

Are International Banks Different? Evidence on Bank Performance and Strategy

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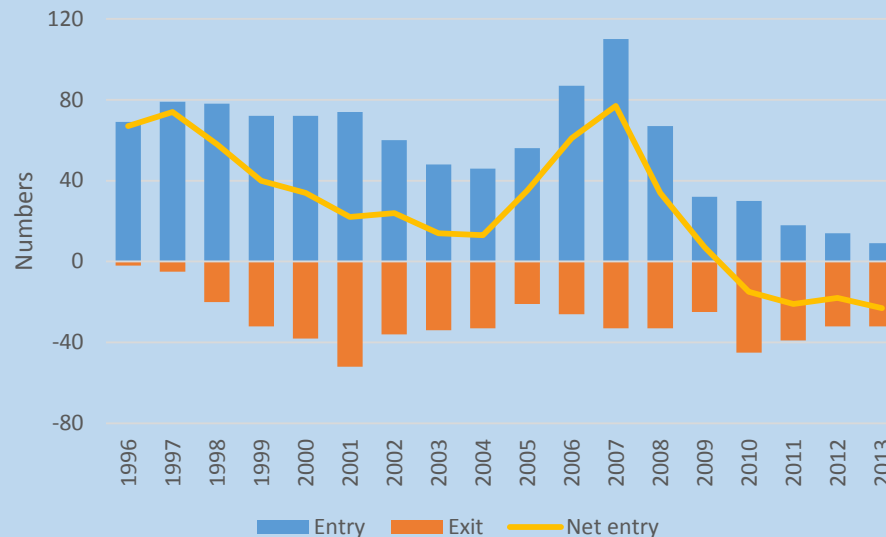
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Why this paper?

- Global financial crisis led to a general backlash against globalization
- A re-evaluation of the pros and cons of international banks
 - Emphasis on shock transmission; impact of retrenchment of global banks
- Resulting in more stringent capital regulations, macroprudential rules
- And greater restrictions on foreign entry particularly from developing countries

Global Financial Development Report, Bankers without Borders, 2017/18.

Number of Entries and Exits of Foreign Banks 1995-2013



Claessens and van Horen, IMF Economic Review, 2015

- Global international banks retracted after crisis; there was much less entry so net entry became negative for the first time
- International banks from high income countries drove the exits, but developing country international banks continued their expansion, accounting for 60% of new entries

Two important trends emerged:

- South- South banking
- Regionalization

South-South Banking Subsidiary Networks

2005



2014



Maps show the location of foreign bank subsidiaries to and from developing countries. The connections reflect majority ownership. Visualization based on Bertay et al., 2018.

Questions we ask:

- What is the relationship between internationalization and performance and risk-taking?
- What are the implications for developing countries?
 - How did the Global Financial Crisis affect the international banking landscape in terms of bank performance, strategy and loan provision?
 - Do international banks headquartered in developing countries behave and perform differently from those headquartered in high-income countries?

Literature

- Bank internationalization focusing on foreign-owned banks
 - Claessens, Demirguc-Kunt, and Huizinga (2001)
 - Claessens and van Horen (2012, 2014)
 - Cull and Martinez Peria (2010)
- Bank internationalization on risk and return from parents' perspective
 - Higher returns (Garcia-Herrero and Vazquez (2013)) and shareholder value (Gulamhussen et al. (2017))
 - Higher risk (Gulamhussen et al. (2014))
 - Higher funding costs (Bertay, Demirguc-Kunt, and Huizinga, 2016)
 - Country-level evidence on internationalization dynamics (Buch et al. (2011, 2013, 2014), Galema et al. (2013), Berger et al. (2016))
- Internationalization and loan provision
 - De Haas and Van Horen (2013), De Haas and van Lelyveld (2014)

