Online Appendix to
"Foreign Booms, Domestic Busts: The Global Dimension of Banking Crises"
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This Online Appendix includes additional details and results to Cesa-Bianchi et al. (2016). It is structured as follows:

- **Data and Some New Stylized Facts**. Table 1 reports the crisis episodes in the Laeven and Valencia (2013) data set and a definition of countries as 'advanced' and 'emerging' following IMF's WEO classification. Table 2 reports the summary statistics of real growth of domestic credit from banks to the private non-financial sector. Figures 1, 2, 3, and 4.

- **The Global Determinants Of Domestic Banking Crises**
  - The Role Of Foreign Credit: see Table 3.
  - Macro Controls and Non-linearities: see Table 4.
  - The Role Of Openness: see Tables 5

- **Inspecting the Mechanism**. See Tables 6 and 7

- **Robustness**. See Figure 5 and Tables 8, 9, 10, 11, 12 and 13.

- **Full lags reporting**. Tables from 14 to 21 report the coefficients on each lag of $Cred$ and $Cred^*$ (rather than just the sum of them).

Table 1 Banking Crisis Episodes By Country (Laeven and Valencia, 2013)

COUNTRY	CRISES	COUNTRY	CRISES	COUNTRY	CRISES
Argentina	1980, 1989, 1995, 2001	Hong Kong*		Poland	1992
Australia*		Hungary	1991, 2008	Portugal*	2008
Austria*	2008	India	1993	Russia	1998, 2008
Belgium*	2008	Indonesia	1997	Singapore*	
Brazil	1990, 1994	Ireland*	2008	South Africa	
Canada*		Italy*	2008	Spain*	1977, 2008
China, P.R.	1998	Japan*	1997	Sweden*	1991, 2008
Czech Republic*	1996	Korea*	1997	Switzerland*	2008
Denmark*	2008	Luxembourg*	2008	Thailand	1983, 1997
Finland*	1991	Malaysia	1997	Turkey	1982, 2000
France*	2008	Mexico	1981, 1994	United Kingdom*	2007
Germany*	2008	Netherlands*	2008	United States*	1988, 2007
Greece*	2008	Norway*	1991		

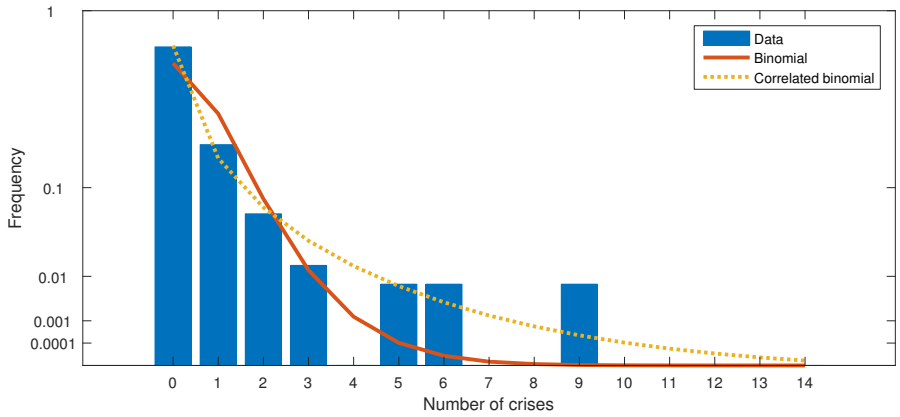
Note. Asterisks denote an "advanced economies", as classified by the IMF. Years correspond to the beginning of banking crises episodes, which display varying lengths

Table 2 Summary statistics of real growth of domestic credit from banks to the private non-financial sector, BIS

Country	Mean	SD	Median	Max	Min	N
ARGENTINA	2.99	29.25	10.93	43.73	-83.42	30
AUSTRALIA	7.23	4.42	6.82	17.68	-0.12	45
AUSTRIA	4.18	4.12	4.06	13.34	-3.18	45
BELGIUM	2.56	5.19	3.62	13.00	-10.24	45
BRAZIL	7.46	8.21	6.83	21.39	-5.28	22
CANADA	6.30	6.17	6.10	21.86	-7.33	45
CHINA	12.08	6.91	11.66	28.46	-7.36	30
CZECH REPUBLIC	1.92	11.16	2.35	20.65	-27.87	22
DENMARK	3.23	4.85	2.37	15.26	-3.97	45
FINLAND	4.42	6.09	3.79	21.49	-6.20	41
FRANCE	3.04	3.46	3.15	10.76	-4.53	45
GERMANY	1.21	3.09	0.21	7.08	-3.18	24
GREECE	4.47	8.28	4.14	19.89	-10.23	45
HONG KONG	6.30	7.73	6.44	24.75	-5.82	35
HUNGARY	0.41	13.07	0.69	22.12	-25.71	26
INDIA	8.14	7.59	6.88	27.56	-12.47	45
INDONESIA	8.70	17.86	11.91	32.74	-78.68	39
IRELAND	4.57	11.49	3.30	29.88	-26.10	44
ITALY	2.76	4.61	2.51	12.34	-4.87	41
JAPAN	2.57	4.99	1.99	18.09	-9.18	45
KOREA	9.72	7.85	12.33	23.18	-7.12	45
LUXEMBOURG	6.82	8.05	7.94	20.25	-4.46	12
MALAYSIA	10.72	7.74	9.52	25.27	-4.46	45
MEXICO	3.38	19.90	5.69	50.37	-39.21	35
NETHERLANDS	5.00	5.06	4.11	17.32	-4.64	45
NORWAY	5.40	6.34	5.39	20.80	-9.29	45
POLAND	8.70	8.96	7.29	28.19	-6.08	23
PORTUGAL	4.05	8.30	3.38	21.36	-13.94	45
RUSSIAN FEDERATION	12.39	12.94	11.47	30.85	-15.24	20
SINGAPORE	8.40	6.48	9.14	25.65	-3.53	45
SOUTH AFRICA	4.38	6.09	3.67	17.82	-9.06	45
SPAIN	3.97	7.67	3.13	20.78	-13.21	45
SWEDEN	3.49	5.01	3.49	15.58	-10.17	45
SWITZERLAND	2.99	3.30	2.90	10.57	-5.76	45
THAILAND	8.67	9.54	8.25	25.53	-14.41	45
TURKEY	12.44	21.20	15.64	59.38	-32.52	26
UNITED KINGDOM	4.89	5.97	5.06	16.86	-7.13	45
UNITED STATES	2.45	5.00	4.37	11.32	-11.77	45
Total	5.44	9.72	4.91	59.38	-83.42	1460

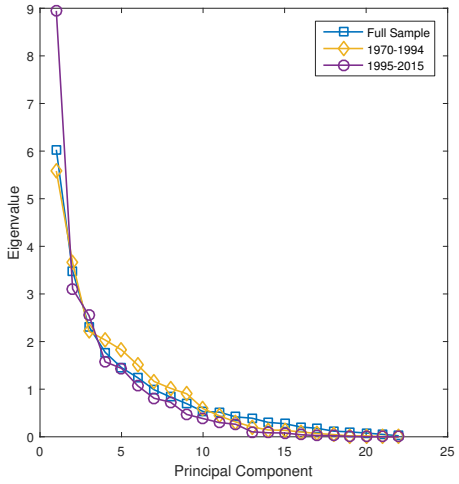
Note. First five columns are in percentage terms.

Figure 1 Empirical And Predicted Frequency Of Banking Crises In ST Data Set Excluding The Global Financial Crisis Years



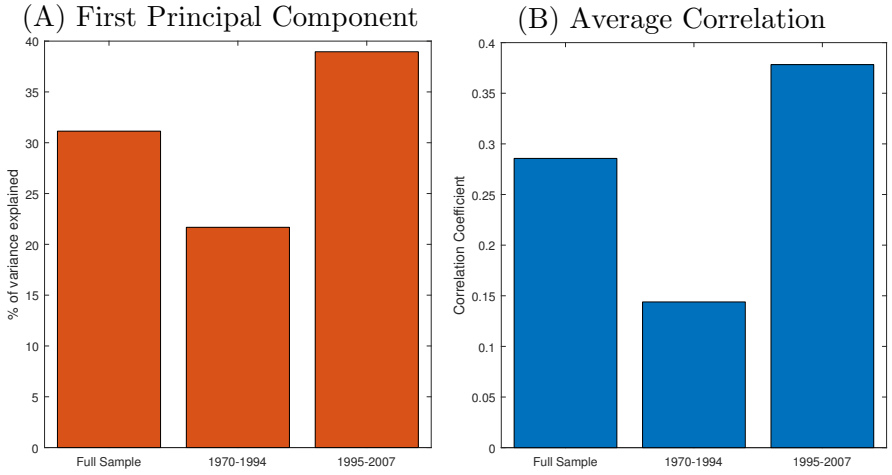
Note. Proportion of countries with (the start of) systemic banking crises in the data (solid line), predicted by a standard binomial distribution (dashed line), and predicted by a correlated binomial distribution (dotted line). The data used is the original data from ST, excluding the Global Financial Crisis years.

Figure 2 International Synchronization Of Credit Growth – Scree Plot



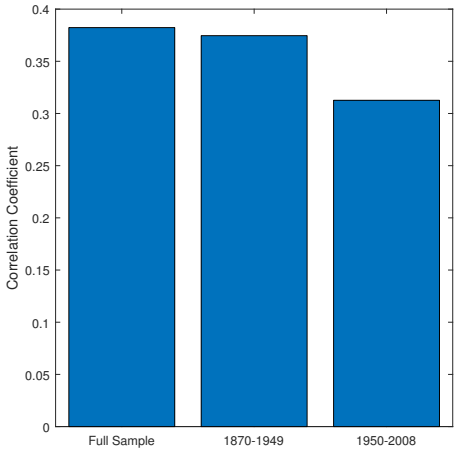
Note. Eigenvalues associated with the principal components computed on the panel of credit growth series. Squares, diamonds, and circles display the scree plot computed using the full sample, the 1970-1994 sample, and the 1995-2015 sample, respectively.

