

Banking system stability: A global analysis of cybercrime laws

Internet Appendix

This appendix provides supplementary material to the paper. The paper refers to results reported in the “Internet Appendix” in numerous places. This appendix tabulates all such results.

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Table IA1: Country-level Summary Statistics of Bank Stability Measures

Country	N	Z_SCORE	MES_VARS%	SRISK
Afghanistan	117	2.474		
Albania	282	2.087		
Algeria	194	2.709		
Angola	142	3.523	0.097	0.004
Argentina	1,822	2.020	0.317	0.075
Armenia	263	2.888		
Australia	1,279	3.706	0.103	0.371
Austria	7,540	3.804	0.120	0.064
Azerbaijan	235	2.619		
Bahrain	102	2.609		
Bangladesh	99	2.510	0.250	0.000
Belize	128	2.349		
Benin	804	2.788	0.168	0.011
Bhutan	432	2.658	0.199	0.000
Bosnia and Herzegovina	195	3.422	0.124	0.001
Botswana	474	3.244		0.000
Brazil	41	3.116		
Brunei Darussalam	2,152	2.514	0.174	0.166
Bulgaria	61	3.250		
Burkina Faso	61	3.159		
Burundi	222	2.799	0.137	0.001
Cameroon	290	3.608		0.869
Canada	9,317	4.194	0.047	0.012
Chile	323	2.907	0.100	0.013
China	1,845	3.499	0.133	0.520
Colombia	231	2.433	0.287	0.000
Costa Rica	149	2.545		
Croatia	823	2.916	0.186	0.000
Cuba	907	3.385		
Cyprus	51	2.797		
Czech Republic	225	2.381	0.301	0.149
Côte D'Ivoire	674	2.891	0.228	0.010
Denmark	16,891	4.141	0.127	1.736
Djibouti	53	2.862		
Dominican Republic	1,816	3.168	0.062	0.113
Ecuador	646	2.924		
Egypt	318	3.119		
El Salvador	438	2.986		
Estonia	912	2.706	0.144	0.008
Ethiopia	3,619	3.426	0.194	0.777
Finland	128	2.554	0.137	0.002
France	230	3.244		
Gambia	364	3.764	0.159	0.016
Germany	6,465	3.176	0.135	1.941
Ghana	5,593	2.942	0.104	1.257

Greece	472	2.491	0.182	0.000
Guatemala	43	2.362		
Guinea	67	2.259		0.000
Honduras	402	2.466	0.376	0.163
Hungary	484	3.069		
Iceland	322	3.444		
India	843	2.781	0.136	0.001
Indonesia	952	2.616	0.209	0.015
Iran (Islamic Republic Of)	1,280	3.258	0.115	0.014
Ireland	2,442	3.105	0.200	0.039
Israel	491	2.931		
Italy	279	2.603		
Jamaica	143	2.256	0.227	0.000
Japan	258	3.670	0.146	0.090
Jordan	13,770	3.391	0.150	0.596
Kazakhstan	204	3.073		
Kenya	99	3.313	0.089	0.002
Kuwait	13,752	3.659	0.130	0.129
Kyrgyzstan	307	2.802	0.204	0.004
Lao People's Democratic Republic	809	2.924	0.107	0.001
Latvia	178	2.930		
Lebanon	1,282	2.928	0.135	0.111
Lesotho	122	3.447	0.110	0.002
Liechtenstein	82	2.961		
Lithuania	522	2.903	0.157	0.010
Luxembourg	212	3.289	0.138	0.003
Madagascar	506	3.169	0.154	0.008
Malawi	60	2.699		
Malaysia	187	2.481	0.370	0.000
Mali	2,564	3.112	0.265	
Malta	406	2.123		
Mauritania	252	2.825		
Mauritius	92	2.669		
Mexico	771	2.700	0.303	0.027
Mongolia	319	2.850		0.001
Montenegro	137	2.609		
Mozambique	269	3.361	0.076	0.067
Nepal	177	2.767		
Netherlands	126	3.036		
New Zealand	249	2.206		
Nicaragua	174	3.332		
Niger	314	2.886	0.057	0.000
Nigeria	169	2.355	0.134	0.000
Norway	1,492	3.277	0.122	0.028
Oman	64	2.759		
Panama	748	2.611	0.125	0.004
Paraguay	193	2.758		
Peru	576	3.447	0.157	2.564

Philippines	2,118	3.697	0.072	0.026
Poland	796	3.298		
Portugal	213	3.744	0.749	
Republic Of Korea	247	3.343	0.101	0.000
Republic Of Moldova	536	2.944	0.159	0.002
Romania	477	3.046	0.150	0.012
Rwanda	782	3.329	0.098	0.009
Saudi Arabia	1,506	3.408	0.170	0.005
Senegal	1,310	3.153	0.213	0.159
Serbia	328	2.906		
Seychelles	462	2.287	0.216	0.000
Sierra Leone	134	2.551		0.013
Singapore	61	3.565	0.149	0.001
Slovakia	279	2.809		
Slovenia	199	2.665	0.278	
South Africa	460	3.437	0.097	0.009
Spain	104	2.254		
Sri Lanka	201	3.688		
Sudan	554	2.386	0.259	0.007
Sweden	303	2.843	0.286	0.005
Switzerland	343	3.000	0.412	0.027
Tajikistan	1,505	3.643	0.189	0.799
Thailand	95	2.501		
Republic Of Macedonia	85	2.589	0.446	0.001
Togo	759	2.875	0.172	0.026
Trinidad And Tobago	65	2.669		
Turkey	135	3.309	0.083	0.000
Uganda	658	2.644	0.236	0.003
Ukraine	520	2.608	0.107	0.000
United Arab Emirates	401	2.587	0.076	0.000
United Kingdom	964	2.461	0.192	0.000
United Republic of Tanzania	460	2.177		
United States of America	105,524	3.634		0.043
Uruguay	124	3.110		
Uzbekistan	606	2.449	0.478	
Bolivarian Republic of Venezuela	535	3.452	0.164	0.015
Viet Nam	632	2.897	0.142	0.067
Zambia	187	2.081	0.264	0.003
Zimbabwe	151	1.826		

This table reports country-level descriptive statistics for all bank stability measures used in this study. Detailed definitions of these variables are provided in Table A1.

