Coercive Origin of Banking Giants

- Online Appendix –

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	Sample	*Independent Variable*	*Estimation*
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	Sample	*Independent Variable*	*Estimation*
Appendix 13.	Full Sample	Duration Count	OLS
Appendix 14.	Full Sample	None	OLS
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Section I. General Summary

Appendix 1. List of Countries (117)

Algeria	Denmark	Lebanon	Saudi Arabia
Angola	Dominican Republic	Lithuania	Senegal
Argentina	Ecuador	Luxembourg	Serbia
Armenia	El Salvador	Macao	Sierra Leone
Australia	Estonia	Malawi	Singapore
Austria	Eswatini	Malaysia	Slovakia
Azerbaijan	Ethiopia	Mali	Slovenia
Bahamas	Finland	Malta	South Africa
Bahrain	France	Mauritania	South Korea
Bangladesh	Georgia	Mauritius	Spain
Belarus	Germany	Moldova	Sri Lanka
Belgium	Ghana	Morocco	Sudan
Benin	Greece	Mozambique	Sweden
Bolivia	Honduras	Nepal	Switzerland
Bosnia and Herzegovina	Hong Kong	Netherlands	Tanzania
Botswana	Hungary	New Zealand	Thailand
Brazil	Iceland	Nigeria	Trinidad and Tobago
Bulgaria	India	North Macedonia	Tunisia
Burkina Faso	Indonesia	Norway	Turkey
Cameroon	Iran	Oman	Ukraine
Canada	Ireland	Pakistan	United Arab Emirates
Chile	Israel	Panama	United Kingdom
China	Italy	Paraguay	United States
Colombia	Jamaica	Peru	Uruguay
Costa Rica	Japan	Philippines	Venezuela
Cote d'Ivoire	Jordan	Poland	Vietnam
Croatia	Kazakhstan	Portugal	Zambia
Cyprus	Kenya	Qatar	
Czech Republic	Kuwait	Romania	
DRC	Latvia	Russia	

Appendix 2. Variable Description

Variable	*Description*	*Source*
Lerner Index	Lerner Index of Banking Industry: (Price – Marginal Cost) / Price	GFDD
All Sanctions		
Sanctions Duration	Consecutive Year Count of Sanctions in Effect: All	GSDB
Post-sanctions Duration	Consecutive Year Count Since Sanctions Were Lifted: All	GSDB
Sanctions Imposition	Binary Indicator of Sanctions Imposition: All	GSDB
Financial Sanctions		
Sanctions Duration	Consecutive Year Count of Sanctions in Effect: Financial	GSDB
Post-sanctions Duration	Consecutive Year Count Since Sanctions Were Lifted: Financial	GSDB
Sanctions Imposition	Binary Indicator of Sanctions Imposition: Financial	GSDB
Non-financial Sanctions		
Sanctions Duration	Consecutive Year Count of Sanctions in Effect: Non-financial	GSDB
Post-sanctions Duration	Consecutive Year Count Since Sanctions Were Lifted: Non-financial	GSDB
Sanctions Imposition	Binary Indicator of Sanctions Imposition: Non-financial	GSDB
Type Cumulation	Count of Distinct Sanction Types Imposed	GSDB
State Senders	Count of State Senders in Sanctions	GSDB
Involvement of IO	Binary Indicator of Involvement of International Organization in Sanctions	GSDB
GDP Growth	GDP Growth (Annual %)	WDI
GDP per Capita	Natural Logarithm of GDP per Capita	WDI
Total GDP	Natural Logarithm of Total GDP	WDI
Financial Crisis	Binary Indicator of Financial Crisis	NCW
Bank Asset to GDP	Total Assets Held by Deposit Money Banks as a Share of GDP	GFDD
Democracy	Binary Indicator of Democracy: POLITY2 ≥ 6	Polity V
FDI	FDI Inflow as a Percentage of Total GDP	WDI
Trade	Trade (Import + Export) as a Percentage of Total GDP	WDI

Notes: Abbreviations for the sources are as follows: (1) GFDD: World Bank Global Financial Development Database, (2) GSDB: Global Sanctions Database, (3) WDI: World Bank World Development Indicators, and (4) NCW: Ngyuyen, Castro, and Wood (2022).

Section II. Pre-1996 Sanctions Excluded

Part 1. Summary Statistics

Appendix 3. Summary Statistics: Pre-1996 Sanctions Excluded

Variable	*Obs.*	*Mean*	*Std. Dev.*	*Min*	*Max*
Lerner Index	1,999	.256	.143	-1.609	1.076
All Sanctions					
Sanctions Duration	1,999	1.092	2.909	0	18
Post-sanctions Duration	1,999	0.388	1.754	0	16
Sanctions Imposition	1,999	0.185	0.388	0	1
Financial Sanctions					
Sanctions Duration	1,999	0.417	1.708	0	17
Post-sanctions Duration	1,999	0.233	1.387	0	16
Sanctions Imposition	1,999	0.089	0.285	0	1
Non-financial Sanctions					
Sanctions Duration	1,999	0.986	2.778	0	18
Post-sanctions Duration	1,999	0.348	1.600	0	15
Sanctions Imposition	1,999	0.169	0.375	0	1
Type Cumulation	1,999	0.399	1.070	0	6
State Senders	1,999	0.500	2.079	0	16
Involvement of IO	1,999	0.089	0.284	0	1
GDP Growth	1,999	4.015	4.089	-17.005	34.5
GDP per Capita	1,999	8.564	1.554	4.705	11.725
Total GDP	1,999	24.882	1.900	20.271	30.496
Financial Crisis	1,999	0.272	0.445	0	1
Bank Asset to GDP	1,999	63.703	47.371	0.438	305.244
Democracy	1,845	0.677	0.468	0	1
FDI	1,989	0.059	0.202	-0.575	4.491
Trade	1,869	0.848	0.559	0.030	4.426

Notes: The following variables are in natural log form: GDP per Capita and Total GDP.

