Table 1 ARIMA model selection using Bayesian Information Criteria (BIC).

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | ARIMA(0,1,0) | ARIMA(1,0,0) | ARIMA(1,0,1) | ARIMA(1,1,0) | ARIMA(1,1,1) |
| World | BIC |  | **-18202.65** | -18196.57 | -18156.74 | -18149.01 |
| Top 20 vaccinated countries | BIC | -4273.59 | -4281.117 | **-4275.271** | -4267.372 | -4261.153 |
| Rest of Top 20 vaccinated countries | BIC | -13970.19 | **-13997.51** | -13991.24 | -13962.78 | -13955.31 |
| Less than 50% vaccinated countries | BIC | -1965.627 | **-1980.05** | -1974.772 | -1960.389 | -1969.822 |
| Above 50% vaccinated countries | BIC | -15823.85 | **-15860** | -15853.9 | -15816.3 | -15808.7 |

Table 2 ARIMAX models.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | World | Top 20 vaccinated countries | Rest of Top 20 vaccinated countries | Above 50% vaccinated countries | Less than 50% vaccinated countries |
| people aged 65 and above | **0.000368568732** | **0.00106180089** | **0.00021470502** | **0.001225278082** | **0.000358961525** |
| GHSI | **0.000185112808** | **0.00034957936** | **0.00015732750** | -0.000044033040 | **0.000189319520** |
| GDP | **-0.000000167732** | -0.00000012064 | **-0.00000014266** | **-0.000000165433** | **-0.00000018061** |
| WGI | **0.000770478092** | **-0.00426202159** | 0.00068882842 | **-0.005620271789** | **0.000802896329** |
| Vaccination (/100) | -0.000014024789 | -0.00001150010 | 0.00000261191 | -0.000059231224 | 0.000007575635 |

\*Bold = Significant