Table IA2: Different Fixed Effect Models

Panel A: Controlling for Bank Fixed Effects			
	<i>Z_SCORE</i>	<i>MES_VAR5%</i>	<i>SRISK</i>
	(1)	(2)	(3)
<i>CYBERLAW</i>	0.024 [0.020]	-0.017 [0.011]	-0.025 [0.007]
Control Variables	Yes	Yes	Yes
Observations	178,735	6,307	8,391
Adjusted R-squared	0.492	0.281	0.437
Bank FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Cluster by Bank	Yes	Yes	Yes
Panel B: Controlling for Bank*Country Fixed Effects			
	<i>Z_SCORE</i>	<i>MES_VAR5%</i>	<i>SRISK</i>
	(1)	(2)	(3)
<i>CYBERLAW</i>	0.019 [0.085]	-0.027 [0.002]	-0.010 [0.003]
Control Variables	Yes	Yes	Yes
Observations	178,735	6,307	8,391
Adjusted R-squared	0.486	0.295	0.471
Bank*Country FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Cluster by Bank	Yes	Yes	Yes

This table provides regression results of different banking system stability measures (i.e., *Z_SCORE*, *MES_VAR5%*, and *SRISK*) on cybercrime law enactment (*CYBERLAW*) in Columns (1)-(3), respectively. We account for bank fixed effects and bank*country fixed effects in Panels A and B, respectively. In terms of control variables, they consist of bank size (*BANK_SIZE*), the equity-to-total-assets ratio (*EQUITY_RATIO*), the deposit-to-total-assets ratio (*DEPOSIT_RATIO*), the cost-to-income ratio (*COST_EFFICIENCY*), revenue diversification (*REV_DIV*), rule of law (*RULE OF LAW*), log GDP (*LOG_GDP*), log GDP per capita (*LOG_GDPPERCAP*), and the credit-to-GDP ratio (*CREDIT_TO_GDP*). All continuous variables are winsorized at the 1st and 99th percentiles and defined in Table A1. *p-values* computed using standard errors clustered at the bank level are reported in parentheses.

Table IA3: Volatility of Deposit-to-Assets Ratio

	<i>Z_SCORE</i>		<i>MES_VAR5%</i>		<i>SRISK</i>	
	Coeff.	<i>p</i> -values	Coeff.	<i>p</i> -values	Coeff.	<i>p</i> -values
	(1)	(2)	(3)	(4)	(5)	(6)
Direct Path						
P (<i>CYBERLAW</i> , Bank Stability)	0.033	0.009	-0.009	0.063	-0.033	0.019
Indirect Path						
P (<i>CYBERLAW</i> , <i>VOL_DEPTOASSET</i>)	-0.004	0.000	-0.008	0.022	-0.007	0.008
P (<i>VOL_DEPTOASSET</i> , Bank Stability)	-1.415	0.000	0.009	0.069	0.401	0.000
P (<i>CYBERLAW</i> , <i>VOL_DEPTOASSET</i>) × P (<i>VOL_DEPTOASSET</i> , Bank Stability)	0.006	0.026	-0.000	0.069	-0.003	0.034
Total Effect	0.039	0.009	-0.009	0.063	-0.036	0.005
Mediated % in Total	14.64%		0.79%		7.84%	
Observations	156,498		5,390		7,379	

This table reports path analysis results, in which we examine whether cybercrime laws can affect banking system stability through funding liquidity. We measure funding liquidity as the standard deviation of the deposit-to-assets ratio over a rolling window (i.e., volatility of deposit-to-assets ratio), which provides insight into the stability of the deposit funding source. The lower the volatility of the deposit-to-asset ratio (*VOL_DEPTOASSET*), the more stable the funding source. We use three measures of banking system stability: *Z_SCORE*, *MES_VAR5%*, and *SRISK*. Detailed variable definitions of all other variables are provided in Table A1.

Table IA4: Country Legal Origin			
	<i>Z SCORE</i>	<i>MES VAR5%</i>	<i>SRISK</i>
	(1)	(2)	(3)
<i>CYBERLAW</i>	0.039 [0.405]	-0.040 [0.000]	-0.123 [0.001]
<i>CYBERLAW*FRENCH</i>	-0.041 [0.438]	0.010 [0.578]	0.030 [0.562]
<i>CYBERLAW*GERMAN</i>	-0.277 [0.000]	0.056 [0.005]	0.118 [0.005]
<i>CYBERLAW* SCANDINAVIAN</i>	0.282 [0.000]	0.045 [0.008]	-0.016 [0.797]
<i>CYBERLAW* SOCIALIST</i>	0.242 [0.001]	-0.003 [0.905]	-0.189 [0.000]
Control Variables	Yes	Yes	Yes
Observations	178,735	6,307	8,391
Adjusted R-squared	0.127	0.284	0.248
Country FE, Year FE	Yes	Yes	Yes
Cluster by Bank	Yes	Yes	Yes

This table provides regression results of different banking system stability measures (i.e., *Z SCORE*, *MES VAR5%*, and *SRISK*) on the interaction term between enactment of cybercrime law (*CYBERLAW*) and the legal origin (*FRENCH*, *GERMAN*, *SCANDINAVIAN*, *SOCIALIST*). Using English common law as the benchmark, we omit it from our models. All continuous variables are winsorized at the 1st and 99th percentiles and defined in Table A1. *p-values* computed using standard errors cluster at the bank level are reported in parentheses.

Table IA5: Fintech Development			
	<i>Z_SCORE</i>	<i>MES_VAR5%</i>	<i>SRISK</i>
	(1)	(2)	(3)
<i>CYBERLAW</i>	-0.280	-0.051	-0.014
	[0.000]	[0.133]	[0.918]
<i>CYBERLAW*FINDEX</i>	0.212	-0.027	0.119
	[0.000]	[0.090]	[0.763]
<i>FINDEX</i>	-4.035	-0.061	-0.226
	[0.001]	[0.457]	[0.531]
Control Variables	Yes	Yes	Yes
Observations	21,310	657	924
Adjusted R-squared	0.106	0.519	0.148
Country FE, Year FE	Yes	Yes	Yes
Cluster by Bank	Yes	Yes	Yes

This table provides regression results of different banking system stability measures (i.e., *Z_SCORE*, *MES_VAR5%*, and *SRISK*) on the interaction term between enactment of cybercrime law (*CYBERLAW*) and the financial development index (*FINDEX*). All continuous variables are winsorized at the 1st and 99th percentiles and defined in Table A1. *p-values* computed using standard errors clustered at the bank level are reported in parentheses.