Part 2. Robustness Tests

Appendix 4. Effects of Sanctions on Bank Competition (OLS): Pre-1996 Sanctions Excluded

	DV: Lerner Index			
	(1)	(2)	(3)	(4)
Type Cumulation	0.001	0.002	0.001	0.002
	(0.004)	(0.004)	(0.004)	(0.004)
State Senders	-0.006***	-0.006***	-0.006***	-0.006***
	(0.002)	(0.002)	(0.002)	(0.002)
Involvement of IO	0.002	0.002	0.002	0.002
	(0.014)	(0.014)	(0.014)	(0.014)
GDP Growth		0.003***		0.003***
		(0.001)		(0.001)
Financial Crisis		-0.006		-0.006
		(0.007)		(0.007)
Bank Asset to GDP		-0.000**		-0.000**
		(0.000)		(0.000)
Constant	0.258***	0.265***	0.258***	0.265***
	(0.003)	(0.010)	(0.003)	(0.010)
Country Fixed Effects	YES	YES	YES	YES
Year Fixed Effects	YES	YES	YES	YES
Observations	1,999	1,999	1,999	1,999
Adjusted R^2	0.490	0.498	0.490	0.498

Notes: Robust standard errors are presented in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Appendix 5. Effects of Sanctions on Bank Competition (OLS): Pre-1996 Sanctions Excluded

	DV: Lerner Index			
	(1)	(2)	(3)	(4)
All Sanctions				
Sanctions Duration	-0.000	-0.000		
	(0.002)	(0.002)		
Post-sanctions Duration	-0.006***	-0.006***		
	(0.002)	(0.002)		
Financial Sanctions				
Sanctions Duration			0.006***	0.006***
			(0.002)	(0.002)
Post-sanctions Duration			-0.012***	-0.012***
			(0.003)	(0.003)
Non-financial Sanctions				
Sanctions Duration			-0.001	-0.001
			(0.002)	(0.002)
Post-sanctions Duration			-0.003	-0.003
			(0.002)	(0.002)
Type Cumulation	-0.001	-0.001	-0.006	-0.006
	(0.005)	(0.005)	(0.005)	(0.005)
State Senders	-0.006***	-0.006***	-0.005***	-0.005***
	(0.002)	(0.002)	(0.002)	(0.002)
Involvement of IO	-0.001	-0.001	-0.016	-0.016
	(0.014)	(0.014)	(0.014)	(0.014)
GDP per Capita	-0.010		-0.008	
	(0.012)		(0.013)	
Total GDP		-0.007		-0.003
		(0.012)		(0.012)
Financial Crisis	-0.012*	-0.012	-0.012*	-0.012
	(0.007)	(0.007)	(0.007)	(0.007)
Bank Asset to GDP	-0.000**	-0.000**	-0.000**	-0.000**
	(0.000)	(0.000)	(0.000)	(0.000)
Constant	0.372***	0.469	0.357***	0.372
	(0.105)	(0.297)	(0.105)	(0.301)
Country Fixed Effects	YES	YES	YES	YES
Year Fixed Effects	YES	YES	YES	YES
Observations	1,999	1,999	1,999	1,999
Adjusted R^2	0.494	0.494	0.500	0.500

Notes: Robust standard errors are presented in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Appendix 6. Effects of Sanctions on Bank Competition (OLS): Pre-1996 Sanctions Excluded

	DV: Lerner Index			
	(1)	(2)	(3)	(4)
All Sanctions				
Sanctions Imposition	-0.010	-0.011		
	(0.014)	(0.014)		
Financial Sanctions				
Sanctions Imposition			0.047***	0.042**
			(0.017)	(0.017)
Non-financial Sanctions				
Sanctions Imposition			-0.011	-0.012
			(0.013)	(0.013)
Type Cumulation	0.003	0.004	-0.003	-0.001
	(0.005)	(0.005)	(0.006)	(0.006)
State Senders	-0.006***	-0.006***	-0.006***	-0.006***
	(0.002)	(0.002)	(0.002)	(0.002)
Involvement of IO	0.005	0.006	-0.015	-0.012
	(0.015)	(0.015)	(0.018)	(0.018)
GDP Growth		0.003***		0.003***
		(0.001)		(0.001)
Financial Crisis		-0.006		-0.005
		(0.007)		(0.007)
Bank Asset to GDP		-0.000**		-0.000*
		(0.000)		(0.000)
Constant	0.259***	0.266***	0.259***	0.265***
	(0.003)	(0.010)	(0.003)	(0.010)
Country Fixed Effects	YES	YES	YES	YES
Year Fixed Effects	YES	YES	YES	YES
Observations	1,999	1,999	1,999	1,999
Adjusted R^2	0.490	0.498	0.492	0.499

