

Internet Appendix

Understanding commonality in liquidity around the world

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This document contains a number of tables that show the results of additional analyses and robustness checks that are briefly discussed but not included in the paper.

Appendix Table I: What drives cross-country variation in commonality in liquidity during large market declines?

(results discussed in section 4.2 of the paper)

Difference with Table 2 in the paper: average commonality in liquidity is computed over periods of large market declines only

This table reports results of cross-sectional regressions of average commonality in liquidity during large market declines in 40 countries – denoted by $(R_{liq}^2)^{Down,Large}_m$, computed as the logistic transformation of the time-series average of commonality in liquidity in country m over the period 1995:01-2009:12 computed only over months for which the local market return R_m was more than one standard deviation below its unconditional mean – on various country characteristics:

$$(R_{liq}^2)_m^{Down,Large} = \alpha + \sum_j \beta_j X_m^j + \sum_k \gamma_k Z_m^k + \varepsilon_m \quad (m = 1, \dots, 40),$$

where X_m^j denotes the cross-sectional supply-side and demand-side factors and Z_m^k denotes the cross-sectional control variables for country m . Variable definitions are in Table A1. Intercepts are suppressed to conserve space. Significance at the 1%, 5%, and 10% level (based on standard errors that are robust to heteroskedasticity) is indicated by ^a, ^b, and ^c, respectively. The economic effects in the table represent the effect of a one standard deviation (σ) increase in the supply-side or demand-side factor of interest, expressed as a fraction of one standard deviation of the average R_{liq}^2 across countries.

Model:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
<i>Supply-side factors</i>													
Market volatility (average)	0.0379 ^c												0.0016
Short-term interest rate (average)		0.0023											
Stock market cap. (mcap) / GDP			0.0001										
Bank deposits / GDP				-0.0647									
<i>Demand-side factors</i>													
R_{turn}^2 (average)					0.3475 ^c								0.0442
Equity mutual fund assets / mcap						-0.0024							
Foreign inst. ownership / mcap							0.0024						
Net % equity flow (average)								0.0117 ^b				0.0099 ^c	0.0096
Gross capital flow / GDP (average)									0.0005				
Good government index										-0.0130		-0.0009	0.0007
Financial disclosure											-0.0047 ^b	-0.0039	-0.0038
<i>Control variables</i>													
Ln (GDP per capita)	-0.0386	-0.0640 ^c	-0.0703 ^b	-0.0557	-0.0437	-0.0099	-0.1178 ^a	-0.0352	-0.0822 ^a	-0.0120	-0.0323	-0.0066	-0.0096
Ln (Geographical size)	-0.0070	-0.0098	-0.0065	-0.0100	-0.0023	-0.0127	-0.0210	-0.0125	-0.0049	-0.0112	-0.0111	-0.0137	-0.0123
Ln (Number of stocks)	-0.0106	-0.0017	-0.0077	-0.0099	-0.0077	-0.0115	0.0022	-0.0241	-0.0082	-0.0016	-0.0035	-0.0181	-0.0189
GDP growth volatility	0.0072	0.0080	0.0081	0.0088	0.0073	0.0189 ^b	-0.0021	0.0118 ^c	0.0110	0.0102	0.0090	0.0115	0.0110
Industry Herfindahl index	0.3532	0.4222	0.4747	-0.0987	0.3224	0.4096	-0.6162	0.2800	0.7516	0.4737	-0.1896	-0.1850	-0.1884
Firm Herfindahl index	-2.0999	-1.8390	-1.8743	-0.5728	-1.4878	-1.7500	0.0422	-1.2287	-2.0349	-1.5316	-0.8710	-0.4630	-0.4950
Earnings co-movement index	0.0490	0.0583	0.0622	0.0481	0.0434	0.0269	0.0390	0.0981 ^b	0.0789 ^b	0.0461	0.0504	0.0814	0.0788
# obs.	40	40	40	38	40	31	25	39	39	38	37	36	36
Economic effect ($\times\sigma(R_{liq}^2)$)	0.00 $\times\sigma$	0.00 $\times\sigma$	0.00 $\times\sigma$	-0.01 $\times\sigma$	0.02 $\times\sigma$	-0.01 $\times\sigma$	0.00 $\times\sigma$	0.20 $\times\sigma$	0.17 $\times\sigma$	-0.09 $\times\sigma$	-0.00 $\times\sigma$		
R ²	0.42	0.35	0.35	0.38	0.43	0.37	0.52	0.46	0.37	0.35	0.39	0.48	0.48

Appendix Table II: What drives cross-country variation in commonality in liquidity? Less vs. more developed countries

(results discussed in section 4.2 of the paper)

Difference with Table 2 in the paper: regressions are run separately for less/more developed countries

This table reports results of cross-sectional regressions of average commonality in liquidity in two different groups g among 40 countries – denoted by $(R^2_{liq})_m$, computed as the logistic transformation of the time-series average of commonality in liquidity in country m over the period 1995:01-2009:12 – on various country characteristics:

$$(R^2_{liq})_m = \alpha_g + \sum_j \beta_{g,j} X_m^j + \sum_k \gamma_{g,k} Z_m^k + \varepsilon_m \quad (m = 1, \dots, 40),$$

where X_m^j denotes the cross-sectional supply-side and demand-side factors and Z_m^k denotes the cross-sectional control variables for country m . We run the regressions separately for two groups g of less developed and more developed countries (Panels A and B, respectively), defined as countries with a below/above-median GDP per capita in 2003. Variable definitions are in Table A1. Intercepts are suppressed to conserve space. Significance at the 1%, 5%, and 10% level (based on standard errors that are robust to heteroskedasticity) is indicated by ^a, ^b, and ^c, respectively. The economic effects in the table represent the effect of a one standard deviation (σ) increase in the supply-side or demand-side factor of interest, expressed as a fraction of one standard deviation of the average R^2_{liq} across the countries in each group g .

Panel A: Less developed countries													
Model:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
<i>Supply-side factors</i>													
Market volatility (average)	0.0317												0.0058
Short-term interest rate (average)		-0.0025											
Stock market cap. (mcap) / GDP			-0.0002										
Bank deposits / GDP				-0.1317									
<i>Demand-side factors</i>													
R^2_{um} (average)					0.7589 ^a								0.3024 ^b
Equity mutual fund assets / mcap						-0.0052							
Foreign inst. ownership / mcap							insuffic. # obs.						
Net % equity flow (average)								0.0055				0.0034	0.0049 ^a
Gross capital flow / GDP (average)									0.0100				
Good government index										-0.0191 ^b		0.0112	0.0132 ^b
Financial disclosure											-0.0041 ^a	-0.0049 ^a	-0.0030 ^b
<i>Control variables</i>													
Ln (GDP per capita)	0.0337	0.0210	0.0246	0.0055	0.0208	0.0025		0.0307	-0.0086	0.0699 ^c	-0.0662 ^b	-0.1117 ^b	-0.0853 ^b
Ln (Geographical size)	0.0574	0.0719	0.0667	0.0142	0.0312	0.0040		0.0609	0.0617	0.0144	-0.0227	-0.0349 ^b	-0.0236 ^c
Ln (Number of stocks)	0.0481	0.0748	0.0790	0.0193	0.0260	0.0190		0.0478	0.1140	0.0648 ^c	-0.0713 ^b	-0.1291 ^a	-0.1116 ^b
GDP growth volatility	-0.0107	-0.0093	-0.0090	-0.0010	-0.0102 ^b	0.0107		-0.0079	-0.0090	-0.0030	0.0122 ^b	0.0166 ^a	0.0096 ^c
Industry Herfindahl index	-0.2581	0.0506	-0.0165	0.1906	-0.0826	0.4126		-0.1681	-0.0607	0.2860	-0.5448	-0.7265	-0.4788 ^c
Firm Herfindahl index	-1.5549	-0.8918	-1.0306	0.4282	0.4293	-3.0096		-1.0039	0.8708	0.7540	-3.8705 ^b	-5.0490 ^a	-3.5681 ^b
Earnings co-movement index	0.0531	0.0781	0.0731	0.0402	0.0093	0.0894 ^c		0.0945	0.0752 ^b	0.0272	0.1109 ^a	0.1476 ^a	0.1120 ^a
# obs.	20	20	20	18	20	13		20	20	18	17	17	17
Economic effect ($\times \sigma(R^2_{liq})$)	0.00 $\times \sigma$	-0.01 $\times \sigma$	-0.00 $\times \sigma$	-0.02 $\times \sigma$	0.81 $\times \sigma$	-0.00 $\times \sigma$		0.00 $\times \sigma$	0.14 $\times \sigma$	-0.00 $\times \sigma$	-0.00 $\times \sigma$		
R ²	0.54	0.50	0.49	0.43	0.88	0.72		0.51	0.56	0.42	0.82	0.90	0.99

