

An expert judgment model to predict early stages of the COVID-19 pandemic in the United States

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Dep. Variable:	Expert specific + R.E. minus equal weights				R-squared:	0.435
Model:	OLS				Adj. R-squared:	0.416
Method:	Least Squares				F-statistic:	22.46
Date:	Sat, 02 Apr 2022				Prob (F-statistic):	1.24e-116
Time:	12:20:38				Log-Likelihood:	3425.6
No. Observations:	1207				AIC:	-6769.
Expert id	β	s.e.(β)	t	P> t	[0.025	0.975]
0	0.0061	0.002	2.853	0.004	0.002	0.010
1	0.0013	0.005	0.247	0.805	-0.009	0.012
2	0.0018	0.002	0.993	0.321	-0.002	0.005
3	-0.0126	0.002	-6.668	0.000	-0.016	-0.009
4	0.0483	0.002	24.180	0.000	0.044	0.052
5	-0.0036	0.003	-1.165	0.244	-0.010	0.002
6	-0.0078	0.002	-4.357	0.000	-0.011	-0.004
7	0.0237	0.003	7.157	0.000	0.017	0.030
8	-0.0072	0.002	-3.007	0.003	-0.012	-0.003
9	-0.0043	0.002	-2.003	0.045	-0.009	-8.85e-05
10	0	0.008	0	1.000	-0.016	0.016
11	-0.0049	0.005	-0.959	0.338	-0.015	0.005
12	-0.0078	0.002	-4.308	0.000	-0.011	-0.004
13	-0.0074	0.002	-4.136	0.000	-0.011	-0.004
14	0	0.008	0	1.000	-0.016	0.016
15	-0.0003	0.005	-0.072	0.942	-0.009	0.009
16	-0.0105	0.002	-5.290	0.000	-0.014	-0.007
17	-0.0057	0.002	-2.727	0.006	-0.010	-0.002
18	-0.0031	0.004	-0.810	0.418	-0.011	0.004
19	0.0015	0.002	0.808	0.419	-0.002	0.005
20	0.0011	0.007	0.153	0.879	-0.013	0.015
21	-0.0025	0.004	-0.614	0.539	-0.010	0.005
22	0.0124	0.005	2.727	0.006	0.003	0.021
23	-0.0051	0.003	-1.553	0.121	-0.012	0.001
24	0.0109	0.002	5.459	0.000	0.007	0.015
25	-0.0021	0.003	-0.766	0.444	-0.008	0.003
26	-0.0066	0.003	-2.507	0.012	-0.012	-0.001
27	-0.0076	0.002	-3.459	0.001	-0.012	-0.003
28	0.0006	0.002	0.268	0.789	-0.004	0.005
29	-0.0009	0.003	-0.272	0.785	-0.007	0.005
30	-0.0068	0.003	-2.641	0.008	-0.012	-0.002
31	-0.0014	0.003	-0.439	0.661	-0.008	0.005
32	0.0025	0.003	0.780	0.435	-0.004	0.009
33	0.0116	0.002	5.561	0.000	0.007	0.016
34	-0.0049	0.003	-1.493	0.136	-0.011	0.002
35	-0.0006	0.005	-0.140	0.888	-0.010	0.008
36	-0.0035	0.005	-0.729	0.466	-0.013	0.006
37	0.0048	0.005	1.053	0.292	-0.004	0.014
38	-0.0008	0.004	-0.224	0.823	-0.008	0.006
39	-0.0015	0.005	-0.268	0.789	-0.012	0.009
40	-0.0024	0.003	-0.744	0.457	-0.009	0.004

Table 5. Linear regression that compares the weights assigned to each expert using the expert-specific plus relative entropy performance weighting and assigning experts equal weights. A positive (negative) estimate of β for expert i indicates an equal weighted ensemble assigned less (more) weight than this performance based ensemble over all surveys.