Notes: Robust standard errors are presented in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Appendix 7. Effects of Sanctions on Bank Competition (Heckman): Pre-1996 Sanctions Excluded

	(1)	(2)	(3)	(4)
		Second Stage (DV: Lerner Index)		
All Sanctions				
Sanctions Duration	0.009	0.008		
	(0.006)	(0.006)		
Post-sanctions Duration	-	-		
	-	-		
Financial Sanctions				
Sanctions Duration			0.008**	0.008**
			(0.004)	(0.004)
Post-sanctions Duration			-0.025***	-0.023***
			(0.009)	(0.009)
Non-financial Sanctions				
Sanctions Duration			-0.004	-0.003
			(0.004)	(0.004)
Post-sanctions Duration			0.004	0.003
			(0.006)	(0.006)
Type Cumulation	0.009	0.009	-0.011	-0.011
	(0.011)	(0.012)	(0.011)	(0.011)
State Senders	-0.004	-0.002	0.004	0.005
	(0.005)	(0.005)	(0.005)	(0.005)
Involvement of IO	-0.018	-0.018	-0.064*	-0.061
	(0.039)	(0.038)	(0.039)	(0.038)
GDP Growth		0.001		0.001
		(0.002)		(0.001)
Financial Crisis		-0.034		-0.019
		(0.021)		(0.020)
Bank Asset to GDP		-0.001		-0.001
		(0.001)		(0.001)
Constant	0.301***	0.332***	0.380***	0.386***
	(0.077)	(0.086)	(0.077)	(0.082)
		First Stage (DV: Sanctions Imposition)		
Sanctions Imposition$_{t-1}$	2.171***	2.171***	2.172***	2.171***
	(0.182)	(0.182)	(0.182)	(0.182)
Democracy	-0.955***	-0.950***	-0.951***	-0.948***
	(0.273)	(0.274)	(0.272)	(0.272)
GDP per Capita	-0.156	-0.158	-0.144	-0.150
	(0.314)	(0.314)	(0.316)	(0.316)
FDI	-0.713	-0.708	-0.669	-0.676
	(2.141)	(2.137)	(2.138)	(2.138)
Trade	-0.225	-0.221	-0.203	-0.203
	(0.692)	(0.692)	(0.691)	(0.692)
Constant	-1.159	-1.143	-1.292	-1.242
	(2.714)	(2.719)	(2.730)	(2.736)
Rho	-0.194**	-0.192**	-0.215**	-0.212**
	(0.086)	(0.087)	(0.090)	(0.090)
Country Fixed Effects	YES	YES	YES	YES
Year Fixed Effects	YES	YES	YES	YES
Observations: Total	738	738	738	738
Observations: Uncensored	302	302	302	302
Log Pseudo-likelihood	149.084	152.158	169.139	170.992

Notes: In Models (1) and (2), the *Post-sanctions Duration* variable is omitted from the second-stage estimation due to lack of variation. This is expected given the structure of the Heckman selection model, which estimates the second-stage equation only for observations where sanctions were ongoing. In this subsample, *Post-sanctions Duration* is always zero by construction, as the sanctions have not yet ended. Target and year fixed effects apply to both stages of the Heckman estimation. Robust standard errors are presented in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Appendix 8. Effects of Sanctions on Bank Competition (OLS): Pre-1996 Sanctions Excluded

	DV: Lerner Index			
	(1)	(2)	(3)	(4)
All Sanctions				
Sanctions Duration$_{t-1}$	-0.001	-0.002		
	(0.002)	(0.002)		
Post-sanctions Duration$_{t-1}$	-0.006***	-0.006***		
	(0.002)	(0.002)		
Financial Sanctions				
Sanctions Duration$_{t-1}$			0.005**	0.004*
			(0.002)	(0.003)
Post-sanctions Duration$_{t-1}$			-0.011***	-0.012***
			(0.003)	(0.003)
Non-financial Sanctions				
Sanctions Duration$_{t-1}$			-0.002	-0.002
			(0.002)	(0.002)
Post-sanctions Duration$_{t-1}$			-0.002	-0.002
			(0.002)	(0.002)
Type Cumulation$_{t-1}$	0.007	0.008	0.002	0.003
	(0.005)	(0.005)	(0.005)	(0.005)
State Senders$_{t-1}$	-0.007***	-0.008***	-0.007***	-0.007***
	(0.002)	(0.002)	(0.002)	(0.002)
Involvement of IO$_{t-1}$	0.005	0.005	-0.008	-0.008
	(0.012)	(0.012)	(0.012)	(0.013)
GDP Growth$_{t-1}$		0.003***		0.003***
		(0.001)		(0.001)
Financial Crisis$_{t-1}$		0.006		0.005
		(0.007)		(0.007)
Bank Asset to GDP$_{t-1}$		-0.000**		-0.000**
		(0.000)		(0.000)
Constant	0.262***	0.270***	0.264***	0.271***
	(0.003)	(0.010)	(0.003)	(0.010)
Country Fixed Effects	YES	YES	YES	YES
Year Fixed Effects	YES	YES	YES	YES
Observations	1,868	1,868	1,868	1,868
Adjusted R^2	0.509	0.516	0.513	0.519

Notes: Robust standard errors are presented in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Appendix 9. Effects of Sanctions on Bank Competition (OLS): Pre-1996 Sanctions Excluded