Appendix Table II, continued

Panel B: More developed countries													
Model:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
<i>Supply-side factors</i>													
Market volatility (average)	0.0073												0.0050
Short-term interest rate (average)		0.0157											
Stock market cap. (mcap) / GDP			-0.0004										
Bank deposits / GDP				-0.0086									
<i>Demand-side factors</i>													
R^2_{turn} (average)					0.3319 ^a								0.4618 ^b
Equity mutual fund assets / mcap						-0.0001							
Foreign inst. ownership / mcap							-0.0011						
Net % equity flow (average)								0.0069 ^a				0.0037 ^c	-0.0023
Gross capital flow / GDP (average)									0.0000				
Good government index										-0.0338 ^a		-0.0242 ^a	-0.0039
Financial disclosure											0.0003	0.0002	0.0011
<i>Control variables</i>													
Ln (GDP per capita)	0.0476	0.1151	0.0576	0.0522	0.0860 ^b	0.1199	0.1202 ^b	0.0757	0.0252	0.2059 ^a	0.0555	0.1835	0.1591 ^a
Ln (Geographical size)	-0.0019	-0.0059	-0.0099 ^c	-0.0038	0.0066 ^b	-0.0016	-0.0010	-0.0053	-0.0042	0.0040	-0.0029	0.0010	0.0145
Ln (Number of stocks)	-0.0072	-0.0035	0.0057	-0.0056	-0.0094	-0.0003	-0.0058	-0.0055	-0.0098	-0.0113	-0.0077	-0.0091	-0.0096 ^c
GDP growth volatility	0.0023	0.0059	-0.0011	0.0024	0.0020	0.0064 ^b	0.0063 ^b	0.0039	0.0052	0.0019	0.0024	0.0023	-0.0027
Industry Herfindahl index	0.0029	-0.0029	-0.0394	-0.0541	-0.1390	-0.1118	-0.2153	0.0956	-0.0568	-0.0396	-0.0695	0.0312	-0.1982
Firm Herfindahl index	-0.1517	-0.1344	-0.0741	-0.0184	0.0859	0.1326	0.2894	0.1451	0.0017	0.3246	-0.0089	0.3223	0.0431
Earnings co-movement index	-0.0358	-0.0421 ^a	-0.0416 ^b	-0.0396 ^c	-0.0377 ^a	-0.0541 ^a	-0.0556 ^a	-0.0243	-0.0291	-0.0148	-0.0399 ^c	-0.0158	-0.0507 ^a
# obs.	20	20	20	20	20	18	19	19	19	20	20	19	19
Economic effect ($\times\sigma(R^2_{liq})$)	0.09 $\times\sigma$	0.76 $\times\sigma$	-0.14 $\times\sigma$	-0.02 $\times\sigma$	0.29 $\times\sigma$	-0.01 $\times\sigma$	-0.03 $\times\sigma$	1.60 $\times\sigma$	0.02 $\times\sigma$	-4.37 $\times\sigma$	0.03 $\times\sigma$		
R^2	0.33	0.45	0.48	0.32	0.86	0.74	0.78	0.69	0.30	0.77	0.32	0.83	0.95

Appendix Table III: Summary statistics (results discussed in section 3.2 of the paper)

Difference with Table 1 in the paper: this table compares summary statistics of R^2_{liq} when excluding/including stock i in the market liquidity index in the individual stock commonality regressions.

This table reports the average and the standard deviation of (local) commonality in Amihud liquidity (R^2_{liq}) for 40 countries over the period 1995:01-2009:12. For each country, the table presents summary statistics for commonality in liquidity (R^2_{liq}) computed by including/excluding the individual stock in/from the market liquidity in the country. Countries are listed in order of decreasing GDP per capita. The screening procedures applied in the selection of the sample are described in Section 2. Liquidity for individual stocks is the average of the daily Amihud measures – computed as the absolute stock return divided by local currency trading volume. The Amihud measure is multiplied by -10,000. Commonality in liquidity of individual stocks is measured by the R^2 of monthly regressions of the daily innovations in liquidity of individual stocks on the lead, lag, and contemporaneous innovations in market liquidity (including/excluding stock i) at the country level. Daily innovations in liquidity are the residuals of filtering regressions in Equation (4) of each stock's daily Amihud liquidity on lagged liquidity, day-of-the-week dummies, and holiday dummies within the month. Daily innovations in market liquidity are the value-weighted average of the daily innovations in each stock within the country, with or without including the stock of interest. The table presents the time-series average and standard deviation of the equally-weighted average of R^2_{liq} across the individual stocks in each country.

	R^2_{liq} (excluding stock i)		R^2_{liq} (including stock i)			R^2_{liq} (excluding stock i)		R^2_{liq} (including stock i)	
	mean (%)	st.dev.	mean (%)	st.dev.		mean (%)	st.dev.	mean (%)	st.dev.
Japan	23.5152	3.8937	23.5732	3.8887	Taiwan	27.6853	11.4068	27.8977	11.4073
Norway	22.0869	3.6591	23.1850	3.6754	Spain	21.5263	5.0294	22.2660	5.0473
United States	23.0263	5.0291	23.0989	5.0365	New Zealand	21.7540	4.8865	23.1534	4.8930
Switzerland	20.9378	2.5475	21.5255	2.5618	South Korea	24.0081	6.4421	24.1417	6.4426
Denmark	22.0185	3.2113	23.1248	3.2344	Portugal	22.3993	5.4351	24.9902	5.6099
Sweden	21.1269	2.6234	21.5597	2.6725	Greece	24.3749	7.8926	24.8246	7.8973
Ireland	23.0045	7.5752	26.1645	7.5362	Argentina	27.3293	7.2097	31.2255	8.6935
Hong Kong	22.2360	3.4070	22.4686	3.4201	Mexico	25.2727	8.5903	27.3491	8.6460
United Kingdom	21.0708	3.3366	21.1780	3.3404	Chile	22.9057	4.7546	25.0006	4.8599
Austria	21.8113	3.8683	23.6786	3.8283	Poland	22.0391	4.9133	23.6724	6.6822
Netherlands	20.7087	4.3043	21.4332	4.2508	Malaysia	24.1025	4.6989	24.3073	4.7104
Finland	22.0060	4.8980	24.3475	6.1634	Brazil	24.1254	9.3835	31.2880	10.8215
Canada	21.5395	3.1821	21.6709	3.1795	Turkey	26.5872	7.2375	27.0865	7.2185
Singapore	22.2048	3.1384	22.6779	3.1864	South Africa	21.5309	3.3715	22.0787	3.4018
Germany	21.9223	3.1484	22.1706	3.1413	Thailand	23.3432	4.4399	23.7491	4.4328
Belgium	21.5786	4.0555	22.8990	4.1253	Philippines	22.6706	3.9928	24.3205	4.0743
France	20.7443	2.3194	20.9524	2.3217	China	41.6498	10.1383	41.9020	10.1360
Australia	21.1190	2.4761	21.2811	2.4818	Indonesia	22.1396	4.0551	23.1741	4.1299
Italy	22.4207	4.8090	22.9087	4.8073	India	24.7608	7.1431	24.9566	7.1566
Israel	23.7339	5.3350	25.3537	5.6714	Pakistan	25.2564	7.7962	28.2357	10.1129

Appendix Table IV: What drives cross-country variation in commonality in liquidity? (results discussed in section 3.2 of the paper)

Difference with Table 2 in the paper: stock i is included in the market liquidity index in the individual stock commonality regressions.

This table reports results of cross-sectional regressions of average commonality in liquidity in 40 countries – denoted by $(R^2_{liq})_m$, computed as the logistic transformation of the time-series average of commonality in liquidity in country m over the period 1995:01-2009:12 – on various country characteristics:

$$(R^2_{liq})_m = \alpha + \sum_j \beta_j X_m^j + \sum_k \gamma_k Z_m^k + \varepsilon_m \quad (m = 1, \dots, 40),$$

where X_m^j denotes the cross-sectional supply-side and demand-side factors and Z_m^k denotes the cross-sectional control variables for country m . Variable definitions are in Table A1. Intercepts are suppressed to conserve space. Significance at the 1%, 5%, and 10% level (based on standard errors that are robust to heteroskedasticity) is indicated by ^a, ^b, and ^c, respectively. The economic effects in the table represent the effect of a one standard deviation (σ) increase in the supply-side/demand-side factor of interest, expressed as a fraction of one standard deviation of the average R^2_{liq} across countries, or $\sigma(R^2_{liq})$.