This Paper

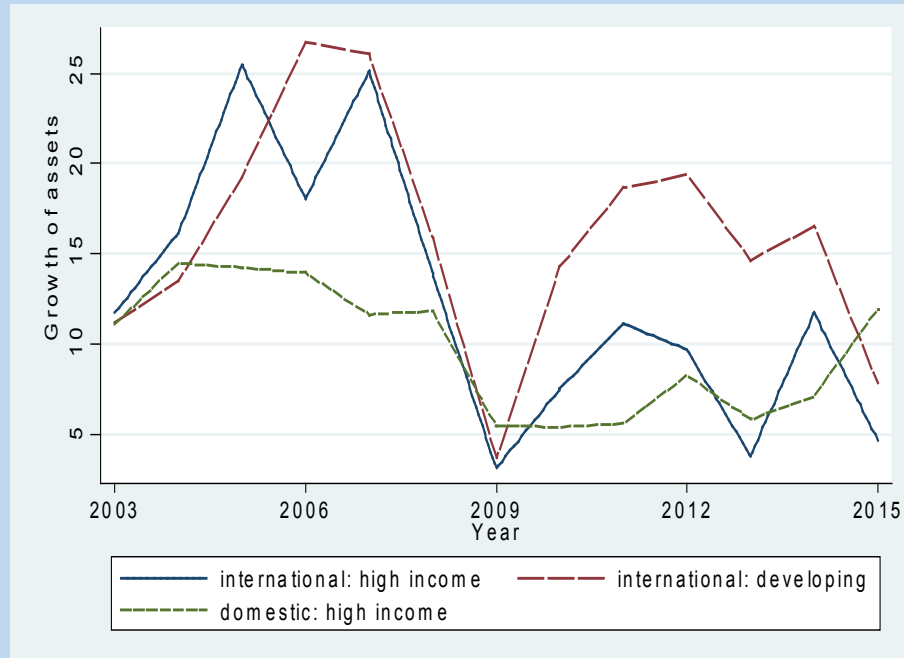
- We shift the focus to parent bank and use **consolidated data** to analyze whether internationalization affects bank performance and strategy
 - Robust to profit shifting (e.g. Huizinga et al. (2014))
 - Banks tend to fail at consolidated level (Anginer et al. 2017)
- We use bank-level information from Bankscope, for 113 countries over the 2000-2015 period.
- Documenting changes after the global financial crisis
- Comparing **international banks headquartered in high-income countries vs. developing countries** – investigate the rising South-South trend
- Also examine the implications of bank internationalization for their credit provision.

Data

- **Bank internationalization**
 - The share of a bank's overall assets owned by its foreign subsidiaries
 - The number of foreign host countries where the bank operates at least one subsidiary
 - Our sample of banks contains 2,793 banks in total, of which 325 banks are international with at least one foreign subsidiary.
- **Bank ownership information**
 - 2000-2015 from Bankscope CDs and WRDS
 - Consolidated parents, unconsolidated subsidiaries
 - Only subsidiaries no branch information
- **Balance sheet data from Bankscope**
- **Market data from Datastream**
- **Macro data from WDI**

Data: Trends

Growth rate of assets for international and domestic banks



The number of foreign host countries of international banks



The Model

- Basic specification:

$$Y_{ijt} = \alpha_i + \gamma_t + \beta_1 Inter_{ijt} + \beta_2 Bank_{ijt-1} + \beta_3 Macro_{jt} + \varepsilon_{ijt}$$

- Crisis period and International banks from developing countries:

$$Y_{ijt} = \alpha_i + \gamma_t + \beta_1 Inter_{ijt} + \beta_2 Inter_{ijt} \times Crisis_{j,t} + \beta_3 Bank_{ijt-1} + \beta_4 Macro_{jt} + \varepsilon_{ijt}$$

$$Y_{ijt} = \alpha_i + \gamma_t + \beta_1 Inter_{ijt} + \beta_2 Inter_{ijt} \times Developing_j + \beta_3 Inter_{ijt} \times Crisis_{j,t} + \beta_4 Inter_{ijt} \times Developing_j \times Crisis_{j,t} + \beta_5 Developing_j \times Crisis_{j,t} + \beta_6 Bank_{ijt-1} + \beta_7 Macro_{jt} + \varepsilon_{ijt}$$