	DV: Lerner Index $_{\{(t_5+t_6+t_7)/3\}-t_0}$			
	(1)	(2)	(3)	(4)
All Sanctions				
Sanctions Duration $_{[t_0, t_4]}$	0.017**	0.018**		
	(0.008)	(0.008)		
Post-sanctions Duration $_{[t_0, t_4]}$	0.004	0.004		
	(0.005)	(0.005)		
Financial Sanctions				
Sanctions Duration $_{[t_0, t_4]}$			0.018**	0.022**
			(0.008)	(0.009)
Post-sanctions Duration $_{[t_0, t_4]}$			0.003	0.004
			(0.010)	(0.009)
Non-financial Sanctions				
Sanctions Duration $_{[t_0, t_4]}$			0.017**	0.018**
			(0.008)	(0.009)
Post-sanctions Duration $_{[t_0, t_4]}$			0.004	0.005
			(0.005)	(0.005)
Type Cumulation $_{[t_0, t_4]}$	-0.013	-0.014	-0.020**	-0.021**
	(0.010)	(0.010)	(0.010)	(0.010)
State Senders $_{[t_0, t_4]}$	0.006*	0.005*	0.006**	0.006**
	(0.003)	(0.003)	(0.003)	(0.003)
Involvement of IO $_{[t_0, t_4]}$	-0.008	-0.008	-0.020	-0.024
	(0.027)	(0.027)	(0.031)	(0.031)
GDP Growth $_{[t_0, t_4]}$		-0.003		-0.004
		(0.003)		(0.003)
Financial Crisis $_{[t_0, t_4]}$		0.026*		0.027*
		(0.015)		(0.014)
Bank Asset to GDP $_{[t_0, t_4]}$		-0.000		-0.000
		(0.000)		(0.000)
Constant	0.027***	0.033	0.026***	0.028
	(0.007)	(0.029)	(0.007)	(0.028)
Country Fixed Effects	YES	YES	YES	YES
Year Fixed Effects	YES	YES	YES	YES
Observations	1,178	1,178	1,178	1,178
Adjusted R^2	0.147	0.151	0.149	0.153

Notes: Robust standard errors are presented in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Appendix 10. Effects of Sanctions on Bank Competition (OLS): Pre-1996 Sanctions Excluded

	DV: Lerner Index $_{\{(t_6+t_7+t_8)/3\}-t_0}$			
	(1)	(2)	(3)	(4)
All Sanctions				
Sanctions Duration $_{[t_0, t_5]}$	0.016**	0.017**		
	(0.007)	(0.007)		
Post-sanctions Duration $_{[t_0, t_5]}$	0.007	0.006		
	(0.005)	(0.005)		
Financial Sanctions				
Sanctions Duration $_{[t_0, t_5]}$			0.021**	0.023***
			(0.008)	(0.009)
Post-sanctions Duration $_{[t_0, t_5]}$			0.009	0.009
			(0.010)	(0.010)
Non-financial Sanctions				
Sanctions Duration $_{[t_0, t_5]}$			0.015*	0.015*
			(0.008)	(0.008)
Post-sanctions Duration $_{[t_0, t_5]}$			0.005	0.005
			(0.005)	(0.005)
Type Cumulation $_{[t_0, t_5]}$	-0.014	-0.014	-0.020*	-0.020*
	(0.011)	(0.011)	(0.010)	(0.010)
State Senders $_{[t_0, t_5]}$	0.007**	0.007**	0.007**	0.007**
	(0.003)	(0.003)	(0.003)	(0.003)
Involvement of IO $_{[t_0, t_5]}$	0.013	0.013	-0.001	-0.004
	(0.026)	(0.026)	(0.028)	(0.029)
GDP Growth $_{[t_0, t_5]}$		-0.001		-0.001
		(0.004)		(0.004)
Financial Crisis $_{[t_0, t_5]}$		0.017		0.018
		(0.014)		(0.014)
Bank Asset to GDP $_{[t_0, t_5]}$		0.000		0.000
		(0.000)		(0.000)
Constant	0.029***	0.024	0.027***	0.020
	(0.007)	(0.034)	(0.007)	(0.033)
Country Fixed Effects	YES	YES	YES	YES
Year Fixed Effects	YES	YES	YES	YES
Observations	1,062	1,062	1,062	1,062
Adjusted R^2	0.279	0.279	0.281	0.281

Notes: Robust standard errors are presented in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Appendix 11. Effects of Sanctions on Bank Competition (OLS): Pre-1996 Sanctions Excluded