Model:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
<i>Supply-side factors</i>													
Market volatility (average)	0.0442 ^b												0.0107
Short-term interest rate (average)		-0.0002											
Stock market cap. (mcap) / GDP			-0.0002										
Bank deposits / GDP				-0.0123									
<i>Demand-side factors</i>													
R^2_{turn} (average)					0.7559 ^a								0.4341 ^a
Equity mutual fund assets / mcap						-0.0020 ^b							
Foreign inst. ownership / mcap							0.0007						
Net % equity flow (average)								0.0085 ^b				0.0051 ^c	0.0026
Gross capital flow / GDP (average)									0.0002				
Good government index										-0.0244 ^a		-0.0163 ^b	-0.0006
Financial disclosure											-0.0034 ^a	-0.0020	-0.0013
<i>Control variables</i>													
Ln (GDP per capita)	-0.0223	-0.0584	-0.0563	-0.0235	-0.0080	0.0071	-0.0148	-0.0296	-0.0609 ^c	0.0565 ^c	-0.0141	0.0455 ^c	0.0088
Ln (Geographical size)	0.0186 ^c	0.0172	0.0147	0.0132	0.0216 ^a	0.0114	-0.0001	0.0169	0.0205	0.0101	0.0090	0.0071	0.0160 ^a
Ln (Number of stocks)	-0.0592 ^a	-0.0534 ^b	-0.0500 ^c	-0.0708 ^a	-0.0124	-0.0585 ^a	-0.0281	-0.0654 ^a	-0.0534 ^c	-0.0498 ^a	-0.0614 ^a	-0.0588 ^a	-0.0387 ^b
GDP growth volatility	-0.0063	-0.0053	-0.0054	0.0005	-0.0074 ^b	0.0095	-0.0028	-0.0035	-0.0047	0.0004	0.0033	0.0042	-0.0012
Industry Herfindahl index	0.1727	0.2724	0.2209	0.1327	0.1040	0.6095	0.5595	0.1331	0.3887	0.3454	-0.1277	-0.0495	-0.0187
Firm Herfindahl index	-1.3146 ^c	-1.0406	-1.0238	-0.3281	-0.2854	-1.3205 ^c	-0.7130	-0.5941	-1.1225	-0.4274	-0.3153	0.0465	-0.2496
Earnings co-movement index	0.0016	0.0151	0.0125	-0.0063	-0.0024	-0.0113	-0.0214	0.0361	0.0186	-0.0150	0.0029	0.0132	0.0023
# obs.	40	40	40	38	40	31	25	39	39	38	37	36	36
Economic effect ($\times \sigma(R^2_{liq})$)	0.01 $\times \sigma$	-0.00 $\times \sigma$	-0.01 $\times \sigma$	-0.02 $\times \sigma$	0.66 $\times \sigma$	-0.16 $\times \sigma$	0.03 $\times \sigma$	0.20 $\times \sigma$	0.05 $\times \sigma$	-0.78 $\times \sigma$	-0.02 $\times \sigma$		
R ²	0.47	0.35	0.35	0.52	0.85	0.57	0.46	0.42	0.35	0.59	0.63	0.73	0.86

Appendix Table V: What drives time-series variation in commonality in liquidity? (results discussed in section 3.2 of the paper)

Difference with Table 3 in the paper: stock i is included in the market liquidity index in the individual stock commonality regressions.

Also, these regressions do not include a trend.

This table reports results of time-series regressions of monthly commonality in liquidity in 40 countries – denoted by $(R^2_{liq})_{m,t}$, computed as the logistic transformation of commonality in liquidity in country m in month t – over the period 1995:01-2009:12 on various country-level time-series variables:

$$(R^2_{liq})_{m,t} = \alpha + \sum_j \beta_j X_{m,t}^j + \sum_k \gamma_k Z_{m,t}^k + \varepsilon_{m,t} \quad (m = 1, \dots, 40; t = 1995:01, \dots, 2009:12),$$

where $X_{m,t}^j$ denotes the time-series supply-side and demand-side factors and $Z_{m,t}^k$ denotes the time-series control variables (market return, volatility, liquidity, and turnover – to capture general variation in capital market conditions) for country m in month t . Variable definitions are in Table A4. The coefficients in the table are taken from seemingly unrelated regression (SUR) models estimated jointly for all 40 countries (coefficients are restricted to be the same for all countries). Intercepts are suppressed to conserve space. Significance at the 1%, 5%, and 10% level is indicated by ^a, ^b, and ^c, respectively. The economic effects in the table represent the effect of a one standard deviation (σ) increase in a supply-side or demand-side factor of interest, expressed as a fraction of one σ of R^2_{liq} (except $R_m^{Down,Large}$, which has no meaningful σ). Equity/capital flow data are only available to/from the U.S., so models with these variables exclude the U.S.; ETF volume and local country fund discount data are only available for 28 and 27 countries, respectively. The final three rows of the table show the number of (significantly) negative and positive coefficients on a supply-side/demand-side factor of interest and the average R^2 taken from 40 country-by-country time-series regressions (instead of SUR models) with the same specification.

Model:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Capital market conditions</i>								
Market return	-0.0141		-0.0249	-0.0214	-0.0332	-0.0168	-0.0703	-0.0823
Market volatility	0.0890 ^a		0.0819 ^a	0.0957 ^a	0.0890 ^a	0.0891 ^a	0.0891 ^a	0.0899 ^a
Market liquidity	8.5756		17.7602 ^c	9.2950	-14.9751	8.6395	8.3078	16.5427 ^c
Market turnover	6.3897 ^a		6.8577 ^a	6.7910 ^a	7.3469 ^a	6.3988 ^a	6.3890 ^a	7.0934 ^a
<i>Large/small up/down market returns</i>								
$R_m^{Down,Large}$		-0.5497 ^a						
R_m^{Small}		-0.1746 ^b						
$R_m^{Up,Large}$		0.3427 ^a						
<i>Supply-side factors</i>								
Short-term interest rate			0.0021 ^a					0.0016 ^a
U.S. default spread				-0.0269 ^a				-0.0270 ^a
U.S. commercial paper (CP) spread					-0.0450 ^b			
Global prime broker returns						0.0000		
Local bank returns							0.0006	0.0005
# obs.	6,988	6,988	6,955	6,988	5,963	6,988	6,988	6,955
<i>Supply-side factor of interest:</i>	<i>Market volatility</i>	$R_m^{Down,Large}$	<i>Short-term interest rate</i>	<i>U.S. default spread</i>	<i>U.S. CP spread</i>	<i>Prime broker returns</i>	<i>Local bank returns</i>	<i>Short-term interest rate</i>
Economic effect ($\times \sigma(R^2_{liq})$)	0.23 $\times \sigma$	NA	0.03 $\times \sigma$	-0.07 $\times \sigma$	-0.04 $\times \sigma$	0.00 $\times \sigma$	0.02 $\times \sigma$	0.02 $\times \sigma$
# coefficients < 0 (# significantly < 0)	6 (0)	29 (13)	13 (2)	23 (10)	22 (6)	19 (2)	16 (3)	11 (2)
# coefficients > 0 (# significantly > 0)	34 (24)	11 (1)	27 (11)	17 (6)	18 (1)	21 (3)	24 (3)	29 (9)
Average R^2	0.15	0.05	0.16	0.16	0.15	0.15	0.15	0.18

Appendix Table V, continued

Model:	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	
<i>Capital market conditions</i>										
Market return	-0.0570	-0.0183	-0.0179	-0.0147	0.0897	-0.0592	-0.0188	0.0213	-0.0681	
Market volatility	0.0746 ^a	0.0895 ^a	0.0872 ^a	0.0898 ^a	0.0854 ^a	0.1025 ^a	0.0903 ^a	0.0941 ^a	0.0734 ^a	
Market liquidity	3.5022	18.5149 ^b	19.7259 ^b	8.3701	14.6380	10.9260	8.6065	13.0481	13.1668	
Market turnover	7.0128 ^a	4.9298 ^a	4.7581 ^a	6.3368 ^a	-18.6250 ^a	2.8800 ^a	6.3021 ^a	-4.7376 ^a	5.7631 ^a	
<i>Demand-side factors</i>										
R^2_{turn} (orthogonalized to supply-side factors)	0.1659 ^a								0.1622 ^a	
Net % equity flow		0.0002 ^a							0.0002 ^a	
Gross capital flow / GDP			-0.0002 ^a						-0.0002 ^a	
Exchange rate				-0.0012						
ETF volume					-0.0000					
U.S. sentiment index						0.0056				
Global country fund (cf) discount							-0.0011		-0.0003	
Local country fund (cf) discount								0.0007 ^b		
# obs.	6,955	6,657	6,664	6,988	4,231	6,034	6,988	3,848	6,624	
	<i>Demand-side factor of interest:</i>	R^2_{turn}	<i>Net % equity flow</i>	<i>Gross capital flow</i>	<i>Exchange rate</i>	<i>ETF volume</i>	<i>U.S. sentiment</i>	<i>Global cf discount</i>	<i>Local cf discount</i>	R^2_{turn}
Economic effect ($\times\sigma(R^2_{liq})$)		$0.15\times\sigma$	$0.03\times\sigma$	$-0.02\times\sigma$	$-0.01\times\sigma$	$-0.01\times\sigma$	$0.01\times\sigma$	$-0.02\times\sigma$	$0.02\times\sigma$	$0.15\times\sigma$
# coefficients < 0 (# significantly < 0)		1 (0)	17 (2)	28 (9)	24 (3)	20 (3)	25 (6)	17 (7)	12 (4)	1 (0)
# coefficients > 0 (# significantly > 0)		39 (36)	22 (5)	11 (4)	16 (0)	8 (3)	15 (5)	23 (5)	15 (2)	38 (35)
Average R ²		0.20	0.14	0.14	0.15	0.12	0.16	0.16	0.16	0.21

Appendix Table VI: What drives time-series variation in commonality in liquidity? (results discussed in footnote 7 of the paper)

Difference with Table 3 in the paper: We exclude stock-month observations with a monthly return or stock price at the end of previous month in the top or the bottom 2.5% (instead of 1% as in the paper), or a Turn or Liq in the top 2.5% (instead of 1%) of the cross-sectional distribution within a country. Also, these regressions do not include a trend.