Figure 3 International Synchronization Of Credit Growth Excluding the Global Financial Crisis



Note. Panel A reports the share of the variance of real domestic credit growth explained by the first principal component, obtained using the same sample of 22 countries as in the main text. Panel B reports the cross-country average of the correlation between country i's credit growth and credit growth in the rest of the world, computed as the weighted average of credit growth the remaining $N-1$ countries (where $N=38$) over the the sample. The sample period used to produce this charts is 1970–2007, and therefore excludes the global financial crisis.

Figure 4 International Synchronization Of Credit Growth – Average Correlation in ST database



Note. Cross-country average of the correlation between country i's credit growth and credit growth in the rest of the world, computed as the weighted average of credit growth in the remaining $N-1$ countries (where $N=14$) over the sample considered.

Table 3 Banking Crises Prediction – Credit to GDP

Specification	(1)	(2)	(3)	(4)
Estimation method	OLS	Logit	OLS	Logit
Weighting	GDP		Equal	
Δ(Cred/Y)	0.87***	26.7***	0.77***	22.88***
Sum of lag coeffs	[0.001]	[0.001]	[0.002]	[0.001]
Δ(Cred*/Y*)	0.68	23.21	2.43***	65.22***
Sum of lag coeffs	[0.508]	[0.541]	[0.005]	[0.003]
Constant	-0.03***	-18.60***	-0.05***	-19.32***
	(0.012)	(0.710)	(0.015)	(0.927)
Observations	1,142	966	1,142	966
Crises	34	34	34	34
Test for CFE	0.90	1364	0.87	914
p-value	0.64	0.00	0.69	0.00
R^2	0.06	0.20	0.07	0.23
AUROC	0.83	0.81	0.83	0.82
Standard error	0.04	0.04	0.04	0.05

Note. Robust standard errors between parentheses. $\Delta Cred/Y$ is the growth rate of real lending by domestic banks to domestic households and non-financial corporations, expressed as a share of GDP. For each country and year, $\Delta Cred*/Y*$ is the average of $\Delta Cred/Y$ for the $N-1$ remaining countries in the sample, weighted by PPP-adjusted GDP. We consider 5 lags (L1 to L5) of both $\Delta Cred/Y$ and $\Delta Cred*/Y*$. *CFE* stands for country fixed effects. AUROC stands for Area Under the Receiving Operating Characteristic curve, a measure of the binary classification ability of the model. Sample covers 38 countries over 1970-2011. The dependent variable is a dummy variable capturing banking crises.

Table 4 Banking Crises Prediction - Supervision

Specification	(1)	(2)	(3)	(4)
Sample end	2006		2008	
Estimation	OLS	Logit	OLS	Logit
ΔCred	0.25**	11.86***	0.46***	16.67***
Sum of lag coeffs	[0.039]	[0.008]	[0.001]	[0.001]
ΔCred*	-0.39	-13.66	1.18*	34.49**
Sum of lag coeffs	[0.365]	[0.589]	[0.055]	[0.046]
ΔSupervision	0.06	0.06	0.01	1.56
Sum of lag coeffs	[0.167]	[0.589]	[0.979]	[0.276]
Constant	-0.01	-19.92***	-0.09***	-20.72***
	(0.019)	(1.782)	(0.032)	(1.309)
Observations	861	369	861	679
Crises	16	16	33	33
R^2	0.07	0.19	0.06	0.18
AUROC	0.90	0.83	0.84	0.82
Standard error	0.03	0.05	0.04	0.04

Note. Robust standard errors between parentheses. $\Delta Cred$ is the growth rate of real lending by domestic banks to domestic households and non-financial corporations, deflated using CPI. For each country and year, $\Delta Cred*$ is the average of $\Delta Cred$ for the $N-1$ remaining countries in the sample, weighted by PPP-adjusted GDP. $\Delta Supervision$ is the first difference of the (sub)index on financial system supervision quality compiled by Abiad et al. (2010), which ends in 2005. Consequently, in the sample up to 2006 we consider 5 lags (L1 to L5) of both $\Delta Cred$, $\Delta Cred*$ and $\Delta Supervision$ (cols. (1) and (2)). In order not to lose the observations around the GFC, we then change the lag structure to L3-L7, which allows us to use data up to 2008 (cols. (3) and (4)).*CFE* stands for country fixed effects. AUROC stands for Area Under the Receiving Operating Characteristic curve, a measure of the binary classification ability of the model. The dependent variable is a dummy variable capturing banking crises.

Table 5 Banking Crises Prediction – Financial interconnectedness

Specification	(1)	(2)
Interconnectedness proxy	Inbound	Outbound
ΔCred	13.46**	13.7**
Sum of lag coeffs	[0.023]	[0.025]
ΔCred*	-12.49	16.51
Sum of lag coeffs	[0.752]	[0.75]
ΔCred* x Interconnect	-239.2	-274.9
Sum of lag coeffs	[0.124]	[0.159]
ΔCred* x FinOpen	71.91***	58.75***
Sum of lag coeffs	[0.001]	[0.004]
Constant	-19.36***	-27.93***
	(3.796)	(5.251)
Observations	763	763
Crises	24	24
R^2	0.55	0.53
AUROC	0.95	0.94
Standard error	0.02	0.02

Note. Robust standard errors between parentheses. $\Delta Cred$ is the growth rate of real lending by domestic banks to domestic households and non-financial corporations, deflated using CPI. For each country and year, $\Delta Cred^*$ is the average of $\Delta Cred$ for the $N-1$ remaining countries in the sample, weighted by PPP-adjusted GDP. *FinOpen* is the first lag of a proxy for financial openness, namely a country's gross external liabilities as a share of GDP. *Interconnect* is the first lag of a proxy for a country's financial connections to the US, as quantified by either its banking inflows from the US ("inbound") or banking outflows to the US ("outbound'), both quantities normalised by aggregate flows. We consider 5 lags (L1 to L5) of both $\Delta Cred$ and $\Delta Cred^*$. *CFE* stands for country fixed effects. AUROC stands for Area Under the Receiving Operating Characteristic curve, a measure of the binary classification ability of the model. The dependent variable is a dummy variable capturing banking crises.

Table 6 Banking crisis prediction – Bank to bank inflows

Specification	(1)	(2)	(3)	(4)
Estimation method	OLS	OLS	Logit	Logit
Fixed effects	None	Country	None	Country
Δ*Cross-border inflows*				
Sum of lag coeffs	0.04	0.05*	0.61	1.13
	[0.142]	[0.072]	[0.177]	[0.163]
Constant	0.03***	-0.02*	-3.41***	-18.64***
	(0.007)	(0.009)	(0.194)	(1.542)
Observations	1,102	1,102	1,102	986
Crises	41	41	41	41
Test for *CFE*		1.11		307.20
p-value		0.298		0.000
R^2	0.00	0.02	0.01	0.04
AUROC	0.64	0.72	0.64	0.68
Standard error	0.05	0.04	0.05	0.04

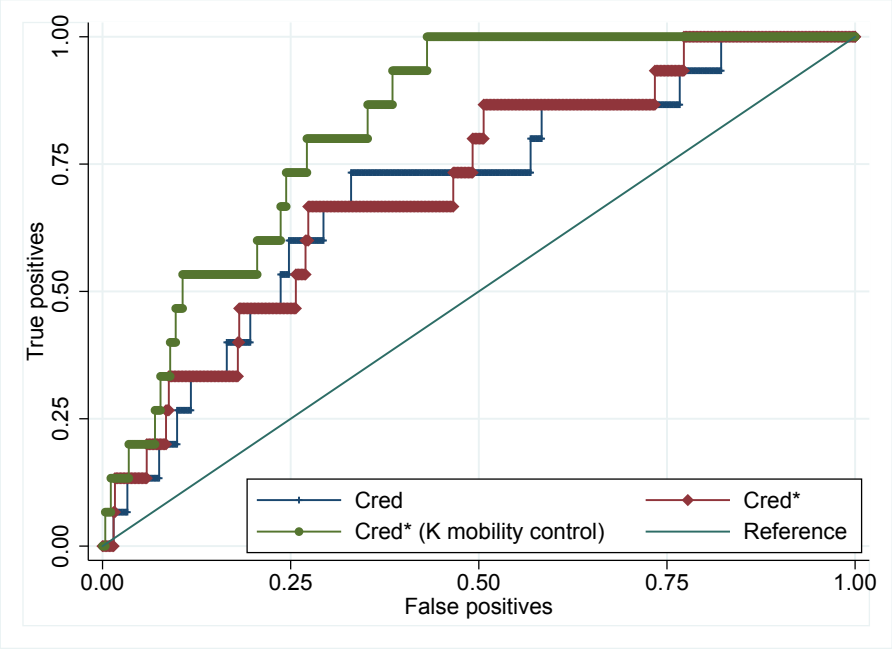
Note. Robust standard errors between parentheses, robust-standard-error-based p-values between brackets. *Cross-border inflows* are capital inflows from foreign banks into the domestic banking sector. Five lags are considered. *CFE* stands for country fixed effects. AUROC stands for Area Under the Receiving Operating Characteristic curve, a measure of the binary classification ability of the model. Sample covers 38 countries over 1970-2011. The dependent variable is a dummy variable capturing banking crises. See Online Appendix for full table.

Table 7 Banking crisis prediction – Cross-border inflows and VIX in common sample

Specification	(1)	(2)	(3)	(4)
Inflows	Banks to non-banks	Banks to banks	Portfolio	-
Δ*Cred*	14.86**	12.21*	12.22*	14.77**
Sum of lag coeffs	[0.011]	[0.075]	[0.056]	[0.031]
Δ*Cred**	63.16***	55.35**	45.96**	18.05
Sum of lag coeffs	[0.003]	[0.011]	[0.037]	[0.361]
Δ*Cross-border inflows*	-1.4	3.4	28.39***	
Sum of lag coeffs	[0.116]	[0.213]	[0.003]	
Δ*VIX*				-0.376***
Sum of lag coeffs				[0.001]
Constant	-23.28***	-25.00***	-24.82***	-14.50***
	(1.949)	(2.477)	(2.181)	(2.160)
Observations	622	622	622	622
Crises	29	29	29	29
Test for CFE	972	532	2868	250
p-value	0.000	0.000	0.000	0.000
R^2	0.29	0.31	0.32	0.44
AUROC	0.82	0.83	0.91	0.88
Standard error	0.05	0.05	0.03	0.04

Note. Robust standard errors between parentheses, robust-standard-error-based p-values between brackets. Δ*Cred* is the growth rate of real lending by domestic banks to domestic households and non-financial corporations, deflated using CPI. For each country and year, Δ*Cred** is the average of Δ*Cred* for the $N-1$ remaining countries in the sample, weighted by PPP-adjusted GDP. *VIX* is the CBOE Volatility Index. *XB-Cred* are three different type of inflows, depending on the specification (see heading). We consider 5 lags of Δ*Cred*, Δ*Cred**, *VIX* and *XB-Cred*. All specifications include country fixed effects. *CFE* stands for country fixed effects. AUROC stands for Area Under the Receiving Operating Characteristic curve, a measure of the binary classification ability of the model. Sample covers 38 countries over 1970-2011. The dependent variable is a dummy variable capturing banking crises.

