

Research article

Impact of U.S. quantitative easing on international financial markets: evidence from a GVAR model

Weiqiang Huang¹ and Xiaomeng Li^{1,*}

School of Business Administration, Northeastern University, Shenyang, Liaoning, China

* **Correspondence:** E-mail: 2301225@stu.neu.edu.cn, xiaomengli177@163.com.

Appendix A: Unit root test

In accordance with standard econometric practice, it is essential to test for the stationarity of time series data in order to avoid spurious regression results. Toward this end, we conduct augmented Dickey–Fuller (ADF) and Wald statistic (WS) unit root tests for all variables included in the model. The null hypothesis of these tests is that the corresponding variable contains a unit root, implying nonstationarity. The test results are summarized in Table A. In the table, variables marked with a “t” indicate that a time trend term was included in the testing equation; variables marked with “D” denote first-differenced series, while those marked with “DD” represent second-differenced series. Within the VARX models for each economy, the unit root test results for domestic variables show that the test statistics for all first-differenced (D) and second-differenced (DD) series are below the critical values. This indicates that at the 5% significance level, the null hypothesis of a unit root can be rejected. In other words, both the first-differenced and second-differenced series are found to be stationary. In summary, the results confirm that the domestic variables across all economies exhibit stationarity after first or second differencing, which satisfies the requirements for subsequent analysis and enhances the validity of the empirical findings.

Table A1. Unit root test.