- Cyclicity of banks' loan provision:

$$Loan\ growth_{ijt} = \alpha_i + \gamma_t + \beta_1 Inter_{ijt} + \beta_2 Inter_{ijt} \times GDP\ growth_{jt} + \beta_3 Bank_{ijt-1} + \beta_4 Macro_{jt} + \varepsilon_{ijt}$$

- Bank-level controls: Size, capital, loan-to-asset
- Country-level controls: GDP growth, inflation, GDP per capita
- Bank and time fixed effects

Bank internationalization and performance

	Tobin's Q	Market-to-book	Z-score	NPL ratio	ROA	ROE	Tobin's Q	Market-to-book	Z-score	NPL ratio	ROA	ROE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Foreign assets	-0.081**	-0.539***	-0.061	0.009	-0.007**	-0.048**						
	(0.036)	(0.135)	(0.080)	(0.006)	(0.003)	(0.022)						
Countries							0.010	-0.040	-0.032	0.003	-0.002	-0.041**
							(0.015)	(0.150)	(0.073)	(0.003)	(0.002)	(0.017)
N	5826	5828	11877	10842	13306	13169	6016	6018	12482	11355	13980	13837
R-sq	0.304	0.391	0.178	0.193	0.142	0.187	0.289	0.377	0.166	0.179	0.129	0.181

- Intensive vs. Extensive margin of internationalization
- Lower valuation and lower return to equity
- Closer look:
 - High-income vs. Developing country international banks
 - Before vs. After global financial crisis

Performance During the Crisis

Panel A. Crisis defined as the years 2007-2009

	Tobin's Q (1)	Market-to-book (2)	Z-score (3)	NPL ratio (4)	ROA (5)	ROE (6)	Tobin's Q (7)	Market-to-book (8)	Z-score (9)	NPL ratio (10)	ROA (11)	ROE (12)
Foreign assets	-0.100** (0.040)	-0.646*** (0.134)	-0.073 (0.083)	0.012* (0.006)	-0.008** (0.003)	-0.051** (0.022)						
Foreign assets * Crisis ₂₀₀₇₋₂₀₀₉	0.060** (0.024)	0.341*** (0.094)	0.051 (0.111)	-0.016*** (0.005)	0.007*** (0.003)	0.016 (0.033)						
Countries							0.008 (0.015)	-0.079 (0.147)	-0.026 (0.073)	0.004 (0.004)	-0.003* (0.002)	-0.042** (0.017)
Countries * Crisis ₂₀₀₇₋₂₀₀₉							0.005 (0.004)	0.095** (0.038)	-0.022 (0.030)	-0.004*** (0.001)	0.003*** (0.001)	0.004 (0.011)
N	5826	5828	11877	10842	13306	13169	6016	6018	12482	11355	13980	13837
R-sq	0.307	0.392	0.178	0.195	0.143	0.187	0.289	0.378	0.166	0.180	0.130	0.181

Panel B. Crisis periods from Laeven and Valencia (2012)

