

Additional information

Other forecast performance indicator:

Mean Absolute Error (MAE):

$$MAE = \frac{\sum_{t=T+1}^{T+N} |\hat{y}_t - y_t|}{N} \quad (2A)$$

Mean Absolute Percentage Error (MAPE):

$$MSE = \frac{\sum_{t=T+1}^{T+N} (\hat{y}_t - y_t)^2}{N} \quad (3A)$$

Symmetric Mean Absolute Percentage Error (SMAPE):

$$SMAPE = \frac{\sum_{t=T+1}^{T+N} |\hat{y}_t - y_t| / y_t}{(|y_t| + |\hat{y}_t|) / 2} \times \frac{100}{N} \quad (4A)$$

Table A.1. Out-of-sample forecast performance for deaths

Lags	RMSE	MAE	MAPE	SMAPE
1	1462.45	1382.47	41.25	52.37
2	1284.91	1206.2	35.84	44.03
3	1075.51	1006.51	29.85	35.34
4	885.1	823.97	24.36	27.92
5	656.56	601.78	17.62	19.45
6	357.85	280.45	7.59	8.04
7	216.25	197.38	6.68	6.42
8	646.64	635.86	19.59	17.84
9	1117.68	1080.37	32.75	28.11
10	1545.14	1465.83	43.82	35.83

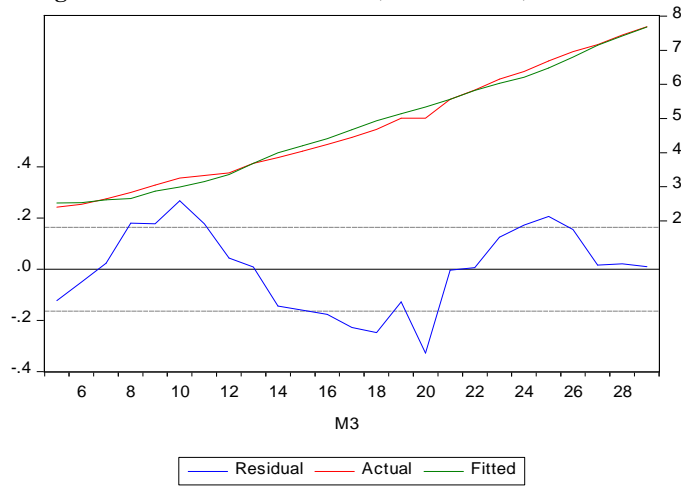
Sources: authors' own compilation. Selected lag in bold.

Table A2. Estimation output for equation (1)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG(CASES(-7))	0.843878	0.016864	50.03987	0.0000
C	-0.920055	0.117526	-7.828543	0.0000
R-squared	0.990898	Mean dependent var	4.728880	
Adjusted R-squared	0.990503	S.D. dependent var	1.677035	
S.E. of regression	0.163435	Akaike info criterion	-0.708180	
Sum squared resid	0.614356	Schwarz criterion	-0.610670	
Log likelihood	10.85225	Hannan-Quinn criter.	-0.681134	
F-statistic	2503.989	Durbin-Watson stat	0.482811	
Prob(F-statistic)	0.000000			

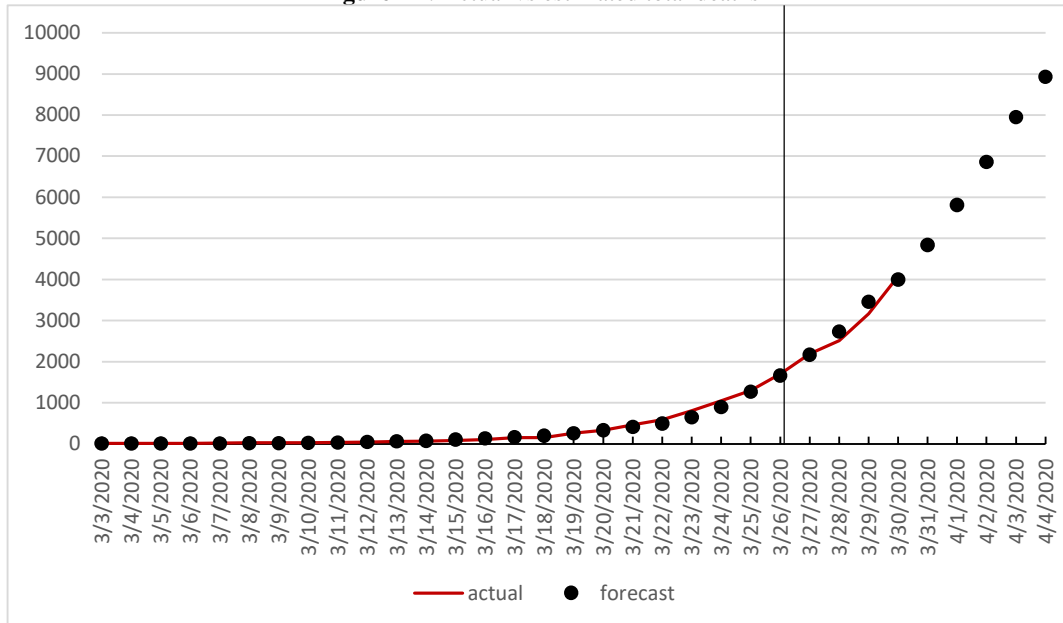
Source: Authors' own compilation

Figure A2. Model estimate values, actual values, and residuals



Source: authors' own compilation

Figure A1. Actual vs estimated total deaths



Source: authors' own compilation