This table reports results of time-series regressions of monthly commonality in liquidity in 40 countries – denoted by $(R^2_{liq})_{m,t}$, computed as the logistic transformation of commonality in liquidity in country m in month t – over the period 1995:01-2009:12 on various country-level time-series variables:

$$(R^2_{liq})_{m,t} = \alpha + \sum_j \beta_j X_{m,t}^j + \sum_k \gamma_k Z_{m,t}^k + \varepsilon_{m,t} \quad (m = 1, \dots, 40; t = 1995:01, \dots, 2009:12),$$

where $X_{m,t}^j$ denotes the time-series supply-side and demand-side factors and $Z_{m,t}^k$ denotes the time-series control variables (market return, market volatility, market liquidity, and market turnover – to capture general variation in capital market conditions) for country m in month t . Variable definitions are in Table A4. The coefficients in the table are taken from seemingly unrelated regression (SUR) models estimated jointly for all 40 countries (coefficients are restricted to be the same for all countries). Intercepts are suppressed to conserve space. Significance at the 1%, 5%, and 10% level is indicated by ^a, ^b, and ^c, respectively. The economic effects in the table represent the effect of a one standard deviation (σ) increase in a supply-side or demand-side factor of interest, expressed as a fraction of one standard deviation of R^2_{liq} (except $R_m^{Down,Large}$, which has no meaningful σ). Equity/capital flow data are only available to/from the U.S., so models with these variables exclude the U.S.; ETF volume and local country fund discount data are only available for 28 and 27 countries, respectively. The final three rows of the table show the number of (significantly) negative and positive coefficients on a supply-side or demand-side factor of interest and the average R^2 taken from 40 country-by-country time-series regressions (instead of SUR models) with the same specification.

Model:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Capital market conditions</i>								
Market return	-0.0565		-0.0660	-0.0631	-0.0764 ^c	-0.0622	-0.1266 ^b	-0.1373 ^b
Market volatility	0.0796 ^a		0.0749 ^a	0.0863 ^a	0.0803 ^a	0.0799 ^a	0.0798 ^a	0.0828 ^a
Market liquidity	8.1349		14.7542 ^c	9.0685	-0.0712	8.1798	8.0206	13.7568
Market turnover	15.2419 ^a		15.2993 ^a	15.6810 ^a	15.0504 ^a	15.2500 ^a	15.1833 ^a	15.5349 ^a
<i>Large/small up/down market returns</i>								
$R_m^{Down,Large}$		-0.5534 ^a						
R_m^{Small}		-0.1559 ^c						
$R_m^{Up,Large}$		0.3225 ^a						
<i>Supply-side factors</i>								
Short-term interest rate			0.0014 ^a					0.0010 ^b
U.S. default spread				-0.0276 ^a				-0.0281 ^a
U.S. commercial paper (CP) spread					-0.0334 ^c			
Global prime broker returns						0.0006		
Local bank returns							0.0007 ^c	0.0007 ^c
# obs.	6,988	6,988	6,955	6,988	5,963	6,988	6,988	6,955
<i>Supply-side factor of interest:</i>	<i>Market volatility</i>	$R_m^{Down,Large}$	<i>Short-term interest rate</i>	<i>U.S. default spread</i>	<i>U.S. CP spread</i>	<i>Prime broker returns</i>	<i>Local bank returns</i>	<i>Short-term interest rate</i>
Economic effect ($\times\sigma(R^2_{liq})$)	0.21 $\times\sigma$	NA	0.02 $\times\sigma$	-0.08 $\times\sigma$	-0.03 $\times\sigma$	0.01 $\times\sigma$	0.02 $\times\sigma$	0.01 $\times\sigma$
# coefficients < 0 (# significantly < 0)	8 (1)	25 (11)	14 (3)	23 (8)	23 (4)	18 (6)	19 (3)	14 (4)
# coefficients > 0 (# significantly > 0)	32 (23)	15 (1)	26 (7)	17 (7)	17 (2)	22 (3)	21 (3)	26 (4)
Average R^2	0.13	0.04	0.14	0.14	0.14	0.13	0.13	0.15

Appendix Table VI, continued

Model:	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
<i>Capital market conditions</i>									
Market return	-0.0897 ^b	-0.0323	-0.0488	-0.0586	0.0452	-0.1119 ^b	-0.0650	-0.0074	-0.0848 ^c
Market volatility	0.0680 ^a	0.0777 ^a	0.0794 ^a	0.0803 ^a	0.0794 ^a	0.0919 ^a	0.0815 ^a	0.0786 ^a	0.0683 ^a
Market liquidity	0.9897	14.7648 ^c	18.0957 ^b	8.0318	17.6880 ^c	12.1259	8.2023	18.0086 ^c	11.5364
Market turnover	15.4921 ^a	10.6294 ^a	12.8434 ^a	15.1902 ^a	-5.3686 ^a	11.5483 ^a	15.0824 ^a	7.1635 ^a	13.3924 ^a
<i>Demand-side factors</i>									
R^2_{turn} (orthogonalized to supply-side factors)	0.1375 ^a								0.1324 ^a
Net % equity flow		0.0002 ^a							0.0001 ^b
Gross capital flow / GDP			-0.0002 ^a						-0.0002 ^a
Exchange rate				-0.0009					
ETF volume					0.0000				
U.S. sentiment index						-0.0033			
Global country fund (cf) discount							-0.0023 ^b		-0.0011
Local country fund (cf) discount								-0.0003	
# obs.	6,955	6,657	6,664	6,988	4,231	6,034	6,988	3,848	6,624
<i>Demand-side factor of interest:</i>	R^2_{turn}	<i>Net % equity flow</i>	<i>Gross capital flow</i>	<i>Exchange rate</i>	<i>ETF volume</i>	<i>U.S. sentiment</i>	<i>Global cf discount</i>	<i>Local cf discount</i>	R^2_{turn}
Economic effect ($\times\sigma(R^2_{liq})$)	0.13 $\times\sigma$	0.02 $\times\sigma$	-0.02 $\times\sigma$	-0.01 $\times\sigma$	-0.00 $\times\sigma$	-0.01 $\times\sigma$	-0.04 $\times\sigma$	-0.01 $\times\sigma$	0.13 $\times\sigma$
# coefficients < 0 (# significantly < 0)	3 (0)	16 (1)	25 (7)	27 (3)	20 (2)	19 (6)	18 (6)	12 (4)	3 (0)
# coefficients > 0 (# significantly > 0)	37 (31)	23 (4)	14 (4)	13 (2)	8 (1)	21 (3)	22 (3)	15 (2)	37 (31)
Average R ²	0.17	0.11	0.12	0.13	0.12	0.14	0.14	0.15	0.17

Appendix Table VII: What drives time-series variation in commonality in liquidity? (results discussed in section 4.2 of the paper)

Difference with Table 3 in the paper: We extend the filtering regression in equation (4) of the paper for the liquidity and turnover of individual stocks by adding the lagged values of both variables as well as lagged individual stock returns, market returns, and market volatility as independent variables. Also, this table does not include a trend.

This table reports results of time-series regressions of monthly commonality in liquidity in 40 countries – denoted by $(R^2_{liq})_{m,t}$, computed as the logistic transformation of commonality in liquidity in country m in month t – over the period 1995:01-2009:12 on various country-level time-series variables:

$$(R^2_{liq})_{m,t} = \alpha + \sum_j \beta_j X_{m,t}^j + \sum_k \gamma_k Z_{m,t}^k + \varepsilon_{m,t} \quad (m = 1, \dots, 40; t = 1995:01, \dots, 2009:12),$$

where $X_{m,t}^j$ denotes the time-series supply-side and demand-side factors and $Z_{m,t}^k$ denotes the time-series control variables (market return, market volatility, market liquidity, and market turnover – to capture general variation in capital market conditions) for country m in month t . Variable definitions are in Table A4. The coefficients in the table are taken from seemingly unrelated regression (SUR) models estimated jointly for all 40 countries (coefficients are restricted to be the same for all countries). Intercepts are suppressed to conserve space. Significance at the 1%, 5%, and 10% level is indicated by ^a, ^b, and ^c, respectively. The economic effects in the table represent the effect of a one standard deviation (σ) increase in a supply-side or demand-side factor of interest, expressed as a fraction of one standard deviation of R^2_{liq} (except $R_m^{Down,Large}$, which has no meaningful σ). Equity/capital flow data are only available to/from the U.S., so models with these variables exclude the U.S.; ETF volume and local country fund discount data are only available for 28 and 27 countries, respectively. The final three rows of the table show the number of (significantly) negative and positive coefficients on a supply-side or demand-side factor of interest and the average R^2 taken from 40 country-by-country time-series regressions (instead of SUR models) with the same specification.