	Tobin's Q (1)	Market-to-book (2)	Z-score (3)	NPL ratio (4)	ROA (5)	ROE (6)	Tobin's Q (7)	Market-to-book (8)	Z-score (9)	NPL ratio (10)	ROA (11)	ROE (12)
Foreign assets	-0.119*** (0.028)	-0.702*** (0.182)	0.024 (0.123)	0.003 (0.006)	-0.006** (0.003)	-0.017 (0.024)						
Foreign assets * Crisis _{LV}	0.107*** (0.021)	0.457** (0.190)	-0.059 (0.178)	-0.004 (0.004)	0.002 (0.003)	-0.044 (0.033)						
Countries							-0.035* (0.021)	-0.234 (0.184)	-0.017 (0.082)	-0.001 (0.003)	-0.003 (0.002)	-0.007 (0.017)
Countries * Crisis _{LV}							0.039*** (0.008)	0.137* (0.082)	0.019 (0.050)	-0.001 (0.002)	0.002 (0.001)	-0.023* (0.014)
Crisis _{LV}	-0.044*** (0.007)	-0.421*** (0.065)	-0.199*** (0.024)	0.012*** (0.001)	-0.005*** (0.001)	-0.051*** (0.006)	-0.046*** (0.007)	-0.435*** (0.064)	-0.220*** (0.024)	0.012*** (0.001)	-0.006*** (0.001)	-0.052*** (0.006)
N	4976	4978	9115	8174	10318	10202	5115	5117	9457	8473	10717	10595
R-sq	0.341	0.409	0.223	0.258	0.166	0.223	0.326	0.395	0.213	0.250	0.153	0.216

International Banks from Developing Countries

Panel A: Foreign assets	Tobin's Q		Market-to-book		Z-score		NPL ratio		ROA		ROE	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Foreign assets	-0.079** (0.038)	-0.092** (0.042)	-0.575*** (0.138)	-0.662*** (0.138)	-0.045 (0.088)	-0.044 (0.093)	0.009 (0.007)	0.011 (0.007)	-0.006* (0.004)	-0.008** (0.004)	-0.058** (0.024)	-0.060** (0.025)
Foreign assets * Developing	-0.029 (0.091)	-0.068 (0.112)	0.595 (0.706)	0.502 (0.522)	-0.089 (0.218)	-0.050 (0.213)	0.002 (0.020)	0.001 (0.017)	-0.001 (0.009)	0.003 (0.009)	0.059 (0.056)	0.080 (0.056)
Foreign assets * Crisis ₂₀₀₇₋₂₀₀₉		0.048*** (0.018)		0.316*** (0.082)		0.017 (0.122)		-0.012*** (0.004)		0.007*** (0.003)		0.012 (0.036)
Foreign assets * Developing * Crisis ₂₀₀₇₋₂₀₀₉		0.305 (0.323)		0.917 (1.097)		0.010 (0.194)		-0.026 (0.025)		-0.007 (0.010)		-0.033 (0.072)
Developing * Crisis ₂₀₀₇₋₂₀₀₉		0.039*** (0.011)		0.329*** (0.080)		0.156*** (0.028)		-0.003** (0.002)		0.006*** (0.001)		0.061*** (0.007)
N	5826	5826	5828	5828	11877	11877	10842	10842	13306	13306	13169	13169
R-sq	0.304	0.320	0.391	0.400	0.178	0.183	0.193	0.198	0.142	0.148	0.187	0.193

Panel B: Countries	Tobin's Q		Market-to-book		Z-score		NPL ratio		ROA		ROE	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Countries	-0.000 (0.012)	-0.001 (0.012)	-0.247* (0.137)	-0.275** (0.134)	-0.110 (0.075)	-0.094 (0.076)	0.009*** (0.003)	0.010*** (0.004)	-0.003** (0.002)	-0.004** (0.002)	-0.063*** (0.018)	-0.062*** (0.018)
Countries * Developing	0.078 (0.069)	0.069 (0.065)	1.529*** (0.455)	1.455*** (0.429)	0.491*** (0.182)	0.430** (0.183)	-0.040*** (0.013)	-0.040*** (0.013)	0.008 (0.006)	0.007 (0.006)	0.141*** (0.051)	0.130** (0.052)
Countries * Crisis ₂₀₀₇₋₂₀₀₉		0.005 (0.004)		0.098*** (0.035)		-0.052* (0.031)		-0.004*** (0.001)		0.002** (0.001)		-0.003 (0.012)
Countries * Developing * Crisis ₂₀₀₇₋₂₀₀₉		-0.020 (0.029)		-0.092 (0.248)		0.102 (0.081)		0.002 (0.006)		-0.004 (0.003)		-0.003 (0.025)
Developing * Crisis ₂₀₀₇₋₂₀₀₉		0.046*** (0.014)		0.337*** (0.084)		0.137*** (0.031)		-0.004* (0.002)		0.007*** (0.001)		0.062*** (0.008)
N	6016	6016	6018	6018	12482	12482	11355	11355	13980	13980	13837	13837
R-sq	0.291	0.301	0.384	0.391	0.169	0.174	0.188	0.191	0.130	0.136	0.183	0.189