Table IA6: Moral Hazard			
	<i>Z_SCORE</i>	<i>MES_VAR5%</i>	<i>SRISK</i>
	(1)	(2)	(3)
<i>CYBERLAW</i>	0.054 [0.073]	-0.314 [0.137]	-0.039 [0.136]
<i>CYBERLAW* EXP_DEP_INSUR</i>	0.024 [0.487]	0.252 [0.198]	-0.143 [0.101]
<i>EXP_DEP_INSUR</i>	-0.041 [0.194]	-0.097 [0.497]	0.150 [0.084]
Control Variables	Yes	Yes	Yes
Observations	178,735	6,307	8,391
Adjusted R-squared	0.152	0.361	0.295
Country FE, Year FE	Yes	Yes	Yes
Cluster by Bank	Yes	Yes	Yes

This table provides regression results of different banking system stability measures (i.e., *Z_SCORE*, *MES_VAR5%*, and *SRISK*) on the interaction term between enactment of cybercrime law (*CYBERLAW*) and a dummy variable indicating if a country has an explicit deposit insurance system (*EXP_DEP_INSUR*). *EXP_DEP_INSUR* equals 1 if a country has an explicit deposit insurance system and 0 otherwise. All continuous variables are winsorized at the 1st and 99th percentiles and defined in Table A1. *p-values* computed using standard errors clustered at the bank level are reported in parentheses.

Table IA7: Cybercrime Law Heterogeneity

Panel A: E-Transaction Laws			
	<i>Z SCORE</i>	<i>MES VAR5%</i>	<i>SRISK</i>
	(1)	(2)	(3)
<i>CYBERLAW</i>	0.067	-0.021	-0.03
	[0.029]	[0.028]	[0.008]
<i>CYBERLAW*E_TRANSACTION</i>	-0.093	0.017	0.001
	[0.003]	[0.367]	[0.964]
<i>E_TRANSACTION</i>	-0.004	-0.002	-0.004
	[0.868]	[0.845]	[0.853]
Control Variables	Yes	Yes	Yes
Observations	178,735	6,307	8,391
Adjusted R-squared	0.157	0.367	0.300
Country FE; Year FE	Yes	Yes	Yes
Cluster by Bank	Yes	Yes	Yes
Panel B: Data Protection and Privacy Laws			
	<i>Z SCORE</i>	<i>MES VAR5%</i>	<i>SRISK</i>
	(1)	(2)	(3)
<i>CYBERLAW</i>	0.053	-0.003	-0.042
	[0.001]	[0.718]	[0.037]
<i>CYBERLAW*PROTECT_PRIVACY</i>	-0.133	-0.002	-0.055
	[0.000]	[0.887]	[0.166]
<i>PROTECT_PRIVACY</i>	-0.088	0.028	-0.059
	[0.006]	[0.056]	[0.099]
Control Variables	Yes	Yes	Yes
Observations	178,735	6,307	8,391
Adjusted R-squared	0.157	0.365	0.298
Country FE; Year FE	Yes	Yes	Yes
Cluster by Bank	Yes	Yes	Yes
Panel C: Consumer Protection Regulations			
	<i>Z SCORE</i>	<i>MES VAR5%</i>	<i>SRISK</i>
	(1)	(2)	(3)
<i>CYBERLAW</i>	0.029	-0.001	-0.044
	[0.109]	[0.029]	[0.051]
<i>CYBERLAW*CONSUMER_PROTECT</i>	-0.090	-0.009	0.028
	[0.000]	[0.414]	[0.221]
<i>CONSUMER_PROTECT</i>	0.011	0.009	-0.031
	[0.627]	[0.327]	[0.157]
Control Variables	Yes	Yes	Yes
Observations	178,735	6,307	8,391
Adjusted R-squared	0.155	0.366	0.299
Country FE; Year FE	Yes	Yes	Yes
Cluster by Bank	Yes	Yes	Yes

This table shows regression results of different banking system stability measures (i.e., *Z SCORE*, *MES VAR5%*, and *SRISK*) on the interaction term between enactment of cybercrime law (*CYBERLAW*) and E-Transaction law (*E_TRANSACTION*) in Panel A, the interaction term between enactment of cybercrime law (*CYBERLAW*) and data protection and privacy laws (*PROTECT_PRIVACY*) in Panel B, and the interaction term between enactment of cybercrime law (*CYBERLAW*) and consumer protection regulations (*CONSUMER_PROTECT*) in Panel C. In terms of control variables, they consist of bank size (*BANK_SIZE*), the equity-to-total-assets ratio (*EQUITY_RATIO*), the deposit-to-total-assets ratio (*DEPOSIT_RATIO*), the cost-to-income ratio (*COST_EFFICIENCY*), revenue diversification (*REV_DIV*), rule of law (*RULE_OF_LAW*), log GDP (*LOG_GDP*), log GDP per capita (*LOG_GDPPERCAP*), and the credit-to-GDP ratio (*CREDIT_TO_GDP*). All continuous variables are winsorized at the 1st and 99th percentiles and defined in Table A1. *p-values* computed using standard errors clustered at the bank level are reported in parentheses.

Table IA8: Banking Industry Concentration			
	<i>Z_SCORE</i>	<i>MES_VAR5%</i>	<i>SRISK</i>
	(1)	(2)	(4)
<i>CYBERLAW</i>	-0.062 [0.002]	0.003 [0.008]	-0.032 [0.097]
<i>CYBERLAW*HHI</i>	0.540 [0.002]	-0.090 [0.046]	-0.017 [0.854]
<i>HHI</i>	-0.324 [0.071]	0.145 [0.076]	-0.040 [0.795]
Control Variables	Yes	Yes	Yes
Observations	178,735	6,307	8,391
Adjusted R-squared	0.157	0.370	0.301
Country FE, Year FE	Yes	Yes	Yes
Cluster by Bank	Yes	Yes	Yes

This table shows regression results of different banking system stability measures (i.e., *Z_SCORE*, *MES_VAR5%*, and *SRISK*) on the interaction term between the enactment of cybercrime law (*CYBERLAW*) and industry concentration (*HHI*). *HHI* refers to the Herfindahl–Hirschman Index, used to measure the level of industry concentration. A higher index is associated with higher industry concentration. In terms of control variables, they consist of bank size (*BANK_SIZE*), the equity-to-total-assets ratio (*EQUITY_RATIO*), the deposit-to-total-assets ratio (*DEPOSIT_RATIO*), the cost-to-income ratio (*COST_EFFICIENCY*), revenue diversification (*REV_DIV*), rule of law (*RULE OF LAW*), log GDP (*LOG_GDP*), log GDP per capita (*LOG_GDPPERCAP*), and the credit-to-GDP ratio (*CREDIT_TO_GDP*). All continuous variables are winsorized at the 1st and 99th percentiles and defined in Table A1. *p-values* computed using standard errors clustered at the bank level are reported in parentheses.