Model:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Capital market conditions</i>								
Market return	-0.0591 ^c		-0.0670 ^c	-0.0620 ^c	-0.0441	-0.0601 ^c	-0.1532 ^a	-0.1464 ^b
Market volatility	0.0535 ^a		0.0503 ^a	0.0568 ^a	0.0511 ^a	0.0535 ^a	0.0537 ^a	0.0735 ^a
Market liquidity	-0.5742		4.3790	-0.5087	-74.3460 ^a	-0.5724	-0.3936	19.3615 ^b
Market turnover	-7.4976 ^a		-7.3580 ^a	-7.2487 ^a	-4.4673 ^a	-7.4926 ^a	-7.4901 ^a	-8.6588 ^a
<i>Large/small up/down market returns</i>								
$R_m^{Down,Large}$		-0.3469 ^a						
R_m^{Small}		-0.1906 ^a						
$R_m^{Up,Large}$		0.0757						
<i>Supply-side factors</i>								
Short-term interest rate			0.0010 ^a					0.0004
U.S. default spread				-0.0086				-0.0293 ^a
U.S. commercial paper (CP) spread					-0.0325 ^b			
Global prime broker returns						-0.0001		
Local bank returns							0.0010 ^a	0.0012 ^b
# obs.	7,018	7,018	6,985	7,018	5,984	7,018	7,018	6,985
<i>Supply-side factor of interest:</i>								
	<i>Market volatility</i>	$R_m^{Down,Large}$	<i>Short-term interest rate</i>	<i>U.S. default spread</i>	<i>U.S. CP spread</i>	<i>Prime broker returns</i>	<i>Local bank returns</i>	<i>Short-term interest rate</i>
Economic effect ($\times \sigma(R^2_{liq})$)	0.17 $\times \sigma$	NA	0.02 $\times \sigma$	-0.03 $\times \sigma$	-0.04 $\times \sigma$	-0.00 $\times \sigma$	0.04 $\times \sigma$	0.01 $\times \sigma$
# coefficients < 0 (# significantly < 0)	6 (0)	29 (13)	8 (3)	24 (14)	19 (6)	23 (1)	15 (0)	14 (1)
# coefficients > 0 (# significantly > 0)	34 (16)	11 (1)	32 (19)	16 (4)	21 (4)	17 (0)	25 (5)	26 (4)
Average R^2	0.15	0.04	0.18	0.17	0.16	0.15	0.15	0.19

Appendix Table VII, continued

Model:	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
<i>Capital market conditions</i>									
Market return	-0.0413	-0.0634 ^c	-0.0613 ^c	-0.0585 ^c	-0.0613	-0.0898 ^c	-0.0116	-0.1099 ^b	-0.0582
Market volatility	0.0500 ^a	0.0528 ^a	0.0523 ^a	0.0545 ^a	0.0550 ^a	0.0602 ^a	0.0664 ^a	0.0823 ^a	0.0461 ^a
Market liquidity	7.6038	8.1746	8.0455	-0.6813	4.8750	5.0028	13.5030 ^c	22.7950 ^a	15.4221 ^b
Market turnover	-7.0665 ^a	-8.1760 ^a	-7.9629 ^a	-7.5968 ^a	-33.8766 ^a	-9.1610 ^a	-8.9332 ^a	-25.4016 ^a	-6.5138 ^a
<i>Demand-side factors</i>									
R^2_{turn} (orthogonalized to supply-side factors)	0.3805 ^a								0.3789 ^a
Net % equity flow		0.0002 ^a							0.0004 ^a
Gross capital flow / GDP			-0.0001 ^a						-0.0000
Exchange rate				-0.0013 ^b					
ETF volume					-0.0000 ^a				
U.S. sentiment index						0.0099			
Global country fund (cf) discount							0.0005		0.0013 ^b
Local country fund (cf) discount								0.0023 ^a	
# obs.	6,985	6,686	6,694	7,018	4,241	6,061	7,018	3,867	6,653
<i>Demand-side factor of interest:</i>	R^2_{turn}	<i>Net % equity flow</i>	<i>Gross capital flow</i>	<i>Exchange rate</i>	<i>ETF volume</i>	<i>U.S. sentiment</i>	<i>Global cf discount</i>	<i>Local cf discount</i>	R^2_{turn}
Economic effect ($\times\sigma(R^2_{liq})$)	0.45 $\times\sigma$	0.03 $\times\sigma$	-0.01 $\times\sigma$	-0.01 $\times\sigma$	-0.01 $\times\sigma$	0.03 $\times\sigma$	0.01 $\times\sigma$	0.10 $\times\sigma$	0.45 $\times\sigma$
# coefficients < 0 (# significantly < 0)	0 (0)	14 (2)	30 (14)	28 (2)	15 (5)	18 (5)	20 (6)	13 (3)	0 (0)
# coefficients > 0 (# significantly > 0)	40 (40)	25 (8)	9 (1)	12 (1)	13 (4)	22 (5)	20 (6)	14 (2)	39 (39)
Average R ²	0.27	0.15	0.15	0.15	0.15	0.16	0.16	0.16	0.29

Appendix Table VIII: What drives time-series variation in commonality in liquidity? (results discussed in section 6 of the paper)

Difference with Table 3 in the paper: explanatory variables are included with a one-month lag instead of contemporaneously. Also, these regressions do not include a trend.

This table reports results of time-series regressions of monthly commonality in liquidity in 40 countries – denoted by $(R^2_{liq})_{m,t}$, computed as the logistic transformation of commonality in liquidity in country m in month t – over the period 1995:01-2009:12 on lagged various country-level time-series variables:

$$(R^2_{liq})_{m,t} = \alpha + \sum_j \beta_j X_{m,t-1}^j + \sum_k \gamma_k Z_{m,t-1}^k + \varepsilon_{m,t} \quad (m = 1, \dots, 40; t = 1995:01, \dots, 2009:12),$$

where $X_{m,t-1}^j$ denotes the time-series supply-side and demand-side factors and $Z_{m,t-1}^k$ denotes the time-series control variables (market return, market volatility, market liquidity, and market turnover – to capture general variation in capital market conditions) for country m in month $t-1$. Variable definitions are in Table A4. The coefficients in the table are taken from seemingly unrelated regression (SUR) models estimated jointly for all 40 countries (coefficients are restricted to be the same for all countries). Intercepts are suppressed to conserve space. Significance at the 1%, 5%, and 10% level is indicated by ^a, ^b, and ^c, respectively. The economic effects in the table represent the effect of a one standard deviation (σ) increase in a supply-side or demand-side factor of interest, expressed as a fraction of one standard deviation of R^2_{liq} (except $R_m^{Down,Large}$, which has no meaningful σ). Equity/capital flow data are only available to/from the U.S., so models with these variables exclude the U.S.; ETF volume and local country fund discount data are only available for 28 and 27 countries, respectively. The final three rows of the table show the number of (significantly) negative and positive coefficients on a supply-side or demand-side factor of interest and the average R^2 taken from 40 country-by-country time-series regressions (instead of SUR models) with the same specification.