Figure 5 Receiver Operating Characteristic Curves, ST data



Note. The ROC curve plots the proportion of "true positives" in the y-axis against the proportion of "false positives" in the x-axis for all possible thresholds of the fitted probability. *Cred* refers to the specification with domestic credit only. *Cred** refers to the specification with the addition of foreign credit to domestic credit growth. *Cred* (K mobility control)* refers to the specification which adds (interacted) dummy variables during the era of low capital mobility of 1945-1971. All specifications are based on linear regressions with country fixed effects.

Table 8 Banking Crisis Prediction - Domestic And Foreign Credit In Schularick And Taylor (2012) Database

Specification	(1)	(2)	(3)
Estimation method	OLS	Logit	OLS
$\Delta Cred$			
Sum of lags	0.48***	11.32***	0.54***
	[0.003]	[0.001]	[0.001]
$\Delta Cred^*$			
Sum of lags	-0.20	-5.86	0.78***
	[0.193]	[0.189]	[0.003]
$\Delta Cred^*$ x *Non-mobile K*			
Sum of lags			-0.15
			[0.750]
Constant	0.01	-4.31***	-0.03
	(0.015)	(0.744)	(0.017)
Observations	1,272	1,272	1,272
Crises	53	53	53
Test for CFE	1.00	7.78	1.07
p-value	0.445	0.858	0.385
R^2	0.03	0.08	0.06
AUROC	0.73	0.73	0.83
Standard error	0.04	0.04	0.03

Note. Standard errors between parentheses (based on robust standard errors for Logit specifications only as in ST), and p-values between brackets. $\Delta Cred$ is the growth rate in lending by domestic banks to domestic households and non-financial corporations. For each country and year, $\Delta Cred^*$ is the average of $\Delta Cred$ for the $N-1$ remaining countries in the sample, weighted by PPP-adjusted GDP. We consider 5 lags of both $\Delta Cred$ and $\Delta Cred^*$. *Non-mobile K* is a dummy variable that takes the value of one between 1945 and 1971, and zero otherwise (note that WWI and WWII years are dropped as they are clear outliers among many dimensions.) All specifications include country fixed effects. *CFE* stands for country fixed effects. Sample covers 14 advanced countries over 1870-2008. The dependent variable is a dummy variable capturing banking crises. See the Online Appendix for the full set of results.

Table 9 Banking Crisis Prediction - Domestic And Foreign Credit In Schularick And Taylor (2012) Database Excluding the Global Financial Crisis

Specification	(1)	(2)	(3)
Sample period	Full	≤ 2007	≤ 2006
ΔCred			
Sum of lag coeffs	0.54***	0.53***	0.5***
	[0.001]	[0.001]	[0.001]
ΔCred*			
Sum of lag coeffs	0.78***	0.66***	0.69***
	[0.003]	[0.009]	[0.006]
ΔCred* x Non-mobile K			
Sum of lag coeffs	-0.15	-0.14	-0.06
	[0.75]	[0.771]	[0.901]
Constant	-0.03	-0.02	-0.02
	-0.017	-0.017	-0.017
Observations	1272	1258	1244
Crises	53	46	44
Test for CFE	1.07	0.98	0.86
p-value	0.385	0.467	0.593
R^2	0.06	0.06	0.06
AUROC	0.83	0.84	0.84
Standard error	0.03	0.03	0.03

Note. Standard errors between parentheses (based on robust standard errors for Logit specifications only as in ST), and p-values between brackets. $\Delta Cred$ is the growth rate in lending by domestic banks to domestic households and non-financial corporations. For each country and year, $\Delta Cred*$ is the average of $\Delta Cred$ for the $N-1$ remaining countries in the sample, weighted by PPP-adjusted GDP. We consider 5 lags of both $\Delta Cred$ and $\Delta Cred*$. *Non-mobile K* is a dummy variable that takes the value of one between 1945 and 1971, and zero otherwise (note that WWI and WWII years are dropped as they are clear outliers among many dimensions.) All specifications include country fixed effects. *CFE* stands for country fixed effects. Sample covers 14 advanced countries over 1870-2008 in column (1), while the last year is 2007 and 2006 in columns (2) and (3), respectively. The dependent variable is a dummy variable capturing banking crises.

Table 10 Banking Crises Prediction - Excluding the Global Financial Crisis

Specification	(1)	(2)	(3)	(4)
Sample period	Full Sample	Pre-Crisis	Pre-Crisis	Pre-Crisis
Countries	All	All	All	Drop 10% poorest
ΔCred	0.08***	0.04	0.05	0.04
Sum of lag coeffs	[0.006]	[0.286]	[0.267]	[0.335]
ΔCred*	0.39***	0.14	-0.09	-0.23
Sum of lag coeffs	[0.009]	[0.335]	[0.619]	[0.183]
ΔCred* x FinOpen			0.26*	0.33**
Sum of lag coeffs			[0.076]	[0.017]
Constant	-4.31***	-3.98**	-3.72**	-15.36***
	(1.303)	(1.720)	(1.783)	(0.485)
Observations	2,675	1,976	1,976	1,732
Crises	108	86	86	77
Test for CFE	26.88	22.40	30.87	1213
p-value	1.00	1.00	1.00	0.00
R^2	0.07	0.05	0.06	0.07
AUROC	0.68	0.68	0.68	0.70
Standard error	0.03	0.03	0.03	0.03

Robust standard errors in parentheses
*** p¡0.01, ** p¡0.05, * p¡0.1

Note. Robust standard errors between parentheses. $\Delta Cred$ is the growth rate of real lending by banks to the domestic private sector, deflated using CPI. For each country and year, $\Delta Cred*$ is the average of $\Delta Cred$ for the $N-1$ remaining countries in the sample, weighted by PPP-adjusted GDP. We consider 5 lags (L1 to L5) of both $\Delta Cred$ and $\Delta Cred*$. *CFE* stands for country fixed effects. AUROC stands for Area Under the Receiving Operating Characteristic curve, a measure of the binary classification ability of the model. Sample covers NN countries over YYYY-YYYY. The dependent variable is a dummy variable capturing banking crises.

Table 11 Banking Crisis Prediction - Advanced And Emerging Market Economies

	AEs		EMs	
Specification	(1)	(2)	(3)	(4)
$\Delta Cred$				
Sum of lags	16.59**	30.34*	8.54***	12.22***
	[0.018]	[0.085]	[0.007]	[0.005]
$\Delta Cred^*$				
Sum of lags	114.7***	-49.97	-37.61	-154.9***
	[0.000]	[0.226]	[0.117]	[0.000]
$\Delta Cred^*$ x $FinOpen$				
Sum of lags		145.6**		112.6
		[0.012]		[0.115]
Constant	-28.13***	-17.81***	-1.70	1.99
	(2.966)	(2.162)	(1.991)	(2.612)
Observations	690	690	251	251
Crises	22	22	12	12
Test for CFE	645.3	656.9	5.51	17.98
p-value	0.000	0.000	0.788	0.035
R^2	0.45	0.6	0.13	0.26
AUROC	0.68	0.75	0.52	0.68
Standard error	0.07	0.06	0.05	0.05

Note. Robust standard errors between parentheses, robust-standard-error-based p-values between brackets. $\Delta Cred$ is the growth rate of real lending by domestic banks to domestic households and non-financial corporations, deflated using CPI. For each country and year, $\Delta Cred^*$ is the average of $\Delta Cred$ for the $N-1$ remaining countries in the sample, weighted by PPP-adjusted GDP. We consider 5 lags of both $\Delta Cred$ and $\Delta Cred^*$. $FinOpen$ is the first lag of a proxy for financial openness, namely a country's gross external liabilities as a share of GDP. All specifications are based on Logit regressions and include country fixed effects. *CFE* stands for country fixed effects. AUROC stands for Area Under the Receiving Operating Characteristic curve, a measure of the binary classification ability of the model. Sample covers 38 countries (25 advanced and 13 emerging, as classified by the IMF — see the Appendix for the definitions) over 1970-2011. The dependent variable is a dummy variable capturing banking crises. See the Online Appendix for the full set of results.