Table IA9: State Ownership			
	<i>Z_SCORE</i>	<i>MES_VAR5%</i>	<i>SRISK</i>
	(1)	(2)	(3)
<i>CYBERLAW</i>	-0.017 [0.128]	-0.003 [0.641]	-0.055 [0.003]
<i>CYBERLAW*STATE_BANK</i>	0.147 [0.070]	-0.053 [0.012]	0.168 [0.201]
<i>STATE_BANK</i>	0.056 [0.394]	-0.031 [0.087]	-0.026 [0.035]
Control Variables	Yes	Yes	Yes
Observations	178,735	6,307	8,391
Adjusted R-squared	0.154	0.370	0.303
Country FE, Year FE	Yes	Yes	Yes
Cluster by Bank	Yes	Yes	Yes

This table provides regression results of different banking system stability measures (i.e., *Z_SCORE*, *MES_VAR5%*, and *SRISK*) on the interaction term between enactment of cybercrime law (*CYBERLAW*) and bank state ownership (*STATE_BANK*). *STATE_BANK* is a dummy variable taking the value of 1 if at least 30% of bank shares are owned by a government and 0 otherwise. All continuous variables are winsorized at the 1st and 99th percentiles and defined in Table A1. *p-values* computed using standard errors clustered at the bank level are reported in parentheses.

Table IA10: Foreign Ownership			
	<i>Z_SCORE</i>	<i>MES_VAR5%</i>	<i>SRISK</i>
	(1)	(2)	(3)
<i>CYBERLAW</i>	0.028	-0.001	-0.052
	[0.043]	[0.882]	[0.002]
<i>CYBERLAW*FOREIGN_BANK</i>	0.014	-0.054	-0.047
	[0.839]	[0.004]	[0.089]
<i>FOREIGN_BANK</i>	-0.040	0.034	0.020
	[0.525]	[0.021]	[0.092]
Control Variables	Yes	Yes	Yes
Observations	178,735	6,307	8,391
Adjusted R-squared	0.156	0.372	0.301
Country FE, Year FE	Yes	Yes	Yes
Cluster by Bank	Yes	Yes	Yes

This table provides regression results of different banking system stability measures (i.e., *Z_SCORE*, *MES_VAR5%*, and *SRISK*) on the interaction term between enactment of cybercrime law (*CYBERLAW*) and bank foreign ownership (*FOREIGN_BANK*). *FOREIGN_BANK* is a dummy variable taking the value of 1 if at least 30% of bank shares are owned by a foreign entity and 0 otherwise. All continuous variables are winsorized at the 1st and 99th percentiles and defined in Table A1. *p-values* computed using standard errors clustered at the bank level are reported in parentheses.

Table IA11: Banking Regulations									
	<i>Z_SCORE</i>	<i>MES_VAR5%</i>	<i>SRISK</i>	<i>Z_SCORE</i>	<i>MES_VAR5%</i>	<i>SRISK</i>	<i>Z_SCORE</i>	<i>MES_VAR5%</i>	<i>SRISK</i>
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>CYBERLAW*CAPREG</i>	-0.024 [0.011]	0.004 [0.111]	0.034 [0.000]						
<i>CAPREG</i>	0.031 [0.001]	-0.013 [0.000]	-0.012 [0.098]						
<i>CYBERLAW*ACTRES</i>				-0.026 [0.000]	0.003 [0.296]	0.023 [0.081]			
<i>ACTRES</i>				0.01 [0.144]	-0.005 [0.037]	-0.023 [0.118]			
<i>CYBERLAW*SUPOWER</i>							-0.035 [0.000]	0.002 [0.540]	0.040 [0.091]
<i>SUPOWER</i>							-0.003 [0.616]	-0.006 [0.075]	-0.045 [0.018]
<i>CYBERLAW</i>	0.183 [0.001]	-0.068 [0.000]	-0.118 [-0.034]	0.137 [0.004]	-0.009 [0.689]	-0.248 [0.031]	0.562 [0.000]	-0.052 [0.197]	-0.514 [0.056]
Control Variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	161,698	5,608	7,316	161,698	5,608	7,316	161,698	5,608	7,316
Adjusted R-squared	0.153	0.380	0.306	0.154	0.384	0.307	0.154	0.379	0.308
Country FE, Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cluster by Bank	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

This table provides regression results of different banking system stability measures (i.e., *Z_SCORE*, *MES_VAR5%*, and *SRISK*) on the interaction term between enactment of cybercrime law (*CYBERLAW*) and bank capital regulation (*CAPREG*) from Columns (1)-(3), the interaction term between enactment of cybercrime law (*CYBERLAW*) and bank activity restrictions (*ACTRES*) from Columns (4)-(6), and the interaction term between enactment of cybercrime law (*CYBERLAW*) and bank supervisory power (*SUPOWER*) from Columns (7)-(9). All continuous variables are winsorized at the 1st and 99th percentiles and defined in Table A1. *p-values* computed using standard errors clustered at the bank level are reported in parentheses.

Table IA12: Bank Size			
	<i>Z_SCORE</i>	<i>MES_VAR5%</i>	<i>SRISK</i>
	(1)	(2)	(3)
<i>CYBERLAW</i>	0.059 [0.002]	-0.011 [0.357]	0.011 [0.577]
<i>CYBERLAW*TOPSIZE</i>	0.083 [0.000]	-0.001 [0.124]	-0.052 [0.020]
<i>TOPSIZE</i>	-0.049 [0.020]	0.037 [0.000]	0.055 [0.002]
Control Variables	Yes	Yes	Yes
Observations	178,735	6,307	8,391
Adjusted R-squared	0.157	0.367	0.297
Country FE, Year FE	Yes	Yes	Yes
Cluster by Bank	Yes	Yes	Yes

This table provides regression results of different banking system stability measures (i.e., *Z_SCORE*, *MES_VAR5%*, and *SRISK*) on the interaction term between enactment of cybercrime law (*CYBERLAW*) and bank size (*TOPSIZE*). *TOPSIZE* is a dummy variable which equals 1 if the bank size is greater than the median value of all banks' sizes in a country and 0 otherwise. All continuous variables are winsorized at the 1st and 99th percentiles and defined in Table A1. *p-values* computed using standard errors clustered at the bank level are reported in parentheses.