Model:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Capital market conditions</i>								
Market return	0.1246 ^a		0.1179 ^a	0.1268 ^a	0.1154 ^a	0.1249 ^a	0.1378 ^b	0.1348 ^b
Market volatility	0.0401 ^a		0.0335 ^a	0.0426 ^a	0.0372 ^a	0.0401 ^a	0.0400 ^a	0.0357 ^a
Market liquidity	6.2057		16.2373 ^c	6.7496	-12.7485	6.2253	6.1995	16.6767 ^c
Market turnover	14.3787 ^a		14.8993 ^a	14.5570 ^a	13.7048 ^a	14.4007 ^a	14.3910 ^a	15.0016 ^a
<i>Large/small up/down market returns</i>								
$R_m^{Down,Large}$		-0.1137						
R_m^{Small}		-0.0608						
$R_m^{Up,Large}$		0.3611 ^a						
<i>Supply-side factors</i>								
Short-term interest rate			0.0020 ^a					0.0018 ^a
U.S. default spread				-0.0048				-0.0034
U.S. commercial paper (CP) spread					0.0165			
Global prime broker returns						-0.0005		
Local bank returns							-0.0001	-0.0002
# obs.	6,918	6,918	6,896	6,918	5,899	6,918	6,918	6,896
<i>Supply-side factor of interest:</i>	<i>Market volatility</i>	$R_m^{Down,Large}$	<i>Short-term interest rate</i>	<i>U.S. default spread</i>	<i>U.S. CP spread</i>	<i>Prime broker returns</i>	<i>Local bank returns</i>	<i>Short-term interest rate</i>
Economic effect ($\times\sigma(R^2_{liq})$)	0.10 $\times\sigma$	NA	0.03 $\times\sigma$	-0.01 $\times\sigma$	0.02 $\times\sigma$	-0.01 $\times\sigma$	-0.00 $\times\sigma$	0.03 $\times\sigma$
# coefficients < 0 (# significantly < 0)	9 (2)	20 (5)	8 (0)	20 (5)	17 (3)	21 (2)	24 (2)	26 (2)
# coefficients > 0 (# significantly > 0)	31 (10)	20 (2)	32 (7)	20 (4)	23 (4)	19 (1)	16 (2)	14 (2)
Average R^2	0.07	0.03	0.08	0.08	0.08	0.08	0.08	0.10

Appendix Table VIII, continued

Model:	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
<i>Capital market conditions</i>									
Market return	0.1297 ^a	0.1371 ^a	0.1410 ^a	0.1250 ^a	0.1935 ^a	0.1278 ^a	0.1274 ^a	0.0849	0.1452 ^a
Market volatility	0.0413 ^a	0.0409 ^a	0.0394 ^a	0.0398 ^a	0.0451 ^a	0.0423 ^a	0.0390 ^a	0.0353 ^a	0.0399 ^a
Market liquidity	6.0654	6.1618	7.8148	6.2193	2.0145	8.7901	6.2550	4.6292	6.9664
Market turnover	14.2274 ^a	12.3080 ^a	12.2344 ^a	14.4184 ^a	-7.3015 ^a	10.9792 ^a	14.4718 ^a	5.9564 ^a	12.4995 ^a
<i>Demand-side factors</i>									
R^2_{turn} (orthogonalized to supply-side factors)	-0.0067								-0.0129
Net % equity flow		0.0002 ^a							0.0002 ^a
Gross capital flow / GDP			-0.0002 ^a						-0.0002 ^a
Exchange rate				0.0004					
ETF volume					-0.0000				
U.S. sentiment index						0.0153 ^c			
Global country fund (cf) discount							0.0008		0.0011
Local country fund (cf) discount								-0.0008 ^a	
# obs.	6,896	6,588	6,595	6,918	4,193	6,007	6,918	3,814	6,566
<i>Demand-side factor of interest:</i>	R^2_{turn}	<i>Net % equity flow</i>	<i>Gross capital flow</i>	<i>Exchange rate</i>	<i>ETF volume</i>	<i>U.S. sentiment</i>	<i>Global cf discount</i>	<i>Local cf discount</i>	R^2_{turn}
Economic effect ($\times\sigma(R^2_{liq})$)	-0.01 $\times\sigma$	0.02 $\times\sigma$	-0.02 $\times\sigma$	0.00 $\times\sigma$	-0.01 $\times\sigma$	0.03 $\times\sigma$	0.02 $\times\sigma$	-0.03 $\times\sigma$	-0.01 $\times\sigma$
# coefficients < 0 (# significantly < 0)	26 (5)	17 (2)	15 (3)	23 (1)	18 (1)	12 (1)	15 (2)	15 (4)	26 (5)
# coefficients > 0 (# significantly > 0)	14 (1)	22 (2)	24 (5)	17 (3)	10 (1)	28 (8)	25 (4)	12 (1)	13 (1)
Average R ²	0.08	0.06	0.07	0.08	0.06	0.08	0.08	0.08	0.09

Appendix Table IX: What drives time-series variation in commonality in liquidity? (results discussed in section 6 of the paper)

Country-by-country vector autoregression models with impulse responses and block exogeneity tests

This table reports results of vector autoregression (VAR) models of monthly commonality in liquidity in 40 countries – denoted by $(R^2_{liq})_{m,t}$, computed as the logistic transformation of commonality in liquidity in country m in month t – over the period 1995:01-2009:12 jointly with various country-level time-series variables (market return, market volatility, market liquidity, and market turnover – to capture variation in capital market conditions, denoted $Z_{m,t}^k$) for variable k in country m in month t :

$$\mathbf{y}_{m,t} = \sum_{l=1}^L \mathbf{B}_l \mathbf{y}_{m,t-l} + \mathbf{C} \mathbf{x}_{m,t} + \mathbf{u}_t \quad E[\mathbf{u}_t \mathbf{u}_t'] = \Sigma \quad (m = 1, \dots, 40; t = 1995:01, \dots, 2009:12),$$

where $\mathbf{y}_{m,t} = [(R^2_{liq})_{m,t}, Z_{m,t}^k]$, $\mathbf{x}_{m,t} = [X_{m,t}^j]$ denotes j different deterministic time-series variables related to supply-side and demand-side factors. Variable definitions are in Table A4. The models are estimated by country and with two lags ($l = 2$). Panel A presents the average and median coefficients *only* for the equation associated with $(R^2_{liq})_{m,t}$ across m countries are reported as well as the number of (significantly) negative and positive coefficients. The last row of Panel A shows the mean and median adjusted R^2 . Panel B reports the block exogeneity tests (F -statistics, with counts of those significant at the 5% level) that the lagged values of the time-series variable of interest have predictive power for $(R^2_{liq})_{m,t}$. Panel C shows the impulse responses of the system to standardized unit shocks of each component variable using a Choleski factorization to orthogonalize the innovations. The models in this table exclude the U.S., since equity/capital flow data are only available to/from the U.S. Intercepts are suppressed to conserve space.

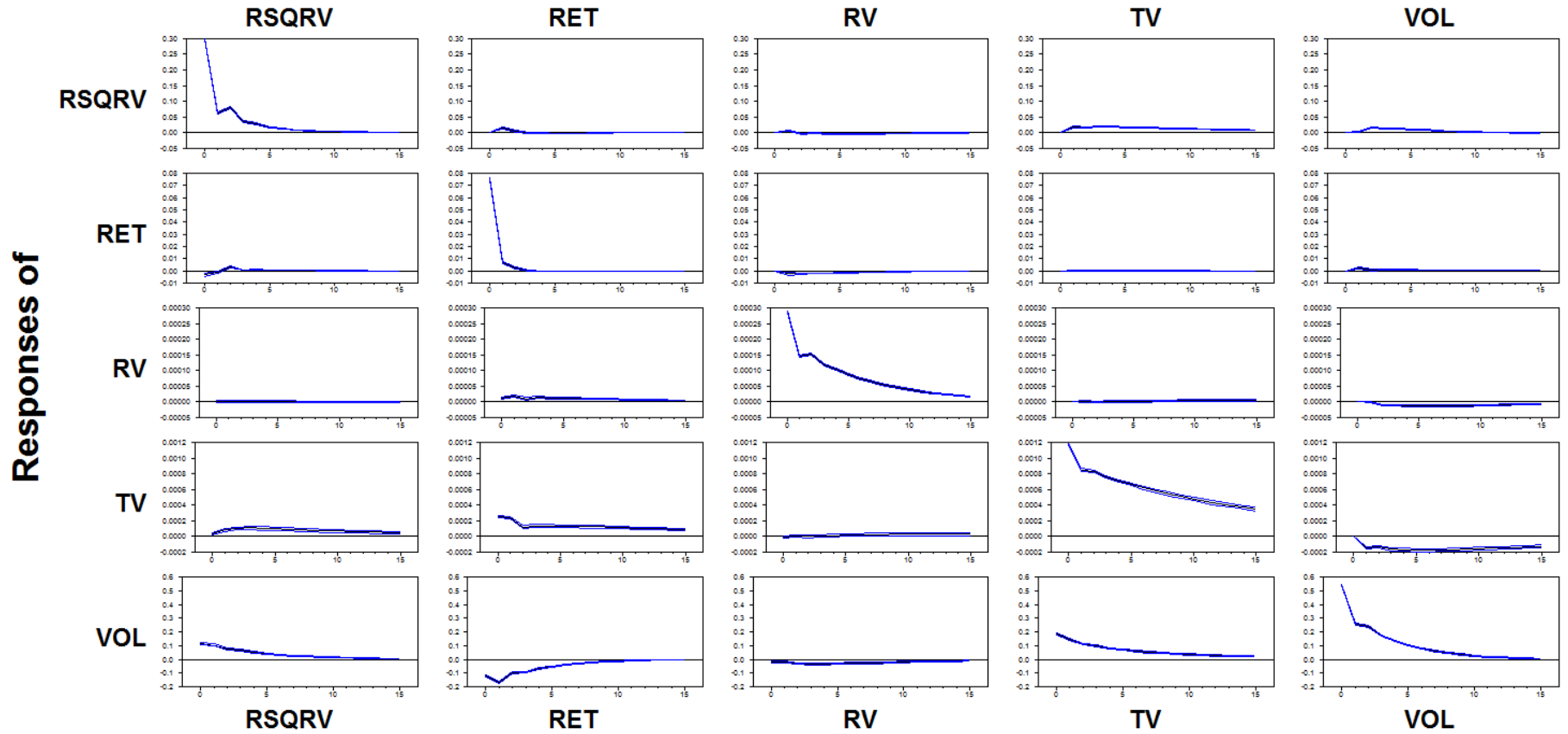
Panel A: Coefficient estimates						
	Mean	Median	# Negative	# Positive	# Sig. Neg.	# Sig. Pos.
$(R^2_{liq})_{m,t}$ Lag 1	0.0002	-0.0356	23	17	4	4
$(R^2_{liq})_{m,t}$ Lag 2	0.0008	-0.0051	23	17	1	2
<i>Capital market conditions</i>						
Market return Lag 1	0.1358	0.1515	14	26	2	4
Market return Lag 2	-0.0282	0.0482	19	21	0	1
Market volatility Lag 1	-0.0166	-0.0087	23	18	3	2
Market volatility Lag 2	0.0227	0.0310	12	28	1	3
Market liquidity Lag 1	-4613.9	-75.615	26	14	2	4
Market liquidity Lag 2	6845.2	6.9565	19	21	1	0
Market turnover Lag 1	-8.7680	10.362	14	26	1	4
Market turnover Lag 2	-8.7958	-10.564	23	17	3	0
<i>Supply-side factors</i>						
Short-term interest rate	0.0095	0.0065	9	31	1	11
U.S. default spread	0.0103	0.0113	16	24	2	2
Local bank returns	-0.0002	-0.0002	21	19	3	2
<i>Demand-side factors</i>						
R^2_{turn} (orthogonalized to supply-side factors)	0.2151	0.2263	0	40	0	33
Net % equity flow	-0.0001	0.0001	18	22	3	0
Gross capital flow / GDP	-0.0008	-0.0003	24	16	5	2
Global country fund (cf) discount	0.0004	0.0014	18	22	4	4
Average R^2	0.19	0.13				