Exploring the Channels: Bank internationalization and Deposit Insurance

	Tobin's Q	Market-to-book	Z-score	NPL ratio	ROA	ROE	Tobin's Q	Market-to-book	Z-score	NPL ratio	ROA	ROE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Foreign assets	-0.224*** (0.066)	-1.055*** (0.350)	-0.122 (0.159)	0.020 (0.014)	-0.012* (0.007)	0.000 (0.045)						
Foreign assets * Coverage	0.027*** (0.010)	0.123** (0.061)	-0.001 (0.033)	-0.001 (0.003)	0.001 (0.001)	-0.009 (0.008)						
Foreign Assets * Crisis ₂₀₀₇₋₂₀₀₉	0.054 (0.076)	-0.083 (0.452)	-0.289 (0.249)	0.030** (0.012)	-0.030*** (0.011)	-0.288*** (0.098)						
Foreign assets * Coverage * Crisis ₂₀₀₇₋₂₀₀₉	0.003 (0.016)	0.100 (0.094)	0.065 (0.045)	-0.010*** (0.003)	0.008*** (0.002)	0.061*** (0.019)						
Countries							-0.050 (0.051)	0.103 (0.303)	-0.057 (0.144)	-0.010 (0.009)	-0.003 (0.004)	0.015 (0.029)
Countries * Coverage							0.014** (0.007)	0.021 (0.043)	-0.001 (0.022)	0.003** (0.001)	-0.000 (0.001)	-0.013*** (0.005)
Countries * Crisis ₂₀₀₇₋₂₀₀₉							-0.013 (0.034)	-0.272 (0.208)	-0.113 (0.091)	0.009* (0.005)	-0.008*** (0.003)	-0.094*** (0.029)
Countries * Coverage * Crisis ₂₀₀₇₋₂₀₀₉							0.005 (0.006)	0.078** (0.039)	0.014 (0.018)	-0.002** (0.001)	0.002*** (0.001)	0.017*** (0.006)
Coverage	0.006** (0.003)	0.047* (0.027)	0.006 (0.012)	0.001* (0.001)	-0.000 (0.000)	-0.002 (0.002)	0.000 (0.004)	0.033 (0.031)	0.005 (0.014)	0.000 (0.001)	-0.000 (0.000)	0.002 (0.003)
Coverage * Crisis ₂₀₀₇₋₂₀₀₉	-0.002 (0.003)	-0.045** (0.021)	-0.006 (0.007)	-0.000 (0.000)	-0.001*** (0.000)	-0.007*** (0.002)	-0.003 (0.004)	-0.056** (0.026)	-0.005 (0.007)	0.000 (0.001)	-0.001*** (0.000)	-0.009*** (0.002)
N	5157	5159	10613	9763	11764	11636	5336	5338	11200	10249	12405	12272
R-sq	0.351	0.449	0.197	0.235	0.162	0.201	0.332	0.431	0.185	0.219	0.146	0.194