Unit root tests for the domestic variables at the 5% significance level																			
Domestic variables	Statistic	Critical value	Australia	Brazil	Canada	China	France	Germany	India	Indonesia	Italy	Japan	Mexico	Russia	Saudi Arabia	South Africa	South Korea	Turkey	United Kingdom
<i>stock</i> (with trend)	ADF	-3.45	-7.41	-9.84	-9.09	-5.77	-11.46	-11.52	-5.85	-6.34	-6.71	-6.51	-7.33	-6.10	-6.52	-9.51	-5.76	-9.47	-6.12
<i>stock</i> (with trend)	WS	-3.24	-7.18	-9.97	-9.21	-5.50	-11.28	-11.29	-5.89	-6.33	-6.67	-6.65	-7.47	-6.03	-6.68	-9.59	-5.93	-9.34	-6.24
<i>stock</i> (no trend)	ADF	-2.89	-7.38	-9.82	-9.10	-5.79	-11.37	-11.54	-5.78	-6.34	-6.69	-6.45	-7.36	-6.07	-6.41	-9.54	-5.78	-9.32	-6.12
<i>stock</i> (no trend)	WS	-2.55	-7.06	-9.94	-9.20	-5.41	-11.12	-11.28	-5.74	-6.34	-6.59	-6.56	-7.49	-6.0	-6.54	-9.62	-5.94	-9.09	-6.22
<i>Dstock</i>	ADF	-2.89	-10.53	-11.45	-10.57	-11.24	10.55	-11.61	10.11	-9.50	11.29	-11.41	-11.24	16.73	11.29	10.78	-10.84	12.11	-12.54
<i>Dstock</i>	WS	-2.55	-9.60	-10.69	-10.52	-9.90	-9.63	-11.33	-9.14	-9.49	11.35	-11.25	-11.36	16.69	-11.4	10.26	-9.26	12.13	-12.44
<i>DDstock</i>	ADF	-2.89	-13.21	-13.15	-15.14	-16.44	13.77	-13.33	15.73	-12.74	12.84	-16.22	-13.01	11.43	15.14	13.97	-16.73	15.59	-14.18
<i>DDstock</i>	WS	-2.55	-12.67	-12.84	-15.20	-13.48	12.84	-12.05	12.94	-12.73	12.27	-16.11	-12.96	-9.60	15.23	13.87	-15.83	12.74	-13.21
<i>bond</i> (with trend)	ADF	-3.45	-1.41	-2.54	-1.57	-3.83	-0.48	-0.70	-3.10	-2.48	-1.60	0.16	-2.12	-2.58	-2.01	-3.42	-1.22	-4.41	-1.00
<i>bond</i> (with trend)	WS	-3.24	-1.45	-2.75	-1.50	-3.87	-0.77	-0.75	-3.23	-2.43	-1.87	-0.32	-2.20	-2.60	-2.06	-3.35	-1.42	-4.48	-0.98
<i>bond</i> (no trend)	ADF	-2.89	-2.10	-2.25	-1.99	-2.97	-1.95	-1.85	-2.62	-2.57	-1.66	-2.13	-1.87	-2.56	-1.51	-2.61	-1.78	-2.02	-1.95
<i>bond</i> (no trend)	WS	-2.55	-1.07	-2.30	-1.38	-2.59	-1.22	-0.62	-2.82	-1.80	-1.80	-0.44	-2.08	-2.52	-1.76	-2.81	-1.02	-1.37	-0.94
<i>Dbond</i>	ADF	-2.89	-8.51	-10.68	-9.27	-7.73	-5.60	-5.56	-6.75	-7.74	-9.87	-8.19	-10.03	-9.72	-8.57	-8.99	-6.40	-8.64	-7.58
<i>Dbond</i>	WS	-2.55	-8.64	-10.80	-9.24	-7.84	-5.58	-5.57	-6.70	-7.22	-9.99	-7.90	-10.15	-9.85	-8.65	-8.83	-6.44	-8.77	-7.72
<i>DDbond</i>	ADF	-2.89	-10.47	-11.97	-9.79	-10.37	15.37	-14.46	10.66	-13.95	10.79	-10.53	-11.46	11.18	10.86	10.69	-10.91	-9.12	-12.07
<i>DDbond</i>	WS	-2.55	-10.66	-11.30	-9.90	-10.22	15.47	-14.48	10.73	-13.51	10.85	-11.03	-11.44	11.16	11.19	10.83	-10.75	-9.29	-12.18
<i>exs</i> (with trend)	ADF	-3.45	-2.55	-2.47	-2.25	-2.43	-3.49	-3.49	-3.32	-2.21	-3.49	-2.26	-2.00	-2.66	-2.71	-3.04	-3.36	2.70	-3.68
<i>exs</i> (with trend)	WS	-3.24	-2.73	-2.34	-2.48	-1.64	-3.54	-3.54	-3.30	-2.40	-3.54	-1.66	-2.23	-2.85	-2.81	-3.08	-2.89	1.92	-3.42
<i>exs</i> (no trend)	ADF	-2.89	-1.82	-0.87	-1.66	-2.06	-2.09	-2.09	-1.02	-0.91	-2.09	-0.55	-1.81	-0.60	-1.73	-0.68	-3.30	4.71	-2.29
<i>exs</i> (no trend)	WS	-2.55	-1.88	-0.69	-1.22	-1.66	-1.42	-1.42	0.74	-0.45	-1.42	-0.93	-1.22	-0.15	-1.92	-0.40	-2.45	3.64	-0.92
<i>Dexs</i>	ADF	-2.89	-8.95	-9.39	-8.93	-8.53	-9.98	-9.98	10.62	-11.54	-9.98	-8.86	-10.59	-9.21	-6.04	10.48	-11.07	-7.89	-8.44
<i>Dexs</i>	WS	-2.55	-9.05	-9.52	-9.08	-8.50	-9.97	-9.97	10.75	-11.67	-9.97	-8.80	-10.72	-9.35	-6.09	10.58	-11.16	-8.01	-8.57
<i>DDexs</i>	ADF	-2.89	-10.31	-11.03	-11.06	-9.54	11.05	-11.05	11.40	-11.08	11.05	-9.69	-11.52	10.76	11.41	10.77	-11.70	10.91	-9.63
<i>DDexs</i>	WS	-2.55	-10.63	-11.24	-10.91	-9.69	11.18	-11.18	11.65	-11.20	11.18	-9.75	-11.71	10.95	11.40	10.89	-11.55	11.10	-9.80

Appendix B: Cointegration regression

To further ensure that the observed relationships among the variables are not spurious, we conduct cointegration tests for the domestic variables included in each economy's model. Given its ability to detect multiple cointegrating relationships among variables, the Johansen cointegration approach is used for this purpose. In addition, the maximum eigenvalue test is conducted to further verify the presence of cointegrating relationships. The Johansen cointegration procedure is sequential in nature. The null hypothesis at each step is that there are at most r cointegrating vectors (where $r = 0, 1, \dots$). The testing begins with $r = 0$ and continues until the null hypothesis can no longer be rejected. Throughout the process, the critical values proposed by Mackinnon et al. (1999) are used as the reference standard for determining statistical significance.