	DV: Lerner Index $_{\{(t_7+t_8+t_9)/3\}-t_0}$			
	(1)	(2)	(3)	(4)
All Sanctions				
Sanctions Duration $_{[t_0, t_6]}$	0.015**	0.015**		
	(0.006)	(0.006)		
Post-sanctions Duration $_{[t_0, t_6]}$	0.008	0.008		
	(0.006)	(0.006)		
Financial Sanctions				
Sanctions Duration $_{[t_0, t_6]}$			0.022***	0.023***
			(0.008)	(0.009)
Post-sanctions Duration $_{[t_0, t_6]}$			0.010	0.010
			(0.011)	(0.011)
Non-financial Sanctions				
Sanctions Duration $_{[t_0, t_6]}$			0.012*	0.012*
			(0.007)	(0.007)
Post-sanctions Duration $_{[t_0, t_6]}$			0.005	0.005
			(0.006)	(0.006)
Type Cumulation $_{[t_0, t_6]}$	-0.006	-0.006	-0.011	-0.011
	(0.007)	(0.008)	(0.007)	(0.007)
State Senders $_{[t_0, t_6]}$	0.004*	0.004	0.005*	0.005*
	(0.003)	(0.003)	(0.003)	(0.003)
Involvement of IO $_{[t_0, t_6]}$	0.040	0.040	0.026	0.025
	(0.026)	(0.026)	(0.028)	(0.028)
GDP Growth $_{[t_0, t_6]}$		0.002		0.001
		(0.005)		(0.005)
Financial Crisis $_{[t_0, t_6]}$		0.012		0.014
		(0.012)		(0.012)
Bank Asset to GDP $_{[t_0, t_6]}$		-0.000		-0.000
		(0.000)		(0.000)
Constant	0.030***	0.019	0.027***	0.015
	(0.008)	(0.038)	(0.008)	(0.037)
Country Fixed Effects	YES	YES	YES	YES
Year Fixed Effects	YES	YES	YES	YES
Observations	948	948	948	948
Adjusted R^2	0.362	0.360	0.363	0.362

Notes: Robust standard errors are presented in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Section III. Pre-1996 Sanctions Included

Part 1. Summary Statistics

Appendix 12. Summary Statistics: Pre-1996 Sanctions Included

Variable	*Obs.*	*Mean*	*Std. Dev.*	*Min*	*Max*
Lerner Index	1,999	0.256	0.143	-1.609	1.076
All Sanctions					
Sanctions Duration	1,999	3.006	7.786	0	65
Post-sanctions Duration	1,999	0.962	2.817	0	17
Sanctions Imposition	1,999	0.259	0.438	0	1
Financial Sanctions					
Sanctions Duration	1,999	1.019	3.917	0	35
Post-sanctions Duration	1,999	0.589	2.288	0	17
Sanctions Imposition	1,999	0.113	0.317	0	1
Non-financial Sanctions					
Sanctions Duration	1,999	2.796	7.691	0	65
Post-sanctions Duration	1,999	0.839	2.633	0	17
Sanctions Imposition	1,999	0.236	0.425	0	1
Type Cumulation	1,999	0.570	1.244	0	6
State Senders	1,999	0.639	2.207	0	16
Involvement of IO	1,999	0.126	0.332	0	1
GDP Growth	1,999	4.015	4.089	-17.005	34.500
GDP per Capita	1,999	8.564	1.554	4.705	11.725
Total GDP	1,999	24.882	1.900	20.271	30.496
Financial Crisis	1,999	0.272	0.445	0	1
Bank Asset to GDP	1,999	63.703	47.371	0.438	305.244
Democracy	1,845	0.677	0.468	0	1
FDI	1,989	0.059	0.202	-0.575	4.491
Trade	1,869	0.848	0.559	0.030	4.426

Notes: The following variables are in natural log form: GDP per Capita and Total GDP.

Part 2. Robustness Tests

Appendix 13. Effects of Sanctions on Bank Competition (OLS): Pre-1996 Sanctions Included

	DV: Lerner Index			
	(1)	(2)	(3)	(4)
All Sanctions				
Sanctions Duration	-0.001	-0.001		
	(0.001)	(0.001)		
Post-sanctions Duration	0.001	0.001		
	(0.001)	(0.001)		
Financial Sanctions				
Sanctions Duration			0.004***	0.004***
			(0.001)	(0.001)
Post-sanctions Duration			-0.006***	-0.006***
			(0.002)	(0.002)
Non-financial Sanctions				
Sanctions Duration			-0.003***	-0.003***
			(0.001)	(0.001)
Post-sanctions Duration			0.000	0.000
			(0.001)	(0.001)
Type Cumulation	0.006	0.007	-0.002	-0.001
	(0.004)	(0.004)	(0.004)	(0.004)
State Senders	-0.008***	-0.008***	-0.007***	-0.007***
	(0.002)	(0.002)	(0.002)	(0.002)
Involvement of IO	0.001	0.001	-0.005	-0.005
	(0.015)	(0.015)	(0.015)	(0.015)
GDP Growth		0.003***		0.003***
		(0.001)		(0.001)
Financial Crisis		-0.005		-0.009
		(0.007)		(0.007)
Bank Asset to GDP		-0.000**		-0.000*
		(0.000)		(0.000)
Constant	0.259***	0.267***	0.268***	0.274***
	(0.004)	(0.010)	(0.004)	(0.010)
Country Fixed Effects	YES	YES	YES	YES
Year Fixed Effects	YES	YES	YES	YES
Observations	1,999	1,999	1,999	1,999
Adjusted R^2	0.491	0.499	0.499	0.508

Notes: Robust standard errors are presented in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Appendix 14. Effects of Sanctions on Bank Competition (OLS): Pre-1996 Sanctions Included