Table 12 Banking crisis prediction – Alternative weighting schemes

Specification	(1)	(2)	(3)	(4)	(5)	(6)
Estimation method	OLS	Logit	OLS	Logit	OLS	Logit
Weighting method	Equal		Banking exposures		Exports	
$\Delta Cred$	0.23**	9.55**	0.33**	13.74***	0.3**	10.6***
Sum of lag coeffs	[0.036]	[0.011]	[0.027]	[0.002]	[0.012]	[0.008]
$\Delta Cred*$	1.58***	50.53***	0.68**	28.41***	0.65*	22.51**
Sum of lag coeffs	[0.002]	[0.002]	[0.042]	[0.007]	[0.070]	[0.020]
Constant	-0.11***	-21.38***	-0.06***	-21.72***	-0.06***	-20.62***
	(0.030)	(1.439)	(0.017)	(1.313)	(0.019)	(0.584)
Observations	1,118	941	913	799	1,065	915
Test for CFE	0.87	1161	0.89	880.4	0.90	37620
p-value	0.688	0.000	0.634	0.000	0.635	0.000
R^2	0.06	0.21	0.04	0.16	0.04	0.14
AUROC	0.84	0.83	0.84	0.83	0.83	0.81
Standard error	0.04	0.04	0.04	0.04	0.03	0.04

Note. Robust standard errors between parentheses, robust-standard-error-based p-values between brackets. $\Delta Cred$ is the growth rate of real lending by domestic banks to domestic households and non-financial corporations, deflated using CPI. For each country and year, $\Delta Cred*$ is the average of $\Delta Cred$ for the $N-1$ remaining countries in the sample, alternatively weighted by equal weights, weights based on a country's banking sector bilateral exposures to other countries in the sample, and on a country's exports to other countries in the sample. We consider 5 lags of both $\Delta Cred$ and $\Delta Cred*$. All specifications include country fixed effects. *CFE* stands for country fixed effects. AUROC stands for Area Under the Receiving Operating Characteristic curve, a measure of the binary classification ability of the model. Sample covers 38 countries over 1970-2011. The dependent variable is a dummy variable capturing banking crises. See Online Appendix for full table

Table 13 Banking crisis prediction – Alternative lag structure

Specification	(1)	(2)	(3)	(4)
Estimation method	OLS	Logit	OLS	Logit
Δ*Cred*				
Sum of lag coeffs	0.14	4.75	0.12	2.78
	[0.122]	[0.151]	[0.187]	[0.300]
Δ*Cred**				
Sum of lag coeffs	1.07***	34.99***	-0.17	-43.18***
	[0.005]	[0.001]	[0.668]	[0.001]
Δ*Cred** x *FinOpen*			0.81***	65.47***
Sum of lag coeffs			[0.002]	[0.000]
FinOpen			-0.04***	-4.19***
			(0.012)	(1.095)
Constant	-0.06***	-20.08***	-0.01	-15.59***
	(0.020)	(0.856)	(0.019)	(0.786)
Observations	1,194	1,006	1,189	1,001
Test for CFE	0.95	2406	0.96	1356
p-value	0.563	0.000	0.538	0.000
R^2	0.05	0.17	0.09	0.36
AUROC	0.82	0.81	0.87	0.89
Standard error	0.04	0.04	0.03	0.03

Note. Robust standard errors between parentheses, robust-standard-error-based p-values between brackets. Δ*Cred* is the growth rate of real lending by domestic banks to domestic households and non-financial corporations, deflated using CPI. For each country and year, Δ*Cred** is the average of Δ*Cred* for the $N-1$ remaining countries in the sample, weighted by PPP-adjusted GDP. We consider 3 lags of both Δ*Cred* and Δ*Cred** (instead of the 5 lags considered in the main specification). *FinOpen* is the lag of a proxy for financial openness, namely a country's gross external liabilities as a share of GDP. All specifications include country fixed effects. *CFE* stands for country fixed effects. AUROC stands for Area Under the Receiving Operating Characteristic curve, a measure of the binary classification ability of the model. Sample covers 38 countries over 1970-2011. The dependent variable is a dummy variable capturing banking crises. See Online Appendix for full table.

Table 14 Banking Crisis Prediction – The Role Of Financial And Trade Openness

Specification	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Estimation method	OLS	OLS	Logit	Logit	OLS	OLS	Logit	Logit
Fixed effects	None	Country	None	Country	None	Country	None	Country
Openness			Financial				Trade	
L.$\Delta Cred$	-0.03	-0.01	-3.16	-1.10	-0.02	-0.00	-2.08	-0.81
	(0.049)	(0.047)	(2.395)	(2.360)	(0.047)	(0.046)	(2.062)	(2.771)
L2.$\Delta Cred$	-0.00	0.00	-0.10	0.03	0.00	0.01	-0.16	0.88
	(0.048)	(0.053)	(2.335)	(1.868)	(0.047)	(0.053)	(1.775)	(1.828)
L3.$\Delta Cred$	0.15**	0.16**	7.54***	6.25**	0.16**	0.17**	6.88***	7.64**
	(0.068)	(0.070)	(2.837)	(3.150)	(0.069)	(0.072)	(2.524)	(3.368)
L4.$\Delta Cred$	0.07	0.08	2.39	3.03	0.08	0.08	2.47	3.36*
	(0.058)	(0.056)	(2.768)	(1.923)	(0.059)	(0.057)	(2.231)	(1.718)
L5.$\Delta Cred$	0.01	0.02	0.87	0.90	0.01	0.02	0.82	1.33
	(0.113)	(0.107)	(3.693)	(1.871)	(0.113)	(0.108)	(2.723)	(1.917)
L.$\Delta Cred^*$	-0.06	-0.09	-5.61	-29.25***	0.49	0.49	17.85	13.67
	(0.278)	(0.279)	(8.590)	(10.423)	(0.329)	(0.325)	(12.410)	(18.250)
L2.$\Delta Cred^*$	0.38	0.34	16.25	3.79	0.76***	0.73***	1.61	-26.63
	(0.244)	(0.247)	(10.774)	(13.103)	(0.263)	(0.272)	(15.674)	(19.088)
L3.$\Delta Cred^*$	-0.41	-0.43	-21.07**	-33.05***	-0.51*	-0.54*	-24.09*	-23.28
	(0.265)	(0.267)	(10.666)	(12.172)	(0.295)	(0.299)	(13.078)	(15.955)
L4.$\Delta Cred^*$	0.17	0.18	15.29	21.24*	0.34	0.33	12.35	20.83
	(0.196)	(0.198)	(9.892)	(12.113)	(0.242)	(0.243)	(12.280)	(19.803)
L5.$\Delta Cred^*$	-0.15	-0.16	-6.47	-14.93	0.05	0.03	8.88	6.96
	(0.225)	(0.227)	(10.540)	(11.688)	(0.271)	(0.277)	(15.321)	(19.108)
L.$\Delta Cred^*$ x $Open$	0.46***	0.42***	29.33**	36.94***	0.10	0.08	-2.21	0.80
	(0.160)	(0.159)	(13.665)	(12.400)	(0.194)	(0.200)	(13.083)	(24.079)
L2.$\Delta Cred^*$ x $Open$	0.41**	0.41**	30.86***	43.69**	0.16	0.18	78.41**	133.87***
	(0.176)	(0.174)	(11.787)	(18.094)	(0.186)	(0.193)	(36.644)	(50.238)
L3.$\Delta Cred^*$ x $Open$	-0.01	-0.03	-4.83	-4.28	0.21	0.24	-3.17	-9.90
	(0.141)	(0.141)	(14.041)	(16.243)	(0.181)	(0.191)	(24.754)	(28.262)
L4.$\Delta Cred^*$ x $Open$	0.05	0.02	-3.16	-11.64	-0.14	-0.14	2.92	-11.74
	(0.092)	(0.100)	(11.408)	(12.205)	(0.153)	(0.156)	(17.906)	(31.363)
L5.$\Delta Cred^*$ x $Open$	0.21**	0.19*	7.03	8.64	0.07	0.08	-22.66	-22.79
	(0.100)	(0.105)	(15.467)	(14.410)	(0.167)	(0.180)	(26.864)	(31.873)
$Open$	-0.06***	-0.05***	-5.35***	-4.85***	-0.03	-0.03	-6.03	-8.74
	(0.016)	(0.016)	(1.554)	(1.354)	(0.020)	(0.036)	(4.136)	(7.953)
Constant	0.02	-0.01	-3.12***	-17.08***	-0.03	-0.07**	-3.87**	-17.04***
	(0.026)	(0.026)	(1.006)	(1.122)	(0.030)	(0.034)	(1.799)	(3.361)
Observations	1,115	1,115	1,115	941	1,113	1,110	1,113	936
Crises	34	34	34	34	34	34	34	34
Sum of lagged coeffs. of $\Delta Cred$	0.20	0.25	7.55	9.11	0.23	0.28	7.92	12.40
Test for sum of lags=0 (p-val)	0.042	0.019	0.016	0.008	0.024	0.013	0.007	0.008
Sum of lagged coeffs. of $\Delta Cred^*$	-0.06	-0.16	-1.61	-52.20	1.14	1.04	16.60	-8.45
Test for sum of lags=0 (p-val)	0.905	0.766	0.920	0.010	0.065	0.095	0.462	0.818
Sum of lagged coeffs. of $\Delta Cred^*$ x $Open$	1.11	1.01	59.23	73.36	0.40	0.44	53.29	90.24
Test for sum of lags=0 (p-val)	0.000	0.001	0.004	0.000	0.299	0.303	0.267	0.268
Test for CFE		0.89		14560		0.90		996.9
p-value		0.650		0.000		0.638		0.000
R^2	0.08	0.10	0.27	0.40	0.05	0.06	0.22	0.29
AUROC	0.85	0.87	0.88	0.91	0.82	0.84	0.86	0.87
Standard error	0.03	0.03	0.03	0.02	0.04	0.04	0.04	0.04

Note. Robust standard errors between parentheses, robust-standard-error-based p-values between brackets. $\Delta Cred$ is the growth rate of real lending by domestic banks to domestic households and non-financial corporations, deflated using CPI. For each country and year, $\Delta Cred^*$ is the average of $\Delta Cred$ for the $N-1$ remaining countries in the sample, weighted by PPP-adjusted GDP. We consider 5 lags of both $\Delta Cred$ and $\Delta Cred^*$. $FinOpen$ is the first lag of a proxy for financial openness, namely a country's gross external liabilities as a share of GDP. $TradeOpen$ is the first lag of a proxy for trade openness, namely the sum of exports and imports normalized by GDP. All specifications include country fixed effects. CFE stands for country fixed effects. AUROC stands for Area Under the Receiving Operating Characteristic curve, a measure of the binary classification ability of the model. Sample covers 38 countries over 1970-2011. The dependent variable is a dummy variable capturing banking crises.