Exploring the channels: Bank internationalization and Funding Sources I

	Tobin's Q	Market-to-book	Z-score	NPL ratio	ROA	ROE	Tobin's Q	Market-to-book	Z-score	NPL ratio	ROA	ROE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Foreign assets	-0.024 (0.084)	-0.151 (0.323)	-0.189 (0.202)	-0.003 (0.015)	-0.008 (0.007)	-0.064 (0.058)						
Foreign Assets * Deposit funding	-0.140 (0.172)	-0.847 (0.685)	0.226 (0.412)	0.025 (0.030)	0.002 (0.011)	0.031 (0.095)						
Foreign Assets * Crisis ₂₀₀₇₋₂₀₀₉	-0.194* (0.113)	-1.786*** (0.512)	-0.354 (0.256)	0.021* (0.012)	-0.014** (0.007)	-0.190** (0.084)						
Foreign Assets * Deposit funding * Crisis ₂₀₀₇₋₂₀₀₉	0.547* (0.299)	4.645*** (1.256)	0.898** (0.437)	-0.077** (0.031)	0.041*** (0.014)	0.452*** (0.138)						
Countries							-0.011 (0.025)	-0.489** (0.244)	-0.326* (0.172)	0.021*** (0.008)	-0.006 (0.004)	-0.098*** (0.035)
Countries * Deposit funding							0.051 (0.047)	0.949* (0.509)	0.632** (0.307)	-0.034** (0.015)	0.007 (0.006)	0.124** (0.061)
Countries * Crisis ₂₀₀₇₋₂₀₀₉							-0.051*** (0.016)	-0.468*** (0.148)	-0.127* (0.073)	0.002 (0.003)	-0.011*** (0.003)	-0.114*** (0.030)
Countries * Deposit funding * Crisis ₂₀₀₇₋₂₀₀₉							0.105*** (0.036)	1.171*** (0.305)	0.279* (0.146)	-0.016** (0.007)	0.027*** (0.006)	0.254*** (0.055)
Deposit funding	-0.048* (0.027)	-0.212 (0.241)	-0.033 (0.110)	-0.003 (0.006)	0.008*** (0.003)	0.085*** (0.023)	-0.060* (0.033)	-0.434 (0.268)	-0.065 (0.114)	0.006 (0.006)	0.004 (0.004)	0.040 (0.027)
Deposits funding * Crisis ₂₀₀₇₋₂₀₀₉	-0.034*** (0.012)	-0.336*** (0.114)	0.027 (0.045)	0.003 (0.002)	-0.008*** (0.002)	-0.034** (0.014)	-0.044*** (0.014)	-0.382*** (0.129)	-0.006 (0.048)	0.002 (0.002)	-0.009*** (0.002)	-0.050*** (0.015)
N	5712	5715	11651	10766	13028	12896	5892	5895	12231	11277	13674	13536
R-sq	0.349	0.401	0.186	0.203	0.161	0.196	0.332	0.392	0.178	0.189	0.147	0.191

