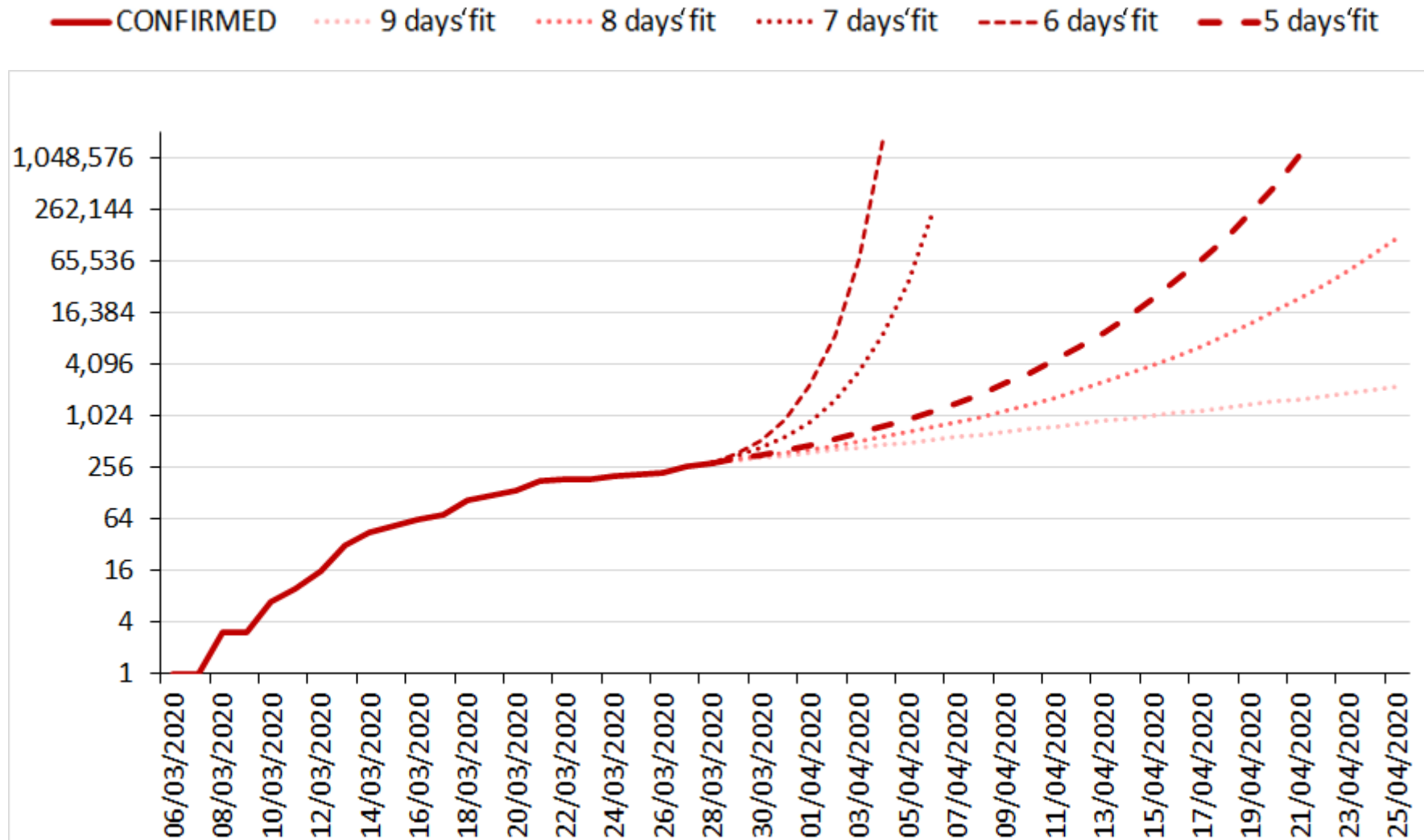
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Singapore



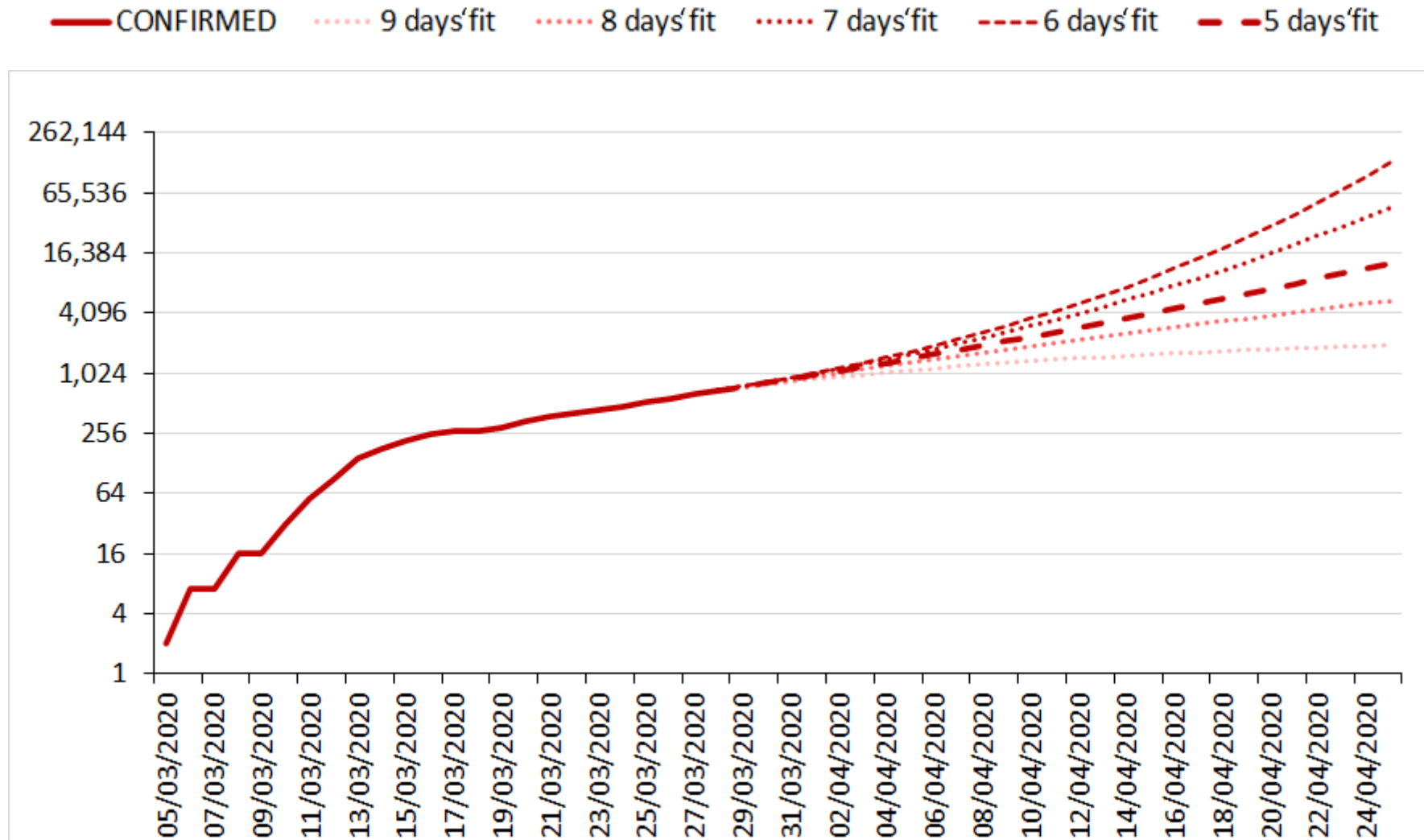
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Slovakia