Table 15 Banking Crisis Prediction – Cross-border Capital Inflows

Specification	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Estimation method	OLS	Logit	OLS	Logit	OLS	Logit	OLS	Logit	OLS	Logit	OLS	Logit
		Bank inflows to banks				Bank inflows to non-banks				Portfolio inflows		
L.$\Delta Cred$	0.04	0.82	-0.00	-0.19	0.02	0.58	-0.01	-0.74	-0.00	0.37	-0.04	-2.95
	(0.047)	(1.981)	(0.051)	(2.465)	(0.049)	(2.171)	(0.052)	(2.459)	(0.055)	(3.242)	(0.058)	(3.459)
L2.$\Delta Cred$	0.05	1.70	-0.00	-0.44	0.04	1.26	-0.01	-1.18	0.06	2.50	0.00	-0.48
	(0.057)	(1.741)	(0.059)	(2.499)	(0.058)	(1.894)	(0.060)	(2.679)	(0.065)	(2.659)	(0.068)	(3.510)
L3.$\Delta Cred$	0.16**	6.21**	0.17**	7.61**	0.15**	6.17**	0.17**	7.78**	0.17**	7.65**	0.19**	11.49**
	(0.075)	(2.832)	(0.081)	(3.659)	(0.076)	(2.902)	(0.082)	(3.658)	(0.078)	(3.737)	(0.087)	(4.921)
L4.$\Delta Cred$	0.09	2.46	0.09	3.56	0.08	2.43	0.08	3.85	0.07	1.74	0.08	3.88
	(0.058)	(1.569)	(0.062)	(3.167)	(0.060)	(1.747)	(0.064)	(3.241)	(0.057)	(1.272)	(0.061)	(3.127)
L5.$\Delta Cred$	-0.00	0.51	0.02	1.07	-0.00	0.24	0.02	0.71	-0.05	-0.26	-0.03	0.27
	(0.109)	(1.712)	(0.119)	(3.528)	(0.112)	(1.850)	(0.120)	(3.411)	(0.116)	(1.336)	(0.126)	(1.977)
L.$\Delta Cred^*$			0.59*	17.42*			0.55*	17.49*			0.57*	23.02*
			(0.305)	(9.921)			(0.300)	(10.200)			(0.319)	(13.544)
L2.$\Delta Cred^*$			1.10***	41.75***			1.08***	41.43***			1.30***	50.43***
			(0.280)	(10.251)			(0.278)	(10.086)			(0.326)	(14.504)
L3.$\Delta Cred^*$			-0.40**	-25.23**			-0.41**	-26.69**			-0.52**	-35.30**
			(0.177)	(12.146)			(0.176)	(11.840)			(0.217)	(17.253)
L4.$\Delta Cred^*$			0.09	12.07			0.09	12.21*			0.09	9.01
			(0.186)	(7.656)			(0.189)	(7.309)			(0.213)	(10.301)
L5.$\Delta Cred^*$			0.09	0.07			0.09	0.51			0.05	-1.21
			(0.244)	(10.316)			(0.240)	(9.801)			(0.252)	(14.692)
L.$\Delta XB\text{-}Cred$	-0.00	-0.01	-0.01	-0.20	0.02	0.48	0.02	0.65*	0.25**	4.04	0.23**	3.56
	(0.006)	(0.150)	(0.005)	(0.239)	(0.015)	(0.388)	(0.013)	(0.365)	(0.117)	(2.907)	(0.113)	(2.405)
L2.$\Delta XB\text{-}Cred$	0.00	0.05	-0.00	-0.02	0.01	0.27	0.00	0.04	0.25**	9.00**	0.17*	4.09
	(0.008)	(0.161)	(0.008)	(0.212)	(0.013)	(0.337)	(0.013)	(0.345)	(0.104)	(4.367)	(0.093)	(3.835)
L3.$\Delta XB\text{-}Cred$	-0.01	-0.56	-0.01	-0.69	-0.00	-0.37	-0.01	-0.38	0.11**	14.95***	0.08*	14.16**
	(0.005)	(0.566)	(0.006)	(0.587)	(0.008)	(0.461)	(0.008)	(0.519)	(0.051)	(5.793)	(0.047)	(6.343)
L4.$\Delta XB\text{-}Cred$	0.00	0.09	-0.00	-0.05	0.01	0.44	0.01	0.42	0.26*	3.84	0.30**	7.37
	(0.009)	(0.239)	(0.010)	(0.246)	(0.009)	(0.332)	(0.009)	(0.287)	(0.146)	(6.101)	(0.144)	(6.741)
L5.$\Delta XB\text{-}Cred$	0.00	0.14	0.00	0.13	0.01	0.37	0.01	0.16	0.25	4.60	0.16	-0.79
	(0.008)	(0.210)	(0.008)	(0.267)	(0.010)	(0.334)	(0.010)	(0.263)	(0.176)	(5.210)	(0.166)	(6.129)
Constant	-0.03***	-17.21***	-0.10***	-21.87***	-0.04***	-17.40***	-0.10***	-22.16***	-0.07***	-20.87***	-0.14***	-24.82***
	(0.011)	(0.409)	(0.033)	(1.458)	(0.013)	(0.683)	(0.033)	(1.614)	(0.019)	(0.987)	(0.040)	(2.181)
Observations	951	795	951	795	951	795	951	795	793	622	793	622
Crises	33	33	33	33	33	33	33	33	29	29	29	29
Sum of lagged coeffs. of $\Delta Cred$	0.34	11.70	0.29	11.61	0.29	10.68	0.25	10.42	0.25	12.01	0.20	12.22
Test for sum of lags=0 (p-val)	0.004	0.000	0.016	0.005	0.018	0.002	0.045	0.010	0.070	0.031	0.172	0.056
Sum of lagged coeffs. of $\Delta Cred^*$			1.47	46.09			1.40	44.95			1.49	45.96
Test for sum of lags=0 (p-val)			0.015	0.008			0.017	0.008			0.031	0.037
Sum of lagged coeffs. of $\Delta XB\text{-}Cred$	0.00	-0.30	-0.02	-0.83	0.04	1.19	0.03	0.89	1.12	36.43	0.94	28.39
Test for sum of lags=0 (p-val)	0.910	0.627	0.388	0.240	0.271	0.395	0.448	0.490	0.002	0.000	0.004	0.003
Test for CFE	0.90	2367	0.87	1141	0.90	1884	0.86	893	0.82	3009	0.80	2868
p-value	0.649	0.000	0.688	0.000	0.646	0.000	0.701	0.000	0.776	0.000	0.799	0.000
R^2	0.03	0.08	0.06	0.20	0.03	0.09	0.06	0.21	0.07	0.19	0.10	0.32
AUROC	0.76	0.72	0.84	0.82	0.77	0.74	0.83	0.82	0.83	0.83	0.87	0.89
Standard error	0.04	0.04	0.04	0.04	0.04	0.05	0.04	0.04	0.03	0.03	0.03	0.04

Note. Robust standard errors between parentheses, robust-standard-error-based p-values between brackets. $\Delta Cred$ is the growth rate of real lending by domestic banks to domestic households and non-financial corporations, deflated using CPI. For each country and year, $\Delta Cred^*$ is the average of $\Delta Cred$ for the $N-1$ remaining countries in the sample, weighted by PPP-adjusted GDP. *XB-Cred* are three different type of inflows, depending on the specification (see heading). We consider 5 lags of $\Delta Cred$, $\Delta Cred^*$ and *XB-Cred*. All specifications include country fixed effects. *CFE* stands for country fixed effects. AUROC stands for Area Under the Receiving Operating Characteristic curve, a measure of the binary classification ability of the model. Sample covers 38 countries over 1978-2011 (1980-2011 for portfolio flows). The dependent variable is a dummy variable capturing banking crises.

Table 16 Banking Crisis Prediction – The Role Of Other Global Variables

Specification	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Estimation method	OLS	Logit	OLS	Logit	OLS	Logit	OLS	Logit	OLS	Logit	OLS	Logit	OLS	Logit
L.$\Delta Cred$	-0.00	-0.85	-0.02	-1.09	-0.00	-0.78	-0.01	-0.60	-0.00	-0.77	-0.04	-2.45	-0.02	-1.91
	(0.045)	(2.208)	(0.048)	(2.237)	(0.045)	(2.355)	(0.055)	(2.286)	(0.045)	(2.157)	(0.050)	(2.617)	(0.058)	(2.690)
L2.$\Delta Cred$	0.01	-0.40	-0.01	-1.00	0.01	-0.32	-0.02	-0.95	0.00	-0.56	-0.02	0.07	-0.03	-0.25
	(0.053)	(2.334)	(0.055)	(2.587)	(0.053)	(2.376)	(0.073)	(2.781)	(0.054)	(2.465)	(0.062)	(3.317)	(0.075)	(2.663)
L3.$\Delta Cred$	0.17**	7.71**	0.17**	8.54**	0.17**	7.95**	0.21**	9.57**	0.16**	7.68**	0.18**	10.69**	0.23**	10.30**
	(0.072)	(3.559)	(0.073)	(4.084)	(0.072)	(3.724)	(0.097)	(3.988)	(0.073)	(3.583)	(0.082)	(4.527)	(0.099)	(4.255)
L4.$\Delta Cred$	0.08	3.09	0.08	3.97	0.08	2.93	0.10	3.45	0.08	3.23	0.08	2.58	0.11	3.12
	(0.056)	(2.891)	(0.058)	(3.363)	(0.056)	(2.835)	(0.073)	(3.317)	(0.057)	(3.055)	(0.064)	(3.081)	(0.076)	(2.920)
L5.$\Delta Cred$	0.02	1.11	0.04	1.29	0.02	1.10	0.01	0.55	0.02	1.06	0.01	0.34	-0.00	0.13
	(0.108)	(3.469)	(0.110)	(3.456)	(0.108)	(3.260)	(0.138)	(2.659)	(0.110)	(3.718)	(0.115)	(2.017)	(0.140)	(2.156)
L.$\Delta Cred^*$	0.56**	19.43**	0.93***	25.16***	0.52**	14.77*	0.75**	19.11**	0.66**	20.19**	0.59*	2.13	1.13***	5.21
	(0.243)	(9.081)	(0.289)	(9.590)	(0.243)	(8.824)	(0.313)	(9.700)	(0.279)	(9.028)	(0.307)	(14.942)	(0.406)	(13.376)
L2.$\Delta Cred^*$	0.87***	43.01***	0.77***	44.78***	0.86***	45.95***	1.40***	50.81***	0.89***	42.43***	0.82***	46.16***	1.36***	59.35***
	(0.214)	(10.547)	(0.203)	(10.369)	(0.217)	(11.095)	(0.362)	(14.551)	(0.221)	(10.066)	(0.245)	(17.388)	(0.353)	(15.390)
L3.$\Delta Cred^*$	-0.34*	-28.54***	-0.12	-28.03**	-0.36**	-32.58***	-0.59**	-31.19**	-0.33*	-27.96***	-0.31*	-52.94**	0.00	-7.48
	(0.180)	(9.084)	(0.189)	(11.709)	(0.182)	(9.188)	(0.262)	(14.405)	(0.182)	(8.884)	(0.184)	(23.897)	(0.274)	(20.660)
L4.$\Delta Cred^*$	0.24	14.68**	0.22	17.58*	0.23	15.45**	0.07	4.76	0.21	13.43*	0.04	36.48**	0.66**	11.49
	(0.144)	(6.669)	(0.145)	(10.648)	(0.146)	(6.691)	(0.274)	(12.663)	(0.141)	(6.926)	(0.179)	(17.021)	(0.318)	(18.245)
L5.$\Delta Cred^*$	0.10	1.13	0.46**	16.20	0.07	-1.16	0.01	-8.90	0.10	0.31	0.02	-11.72	0.14	-21.40*
	(0.178)	(6.490)	(0.196)	(10.218)	(0.187)	(6.889)	(0.329)	(14.410)	(0.180)	(6.449)	(0.230)	(15.086)	(0.342)	(12.508)
Spread			-0.08***	-4.62***										
			(0.015)	(0.852)										
r^{ST}					-0.14	-14.50								
					(0.190)	(9.270)								
TED							0.01	0.59						
							(0.040)	(0.924)						
Slope									-1.03	-19.29				
									(0.695)	(38.025)				
VIX											-0.01***	-0.40***		
											(0.001)	(0.092)		
LEV													0.58***	20.58***
													(0.151)	(5.849)
Constant	-0.09***	-21.11***	0.05**	-13.69***	-0.08**	-21.09***	-0.12***	-21.73***	-0.09***	-20.77***	0.07*	-11.48***	-0.21***	-21.83***
	(0.027)	(1.299)	(0.023)	(1.409)	(0.032)	(1.390)	(0.041)	(1.489)	(0.025)	(1.298)	(0.039)	(1.771)	(0.058)	(1.367)
Observations	1,118	941	1,118	941	1,118	941	761	630	1,118	941	925	772	733	606
Crises	34	34	34	34	34	34	31	31	34	34	32	32	31	31
Sum of lagged coeffs. of $\Delta Cred$	0.27	10.66	0.25	11.70	0.27	10.88	0.29	12.01	0.26	10.64	0.20	11.22	0.28	11.40
Test for sum of lags=0 (p-val)	0.014	0.008	0.022	0.006	0.014	0.012	0.043	0.028	0.019	0.008	0.082	0.043	0.044	0.020
Sum of lagged coeffs. of $\Delta Cred^*$	1.42	49.71	2.26	75.69	1.32	42.43	1.65	34.60	1.53	48.39	1.17	20.10	3.28	47.17
Test for sum of lags=0 (p-val)	0.006	0.001	0.000	0.000	0.016	0.008	0.028	0.072	0.007	0.001	0.046	0.173	0.001	0.007
Test for CFE	0.91	1405	0.86	1118	0.91	1464	0.80	967	0.90	1330	0.81	541	0.77	659
p-value	0.625	0.000	0.711	0.000	0.625	0.000	0.795	0.000	0.648	0.000	0.791	0.000	0.841	0.000
R^2	0.06	0.21	0.08	0.32	0.06	0.22	0.08	0.22	0.06	0.21	0.09	0.37	0.11	0.29
AUROC	0.84	0.83	0.88	0.89	0.84	0.83	0.84	0.84	0.83	0.83	0.91	0.90	0.86	0.86
Standard error	0.04	0.04	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03