	DV: Lerner Index			
	(1)	(2)	(3)	(4)
Type Cumulation	0.003	0.004	0.003	0.004
	(0.004)	(0.004)	(0.004)	(0.004)
State Senders	-0.008***	-0.008***	-0.008***	-0.008***
	(0.002)	(0.002)	(0.002)	(0.002)
Involvement of IO	0.002	0.002	0.002	0.002
	(0.015)	(0.015)	(0.015)	(0.015)
GDP Growth		0.003***		0.003***
		(0.001)		(0.001)
Financial Crisis		-0.005		-0.005
		(0.007)		(0.007)
Bank Asset to GDP		-0.000**		-0.000**
		(0.000)		(0.000)
Constant	0.259***	0.264***	0.259***	0.264***
	(0.003)	(0.010)	(0.003)	(0.010)
Country Fixed Effects	YES	YES	YES	YES
Year Fixed Effects	YES	YES	YES	YES
Observations	1,999	1,999	1,999	1,999
Adjusted R^2	0.491	0.499	0.491	0.499

Notes: Robust standard errors are presented in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Appendix 15. Effects of Sanctions on Bank Competition (OLS): Pre-1996 Sanctions Included

	DV: Lerner Index			
	(1)	(2)	(3)	(4)
All Sanctions				
Sanctions Duration	-0.001	-0.001		
	(0.001)	(0.001)		
Post-sanctions Duration	0.001	0.001		
	(0.001)	(0.001)		
Financial Sanctions				
Sanctions Duration			0.004***	0.004***
			(0.001)	(0.001)
Post-sanctions Duration			-0.006***	-0.006***
			(0.002)	(0.002)
Non-financial Sanctions				
Sanctions Duration			-0.003***	-0.003***
			(0.001)	(0.001)
Post-sanctions Duration			0.000	0.000
			(0.001)	(0.001)
Type Cumulation	0.006	0.006	-0.001	-0.001
	(0.004)	(0.004)	(0.004)	(0.004)
State Senders	-0.008***	-0.008***	-0.006***	-0.006***
	(0.002)	(0.002)	(0.002)	(0.002)
Involvement of IO	0.001	0.001	-0.006	-0.006
	(0.015)	(0.015)	(0.015)	(0.015)
GDP per Capita	-0.012		0.000	
	(0.012)		(0.013)	
Total GDP		-0.009		0.004
		(0.012)		(0.012)
Financial Crisis	-0.011	-0.011	-0.014*	-0.013*
	(0.007)	(0.007)	(0.007)	(0.007)
Bank Asset to GDP	-0.000**	-0.000**	-0.000**	-0.000**
	(0.000)	(0.000)	(0.000)	(0.000)
Constant	0.387***	0.503*	0.291***	0.189
	(0.103)	(0.292)	(0.104)	(0.294)
Country Fixed Effects	YES	YES	YES	YES
Year Fixed Effects	YES	YES	YES	YES
Observations	1,999	1,999	1,999	1,999
Adjusted R^2	0.494	0.494	0.502	0.502

Notes: Robust standard errors are presented in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Appendix 16. Effects of Sanctions on Bank Competition (OLS): Pre-1996 Sanctions Included

	DV: Lerner Index			
	(1)	(2)	(3)	(4)
All Sanctions				
Sanctions Imposition	-0.036***	-0.036***		
	(0.013)	(0.013)		
Financial Sanctions				
Sanctions Imposition			0.051***	0.049***
			(0.015)	(0.015)
Non-financial Sanctions				
Sanctions Imposition			-0.037***	-0.037***
			(0.013)	(0.013)
Type Cumulation	0.011**	0.012***	0.004	0.006
	(0.005)	(0.005)	(0.005)	(0.005)
State Senders	-0.008***	-0.008***	-0.007***	-0.008***
	(0.002)	(0.002)	(0.002)	(0.002)
Involvement of IO	0.009	0.009	-0.011	-0.011
	(0.016)	(0.016)	(0.017)	(0.017)
GDP Growth		0.003***		0.003***
		(0.001)		(0.001)
Financial Crisis		-0.006		-0.005
		(0.007)		(0.007)
Bank Asset to GDP		-0.000**		-0.000*
		(0.000)		(0.000)
Constant	0.263***	0.269***	0.262***	0.266***
	(0.003)	(0.010)	(0.003)	(0.010)
Country Fixed Effects	YES	YES	YES	YES
Year Fixed Effects	YES	YES	YES	YES
Observations	1,999	1,999	1,999	1,999
Adjusted R^2	0.494	0.502	0.497	0.505

Notes: Robust standard errors are presented in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Appendix 17. Effects of Sanctions on Bank Competition (Heckman): Pre-1996 Sanctions Included