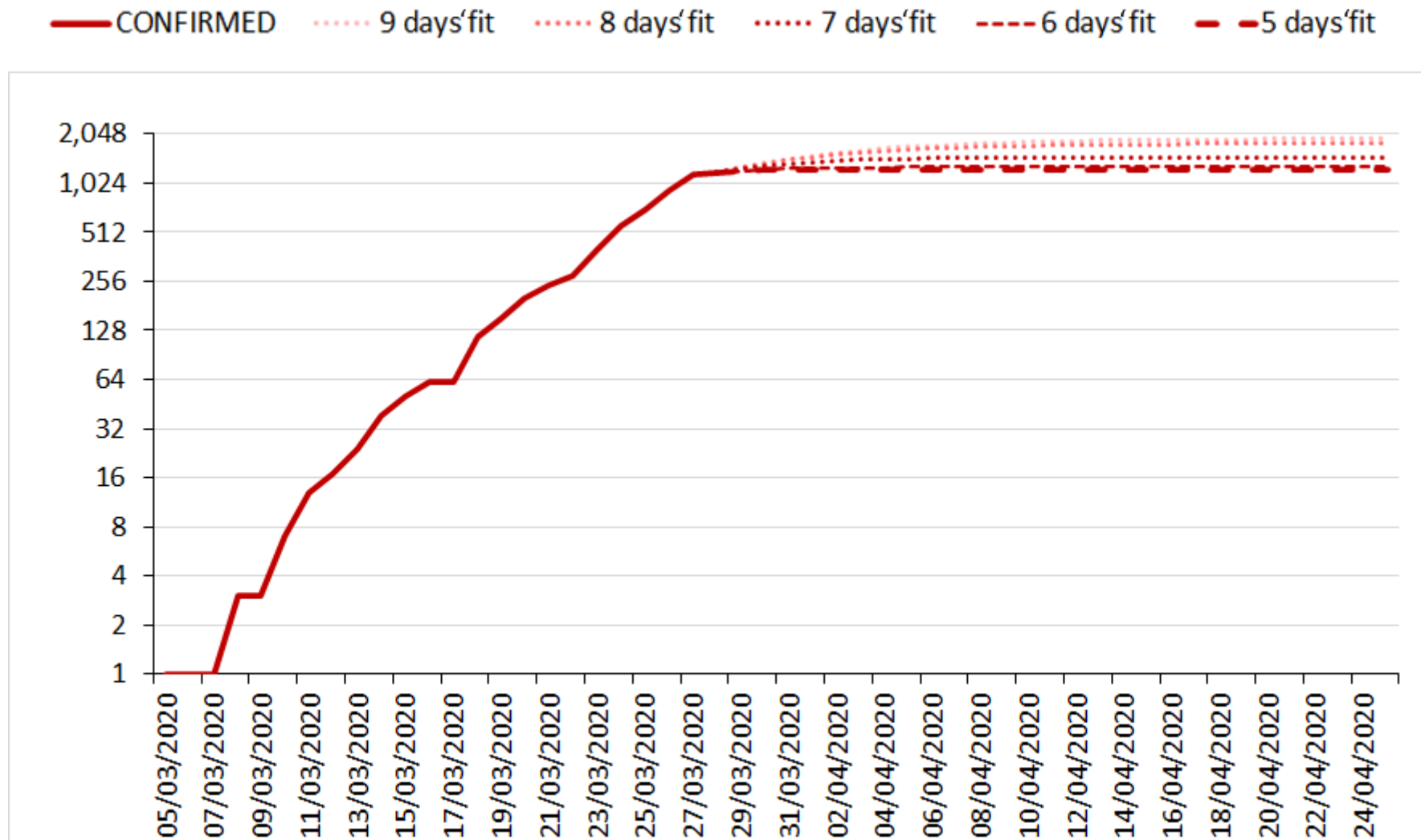
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Slovenia