Note. Robust standard errors between parentheses, robust-standard-error-based p-values between brackets. $\Delta Cred$ is the growth rate of real lending by domestic banks to domestic households and non-financial corporations, deflated using CPI. For each country and year, $\Delta Cred^*$ is the average of $\Delta Cred$ for the $N-1$ remaining countries in the sample, weighted by PPP-adjusted GDP. We consider 5 lags of both $\Delta Cred$ and $\Delta Cred^*$. *Spread* is the spread between US Baa-rated corporate bond yields and US Treasury bills. r^{ST} is $log(1+FFR)/log(1+\Pi)$, where *FFR* is the effective Fed funds rate and Π is ex-post realised CPI inflation. *TED* is the spread between 3-month interbank rate in the US and 3-month US Treasury bills. *Slope* is $log(1+i^{10y})/log(1+FFR)$, where i^{10y} is the yield of a 10-y maturity Treasury bond in the US, and *FFR* is defined above. *VIX* is the CBOE Volatility Index. *LEV* is (the growth rate in) the leverage of main US broker-dealer banks, taken from Bruno and Shin (2015). *CFE* stands for country fixed effects. AUROC stands for Area Under the Receiving Operating Characteristic curve, a measure of the binary classification ability of the model. Sample covers 38 countries over 1970-2011. The dependent variable is a dummy variable capturing banking crises.

Table 17 Banking Crisis Prediction - Domestic And Foreign Credit In Schularick And Taylor (2012) Database

Specification	(1)	(2)	(3)	(4)	(5)	(6)
Estimation method	OLS	OLS	Logit	Logit	OLS	OLS
Fixed effects	None	Country	None	Country	None	Country
L.$\Delta Cred$	-0.02	-0.02	0.00	-0.07	-0.01	-0.01
	(0.106)	(0.107)	(1.981)	(1.971)	(0.106)	(0.107)
L2.$\Delta Cred$	0.30**	0.31**	7.35***	7.58***	0.30**	0.30**
	(0.121)	(0.122)	(2.391)	(2.736)	(0.118)	(0.119)
L3.$\Delta Cred$	0.05	0.05	0.95	0.79	0.08	0.08
	(0.118)	(0.118)	(2.898)	(3.090)	(0.119)	(0.118)
L4.$\Delta Cred$	0.02	0.01	0.51	0.53	0.02	0.02
	(0.062)	(0.063)	(1.300)	(1.398)	(0.063)	(0.064)
L5.$\Delta Cred$	0.13	0.13	2.72*	2.49	0.16*	0.15*
	(0.080)	(0.081)	(1.560)	(1.629)	(0.081)	(0.081)
L.$\Delta Cred^*$	0.03	0.03	0.51	0.25	0.21	0.21
	(0.157)	(0.156)	(3.826)	(3.830)	(0.227)	(0.226)
L2.$\Delta Cred^*$	-0.14	-0.15	-2.47	-2.86	-0.10	-0.10
	(0.201)	(0.203)	(4.567)	(4.531)	(0.265)	(0.267)
L3.$\Delta Cred^*$	0.29*	0.29*	7.63**	8.09**	0.73***	0.71***
	(0.171)	(0.170)	(3.474)	(3.611)	(0.258)	(0.256)
L4.$\Delta Cred^*$	-0.17	-0.17	-5.95*	-6.45*	-0.05	-0.05
	(0.115)	(0.115)	(3.568)	(3.717)	(0.148)	(0.147)
L5.$\Delta Cred^*$	-0.21*	-0.21*	-4.90*	-4.88*	-0.02	-0.01
	(0.116)	(0.118)	(2.784)	(2.866)	(0.150)	(0.151)
L.$\Delta Cred^*$ x *Non-mobile K*					-0.05	-0.07
					(0.251)	(0.269)
L2.$\Delta Cred^*$ x *Non-mobile K*					0.14	0.12
					(0.280)	(0.291)
L3.$\Delta Cred^*$ x *Non-mobile K*					-0.53**	-0.51*
					(0.268)	(0.274)
L4.$\Delta Cred^*$ x *Non-mobile K*					0.24	0.23
					(0.167)	(0.170)
L5.$\Delta Cred^*$ x *Non-mobile K*					0.09	0.08
					(0.181)	(0.187)
L.*Non-mobile K*					0.01	0.01
					(0.033)	(0.035)
L2.*Non-mobile K*					-0.08	-0.08
					(0.080)	(0.080)
L3.*Non-mobile K*					0.13	0.13
					(0.081)	(0.081)
L4.*Non-mobile K*					-0.06*	-0.06*
					(0.032)	(0.032)
L5.*Non-mobile K*					-0.10***	-0.10**
					(0.039)	(0.039)
Constant	0.03***	0.01	-3.69***	-4.31***	-0.00	-0.03
	(0.007)	(0.015)	(0.258)	(0.744)	(0.009)	(0.017)
Observations	1,272	1,272	1,272	1,272	1,272	1,272
Crises	53	53	53	53	53	53
Sum of lagged coeffs. of $\Delta Cred$	0.48	0.48	11.53	11.32	0.56	0.54
Test for sum of lags=0 (p-val)	0.001	0.003	0.000	0.001	0.000	0.001
Sum of lagged coeffs. of $\Delta Cred^*$	-0.20	-0.20	-5.18	-5.86	0.76	0.78
Test for sum of lags=0 (p-val)	0.178	0.193	0.213	0.189	0.002	0.003
Sum of lagged coeffs. of $\Delta Cred^*$ x *Non-mobile K*					-0.11	-0.15
Test for sum of lags=0 (p-val)					0.766	0.750
Test for CFE		1.00		7.78		1.07
p-value		0.445		0.858		0.385
R^2	0.02	0.03	0.06	0.08	0.06	0.06
AUROC	0.69	0.73	0.69	0.73	0.81	0.83
Standard error	0.04	0.04	0.04	0.04	0.03	0.03

Note. Standard errors between parentheses (based on robust standard errors for Logit specifications only as in ST), and p-values between brackets. $\Delta Cred$ is the growth rate in lending by domestic banks to domestic households and non-financial corporations. For each country and year, $\Delta Cred^*$ is the average of $\Delta Cred$ for the $N-1$ remaining countries in the sample, weighted by PPP-adjusted GDP. We consider 5 lags of both $\Delta Cred$ and $\Delta Cred^*$. $Non-mobile\ K$ is a dummy variable that takes the value of one between 1945 and 1971, and zero otherwise (note that WWI and WWII years are dropped as they are clear outliers among many dimensions.) All specifications include country fixed effects. *CFE* stands for country fixed effects. Sample covers 14 advanced countries over 1870-2008. The dependent variable is a dummy variable capturing banking crises.