Appendix Table IX, continued

Panel B: Block exogeneity tests on predictive power for R^2_{liq}				
F -statistics of block exogeneity tests:	Mean	Median	Median p -values	# Sig.
$(R^2_{liq})_{m,t}$	5.2363	1.5098	0.2246	8/40
Market return	1.4542	1.0725	0.3449	6/40
Market volatility	1.0848	0.6608	0.5178	3/40
Market liquidity	1.8349	0.8969	0.4102	7/40
Market turnover	1.5236	0.8329	0.4368	5/40

Panel C: Impulse response analysis (Panel VAR estimation only, pooled across all countries)

Impulse responses



Appendix Table X: Vogelsang trend tests of commonality in liquidity

Tests for a linear time trend that control for the possibility of a spurious trend resulting from serial correlation in the time-series.

This table reports results of Vogelsang (1998) trend tests carried out on our monthly time-series of commonality in liquidity (R^2_{liq}) by country. For ease of interpretation, the trend tests are based on the R^2_{liq} series without logistic transformation (that is the values of R^2_{liq} lie between 0 and 1). Any missing values in the time-series are discarded. The table reports the estimated coefficient on the linear time trend for each individual country. Significance at the 1%, 5%, and 10% level (based on the Vogelsang (1998) $t - PS$ test) is indicated by ^a, ^b, and ^c, respectively.

	<i>Trend in R^2_{liq}</i>		<i>Trend in R^2_{liq}</i>
Argentina	-0.0002	Malaysia	-0.0003
Australia	0.0000	Mexico	-0.0001
Austria	0.0000	Netherlands	-0.0001
Belgium	-0.0001 ^b	New Zealand	-0.0002 ^a
Brazil	-0.0007 ^a	Norway	-0.0001
Canada	0.0000	Pakistan	-0.0002
Chile	0.0000	Philippines	0.0000
China	0.0000	Poland	-0.0004
Denmark	-0.0002 ^b	Portugal	-0.0002 ^b
Finland	-0.0003 ^a	Singapore	-0.0002 ^b
France	-0.0001 ^b	South Africa	-0.0001 ^a
Germany	0.0000	South Korea	-0.0004 ^a
Greece	-0.0005	Spain	-0.0004 ^b
Hong Kong	-0.0001	Sweden	-0.0001 ^b
India	-0.0002	Switzerland	0.0000
Indonesia	-0.0001 ^b	Taiwan	-0.0010 ^a
Ireland	-0.0002	Thailand	-0.0001
Israel	-0.0003 ^b	Turkey	0.0002
Italy	-0.0002 ^a	United Kingdom	-0.0001 ^b
Japan	0.0001 ^b	United States	0.0004

Appendix Table XI: What drives time-series variation in commonality in liquidity?

Difference with Table 3 in the paper: these regressions do not include a trend.

This table reports results of time-series regressions of monthly commonality in liquidity in 40 countries – denoted by $(R^2_{liq})_{m,t}$, computed as the logistic transformation of commonality in liquidity in country m in month t – over the period 1995:01-2009:12 on various country-level time-series variables:

$$(R^2_{liq})_{m,t} = \alpha + \sum_j \beta_j X_{m,t}^j + \sum_k \gamma_k Z_{m,t}^k + \varepsilon_{m,t} \quad (m = 1, \dots, 40; t = 1995:01, \dots, 2009:12),$$

where $X_{m,t}^j$ denotes the time-series supply-side and demand-side factors and $Z_{m,t}^k$ denotes the time-series control variables (market return, market volatility, market liquidity, and market turnover – to capture general variation in capital market conditions) for country m in month t . Variable definitions are in Table A4. The coefficients in the table are taken from seemingly unrelated regression (SUR) models estimated jointly for all 40 countries (coefficients are restricted to be the same for all countries). Intercepts are suppressed to conserve space. Significance at the 1%, 5%, and 10% level is indicated by ^a, ^b, and ^c, respectively. The economic effects in the table represent the effect of a one standard deviation (σ) increase in a supply-side or demand-side factor of interest, expressed as a fraction of one standard deviation of R^2_{liq} (except $R_m^{Down,Large}$, which has no meaningful σ). Equity/capital flow data are only available to/from the U.S., so models with these variables exclude the U.S.; ETF volume and local country fund discount data are only available for 28 and 27 countries, respectively. The final three rows of the table show the number of (significantly) negative and positive coefficients on a supply-side/demand-side factor of interest and the average R^2 taken from 40 country-by-country time-series regressions (instead of SUR models) with the same specification.

Model:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Capital market conditions</i>								
Market return	-0.0352		-0.0437	-0.0419	-0.0560	-0.0381	-0.1090	-0.1210 ^b
Market volatility	0.0773 ^a		0.0733 ^a	0.0834 ^a	0.0765 ^a	0.0774 ^a	0.0776 ^a	0.0811 ^a
Market liquidity	5.4606		10.6522	6.1763	-27.9627	5.5025	5.3011	9.5322
Market turnover	12.6561 ^a		12.7891 ^a	13.0512 ^a	13.0973 ^a	12.6630 ^a	12.6147 ^a	13.0218 ^a
<i>Large/small up/down market returns</i>								
$R_m^{Down,Large}$		-0.5061 ^a						
R_m^{Small}		-0.1472 ^c						
$R_m^{Up,Large}$		0.3254 ^a						
<i>Supply-side factors</i>								
Short-term interest rate			0.0011 ^a					0.0007 ^b
U.S. default spread				-0.0256 ^a				-0.0267 ^a
U.S. commercial paper (CP) spread					-0.0342 ^c			
Global prime broker returns						0.0001		
Local bank returns							0.0008 ^c	0.0008 ^c
# obs.	6,988	6,988	6,955	6,988	5,963	6,988	6,988	6,955
<i>Supply-side factor of interest:</i>	<i>Market volatility</i>	$R_m^{Down,Large}$	<i>Short-term interest rate</i>	<i>U.S. default spread</i>	<i>U.S. CP spread</i>	<i>Prime broker returns</i>	<i>Local bank returns</i>	<i>Short-term interest rate</i>
Economic effect ($\times\sigma(R^2_{liq})$)	0.20 $\times\sigma$	NA	0.02 $\times\sigma$	-0.07 $\times\sigma$	-0.03 $\times\sigma$	0.00 $\times\sigma$	0.03 $\times\sigma$	0.01 $\times\sigma$
# coefficients < 0 (# significantly < 0)	7 (0)	28 (12)	14 (2)	20 (8)	23 (6)	21 (2)	16 (3)	15 (2)
# coefficients > 0 (# significantly > 0)	33 (23)	12 (1)	26 (7)	20 (7)	17 (2)	19 (2)	24 (3)	25 (6)
Average R^2	0.12	0.05	0.14	0.14	0.14	0.13	0.13	0.15