	(1)	(2)	(3)	(4)
		Second Stage (DV: Lerner Index)		
All Sanctions				
Sanctions Duration	-0.006***	-0.005**		
	(0.002)	(0.002)		
Post-sanctions Duration	-	-		
	-	-		
Financial Sanctions				
Sanctions Duration			0.005**	0.006***
			(0.002)	(0.002)
Post-sanctions Duration			-0.008***	-0.007***
			(0.002)	(0.002)
Non-financial Sanctions				
Sanctions Duration			-0.005*	-0.005
			(0.003)	(0.003)
Post-sanctions Duration			0.004	0.004
			(0.004)	(0.004)
Type Cumulation	0.030***	0.029***	0.014*	0.013*
	(0.009)	(0.008)	(0.008)	(0.008)
State Senders	-0.013***	-0.013***	-0.006	-0.005
	(0.004)	(0.004)	(0.004)	(0.004)
Involvement of IO	-0.085**	-0.082**	-0.067*	-0.061*
	(0.042)	(0.040)	(0.038)	(0.037)
GDP Growth		0.003***		0.003***
		(0.001)		(0.001)
Financial Crisis		-0.017		-0.021
		(0.016)		(0.015)
Bank Asset to GDP		-0.001***		-0.001***
		(0.000)		(0.000)
Constant	0.414***	0.409***	0.402***	0.397***
	(0.064)	(0.067)	(0.059)	(0.062)
		First Stage (DV: Sanctions Imposition)		
Sanctions Imposition$_{t-1}$	2.428***	2.424***	2.419***	2.415***
	(0.170)	(0.170)	(0.170)	(0.170)
Democracy	-1.023***	-1.023***	-0.994***	-0.993***
	(0.264)	(0.265)	(0.264)	(0.265)
GDP per Capita	-0.009	-0.020	-0.030	-0.040
	(0.307)	(0.308)	(0.308)	(0.308)
FDI	0.984	0.954	1.025	0.998
	(2.536)	(2.536)	(2.564)	(2.564)
Trade	-0.345	-0.343	-0.343	-0.339
	(0.707)	(0.706)	(0.711)	(0.709)
Constant	-1.301	-1.223	-1.143	-1.079
	(2.433)	(2.437)	(2.441)	(2.444)
Rho	-0.235***	-0.221***	-0.177**	-0.164**
	(0.077)	(0.075)	(0.072)	(0.071)
Country Fixed Effects	YES	YES	YES	YES
Year Fixed Effects	YES	YES	YES	YES
Observations: Total	916	916	916	916
Observations: Uncensored	419	419	419	419
Log Pseudo-likelihood	278.671	285.559	289.502	296.640

Notes: In Models (1) and (2), the *Post-sanctions Duration* variable is omitted from the second-stage estimation due to lack of variation. This is expected given the structure of the Heckman selection model, which estimates the second-stage equation only for observations where sanctions were ongoing. In this subsample, *Post-sanctions Duration* is always zero by construction, as the sanctions have not yet ended. Target and year fixed effects apply to both stages of the Heckman estimation. Robust standard errors are presented in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Appendix 18. Effects of Sanctions on Bank Competition (OLS): Pre-1996 Sanctions Included

	DV: Lerner Index			
	(1)	(2)	(3)	(4)
All Sanctions				
Sanctions Duration$_{t-1}$	-0.001	-0.001		
	(0.001)	(0.001)		
Post-sanctions Duration$_{t-1}$	0.002	0.001		
	(0.002)	(0.002)		
Financial Sanctions				
Sanctions Duration$_{t-1}$			0.002**	0.002**
			(0.001)	(0.001)
Post-sanctions Duration$_{t-1}$			-0.006***	-0.006***
			(0.002)	(0.002)
Non-financial Sanctions				
Sanctions Duration$_{t-1}$			-0.001	-0.002
			(0.001)	(0.001)
Post-sanctions Duration$_{t-1}$			0.001	0.001
			(0.002)	(0.002)
Type Cumulation$_{t-1}$	0.012***	0.014***	0.006	0.007
	(0.004)	(0.005)	(0.005)	(0.005)
State Senders$_{t-1}$	-0.009***	-0.010***	-0.008***	-0.009***
	(0.002)	(0.002)	(0.002)	(0.002)
Involvement of IO$_{t-1}$	0.002	0.001	-0.003	-0.004
	(0.013)	(0.013)	(0.013)	(0.013)
GDP Growth$_{t-1}$		0.003***		0.003***
		(0.001)		(0.001)
Financial Crisis$_{t-1}$		0.007		0.002
		(0.007)		(0.007)
Bank Asset to GDP$_{t-1}$		-0.000**		-0.000**
		(0.000)		(0.000)
Constant	0.258***	0.268***	0.265***	0.273***
	(0.004)	(0.011)	(0.004)	(0.011)
Country Fixed Effects	YES	YES	YES	YES
Year Fixed Effects	YES	YES	YES	YES
Observations	1,868	1,868	1,868	1,868
Adjusted R^2	0.510	0.517	0.514	0.521

Notes: Robust standard errors are presented in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Appendix 19. Effects of Sanctions on Bank Competition (OLS): Pre-1996 Sanctions Included

	DV: Lerner Index $_{\{(t_5+t_6+t_7)/3\}-t_0}$			
	(1)	(2)	(3)	(4)
All Sanctions				
Sanctions Duration $_{[t_0, t_4]}$	0.014*	0.015*		
	(0.008)	(0.008)		
Post-sanctions Duration $_{[t_0, t_4]}$	-0.001	-0.000		
	(0.006)	(0.006)		
Financial Sanctions				
Sanctions Duration $_{[t_0, t_4]}$			0.021**	0.024**
			(0.009)	(0.010)
Post-sanctions Duration $_{[t_0, t_4]}$			0.005	0.008
			(0.010)	(0.010)
Non-financial Sanctions				
Sanctions Duration $_{[t_0, t_4]}$			0.016**	0.017**
			(0.008)	(0.008)
Post-sanctions Duration $_{[t_0, t_4]}$			-0.004	-0.002
			(0.006)	(0.006)
Type Cumulation $_{[t_0, t_4]}$	-0.002	-0.002	-0.011	-0.011
	(0.007)	(0.007)	(0.007)	(0.007)
State Senders $_{[t_0, t_4]}$	0.005*	0.005*	0.005**	0.005**
	(0.003)	(0.002)	(0.003)	(0.003)
Involvement of IO $_{[t_0, t_4]}$	-0.025	-0.024	-0.033	-0.035
	(0.031)	(0.031)	(0.035)	(0.035)
GDP Growth $_{[t_0, t_4]}$		-0.003		-0.003
		(0.003)		(0.003)
Financial Crisis $_{[t_0, t_4]}$		0.025*		0.026*
		(0.014)		(0.014)
Bank Asset to GDP $_{[t_0, t_4]}$		-0.000		-0.000
		(0.000)		(0.000)
Constant	0.022**	0.028	0.019*	0.018
	(0.011)	(0.032)	(0.011)	(0.029)
Country Fixed Effects	YES	YES	YES	YES
Year Fixed Effects	YES	YES	YES	YES
Observations	1,178	1,178	1,178	1,178
Adjusted R^2	0.150	0.153	0.156	0.158