Table 18 Banking Crisis Prediction - Advanced And Emerging Market Economies

	AEs				EMs			
Specification	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Estimation method	OLS	OLS	Logit	Logit	OLS	OLS	Logit	Logit
Fixed effects	None	Country	None	Country	None	Country	None	Country
L.$\Delta Cred$	-0.16*	-8.89*	-0.17**	-14.28***	0.08	2.19	0.09	5.07
	(0.080)	(5.147)	(0.085)	(5.457)	(0.060)	(2.311)	(0.082)	(3.596)
L2.$\Delta Cred$	0.04	5.06	0.02	6.16	-0.01	-0.15	0.01	-0.41
	(0.092)	(5.400)	(0.096)	(5.747)	(0.069)	(1.546)	(0.073)	(1.815)
L3.$\Delta Cred$	0.30*	13.08	0.30*	19.29	0.13	3.58**	0.13*	4.81***
	(0.151)	(12.722)	(0.156)	(17.577)	(0.081)	(1.774)	(0.081)	(1.657)
L4.$\Delta Cred$	-0.05	-2.66	-0.06	-1.75	0.11	2.72*	0.10	2.80
	(0.098)	(7.709)	(0.096)	(9.369)	(0.066)	(1.637)	(0.067)	(1.987)
L5.$\Delta Cred$	0.09	10.01*	0.12*	20.92***	-0.02	0.20	-0.04	-0.05
	(0.067)	(5.168)	(0.072)	(6.302)	(0.135)	(1.596)	(0.133)	(1.523)
L.$\Delta Cred^*$	0.98***	48.29***	0.31	-39.35**	-0.46	-13.41	-2.01*	-69.01***
	(0.278)	(16.796)	(0.304)	(18.295)	(0.480)	(13.100)	(1.099)	(23.573)
L2.$\Delta Cred^*$	1.09***	86.81***	0.60*	35.04*	0.29	9.45	-0.81	-24.49
	(0.260)	(27.332)	(0.307)	(21.102)	(0.387)	(13.377)	(0.959)	(16.844)
L3.$\Delta Cred^*$	-0.19	-55.83**	-0.21	-45.10*	-0.81*	-24.59**	-0.96	-54.38***
	(0.193)	(22.204)	(0.284)	(26.363)	(0.462)	(12.372)	(0.968)	(20.216)
L4.$\Delta Cred^*$	0.31**	28.35**	0.28	30.50*	0.05	5.24	0.04	22.59
	(0.128)	(13.718)	(0.182)	(17.238)	(0.420)	(11.771)	(0.782)	(22.189)
L5.$\Delta Cred^*$	0.25	7.03	-0.01	-31.06	-0.44	-14.30	-0.46	-29.60
	(0.197)	(13.625)	(0.259)	(19.183)	(0.408)	(11.146)	(0.719)	(22.881)
L.$\Delta Cred^*$ x $FinOpen$			0.38**	89.19***			2.04	70.11**
			(0.160)	(34.530)			(1.525)	(31.468)
L2.$\Delta Cred^*$ x $FinOpen$			0.35**	36.90			1.65	39.07*
			(0.177)	(24.489)			(1.395)	(20.282)
L3.$\Delta Cred^*$ x $FinOpen$			-0.08	-4.27			0.08	36.20*
			(0.139)	(33.767)			(1.223)	(21.660)
L4.$\Delta Cred^*$ x $FinOpen$			0.01	-14.35			-0.14	-28.65
			(0.094)	(20.474)			(0.994)	(27.763)
L5.$\Delta Cred^*$ x $FinOpen$			0.17	38.17			-0.22	-4.18
			(0.106)	(31.569)			(1.076)	(33.289)
$FinOpen$			-0.04***	-11.51**			-0.09	-2.44
			(0.016)	(4.550)			(0.170)	(3.619)
Constant	-0.14***	-28.13***	-0.06**	-17.81***	0.12	-1.70	0.21*	1.99
	(0.033)	(2.966)	(0.033)	(2.162)	(0.085)	(1.991)	(0.119)	(2.612)
Observations	804	690	801	690	314	251	314	251
Crises	22	22	22	22	12	12	12	12
Sum of lagged coeffs. of $\Delta Cred$	0.22	16.59	0.21	30.34	0.29	8.54	0.29	12.22
Test for sum of lags=0 (p-val)	0.092	0.018	0.095	0.085	0.065	0.007	0.074	0.005
Sum of lagged coeffs. of $\Delta Cred^*$	2.45	114.70	0.97	-49.97	-1.36	-37.61	-4.20	-154.90
Test for sum of lags=0 (p-val)	0.000	0.000	0.131	0.226	0.119	0.117	0.023	0.000
Sum of lagged coeffs. of $\Delta Cred^*$ x $FinOpen$			0.83	145.60			3.41	112.60
Test for sum of lags=0 (p-val)			0.007	0.012			0.254	0.115
Test for CFE	0.96	645.3	0.83	656.9	0.96	5.51	0.97	17.98
p-value	0.519	0.000	0.698	0.000	0.489	0.788	0.480	0.035
R^2	0.10	0.45	0.14	0.60	0.06	0.13	0.10	0.26
AUROC	0.75	0.68	0.77	0.75	0.52	0.52	0.73	0.68
Standard error	0.06	0.07	0.06	0.06	0.05	0.05	0.05	0.05

Note. Robust standard errors between parentheses, robust-standard-error-based p-values between brackets. $\Delta Cred$ is the growth rate of real lending by domestic banks to domestic households and non-financial corporations, deflated using CPI. For each country and year, $\Delta Cred^*$ is the average of $\Delta Cred$ for the $N-1$ remaining countries in the sample, weighted by PPP-adjusted GDP. We consider 5 lags of both $\Delta Cred$ and $\Delta Cred^*$. $FinOpen$ is the first lag of a proxy for financial openness, namely a country's gross external liabilities as a share of GDP. All specifications include country fixed effects. *CFE* stands for country fixed effects. AUROC stands for Area Under the Receiving Operating Characteristic curve, a measure of the binary classification ability of the model. Sample covers 38 countries (25 advanced and 13 emerging, as classified by the IMF — see the Appendix for the definitions) over 1970-2011. The dependent variable is a dummy variable capturing banking crises.

Table 19 Banking crisis prediction – Controlling for foreign crises

Specification	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Estimation method	OLS	OLS	Logit	Logit	OLS	OLS	Logit	Logit
Fixed effects	None	Country	None	Country	None	Country	None	Country
L.$\Delta Cred$	-0.04	-0.03	-2.23	-1.73	-0.04	-0.03	-3.47	-1.12
	(0.047)	(0.045)	(1.675)	(2.097)	(0.048)	(0.046)	(2.197)	(2.257)
L2.$\Delta Cred$	-0.00	0.01	-0.94	-0.18	-0.00	0.00	-0.02	0.03
	(0.047)	(0.052)	(2.384)	(2.434)	(0.047)	(0.053)	(2.375)	(1.878)
L3.$\Delta Cred$	0.15**	0.16**	7.26**	7.94**	0.14**	0.16**	7.54***	6.25**
	(0.069)	(0.072)	(2.841)	(3.693)	(0.068)	(0.071)	(2.827)	(3.153)
L4.$\Delta Cred$	0.07	0.08	2.24	3.15	0.07	0.07	2.30	3.02
	(0.060)	(0.058)	(3.243)	(2.795)	(0.059)	(0.057)	(2.679)	(1.950)
L5.$\Delta Cred$	0.02	0.03	0.47	1.12	0.02	0.03	0.86	0.89
	(0.115)	(0.110)	(4.138)	(3.038)	(0.114)	(0.108)	(3.546)	(1.878)
L.$\Delta Cred^*$	0.28	0.27	8.76	8.60	-0.18	-0.22	-8.21	-29.21***
	(0.224)	(0.221)	(10.183)	(9.940)	(0.281)	(0.281)	(8.923)	(10.423)
L2.$\Delta Cred^*$	0.67***	0.66***	36.03***	35.75***	0.23	0.18	14.12	3.58
	(0.186)	(0.189)	(10.085)	(10.071)	(0.243)	(0.245)	(11.274)	(14.204)
L3.$\Delta Cred^*$	-0.27	-0.28	-24.67***	-25.10***	-0.34	-0.37	-22.50**	-33.11***
	(0.182)	(0.183)	(8.676)	(9.446)	(0.268)	(0.269)	(11.180)	(12.227)
L4.$\Delta Cred^*$	0.03	0.03	5.91	5.89	-0.00	0.00	12.72	21.06
	(0.157)	(0.156)	(8.612)	(8.181)	(0.212)	(0.213)	(10.944)	(12.901)
L5.$\Delta Cred^*$	0.20	0.19	5.80	5.50	-0.07	-0.08	-5.79	-14.87
	(0.181)	(0.182)	(7.718)	(7.655)	(0.224)	(0.227)	(11.438)	(11.791)
L.$\Delta Cred^*$ x $FinOpen$					0.39**	0.35**	25.93*	36.32**
					(0.155)	(0.155)	(15.104)	(17.753)
L2.$\Delta Cred^*$ x $FinOpen$					0.40**	0.41**	28.85**	43.68**
					(0.174)	(0.171)	(11.385)	(18.090)
L3.$\Delta Cred^*$ x $FinOpen$					-0.02	-0.04	-0.19	-4.05
					(0.138)	(0.137)	(15.722)	(17.356)
L4.$\Delta Cred^*$ x $FinOpen$					0.05	0.02	-6.42	-11.71
					(0.088)	(0.095)	(11.925)	(12.400)
L5.$\Delta Cred^*$ x $FinOpen$					0.21**	0.19*	8.67	8.55
					(0.094)	(0.098)	(16.086)	(15.139)
$FinOpen$					-0.06***	-0.05***	-5.09***	-4.81***
					(0.015)	(0.015)	(1.665)	(1.644)
$Crisis^*$	0.33***	0.33***	4.93**	5.42***	0.25***	0.26***	2.89	0.25
	(0.094)	(0.094)	(2.136)	(1.839)	(0.084)	(0.084)	(2.478)	(3.425)
Constant	-0.04*	-0.07***	-6.50***	-20.38***	0.03	-0.01	-2.89***	-17.06***
	(0.022)	(0.025)	(1.074)	(1.242)	(0.026)	(0.026)	(1.019)	(1.522)
Observations	1,118	1,118	1,118	941	1,115	1,115	1,115	941
Sum of lagged coeffs. of ΔCred	0.19	0.25	6.81	10.30	0.18	0.24	7.22	9.08
Test for sum of lags=0 (p-val)	0.044	0.020	0.035	0.006	0.053	0.024	0.016	0.008
Sum of lagged coeffs. of ΔCred*	0.91	0.87	31.82	30.65	-0.37	-0.49	-9.66	-52.55
Test for sum of lags=0 (p-val)	0.042	0.054	0.084	0.062	0.491	0.362	0.597	0.019
Test for CFE		0.91		1197		0.88		476
p-value		0.633		0.000		0.672		0.000
R^2	0.06	0.08	0.19	0.23	0.09	0.11	0.28	0.40
AUROC	0.83	0.87	0.84	0.84	0.86	0.88	0.89	0.92
Standard error	0.04	0.03	0.04	0.04	0.03	0.03	0.03	0.02

Note. Robust standard errors between parentheses, robust-standard-error-based p-values between brackets. $\Delta Cred$ is the growth rate of real lending by domestic banks to domestic households and non-financial corporations, deflated using CPI. For each country and year, $\Delta Cred^*$ is the average of $\Delta Cred$ for the $N-1$ remaining countries in the sample, weighted by PPP-adjusted GDP. We consider 5 lags of both $\Delta Cred$ and $\Delta Cred^*$. $FinOpen$ is the first lag of a proxy for financial openness, namely a country's gross external liabilities as a share of GDP. $Crisis^*$ is the weighted average of banking crises taking place at time t in the $N-1$ remaining countries in the sample, weighted by PPP-adjusted GDP. All specifications include country fixed effects. CFE stands for country fixed effects. AUROC stands for Area Under the Receiving Operating Characteristic curve, a measure of the binary classification ability of the model. Sample covers 38 countries over 1970-2011. The dependent variable is a dummy variable capturing banking crises.