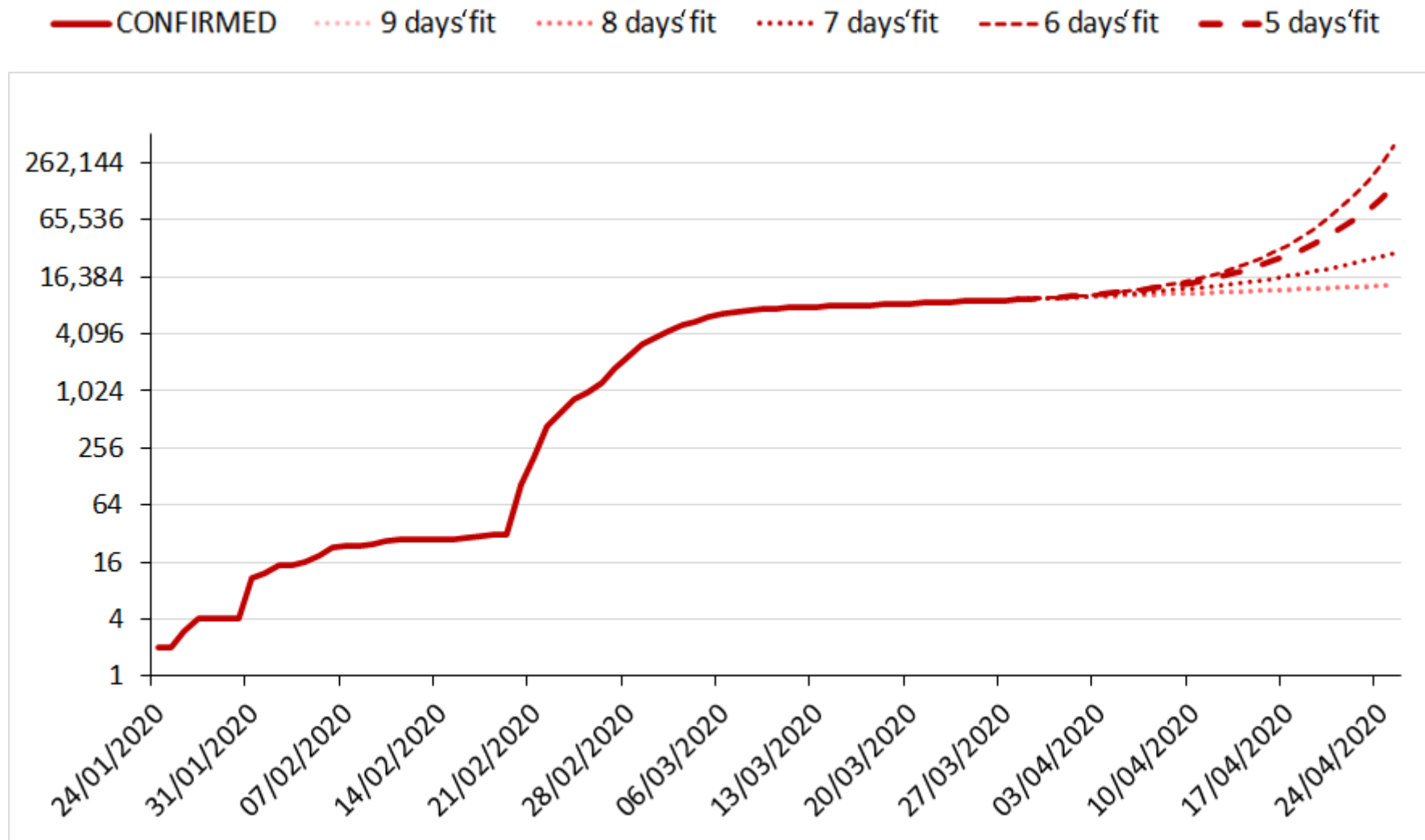
Data: The Johns Hopkins University, Politolog.com

South Africa



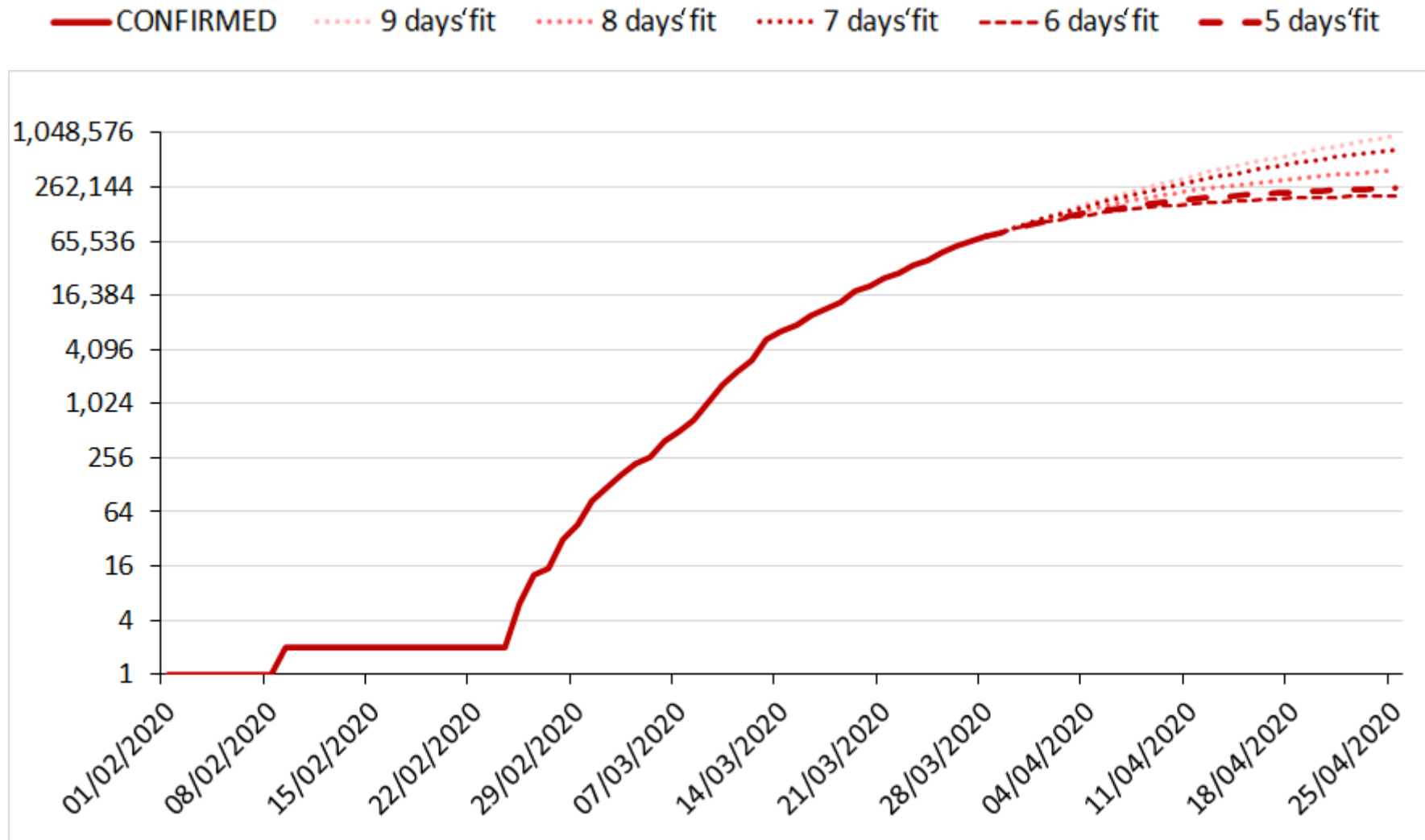
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South Korea