Exploring the channels: Bank internationalization and Funding Sources II

	Tobin's Q	Market-to-book	Z-score	NPL ratio	ROA	ROE	Tobin's Q	Market-to-book	Z-score	NPL ratio	ROA	ROE
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Foreign assets	-0.191** (0.083)	-0.993*** (0.213)	0.052 (0.151)	0.009 (0.010)	-0.010* (0.006)	-0.028 (0.034)						
Foreign assets * ST funding	0.658* (0.339)	2.903*** (1.073)	-0.837 (0.632)	0.011 (0.041)	0.017 (0.023)	-0.164 (0.209)						
Foreign Assets * Crisis ₂₀₀₇₋₂₀₀₉	0.210* (0.110)	1.244*** (0.391)	0.115 (0.212)	-0.031** (0.013)	0.009 (0.006)	0.071 (0.055)						
Foreign assets * ST funding * Crisis ₂₀₀₇₋₂₀₀₉	-0.959* (0.512)	-5.912*** (1.977)	-0.200 (1.404)	0.088* (0.053)	-0.009 (0.026)	-0.255 (0.349)						
Countries							0.010 (0.019)	-0.101 (0.172)	0.103 (0.086)	0.001 (0.004)	-0.003 (0.002)	-0.038** (0.019)
Countries * ST funding							0.031 (0.052)	0.454 (0.501)	-0.792** (0.320)	0.020 (0.014)	-0.001 (0.007)	-0.015 (0.060)
Countries * Crisis ₂₀₀₇₋₂₀₀₉							0.020 (0.013)	0.287*** (0.110)	0.065 (0.059)	-0.007*** (0.003)	0.006*** (0.002)	0.060*** (0.020)
Countries * ST funding * Crisis ₂₀₀₇₋₂₀₀₉							-0.130* (0.067)	-1.519** (0.608)	-0.469 (0.315)	0.017 (0.013)	-0.018 (0.011)	-0.336*** (0.118)
ST funding	-0.034 (0.024)	0.119 (0.205)	0.062 (0.104)	-0.003 (0.005)	-0.011*** (0.003)	-0.068*** (0.024)	-0.017 (0.024)	0.125 (0.232)	0.173 (0.114)	-0.009 (0.006)	-0.007** (0.003)	-0.039 (0.027)
ST funding * Crisis ₂₀₀₇₋₂₀₀₉	0.061*** (0.017)	0.724*** (0.224)	-0.155** (0.073)	-0.007** (0.003)	0.004* (0.002)	0.023 (0.022)	0.060*** (0.019)	0.742*** (0.244)	-0.088 (0.077)	-0.006 (0.004)	0.005* (0.002)	0.048** (0.023)
N	5712	5715	11651	10766	13028	12896	5892	5895	12231	11277	13674	13536
R-sq	0.349	0.401	0.186	0.202	0.157	0.193	0.328	0.389	0.178	0.187	0.142	0.188

Bank internationalization and the cyclicity of lending

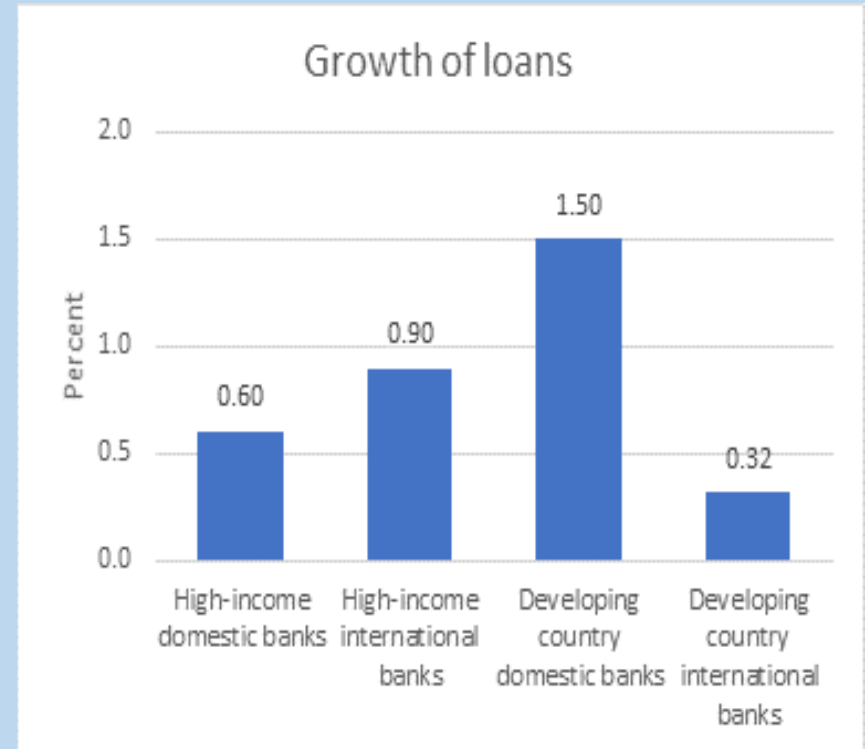
	Loan growth, consolidated		Loan growth, unconsolidated		Loan growth, consolidated		Loan growth, unconsolidated	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
GDP growth	0.005** (0.003)	0.007*** (0.002)	0.006** (0.003)	0.007*** (0.002)	0.008*** (0.002)	0.006*** (0.002)	0.008*** (0.002)	0.007*** (0.002)
Foreign assets	-0.069 (0.052)	-0.109* (0.056)	-0.009 (0.086)	-0.055 (0.105)				
Foreign assets * GDP growth	-0.005 (0.011)	0.009 (0.009)	-0.019 (0.012)	-0.003 (0.014)				
Foreign assets * Developing		0.263 (0.170)		0.287 (0.181)				
Foreign assets * GDP growth * Developing		-0.053** (0.026)		-0.060** (0.025)				
Countries					-0.045 (0.029)	-0.093*** (0.029)	-0.000 (0.039)	-0.024 (0.042)
Countries * GDP growth					-0.005 (0.005)	0.005* (0.003)	-0.007 (0.005)	0.004 (0.004)
Countries * Developing						0.328*** (0.088)		0.170* (0.096)
Countries * GDP growth * Developing						-0.025*** (0.005)		-0.023*** (0.006)
GDP growth * Developing		0.002 (0.003)		0.004 (0.004)		0.009*** (0.003)		0.009** (0.004)
N	13072	13072	12549	12549	13709	13709	13162	13162
R-sq	0.205	0.206	0.164	0.165	0.205	0.210	0.163	0.166