Table IA13: Banking Sector Development			
	<i>Z_SCORE</i>	<i>MES_VAR5%</i>	<i>SRISK</i>
	(1)	(2)	(3)
<i>CYBERLAW</i>	-0.007 [0.501]	-0.017 [0.030]	-0.019 [0.149]
<i>CYBERLAW*BANKDEV</i>	0.129 [0.003]	-0.044 [0.021]	-0.041 [0.026]
<i>BANKDEV</i>	-0.224 [0.000]	-0.001 [0.955]	0.151 [0.000]
Control Variables	Yes	Yes	Yes
Observations	178,735	6,307	8,391
Adjusted R-squared	0.157	0.369	0.301
Country FE, Year FE	Yes	Yes	Yes
Cluster by Bank	Yes	Yes	Yes

This table provides regression results of different banking system stability measures (i.e., *Z_SCORE*, *MES_VAR5%*, and *SRISK*) on the interaction term between enactment of cybercrime law (*CYBERLAW*) and the banking sector development (*BANKDEV*). *BANKDEV* is the ratio of annual banking sector capitalization to GDP, which reflects the banking sector development in each country (Delis and Tsionas, 2009). All continuous variables are winsorized at the 1st and 99th percentiles and defined in Table A1. *p-values* computed using standard errors clustered at the bank level are reported in parentheses.

Table IA14: Change Analysis			
	ΔZ_SCORE	$\Delta MES_VAR5\%$	$\Delta SRISK$
	(1)	(2)	(3)
<i>CYBERLAW</i>	0.059 [0.027]	-0.029 [0.004]	-0.028 [0.082]
<i>ΔBANK_SIZE</i>	-0.016 [0.687]	0.015 [0.633]	-0.010 [0.765]
<i>ΔEQUITY_RATIO</i>	-1.999 [0.000]	-0.030 [0.879]	0.520 [0.104]
<i>ΔDEPOSIT_RATIO</i>	0.021 [0.845]	-0.147 [0.178]	0.141 [0.205]
<i>ΔCOST_EFFICIENCY</i>	0.110 [0.010]	0.027 [0.214]	0.074 [0.074]
<i>ΔREV_DIV</i>	0.033 [0.636]	-0.009 [0.807]	-0.22 [0.053]
<i>ΔEXP_DEP_INSUR</i>	0.094 [0.131]	-0.005 [0.892]	0.006 [0.845]
<i>ΔRULE OF LAW</i>	0.013 [0.793]	0.001 [0.999]	-0.029 [0.348]
<i>ΔLOG_GDP</i>	0.188 [0.088]	0.101 [0.001]	0.001 [0.969]
<i>ΔLOG_GDPPERCAP</i>	-0.367 [0.018]	-0.086 [0.035]	-0.007 [0.888]
<i>ΔCREDIT_TO_GDP</i>	0.097 [0.014]	-0.030 [0.220]	0.051 [0.455]
Observations	71,449	3,158	4,126
Adjusted R-squared	0.04	0.03	0.02
Country FE, Year FE	Yes	Yes	Yes
Cluster by Bank	Yes	Yes	Yes

This table provides regression results of changes in banking system stability, measured by the change in the Z-index ($\Delta ZSCORE$), marginal expected shortfall calculated at 5th percentile of value at risk ($\Delta MES_VAR5\%$), and systemic risk ($\Delta SRISK$) on cybercrime law enactment (*CYBERLAW*) in Columns (1)-(3), respectively. In terms of control variables, they consist of changes in bank size (*ΔBANK_SIZE*), the equity-to-total-assets ratio (*ΔEQUITY_RATIO*), the deposit-to-total-assets ratio (*ΔDEPOSIT_RATIO*), the cost-to-income ratio (*ΔCOST_EFFICIENCY*), revenue diversification (*ΔREV_DIV*), explicit deposit insurance (*ΔEXP_DEP_INSUR*), rule of law (*ΔRULE OF LAW*), log GDP (*ΔLOG_GDP*), log GDP per capita (*ΔLOG_GDPPERCAP*), and the credit-to-GDP ratio (*ΔCREDIT_TO_GDP*). All continuous variables are winsorized at the 1st and 99th percentiles and defined in Table A1. *p-values* computed using standard errors clustered at the bank level are reported in parentheses.

Table IA15: Non-US Sample			
	<i>Z_SCORE</i>	<i>MES_VAR5%</i>	<i>SRISK</i>
	(1)	(2)	(3)
<i>CYBERLAW</i>	0.097	-0.006	-0.036
	[0.000]	[0.004]	[0.025]
Control Variables	Yes	Yes	Yes
Observations	80,639	6,307	5,925
Adjusted R-squared	0.231	0.369	0.334
Country FE, Year FE	Yes	Yes	Yes
Cluster by Bank	Yes	Yes	Yes

This table provides regression results of different banking system stability measures (i.e., *Z_SCORE*, *MES_VAR5%*, and *SRISK*) on cybercrime law enactment (*CYBERLAW*) in Columns (1)-(3), respectively, without U.S. banks. In terms of control variables, they consist of bank size (*BANK_SIZE*), the equity-to-total-assets ratio (*EQUITY_RATIO*), the deposit-to-total-assets ratio (*DEPOSIT_RATIO*), the cost-to-income ratio (*COST_EFFICIENCY*), revenue diversification (*REV_DIV*), rule of law (*RULE OF LAW*), log GDP (*LOG_GDP*), log GDP per capita (*LOG_GDPPERCAP*), and the credit-to-GDP ratio (*CREDIT_TO_GDP*). All continuous variables are winsorized at the 1st and 99th percentiles and defined in Table A1. *p-values* computed using standard errors clustered at the bank level are reported in parentheses.