Notes: Robust standard errors are presented in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Appendix 20. Effects of Sanctions on Bank Competition (OLS): Pre-1996 Sanctions Included

	DV: Lerner Index $_{\{(t_6+t_7+t_8)/3\}-t_0}$			
	(1)	(2)	(3)	(4)
All Sanctions				
Sanctions Duration $_{[t_0, t_5]}$	0.015**	0.015**		
	(0.007)	(0.007)		
Post-sanctions Duration $_{[t_0, t_5]}$	-0.000	-0.000		
	(0.006)	(0.006)		
Financial Sanctions				
Sanctions Duration $_{[t_0, t_5]}$			0.022***	0.024***
			(0.008)	(0.009)
Post-sanctions Duration $_{[t_0, t_5]}$			0.005	0.007
			(0.010)	(0.010)
Non-financial Sanctions				
Sanctions Duration $_{[t_0, t_5]}$			0.015**	0.015**
			(0.007)	(0.007)
Post-sanctions Duration $_{[t_0, t_5]}$			-0.003	-0.002
			(0.005)	(0.005)
Type Cumulation $_{[t_0, t_5]}$	-0.004	-0.004	-0.013*	-0.012*
	(0.007)	(0.007)	(0.007)	(0.007)
State Senders $_{[t_0, t_5]}$	0.006**	0.006**	0.007**	0.006**
	(0.002)	(0.002)	(0.003)	(0.003)
Involvement of IO $_{[t_0, t_5]}$	-0.002	-0.002	-0.012	-0.014
	(0.031)	(0.031)	(0.033)	(0.033)
GDP Growth $_{[t_0, t_5]}$		-0.001		-0.000
		(0.004)		(0.004)
Financial Crisis $_{[t_0, t_5]}$		0.016		0.017
		(0.014)		(0.014)
Bank Asset to GDP $_{[t_0, t_5]}$		-0.000		0.000
		(0.000)		(0.000)
Constant	0.022*	0.018	0.019	0.006
	(0.013)	(0.038)	(0.012)	(0.034)
Country Fixed Effects	YES	YES	YES	YES
Year Fixed Effects	YES	YES	YES	YES
Observations	1,062	1,062	1,062	1,062
Adjusted R^2	0.284	0.283	0.290	0.289

Notes: Robust standard errors are presented in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Appendix 21. Effects of Sanctions on Bank Competition (OLS): Pre-1996 Sanctions Included

	DV: Lerner Index $_{\{(t_7+t_8+t_9)/3\}-t_0}$			
	(1)	(2)	(3)	(4)
All Sanctions				
Sanctions Duration $_{[t_0, t_6]}$	0.015**	0.015**		
	(0.007)	(0.007)		
Post-sanctions Duration $_{[t_0, t_6]}$	-0.000	-0.000		
	(0.006)	(0.006)		
Financial Sanctions				
Sanctions Duration $_{[t_0, t_6]}$			0.020**	0.020**
			(0.008)	(0.008)
Post-sanctions Duration $_{[t_0, t_6]}$			0.004	0.003
			(0.010)	(0.011)
Non-financial Sanctions				
Sanctions Duration $_{[t_0, t_6]}$			0.014**	0.014**
			(0.007)	(0.007)
Post-sanctions Duration $_{[t_0, t_6]}$			-0.003	-0.003
			(0.006)	(0.006)
Type Cumulation $_{[t_0, t_6]}$	0.001	0.002	-0.006	-0.006
	(0.006)	(0.006)	(0.007)	(0.007)
State Senders $_{[t_0, t_6]}$	0.004*	0.004*	0.004*	0.004*
	(0.002)	(0.002)	(0.002)	(0.002)
Involvement of IO $_{[t_0, t_6]}$	0.025	0.025	0.018	0.018
	(0.030)	(0.030)	(0.030)	(0.031)
GDP Growth $_{[t_0, t_6]}$		0.002		0.003
		(0.005)		(0.005)
Financial Crisis $_{[t_0, t_6]}$		0.012		0.013
		(0.012)		(0.012)
Bank Asset to GDP $_{[t_0, t_6]}$		-0.000		-0.000
		(0.000)		(0.000)
Constant	0.021	0.011	0.020	-0.000
	(0.016)	(0.043)	(0.015)	(0.039)
Country Fixed Effects	YES	YES	YES	YES
Year Fixed Effects	YES	YES	YES	YES
Observations	948	948	948	948
Adjusted R^2	0.367	0.366	0.372	0.371

Notes: Robust standard errors are presented in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.