The detailed test results are presented in Tables B1–B8. According to the findings, for the majority of countries, both the trace statistic and the maximum eigenvalue statistic indicate the presence of at least one cointegrating relationship. Notably, when $r = 0$, the test statistics are significantly higher than the corresponding critical values, leading us to reject the null hypothesis of no cointegration. This suggests that there is no spurious regression in the models for these countries. These results imply that the time series data for these economies likely exhibit long-run stable relationships among the variables, which has important implications for economic policy formulation and financial market forecasting. Overall, the cointegration tests confirm the existence of long-term

equilibrium relationships among the variables within each economy's model, providing a solid foundation for further empirical analysis.

Table B1. TS shocks: VIX channel (1).

Detailed cointegration results for the maximum eigenvalue statistic at the 5% significance level																	
Country	Australia	Brazil	Canada	China	France	Germany	India	Indonesia	Italy	Japan	Mexico	Russia	Saudi Arabia	South Africa	South Korea	Turkey	United Kingdom
No. of endogenous variables	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
No. of foreign (star) variables	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
$r=0$	171.74	129.79	193.73	150.49	145.56	146.50	154.81	108.74	152.85	208.86	185.83	111.35	146.59	201.77	123.03	152.28	136.37
$r=1$	27.58	30.65	39.45	28.84	34.65	26.55	44.53	50.33	19.63	20.43	38.76	35.92	19.59	30.71	47.13	51.52	27.24
$r=2$	20.55	10.95	16.74	22.05	16.93	15.49	19.95	16.66	14.86	13.34	20.46	15.00	8.33	17.99	12.70	18.95	13.62

Table B2. TS shocks: VIX channel (2).

Detailed cointegration results for the trace statistic at the 5% significance level																	
Country	Australia	Brazil	Canada	China	France	Germany	India	Indonesia	Italy	Japan	Mexico	Russia	Saudi Arabia	South Africa	South Korea	Turkey	United Kingdom
No. of endogenous variables	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
No. of foreign (star) variables	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
$r=0$	219.87	171.39	249.92	201.37	197.14	188.54	219.28	175.73	187.34	242.63	245.06	162.26	174.51	250.47	182.86	222.75	177.23
$r=1$	48.13	41.60	56.19	50.89	51.58	42.04	64.48	66.99	34.49	33.77	59.23	50.92	27.92	48.70	59.83	70.48	40.86
$r=2$	20.55	10.95	16.74	22.05	16.93	15.49	19.95	16.66	14.86	13.34	20.46	15.00	8.33	17.99	12.70	18.95	13.62

Table B31 TS shocks: MPU channel (1).

Detailed cointegration results for the maximum eigenvalue statistic at the 5% significance level																	
Country	Australia	Brazil	Canada	China	France	Germany	India	Indonesia	Italy	Japan	Mexico	Russia	Saudi Arabia	South Africa	South Korea	Turkey	United Kingdom
No. of endogenous variables	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
No. of foreign (star) variables	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
$r=0$	178.71	129.65	180.91	151.62	146.99	144.12	157.65	188.29	158.46	189.84	166.46	125.12	145.27	190.60	123.03	151.49	195.75
$r=1$	39.39	20.84	47.55	32.55	36.10	25.58	35.15	55.24	28.07	18.62	40.62	34.50	20.87	38.70	52.06	54.40	33.44
$r=2$	14.48	10.52	18.00	22.14	30.07	20.78	14.81	26.07	16.93	14.11	31.65	16.81	8.65	21.04	4.48	25.02	17.30

Table B4. TS shocks: MPU channel (2).

Detailed cointegration results for the trace statistic at the 5% significance level																	
Country	Australia	Brazil	Canada	China	France	Germany	India	Indonesia	Italy	Japan	Mexico	Russia	Saudi Arabia	South Africa	South Korea	Turkey	United Kingdom
No. of endogenous variables	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
No. of foreign (star) variables	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
$r=0$	232.59	161.01	246.47	206.31	213.15	190.48	207.61	269.59	203.46	222.57	238.73	176.43	174.78	250.33	179.57	231.00	246.50
$r=1$	53.88	31.36	65.55	54.69	66.17	46.36	49.96	81.31	45.00	32.73	72.27	51.31	29.52	59.74	56.54	79.50	50.75
$r=2$	14.48	10.52	18.00	22.14	30.07	20.78	14.81	26.07	16.93	14.12	31.65	16.81	8.65	21.04	4.48	25.02	17.30

Table B5. MS shocks: VIX channel (1).