Table IA16: Non-GFC Period			
	<i>Z_SCORE</i>	<i>MES_VAR5%</i>	<i>SRISK</i>
	(1)	(2)	(3)
<i>CYBERLAW</i>	0.015	-0.007	-0.028
	[0.015]	[0.063]	[0.070]
Control Variables	Yes	Yes	Yes
Observations	152,675	5,451	7,261
Adjusted R-squared	0.160	0.362	0.313
Country FE, Year FE	Yes	Yes	Yes
Cluster by Bank	Yes	Yes	Yes

This table provides regression results of different banking system stability measures (i.e., *Z_SCORE*, *MES_VAR5%*, and *SRISK*) on cybercrime law enactment (*CYBERLAW*) in Columns (1)-(3), respectively, without the global financial crisis periods (2007-2008). In terms of control variables, they consist of bank size (*BANK_SIZE*), the equity-to-total-assets ratio (*EQUITY_RATIO*), the deposit-to-total-assets ratio (*DEPOSIT_RATIO*), the cost-to-income ratio (*COST_EFFICIENCY*), revenue diversification (*REV_DIV*), rule of law (*RULE_OF_LAW*), log GDP (*LOG_GDP*), log GDP per capita (*LOG_GDPPERCAP*), and the credit-to-GDP ratio (*CREDIT_TO_GDP*). All continuous variables are winsorized at the 1st and 99th percentiles and defined in Table A1. *p-values* computed using standard errors clustered at the bank level are reported in parentheses.

Table IA17: Additional Control Variables			
	<i>Z_SCORE</i>	<i>MES_VAR5%</i>	<i>SRISK</i>
	(1)	(2)	(3)
<i>CYBERLAW</i>	0.030 [0.012]	-0.015 [0.054]	-0.037 [0.048]
<i>BANK_SIZE</i>	0.002 [0.687]	0.030 [0.000]	0.049 [0.001]
<i>EQUITY_RATIO</i>	1.345 [0.000]	0.143 [0.000]	-0.124 [0.345]
<i>DEPOSIT_RATIO</i>	0.552 [0.000]	-0.002 [0.849]	-0.289 [0.003]
<i>COST_EFFICIENCY</i>	-0.832 [0.000]	0.041 [0.000]	0.145 [0.032]
<i>REV_DIV</i>	-0.951 [0.000]	-0.008 [0.497]	-0.223 [0.024]
<i>EXP_DEP_INSUR</i>	0.104 [0.001]	0.007 [0.456]	0.025 [0.603]
<i>RULE OF LAW</i>	0.075 [0.066]	-0.002 [0.917]	0.048 [0.251]
<i>LOG_GDP</i>	-0.728 [0.000]	-0.144 [0.000]	-0.04 [0.760]
<i>LOG_GDPPERCAP</i>	0.816 [0.000]	-0.079 [0.028]	-0.008 [0.949]
<i>CREDIT_TO_GDP</i>	-0.069 [0.070]	0.044 [0.046]	0.099 [0.095]
<i>ACTRES</i>	-0.008 [0.056]	-0.006 [0.001]	-0.007 [0.017]
<i>CAPREG</i>	0.029 [0.012]	0.010 [0.230]	0.022 [0.037]
<i>SUPOWER</i>	-0.003 [0.505]	0.001 [0.738]	0.002 [0.735]
Observations	161,698	5,608	7,316
Adjusted R-squared	0.153	0.382	0.307
Country FE, Year FE	Yes	Yes	Yes
Cluster by Bank	Yes	Yes	Yes

This table provides regression results of different banking system stability measures (i.e., *Z_SCORE*, *MES_VAR5%*, and *SRISK*) on cybercrime law enactment (*CYBERLAW*) in Columns (1)-(3), respectively. In terms of control variables, they consist of bank size (*BANK_SIZE*), the equity-to-total-assets ratio (*EQUITY_RATIO*), the deposit-to-total-assets ratio (*DEPOSIT_RATIO*), the cost-to-income ratio (*COST_EFFICIENCY*), revenue diversification (*REV_DIV*), rule of law (*RULE OF LAW*), log GDP (*LOG_GDP*), log GDP per capita (*LOG_GDPPERCAP*), and the credit-to-GDP ratio (*CREDIT_TO_GDP*). Additional control variables include bank activity restrictions (*ACTRES*), bank capital regulation (*CAPREG*), and bank supervisory power (*SUPOWER*). All continuous variables are winsorized at the 1st and 99th percentiles and defined in Table A1. *p-values* computed using standard errors clustered at the bank level are reported in parentheses.