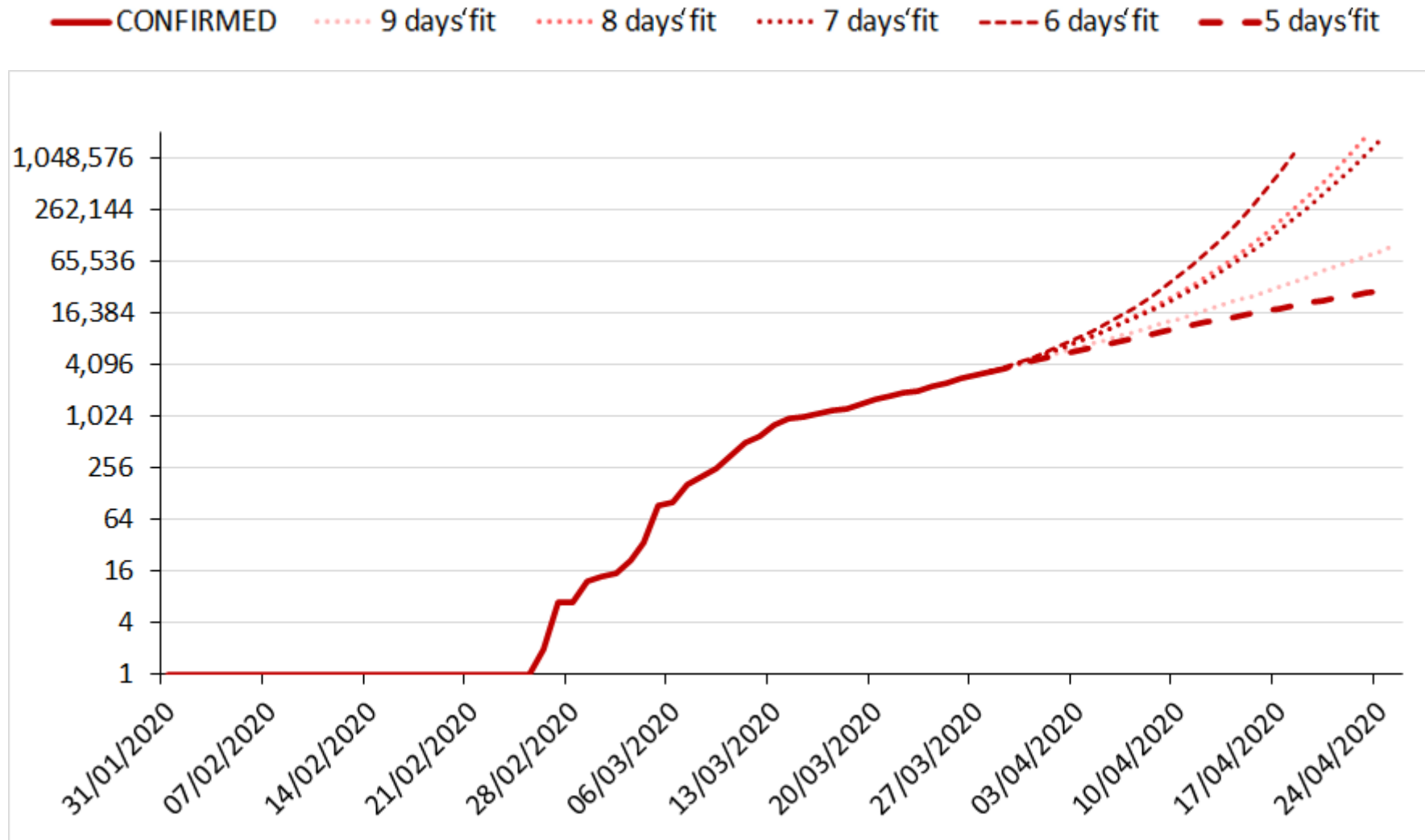
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Spain



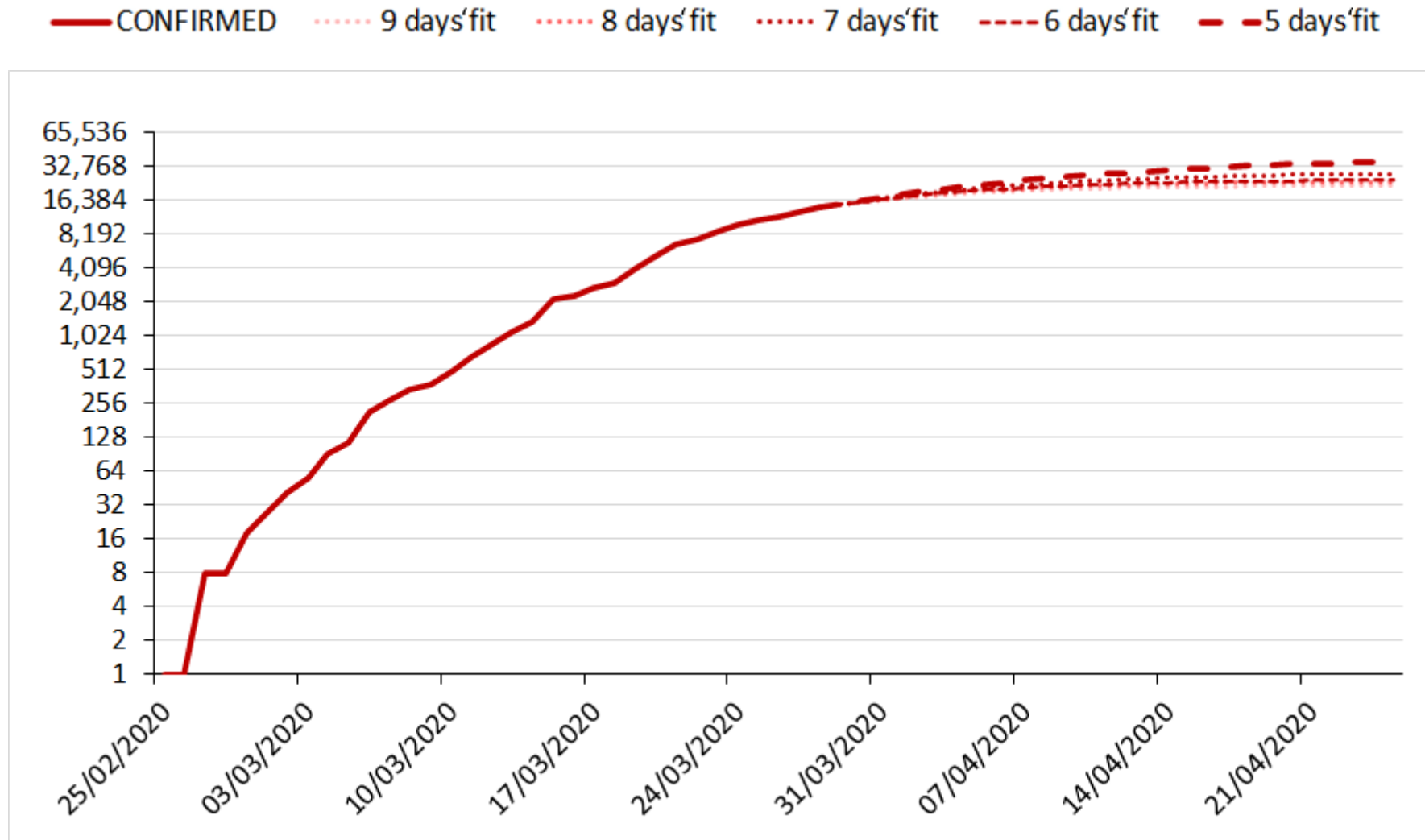
Data: The Johns Hopkins University, Politolog.com