Detailed cointegration results for the maximum eigenvalue statistic at the 5% significance level																	
Country	Australia	Brazil	Canada	China	France	Germany	India	Indonesia	Italy	Japan	Mexico	Russia	Saudi Arabia	South Africa	South Korea	Turkey	United Kingdom
No. of endogenous variables	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
No. of foreign (star) variables	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
$r=0$	179.36	133.77	192.20	151.84	144.05	148.51	156.23	117.12	157.58	209.45	185.50	106.55	146.74	197.75	127.66	138.49	206.34
$r=1$	22.88	29.20	36.34	34.46	31.34	30.16	51.53	50.01	18.92	20.81	32.91	34.04	14.89	33.66	45.08	47.87	25.32
$r=2$	13.92	10.58	12.43	19.05	13.80	12.97	19.56	13.82	12.05	14.82	18.80	12.19	8.54	23.07	11.05	32.00	11.85

Table B6. MS shocks: VIX channel (2).

Detailed cointegration results for the trace statistic at the 5% significance level																	
Country	Australia	Brazil	Canada	China	France	Germany	India	Indonesia	Italy	Japan	Mexico	Russia	Saudi Arabia	South Africa	South Korea	Turkey	United Kingdom
No. of endogenous variables	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
No. of foreign (star) variables	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
$r=0$	216.16	173.56	240.96	205.35	189.18	191.64	227.32	180.95	188.54	245.08	237.22	152.78	170.17	254.48	183.79	218.35	243.51
$r=1$	36.80	39.79	48.76	53.51	45.13	43.13	71.09	63.82	30.96	35.63	51.72	46.23	23.43	56.73	56.13	79.86	37.17
$r=2$	13.92	10.58	12.43	19.05	13.80	12.97	19.56	13.82	12.05	14.82	18.80	12.19	8.54	23.07	11.05	32.00	11.85

Table B7. MS shocks: MPU channel (1).

Detailed cointegration results for the maximum eigenvalue statistic at the 5% significance level																	
Country	Australia	Brazil	Canada	China	France	Germany	India	Indonesia	Italy	Japan	Mexico	Russia	Saudi Arabia	South Africa	South Korea	Turkey	United Kingdom
No. of endogenous variables	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
No. of foreign (star) variables	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
$r=0$	186.15	130.19	180.18	152.68	145.56	145.12	158.23	188.79	164.11	187.31	167.40	119.27	142.62	187.74	127.68	140.19	196.72
$r=1$	36.46	18.72	41.41	37.26	29.89	37.29	46.93	54.30	20.13	19.86	31.98	34.34	15.11	40.25	52.81	50.18	31.17
$r=2$	9.70	11.92	13.28	19.04	25.63	14.00	15.10	24.41	16.62	15.14	26.61	15.10	8.23	20.95	3.55	32.69	12.71

Table B8. MS shocks: MPU channel (2).

Detailed cointegration results for the trace statistic at the 5% significance level																	
Country	Australia	Brazil	Canada	China	France	Germany	India	Indonesia	Italy	Japan	Mexico	Russia	Saudi Arabia	South Africa	South Korea	Turkey	United Kingdom
No. of endogenous variables	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
No. of foreign (star) variables	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
$r=0$	232.31	160.83	234.86	208.98	201.08	196.41	220.27	267.51	200.86	222.31	225.99	168.71	165.96	248.94	184.05	223.06	240.60
$r=1$	46.16	30.64	54.69	56.30	55.51	51.29	62.03	78.71	36.75	35.00	58.59	49.44	23.35	61.20	56.37	82.88	43.89
$r=2$	9.70	11.92	13.28	19.04	25.63	14.00	15.10	24.41	16.62	15.14	26.61	15.10	8.23	20.95	3.55	32.69	12.71

Appendix C. Weak exogeneity test

According to the requirements for constructing a GVAR model, it is assumed that the foreign variables and global common exogenous variables, collectively referred to as external variables, exhibit weak exogeneity within each economy's individual VARX* model. This implies that domestic variables may have long-run effects on external variables, but the reverse does not hold. This assumption constitutes one of the key prerequisites for building a valid GVAR model. To verify whether the assumption of weak exogeneity holds, we conduct an F -test on all external variables in the VARX model of each country. The null hypothesis tested is that the external variables are weakly exogenous.

