## Table S7: Relationship between Temperature, Relative Humidity, and *R* Values: Check with the Serial Interval of Mean 7.5 Days and Standard Deviation 3.4 day (2020)[2] for Chinese Cities

This table utilizes the estimated serial interval in a previous paper (mean 7.5 days, std 3.4 days)[2] to construct R values for China. The table reports the coefficients of the effective reproductive number, R values, on an intercept, temperature, relative humidity and control variables in the Fama-MacBeth regressions.

	Overall	Before Lockdown (Jan 2	24)After Lockdown (Jan 24)
R2	0.2843	0.2009	0.3074
Temperature			
coef	-0.0267	-0.0430	-0.0222
95%CI	[-0.0486,-0.0048]	[-0.0694,-0.0165]	[-0.0456,0.0012]
std.err	0.0106	0.0095	0.0111
t-stat	-2.53	-4.52	-2.00
p-value	0.019	0.011	0.061
Relative Humidity			
coef	-0.0076	-0.0104	-0.0068
95%CI	[-0.0121,-0.0031]	[-0.0166,-0.0041]	[-0.0121,-0.0015]
std.err	0.0022	0.0023	0.0025
t-stat	-3.47	-4.59	-2.69
p-value	0.002	0.010	0.015
Population Density			
coef	0.0223	0.1673	-0.0180
95%CI	[-0.0672,0.1118]	[0.0350,0.2996]	[-0.0825,0.0465]
std.err	0.0432	0.0477	0.0306
t-stat	0.52	3.51	-0.59
p-value	0.611	0.025	0.563
Percentage over 65			
coef	-0.7581	0.3976	-1.0791

	Overall	Before Lockdown (Jan 24)After Lockdown (Jan 24)	
95%CI	[-3.7515,2.2353]	[-2.9474,3.7426]	[-4.8094,2.6511]
std.err	1.4434	1.2048	1.7680
t-stat	-0.53	0.33	-0.61
p-value	0.605	0.758	0.550
GDP per capita			
coef	0.0058	-0.0291	0.0154
95%CI	[-0.0246,0.0361]	[-0.0390,-0.0193]	[-0.0124,0.0433]
std.err	0.0147	0.0035	0.0132
t-stat	0.39	-8.21	1.17
p-value	0.698	0.001	0.258
No. of doctors			
coef	-0.0065	-0.0135	-0.0045
95%CI	[-0.0107,-0.0023]	[-0.0205,-0.0065]	[-0.0067,-0.0024]
std.err	0.0020	0.0025	0.0010
t-stat	-3.22	-5.35	-4.47
p-value	0.004	0.006	0.0003
Drop of BMI			
coef	0.3287	-0.7465	0.6274
95%CI	[-0.5135,1.1709]	[-1.3448,-0.1483]	[-0.1037,1.3585]
std.err	0.4061	0.2155	0.3465
t-stat	0.81	-3.46	1.81
p-value	0.427	0.026	0.088
Inflow population from Wuha	an		
coef	-0.0053	-0.0003	-0.0067
95%CI	[-0.0114,0.0008]	[-0.0009,0.0003]	[-0.0139,0.0006]
std.err	0.0029	0.0002	0.0034
t-stat	-1.79	-1.34	-1.94
p-value	0.087	0.250	0.069
Latitude			

	Overall	Before Lockdown (Jan 24)After Lockdown (Jan 24)	
coef	0.0026	0.0045	0.0021
95%CI	[-0.0245,0.0298]	[-0.0518,0.0608]	[-0.0302,0.0344]
std.err	0.0131	0.0203	0.0153
t-stat	0.20	0.22	0.14
p-value	0.843	0.835	0.893
Longitude			
coef	-0.0103	-0.0305	-0.0046
95%CI	[-0.0233,0.0027]	[-0.0796,0.0186]	[-0.0160,0.0067]
std.err	0.0063	0.0177	0.0054
t-stat	-1.64	-1.72	-0.86
p-value	0.116	0.16	0.399
const			
coef	1.0616	2.2036	0.7444
95%CI	[0.4353,1.6879]	[1.431,2.9762]	[0.5063,0.9826]
std.err	0.3020	0.2783	0.1129
t-stat	3.52	7.92	6.60
p-value	0.002	0.001	0