Sweden



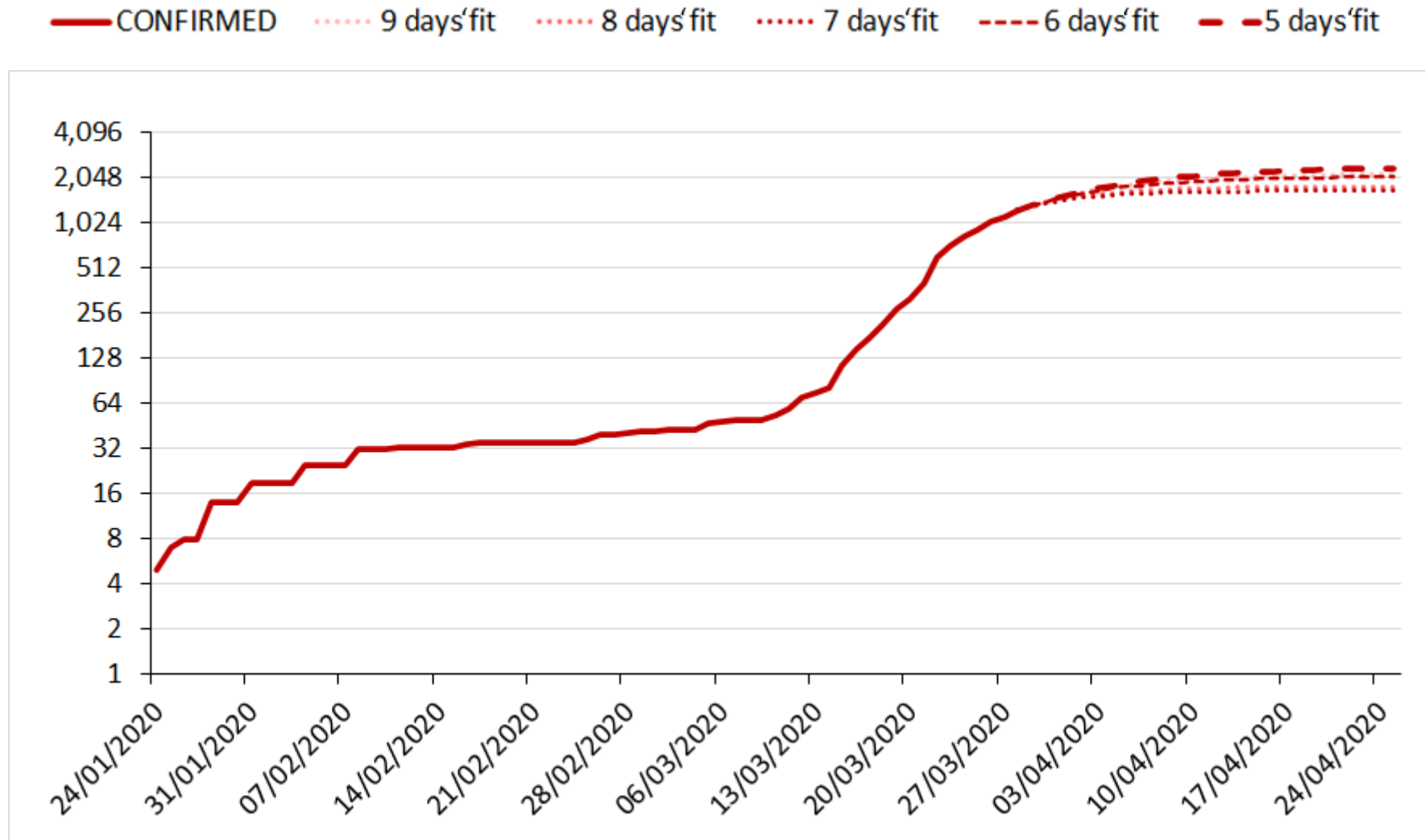
Data: The Johns Hopkins University, Politolog.com