The test results are summarized in Tables C1–C4. In nearly all cases across the different economies, the test statistics for the external variables are below the critical values. This indicates that, at the 5% significance level, we do not reject the null hypothesis of weak exogeneity. In other words, in almost all economies' VARX models, the external variables display characteristics of weak exogeneity. Therefore, we conclude that the external variables included in the VARX* models for each economy largely satisfy the weak exogeneity requirement imposed by the GVAR framework. This provides a necessary foundation for the construction of the GVAR model and ensures the reliability and validity of subsequent empirical analyses.

Table C1. TS shocks—VIX channel.

Test for weak exogeneity at the 5% significance level								
Country	<i>F</i> -test	<i>F</i> _{crit} 0.05	<i>stock</i>	<i>bond</i>	<i>exs</i>	<i>ts</i>	<i>vix</i>	
Australia	<i>F</i> (1,175)	3.80	1.81	0.81	1.11	0.04	0.75	
Brazil	<i>F</i> (1,173)	3.90	0.01	3.44	0.02	4.24	0.20	
Canada	<i>F</i> (2,172)	3.05	3.78	0.46	0.49	0.22	0.16	
China	<i>F</i> (2,172)	3.05	2.75	1.65	0.10	0.42	0.01	
France	<i>F</i> (2,172)	3.05	1.63	0.04	0.03	0.39	0.14	
Germany	<i>F</i> (1,173)	3.90	2.59	2.20	0.13	6.27	0.13	
India	<i>F</i> (2,172)	3.05	4.41	2.43	0.96	0.84	3.26	
Indonesia	<i>F</i> (2,178)	3.05	28.35	2.10	0.96	0.16	4.05	
Italy	<i>F</i> (1,173)	3.90	0.66	1.75	1.58	0.36	0.44	
Japan	<i>F</i> (1,173)	3.90	2.87	4.00	0.00	0.36	1.60	
Mexico	<i>F</i> (2,172)	3.05	1.12	1.59	0.39	1.64	0.14	
Russia	<i>F</i> (2,172)	3.05	3.90	0.833	2.83	0.95	0.91	
Saudi Arabia	<i>F</i> (1,173)	3.90	0.16	2.58	0.59	2.58	0.50	
South Africa	<i>F</i> (1,173)	3.90	1.41	2.11	0.62	0.00	2.25	
South Korea	<i>F</i> (2,174)	3.05	7.89	2.62	0.02	1.79	0.83	
Turkey	<i>F</i> (2,172)	3.05	1.39	0.59	0.69	3.73	1.03	
United Kingdom	<i>F</i> (1,175)	3.90	0.17	4.04	0.29	0.85	0.42	

Table C2. TS shocks: MPU channel.

Test for weak exogeneity at the 5% significance level							
Country	<i>F</i> -test	<i>i</i> 0.05	<i>stock</i>	<i>bond</i>	<i>exs</i>	<i>ms</i>	<i>vix</i>
Australia	<i>F</i> (1,175)	3.90	2.04	0.41	1.07	0.01	0.77
Brazil	<i>F</i> (1,170)	3.90	0.31	3.50	0.01	1.08	0.00
Canada	<i>F</i> (1,173)	3.90	0.08	0.00	0.22	0.17	0.07
China	<i>F</i> (2,172)	3.05	5.09	3.55	0.07	0.12	0.33
France	<i>F</i> (1,175)	3.90	0.09	0.00	0.02	0.42	0.03
Germany	<i>F</i> (1,175)	3.90	0.29	2.03	0.05	1.14	0.24
India	<i>F</i> (2,172)	3.05	2.16	1.32	0.24	0.56	1.21
Indonesia	<i>F</i> (2,178)	3.05	23.47	1.62	0.48	0.11	3.55
Italy	<i>F</i> (1,173)	3.90	0.20	1.86	0.95	3.98	0.17
Japan	<i>F</i> (1,173)	3.90	2.30	3.08	0.29	0.05	1.17
Mexico	<i>F</i> (2,172)	3.05	4.59	1.62	0.10	0.36	2.27
Russia	<i>F</i> (1,173)	3.90	6.73	1.28	6.05	2.03	2.57
Saudi Arabia	<i>F</i> (1,173)	3.90	0.02	1.66	1.43	0.32	0.09
South Africa	<i>F</i> (2,172)	3.05	1.57	1.07	1.34	1.93	2.10
South Korea	<i>F</i> (2,174)	3.05	5.38	0.67	0.13	1.04	0.08
Turkey	<i>F</i> (3,171)	2.66	0.33	0.37	0.02	0.88	0.44
United Kingdom	<i>F</i> (1,175)	3.90	0.08	3.46	0.27	0.12	0.19

Table C3. MS shocks: VIX channel.