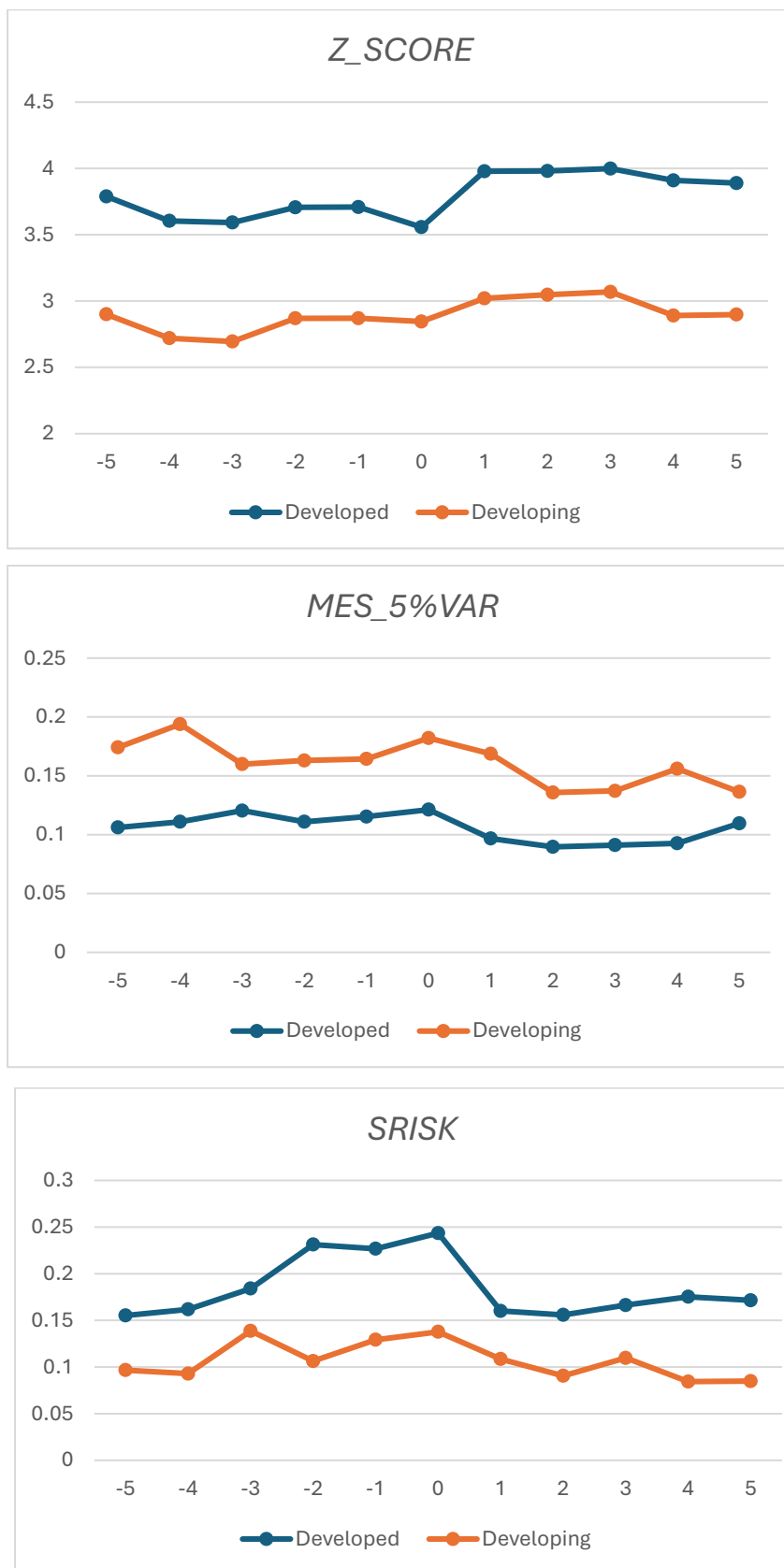
Table IA18: Additional DiD Analysis			
	<i>Z_SCORE</i>	<i>MES_VAR5%</i>	<i>SRISK</i>
	(1)	(2)	(3)
<i>POST*TREATMENT</i>	0.048 [0.022]	-0.047 [0.006]	-0.016 [0.045]
<i>POST</i>	0.034 [0.174]	-0.002 [0.815]	-0.003 [0.789]
<i>TREATMENT</i>	-0.161 [0.014]	0.055 [0.298]	0.011 [0.022]
Control Variables	Yes	Yes	Yes
Observations	30,009	1,690	1,507
Adjusted R-squared	0.321	0.406	0.564
Cohort*Country FE	Yes	Yes	Yes
Cohort*Year FE	Yes	Yes	Yes
Cluster by Bank	Yes	Yes	Yes

This table reports the results of the staggered difference-in-differences regressions using stacked event-by-event models suggested by Baker et al., (2022) after we remove countries enacting significant bank regulation reforms within a five-year window of the cybercrime law enactment. *TREATMENT* is an indicator variable, which equals 1 for countries enacting cybercrime law and zero otherwise during the sample periods. *POST* is a dummy variable equal to 1 if one-to-five years post law enactment and zero otherwise. Columns (1)-(4) report the results associated with the three measures of banking system stability, including the Z-index (*Z_SCORE*), marginal expected shortfall calculated at the 5th percentile of value at risk (*MES_VAR5%*), and systemic risk (*SRISK*). In terms of control variables, they consist of bank size (*BANK_SIZE*), the equity-to-total-assets ratio (*EQUITY_RATIO*), the deposit-to-total-assets ratio (*DEPOSIT_RATIO*), the cost-to-income ratio (*COST_EFFICIENCY*), revenue diversification (*REV_DIV*), rule of law (*RULE OF LAW*), log GDP (*LOG_GDP*), log GDP per capita (*LOG_GDPPERCAP*), and the credit-to-GDP ratio (*CREDIT_TO_GDP*). *p-values* computed using standard errors clustered at the bank level are reported in parentheses.

Table IA19: Additional Subsample Analysis			
	<i>Z_SCORE</i>	<i>MES_VAR5%</i>	<i>SRISK</i>
	(1)	(2)	(3)
<i>CYBERLAW</i>	0.019 [0.036]	-0.021 [0.004]	-0.034 [0.036]
Control Variables	Yes	Yes	Yes
Observations	174,573	5,890	8,094
Adjusted R-squared	0.149	0.380	0.300
Country FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Cluster by Bank	Yes	Yes	Yes

This table provides regression results of different banking system stability measures (i.e., *Z_SCORE*, *MES_VAR5%*, and *SRISK*) on cybercrime law enactment (*CYBERLAW*) in Columns (1)-(3), respectively. In this sample, we exclude countries that enacted cybercrime laws in direct response to major cyber incidents (e.g., Afghanistan, Brazil, Cameroon, Czech Republic, Nigeria, Saudi Arabia, Singapore, Slovenia, Sudan, Ukraine, Vietnam). In terms of control variables, they consist of bank size (*BANK_SIZE*), the equity-to-total-assets ratio (*EQUITY_RATIO*), the deposit-to-total-assets ratio (*DEPOSIT_RATIO*), the cost-to-income ratio (*COST_EFFICIENCY*), revenue diversification (*REV_DIV*), rule of law (*RULE OF LAW*), log GDP (*LOG_GDP*), log GDP per capita (*LOG_GDPPERCAP*), and the credit-to-GDP ratio (*CREDIT_TO_GDP*). All continuous variables are winsorized at the 1st and 99th percentiles and defined in Table A1. *p-values* computed using standard errors clustered at the bank level are reported in parentheses.

Figure IA1: Developed vs Developing Countries



This figure shows the variations across different measures of bank stability surrounding the enactment of cybercrime laws in developed and developing countries.