Switzerland



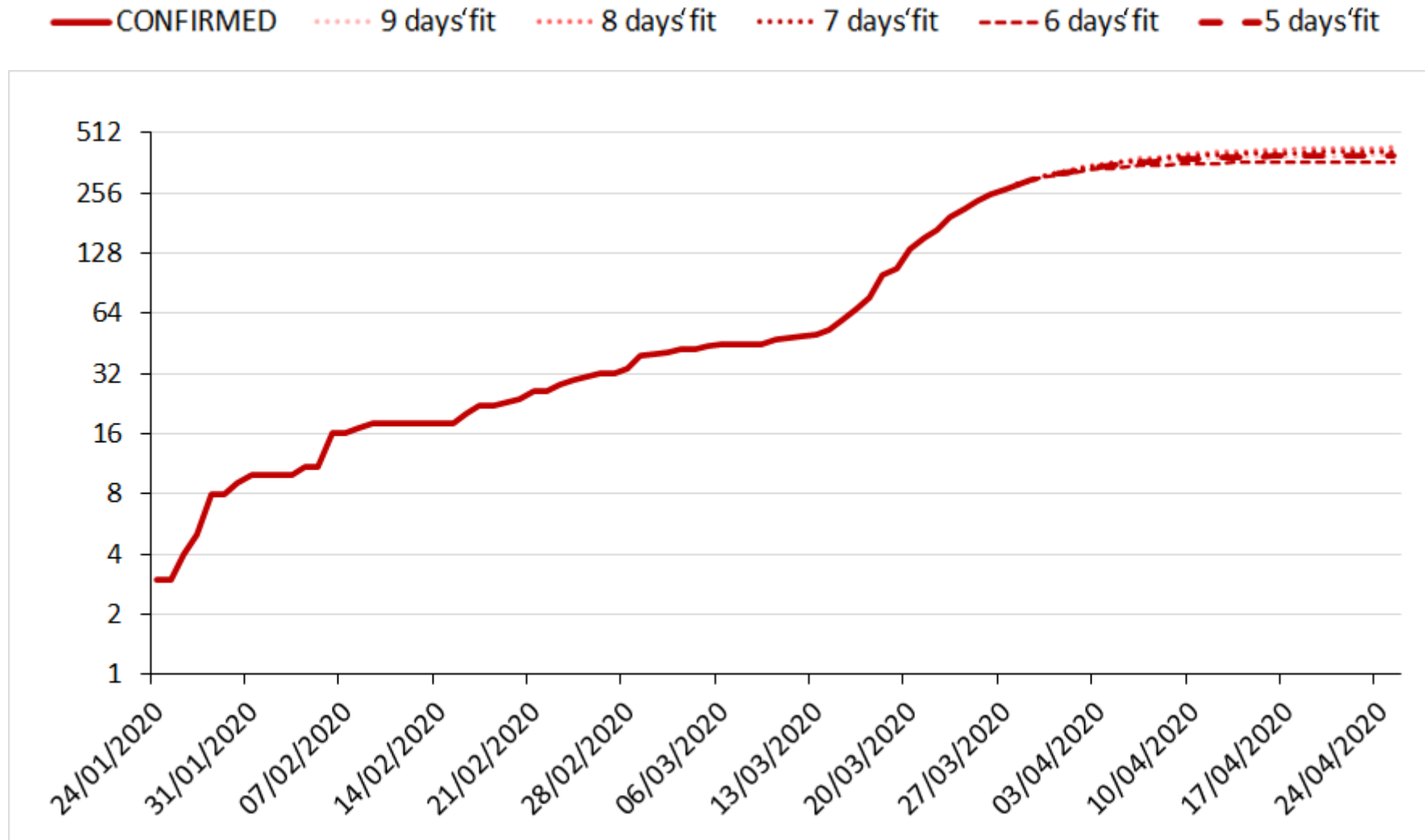
Data: The Johns Hopkins University, Politolog.com

Thailand



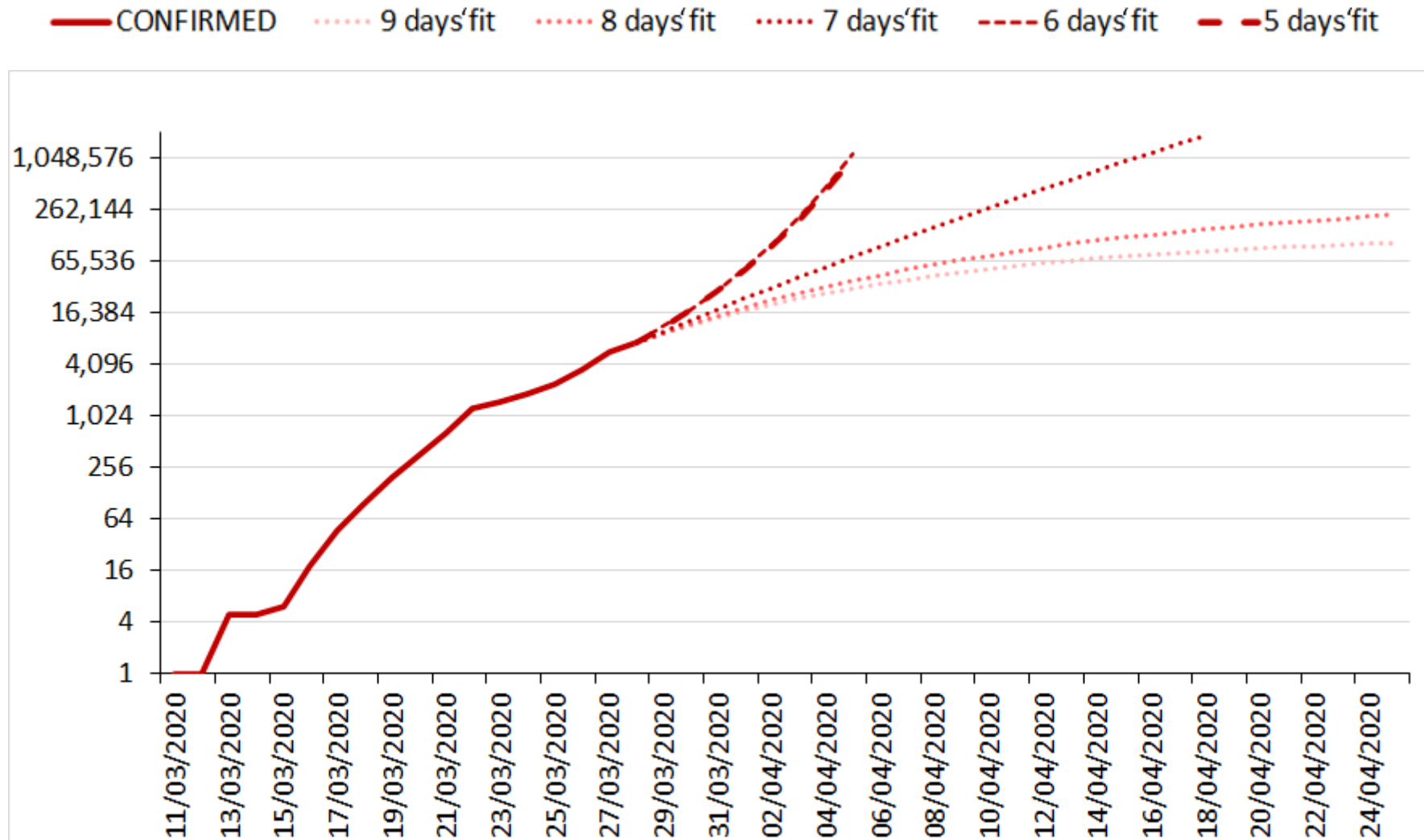
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Taiwan