- From a home country perspective, international banks are less procyclical than domestic counterparts in developing countries

Bank internationalization and the cyclicality of lending

Change in bank lending associated with a 1% increase in GDP growth

	Loan growth, consolidated	
	(5)	(6)
GDP growth	0.008*** (0.002)	0.006*** (0.002)
Countries	-0.045 (0.029)	-0.093*** (0.029)
Countries * GDP growth	-0.005 (0.005)	0.005* (0.003)
Countries * Developing		0.328*** (0.088)
Countries * GDP growth * Developing		-0.025*** (0.005)
GDP growth * Developing		0.009*** (0.003)
N	13709	13709
R-sq	0.205	0.210



The cyclicality of lending in host countries

	High-income host		Developing host	
	Loan growth, consolidated (1)	Loan growth, unconsolidated (2)	Loan growth consolidated (3)	Loan growth, unconsolidated (4)
Home country developing	-0.098** (0.042)	-0.111** (0.053)	0.159* (0.086)	0.162* (0.086)
GDP growth * Home country developing	0.002 (0.004)	0.005 (0.004)	0.007 (0.005)	0.006 (0.005)
Home country high-income	-0.011 (0.030)	-0.006 (0.030)	0.093 (0.069)	0.092 (0.067)
GDP growth * Home country high-income	0.004 (0.003)	0.004 (0.003)	0.011*** (0.003)	0.011*** (0.003)
GDP growth	0.017*** (0.003)	0.017*** (0.003)	-0.000 (0.001)	-0.000 (0.002)
N	11507	11431	2413	2399
R-sq	0.166	0.157	0.225	0.219

- From a host country perspective, high-income country subsidiaries are procyclical in developing countries

Conclusions

- International banks have lower valuations and achieve lower returns on equity, suggesting, on average, bank internationalization has progressed beyond the point where it is in the interest of bank shareholders
 - International banks from developing countries fared better
 - Following the crisis international banks were revalued, particularly if they had more stable funding sources and also depending on their deposit insurance coverage
- International banks from high-income and developing countries appear to adjust their credit provision differently through the business cycles
 - An international bank's **credit provision varies less with its home-country GDP** if the international bank is based in a developing country
 - Credit provision in a foreign developing country, in particular, is found to be **more procyclical with respect to borrower-country GDP growth** if the international bank is headquartered in a high income country.