Figure IA2: Bootstrapping Sampling Distributions

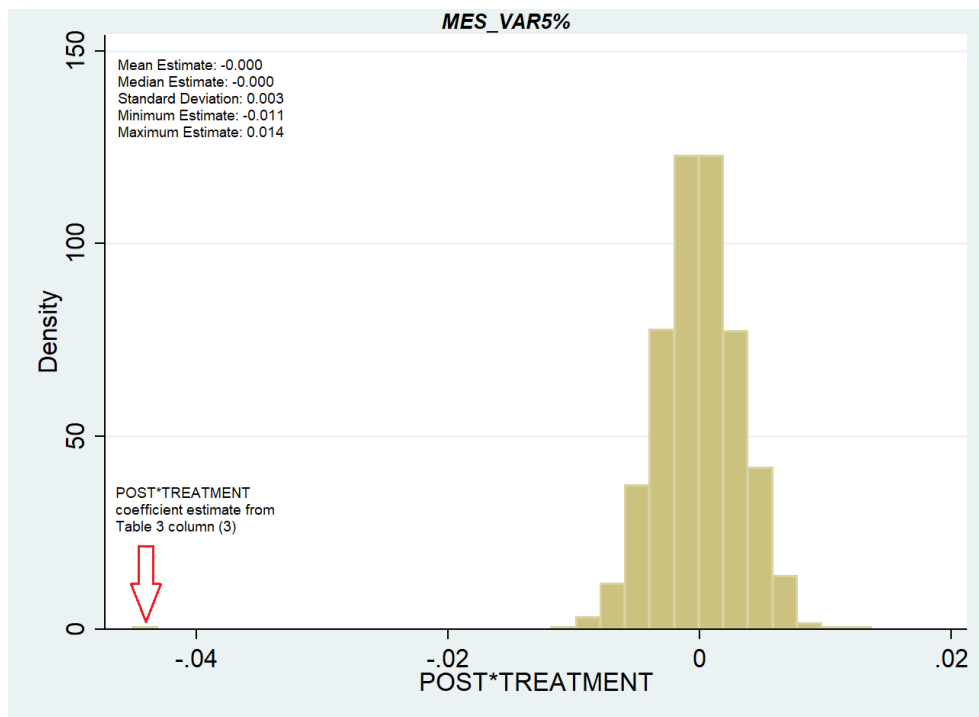
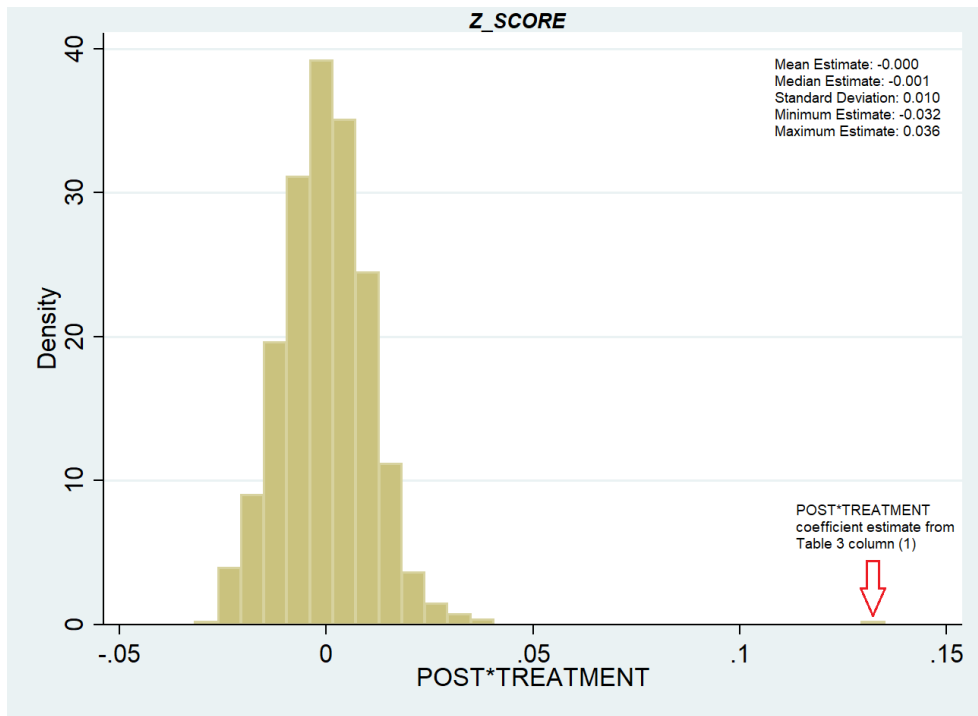
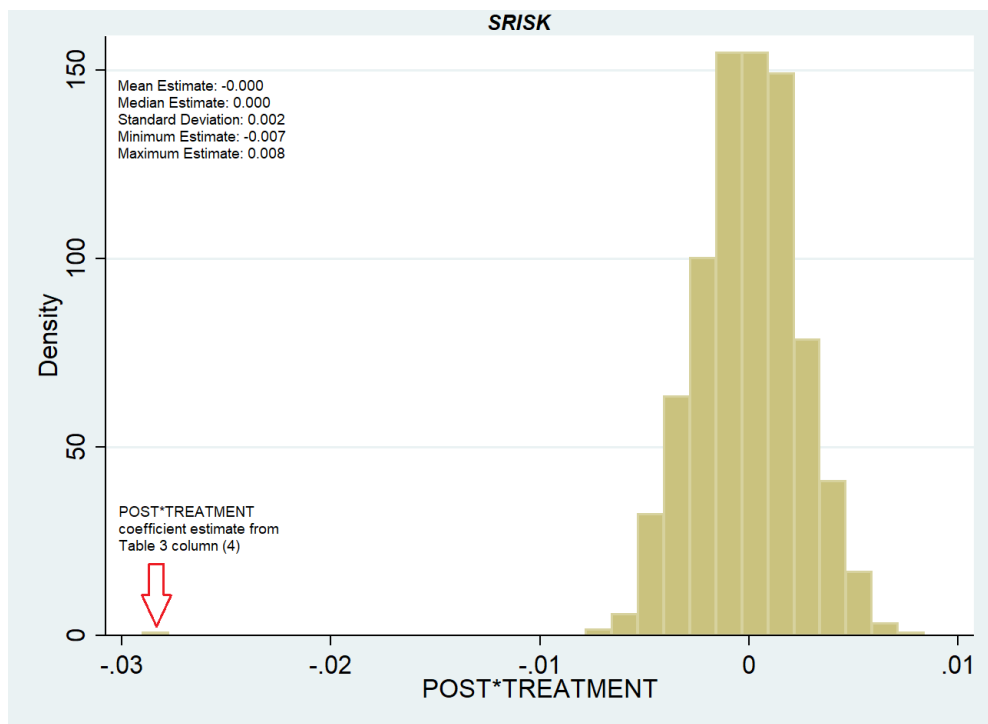


Figure IA2: Bootstrapping Sampling Distributions (Cont.)



This figure plots the bootstrapping sampling distributions of coefficients on three measures of bank stability obtained from 1,000 simulations.