Appendix Table XI, continued

Model:	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
<i>Capital market conditions</i>									
Market return	-0.0727 ^c	-0.0323	-0.0324	-0.0362	0.0599	-0.0871	-0.0412	0.0166	-0.0741 ^c
Market volatility	0.0657 ^a	0.0777 ^a	0.0758 ^a	0.0782 ^a	0.0755 ^a	0.0887 ^a	0.0787 ^a	0.0795 ^a	0.0648 ^a
Market liquidity	-0.0118	14.7648 ^c	16.0344	5.1647	13.4171	9.3210	5.4742	15.2977 ^c	10.0677
Market turnover	12.9464 ^a	10.6294 ^a	10.5327 ^a	12.5945 ^a	-8.4976 ^a	9.2613 ^a	12.5611 ^a	3.5741 ^b	11.1294 ^a
<i>Demand-side factors</i>									
R^2_{turn} (orthogonalized to supply-side factors)	0.1402 ^a								0.1361 ^a
Net % equity flow		0.0002 ^a							0.0002 ^b
Gross capital flow / GDP			-0.0002 ^a						-0.0002 ^a
Exchange rate				-0.0012					
ETF volume					0.0000				
U.S. sentiment index						0.0011			
Global country fund (cf) discount							-0.0018 ^c		-0.0006
Local country fund (cf) discount								-0.0003	
# obs.	6,955	6,657	6,664	6,988	4,231	6,034	6,988	3,848	6,624
<i>Demand-side factor of interest:</i>	R^2_{turn}	<i>Net % equity flow</i>	<i>Gross capital flow</i>	<i>Exchange rate</i>	<i>ETF volume</i>	<i>U.S. sentiment</i>	<i>Global cf discount</i>	<i>Local cf discount</i>	R^2_{turn}
Economic effect ($\times\sigma(R^2_{liq})$)	0.13 $\times\sigma$	0.02 $\times\sigma$	-0.02 $\times\sigma$	-0.01 $\times\sigma$	-0.01 $\times\sigma$	0.00 $\times\sigma$	-0.07 $\times\sigma$	-0.01 $\times\sigma$	0.13 $\times\sigma$
# coefficients < 0 (# significantly < 0)	2 (0)	17 (1)	26 (8)	24 (5)	20 (2)	23 (5)	15 (6)	18 (8)	1 (0)
# coefficients > 0 (# significantly > 0)	38 (32)	22 (2)	13 (4)	16 (1)	8 (2)	17 (5)	25 (5)	9 (2)	38 (30)
Average R ²	0.17	0.11	0.12	0.13	0.11	0.14	0.13	0.18	0.18

Appendix Table XII: What drives time-series variation in commonality in liquidity? U.S. vs. other countries and pre-crisis vs. crisis period

(results discussed in section 5.2 of the paper)

Differences with Table 3 in the paper: (i) results are reported separately for the U.S. and for the other 39 countries; (ii) for the U.S. we also use a commonality measure based on detailed bid-ask spread data; (iii) coefficients are allowed to vary across the period before and during the financial crisis of 2008-2009 – to address comment 5. Also, these regressions do not include a trend.

This table reports results of time-series regressions of monthly commonality in liquidity in 40 countries – denoted by $(R^2_{liq})_{m,t}$, computed as the logistic transformation of commonality in liquidity in country m in month t – over the period 1995:01-2009:12 on various country-level time-series variables:

$$(R^2_{liq})_{m,t} = \alpha + \sum_j \beta_j X_{m,t}^j + \sum_k \gamma_k Z_{m,t}^k + \varepsilon_{m,t} \quad (m = 1, \dots, 40; t = 1995:01, \dots, 2009:12),$$

where $X_{m,t}^j$ denotes the time-series supply-side and demand-side factors and $Z_{m,t}^k$ denotes the time-series control variables (market return, market volatility, market liquidity, and market turnover – to capture general variation in capital market conditions) for country m in month t . Variable definitions are in Table A4. The coefficients in the table are taken from seemingly unrelated regression (SUR) models estimated jointly for 39 countries (coefficients are restricted to be the same for all countries) in model (1) and from OLS regressions for the U.S. only in models (2) and (3). R^2_{liq} in model (3) is based on proportional quoted spreads from ISSM/TAQ rather than Amihud liquidity. Models (4), (5), and (6) are equivalent to Models (1), (2), and (3), respectively, but allow the coefficients to differ across the pre-crisis and crisis periods. The pre-crisis and crisis coefficients are presented in separate columns. We take the “quant crisis” in August 2007 as the starting point of the financial crisis. Models (7) through (12) have a similar set-up as Models (1) through (6), but with a different set of independent variables. Intercepts are suppressed to conserve space. Significance at the 1%, 5%, and 10% level is indicated by ^a, ^b, and ^c, respectively. Equity/capital flow data are only available to/from the U.S., so models with these variables exclude the U.S. The second to last row depicts the number of observations in each model. The final row shows the R^2 , which for models (1) and (4) is the average R^2 taken from 39 country-by-country time-series regressions (instead of SUR models) with the same specification.

Model:	(1)	(2)	(3)	(4)		(5)		(6)	
Countries:	39 countries	U.S. only	U.S. only	39 countries		U.S. only		U.S. only	
Liquidity measure:	Amihud	Amihud	Spreads	Amihud		Amihud		Spreads	
Sample period:	Full period	Full period	Full period	Pre-crisis	Crisis	Pre-crisis	Crisis	Pre-crisis	Crisis
<i>Large/small up/down market returns</i>									
$R_m^{Down, Large}$	-0.4761 ^a	-3.5149 ^a	-6.3192 ^a	-0.5110 ^a	-0.4817 ^a	-1.6713 ^c	-2.3015 ^b	-2.5537 ^b	-4.9111 ^a
R_m^{Small}	-0.1318	-0.6037	-1.2690	-0.1338	-0.1121	-0.4687	-1.8201	-1.0591	-3.0183
$R_m^{Up, Large}$	0.3227 ^a	1.2149	0.2984	0.2915 ^a	0.5302 ^a	-0.3442	2.7401 ^b	-0.0232	-3.3228 ^c
# obs.	6,808	180	180	6,808		180		180	
(Average) R^2	0.05	0.11	0.16	0.08		0.45		0.46	

Appendix Table XII, continued

Model:	(7)	(8)	(9)	(10)	(11)	(12)			
Countries:	39 countries	U.S. only	U.S. only	39 countries	U.S. only	U.S. only			
Liquidity measure:	Amihud	Amihud	Spreads	Amihud	Amihud	Spreads			
Sample period:	Full period	Full period	Full period	Pre-crisis	Crisis	Pre-crisis	Crisis	Pre-crisis	Crisis
<i>Capital market conditions</i>									
Market return	-0.1610 ^a	0.4904	-1.7500 ^b	-0.2702 ^a	0.1602	-0.5049	0.5888	-0.4163	-9.1155 ^a
Market volatility	0.0654 ^a	0.0650 ^c	0.1362 ^a	0.0707 ^a	0.0567 ^a	0.1304 ^b	0.1208	0.1579 ^b	0.3515
Market liquidity	18.2429 ^b	24728.63	47.6752	15.5939 ^c	62.9891	10968.86	-21299.17	25.7714	-457.1208
Market turnover	11.8177 ^a	56.5791 ^a	60.7878 ^a	11.4574 ^a	18.7127 ^a	95.2290 ^b	17.4225	50.8106	-133.7355 ^c
<i>Supply-side factors</i>									
Short-term interest rate	0.0011 ^a	-0.0004	-0.0231	0.0008 ^b	0.0050 ^b	-0.0130	0.0523	0.0067	-0.1603 ^b
U.S. default spread	-0.0289 ^a	-0.0032	-0.1070 ^b	-0.0270 ^a	0.0051	-0.0627	-0.0504	-0.0252	0.0012
Local bank returns	0.0008 ^b	-0.0036	0.0055	0.0013 ^a	-0.0006	0.0003	0.0003	-0.0018	0.0315 ^a
<i>Demand-side factors</i>									
R^2_{turn} (orthogonalized to supply-side factors)	0.1366 ^a	0.0945	0.3917 ^a	0.1507 ^a	0.0657 ^b	0.1200 ^c	-0.1094	0.3906 ^a	0.4101 ^b
Net % equity flow	0.0001 ^b	-0.0952 ^b	-0.0162	0.0001 ^b	0.0001	-0.0608	-0.2892 ^c	-0.0543	-0.1095
Gross capital flow / GDP	-0.0002 ^a	0.0000	0.0003 ^a	-0.0002 ^a	-0.0001 ^b	-0.0002	-0.0003	0.0003	0.0000
Global country fund discount	0.0013	-0.0024	0.0043	0.0013	-0.0052	-0.0037	-0.0109	0.0014	-0.0218
# obs.	6,624	180	180	6,624		180		180	
(Average) R^2	0.21	0.55	0.67	0.28		0.57		0.69	