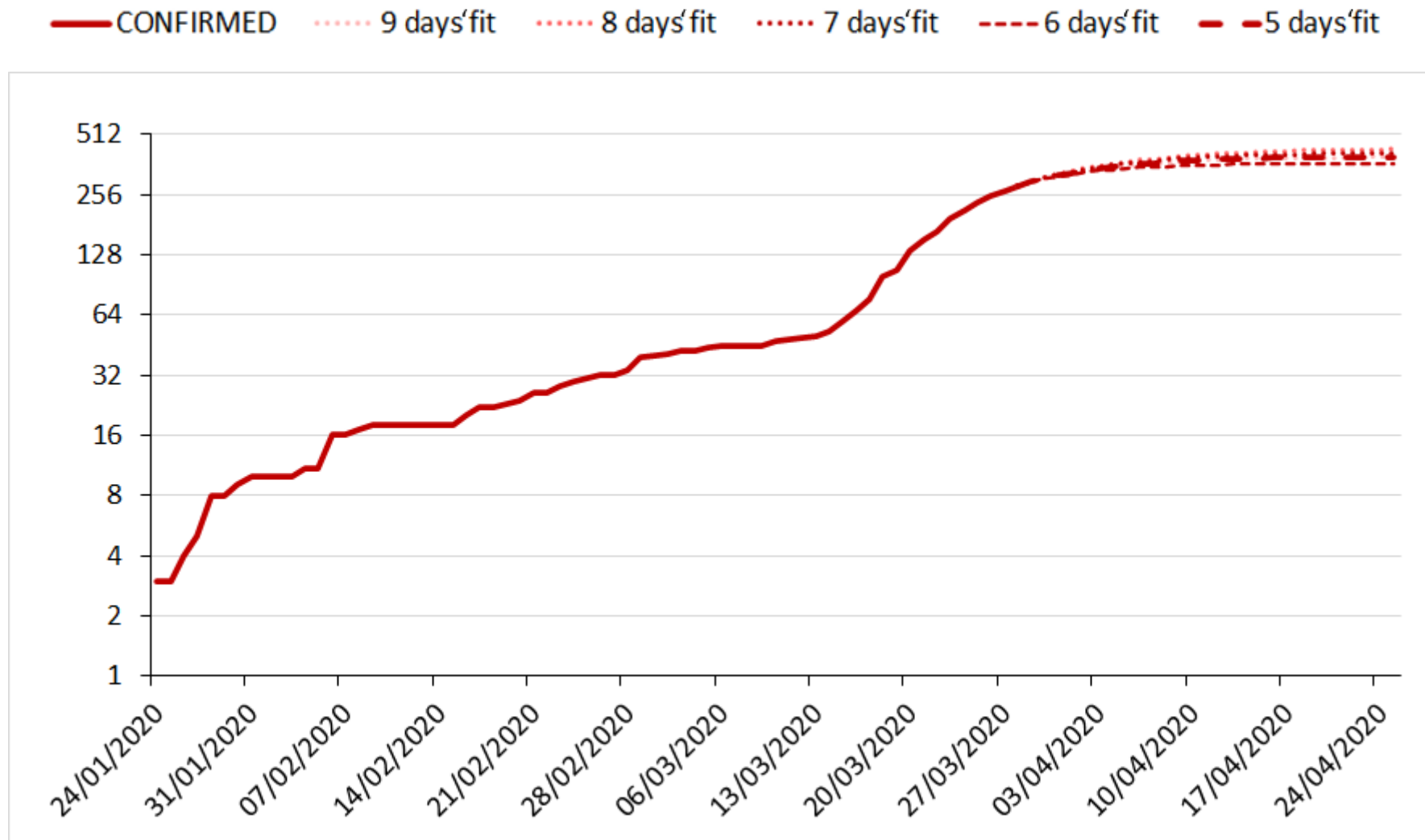
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Turkey