Test for weak exogeneity at the 5% significance level							
Country	<i>F</i> -test	<i>F</i> _{crit} 0.05	<i>stock</i>	<i>bond</i>	<i>exs</i>	<i>ts</i>	<i>mpu</i>
Australia	<i>F</i> (2,174)	3.05	13.48	1.44	0.84	0.34	0.08
Brazil	<i>F</i> (1,173)	3.90	0.06	4.80	0.04	5.74	1.95
Canada	<i>F</i> (2,172)	3.05	4.20	0.32	0.75	0.39	0.54
China	<i>F</i> (2,172)	3.05	3.69	1.57	0.09	0.78	0.54
France	<i>F</i> (3,173)	2.66	6.09	1.61	0.53	2.82	0.10
Germany	<i>F</i> (1,173)	3.90	3.64	2.13	0.46	4.14	0.99
India	<i>F</i> (1,173)	3.90	0.00	2.05	0.12	1.56	0.26
Indonesia	<i>F</i> (2,174)	3.05	23.56	2.82	1.89	0.64	1.71
Italy	<i>F</i> (1,173)	3.90	0.89	1.50	2.85	0.33	0.05
Japan	<i>F</i> (1,173)	3.90	3.82	6.05	0.01	1.21	1.16
Mexico	<i>F</i> (3,171)	2.66	5.00	2.87	0.85	1.54	2.50
Russia	<i>F</i> (2,174)	3.05	12.12	0.36	3.16	0.20	0.23
Saudi Arabia	<i>F</i> (1,173)	3.90	0.01	3.87	0.42	4.16	1.37
South Africa	<i>F</i> (2,174)	3.05	13.06	2.07	0.91	0.46	0.71
South Korea	<i>F</i> (2,174)	3.05	7.96	1.73	0.32	1.28	1.42
Turkey	<i>F</i> (2,172)	3.05	0.84	0.60	0.21	3.26	0.01
United Kingdom	<i>F</i> (2,174)	3.05	7.73	3.80	0.13	2.99	0.64

Table C4. MS shocks: MPU channel.

Test for weak exogeneity at the 5% significance level							
Country	<i>F</i> -test	<i>F</i> _{crit} 0.05	<i>stock</i>	<i>bond</i>	<i>exs</i>	<i>ms</i>	<i>mpu</i>
Australia	<i>F</i> (1,175)	3.90	1.91	0.43	1.69	7.06	0.09
Brazil	<i>F</i> (1,173)	3.90	7.77	4.42	0.15	0.37	2.35
Canada	<i>F</i> (2,172)	3.05	2.94	0.42	0.23	0.16	0.11
China	<i>F</i> (2,172)	3.05	5.63	3.58	0.01	0.98	0.35
France	<i>F</i> (2,174)	3.05	0.02	0.32	0.43	0.93	0.01
Germany	<i>F</i> (2,174)	3.05	0.38	1.86	0.41	1.45	0.78
India	<i>F</i> (2,172)	3.05	0.85	1.25	0.06	0.54	0.23
Indonesia	<i>F</i> (2,174)	3.05	19.45	2.30	1.65	2.10	0.82
Italy	<i>F</i> (1,173)	3.90	0.49	1.44	2.55	3.00	0.05
Japan	<i>F</i> (1,173)	3.90	3.30	4.91	0.08	0.42	1.32
Mexico	<i>F</i> (3,171)	2.66	6.03	2.55	0.54	0.91	2.78
Russia	<i>F</i> (1,175)	3.90	21.83	0.62	3.96	0.15	0.11
Saudi Arabia	<i>F</i> (1,173)	3.90	0.04	2.08	0.86	1.23	1.20
South Africa	<i>F</i> (2,174)	3.05	9.28	1.65	0.82	1.61	0.02
South Korea	<i>F</i> (2,174)	3.05	5.74	0.72	0.68	0.48	1.71
Turkey	<i>F</i> (3,171)	2.66	0.34	0.46	0.10	0.86	1.19
United Kingdom	<i>F</i> (1,175)	3.90	0.41	1.98	0.25	0.43	0.72



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