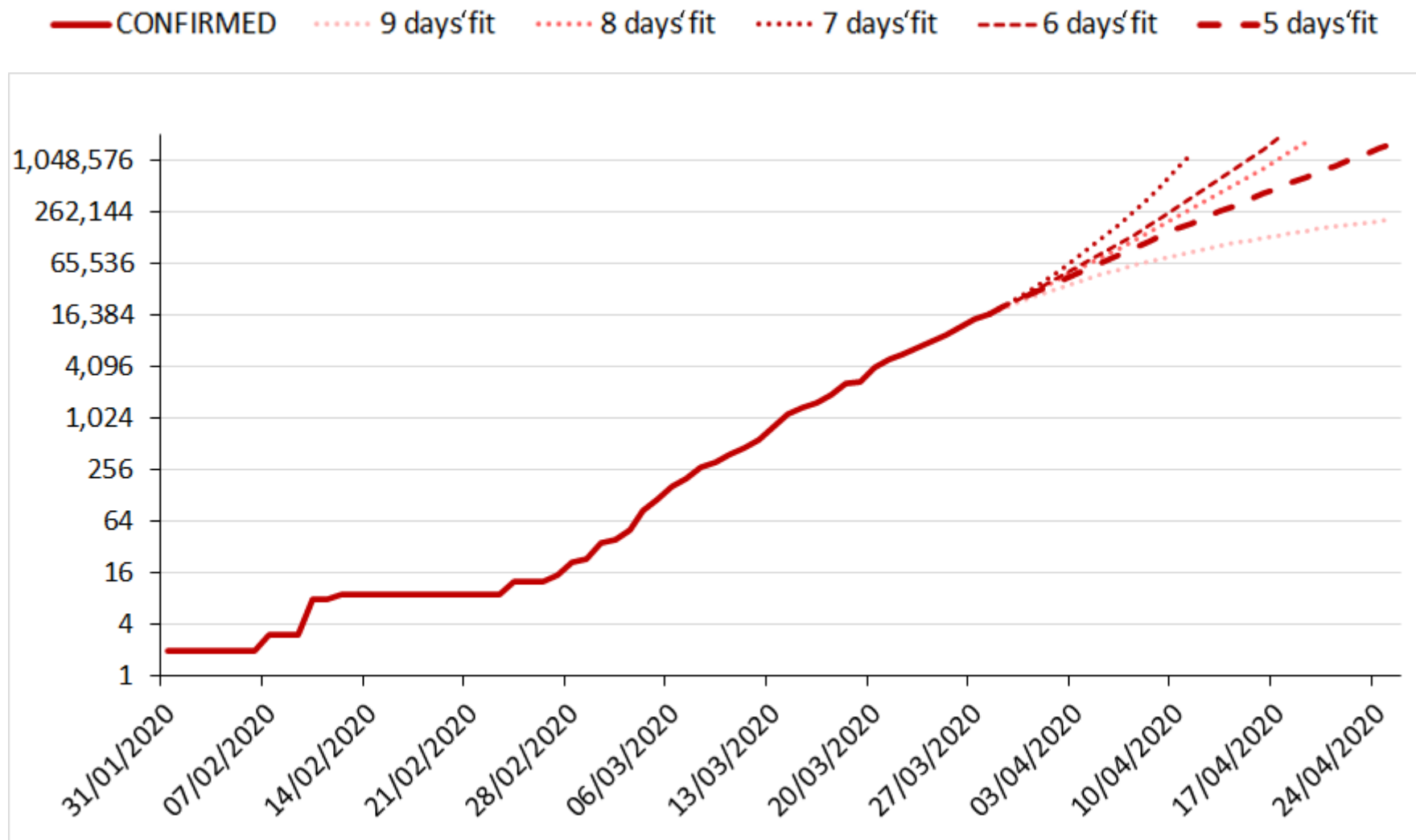
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Ukraine



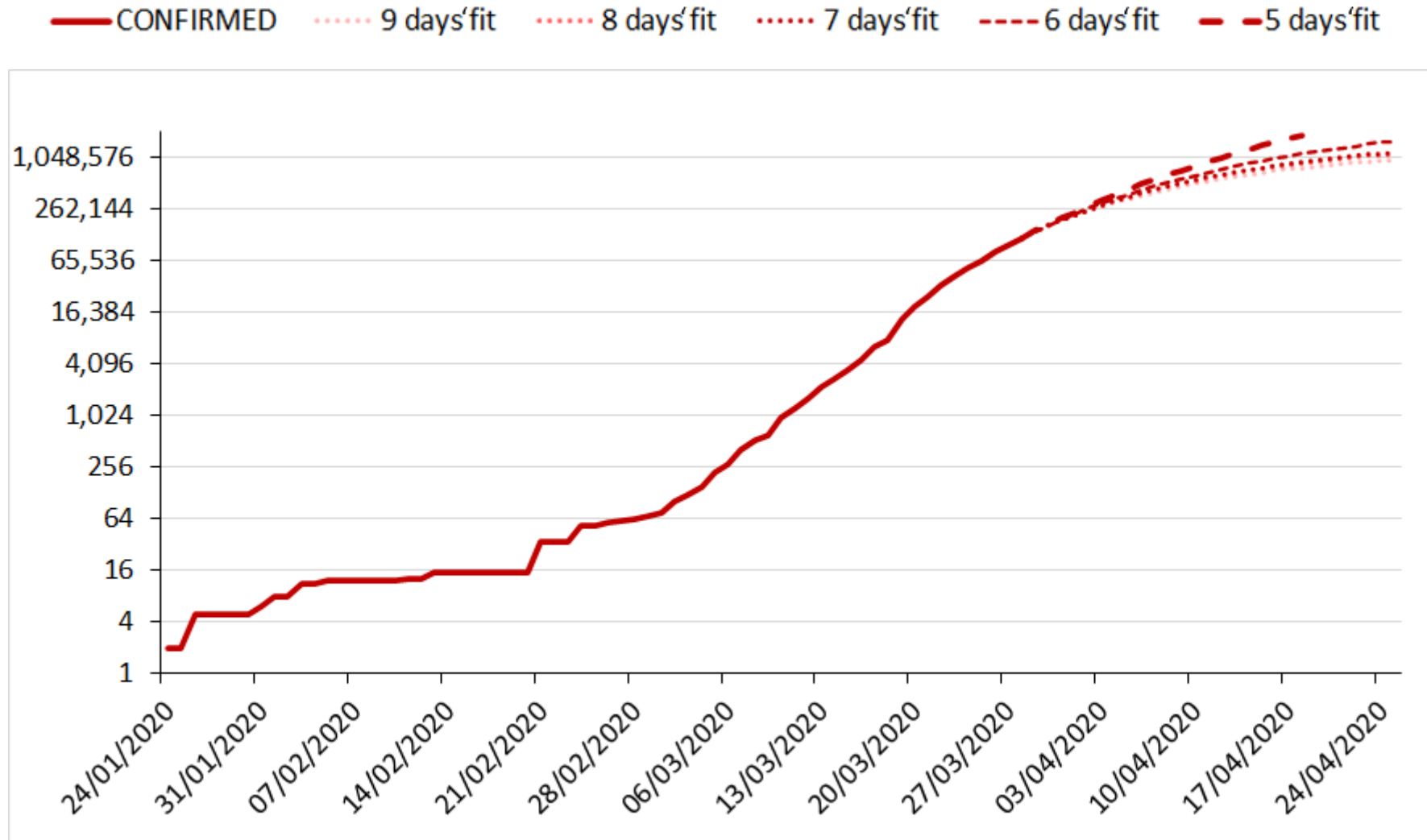
Data: The Johns Hopkins University, Politolog.com

United Kingdom



Data: The Johns Hopkins University, Politolog.com

USA



Data: The Johns Hopkins University, Politolog.com

Gavekal Intelligence Software

Contact

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