Table 20 Banking crisis prediction – Alternative weighting schemes

Specification	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Estimation method	OLS	OLS	Logit	Logit	OLS	OLS	Logit	Logit	OLS	OLS	Logit	Logit
Fixed effects	None	Country	None	Country	None	Country	None	Country	None	Country	None	Country
Weighting method	Equal				Banking exposures				Exports			
L.$\Delta Cred$	-0.03	-0.02	-2.24	-1.53	-0.07	-0.04	-2.63*	-1.95	-0.02	0.00	-1.08	-0.46
	(0.048)	(0.048)	(1.968)	(2.204)	(0.057)	(0.056)	(1.582)	(2.133)	(0.046)	(0.044)	(1.588)	(2.030)
L2.$\Delta Cred$	-0.00	0.00	-0.83	0.13	0.03	0.04	0.46	0.88	0.01	0.02	-0.39	0.20
	(0.049)	(0.056)	(2.648)	(2.668)	(0.070)	(0.073)	(2.727)	(3.388)	(0.048)	(0.053)	(1.891)	(2.202)
L3.$\Delta Cred$	0.13*	0.14*	6.62**	6.97*	0.17**	0.20**	7.83***	11.01**	0.12*	0.14*	5.52**	6.53*
	(0.071)	(0.074)	(3.092)	(3.703)	(0.081)	(0.088)	(2.891)	(4.341)	(0.069)	(0.073)	(2.582)	(3.560)
L4.$\Delta Cred$	0.06	0.07	2.46	2.90	-0.00	0.01	-1.25	-1.98	0.09	0.10*	2.84	3.44
	(0.060)	(0.057)	(3.428)	(3.012)	(0.050)	(0.050)	(2.410)	(3.201)	(0.058)	(0.056)	(2.679)	(2.770)
L5.$\Delta Cred$	0.02	0.03	0.33	1.08	0.09	0.11	3.34	5.79**	0.00	0.03	-0.05	0.89
	(0.118)	(0.113)	(4.950)	(4.152)	(0.066)	(0.074)	(2.419)	(2.921)	(0.112)	(0.108)	(3.014)	(3.040)
L.$\Delta Cred^*$	0.73***	0.73***	27.39***	27.78***	0.42**	0.48**	15.24**	19.01***	0.28*	0.38**	9.03	13.19*
	(0.245)	(0.243)	(9.280)	(9.744)	(0.187)	(0.197)	(6.641)	(6.604)	(0.168)	(0.181)	(6.308)	(7.985)
L2.$\Delta Cred^*$	0.54***	0.53**	17.81***	17.18**	0.18	0.17	7.66	7.13	0.35*	0.35*	15.01*	13.09
	(0.204)	(0.207)	(6.717)	(6.812)	(0.168)	(0.170)	(6.760)	(6.335)	(0.195)	(0.201)	(8.288)	(9.750)
L3.$\Delta Cred^*$	0.10	0.09	-8.90	-8.31	-0.02	0.00	-0.09	2.32	0.13	0.14	7.09	8.06
	(0.180)	(0.179)	(7.716)	(7.905)	(0.217)	(0.214)	(11.575)	(10.951)	(0.222)	(0.228)	(11.930)	(12.693)
L4.$\Delta Cred^*$	0.25	0.24	15.70	16.00	0.21	0.21	9.77	11.13	-0.13	-0.13	-7.61	-7.21
	(0.184)	(0.185)	(10.362)	(10.116)	(0.210)	(0.209)	(8.927)	(7.717)	(0.210)	(0.210)	(10.043)	(11.716)
L5.$\Delta Cred^*$	-0.01	-0.01	-1.51	-2.12	-0.25	-0.19	-14.55*	-11.18	-0.15	-0.08	-6.83	-4.62
	(0.205)	(0.203)	(8.677)	(8.296)	(0.172)	(0.186)	(8.468)	(9.461)	(0.225)	(0.239)	(8.270)	(10.419)
Constant	-0.07***	-0.11***	-7.56***	-21.38***	-0.01	-0.06***	-5.27***	-21.72***	-0.00	-0.06***	-5.05***	-20.62***
	(0.027)	(0.030)	(1.199)	(1.439)	(0.012)	(0.017)	(0.527)	(1.313)	(0.012)	(0.019)	(0.478)	(0.584)
Observations	1,118	1,118	1,118	941	913	913	913	799	1,065	1,065	1,065	915
Sum of lagged coeffs. of $\Delta Cred$	0.18	0.23	6.35	9.55	0.23	0.33	7.75	13.74	0.21	0.30	6.85	10.60
Test for sum of lags=0 (p-val)	0.067	0.036	0.063	0.011	0.080	0.027	0.033	0.002	0.048	0.012	0.029	0.008
Sum of lagged coeffs. of $\Delta Cred^*$	1.60	1.58	50.49	50.53	0.55	0.68	18.03	28.41	0.48	0.65	16.69	22.51
Test for sum of lags=0 (p-val)	0.002	0.002	0.003	0.002	0.094	0.042	0.039	0.007	0.117	0.070	0.053	0.020
Test for CFE		0.87		1161		0.89		880		0.90		37620
p-value		0.688		0.000		0.634		0.000		0.635		0.000
R^2	0.05	0.06	0.17	0.21	0.03	0.04	0.11	0.16	0.02	0.04	0.10	0.14
AUROC	0.79	0.84	0.81	0.83	0.80	0.84	0.80	0.83	0.77	0.83	0.77	0.81
Standard error	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.04	0.04	0.03	0.04	0.04

Note. Robust standard errors between parentheses, robust-standard-error-based p-values between brackets. $\Delta Cred$ is the growth rate of real lending by domestic banks to domestic households and non-financial corporations, deflated using CPI. For each country and year, $\Delta Cred^*$ is the average of $\Delta Cred$ for the $N-1$ remaining countries in the sample, alternatively weighted by equal weights, weights based on a country's banking sector bilateral exposures to other countries in the sample, and on a country's exports to other countries in the sample. We consider 5 lags of both $\Delta Cred$ and $\Delta Cred^*$. All specifications include country fixed effects. *CFE* stands for country fixed effects. AUROC stands for Area Under the Receiving Operating Characteristic curve, a measure of the binary classification ability of the model. Sample covers 38 countries over 1970-2011. The dependent variable is a dummy variable capturing banking crises.

Table 21 Banking crisis prediction – Alternative lag structure

Specification	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Estimation method	OLS	OLS	Logit	Logit	OLS	OLS	Logit	Logit
Fixed effects	None	Country	None	Country	None	Country	None	Country
L.$\Delta Cred$	-0.05	-0.04	-2.19	-1.40	-0.07	-0.06	-2.35	-0.91
	(0.063)	(0.063)	(1.481)	(1.437)	(0.064)	(0.064)	(1.636)	(1.208)
L2.$\Delta Cred$	0.10	0.10	3.69	3.02	0.09	0.10	3.79	2.28
	(0.086)	(0.082)	(3.385)	(2.559)	(0.087)	(0.083)	(3.130)	(2.160)
L3.$\Delta Cred$	0.07	0.09	2.86	3.13	0.07	0.08	2.42	1.41
	(0.092)	(0.089)	(4.222)	(3.606)	(0.092)	(0.089)	(3.708)	(2.310)
L.$\Delta Cred^*$	0.62***	0.59***	22.31***	21.26***	0.06	0.01	5.22	-16.77*
	(0.210)	(0.208)	(7.654)	(7.762)	(0.242)	(0.237)	(7.453)	(10.036)
L2.$\Delta Cred^*$	0.61***	0.61***	26.50***	28.36***	0.17	0.13	1.39	-8.90
	(0.183)	(0.181)	(7.382)	(7.186)	(0.198)	(0.193)	(10.198)	(12.453)
L3.$\Delta Cred^*$	-0.10	-0.13	-12.71*	-14.64**	-0.33	-0.31	-11.04	-17.51*
	(0.167)	(0.168)	(6.789)	(7.180)	(0.226)	(0.226)	(9.004)	(10.327)
L.$\Delta Cred^*$ x $FinOpen$					0.40**	0.36**	18.47**	26.83**
					(0.160)	(0.158)	(8.488)	(11.562)
L2.$\Delta Cred^*$ x $FinOpen$					0.36**	0.39***	32.05**	48.44**
					(0.143)	(0.138)	(13.782)	(20.769)
L3.$\Delta Cred^*$ x $FinOpen$					0.14	0.06	-1.63	-9.80
					(0.094)	(0.094)	(8.509)	(12.635)
$FinOpen$					-0.05***	-0.04***	-4.44***	-4.19***
					(0.013)	(0.012)	(1.160)	(1.095)
Constant	-0.03**	-0.06***	-6.16***	-20.08***	0.03	-0.01	-2.79***	-15.59***
	(0.017)	(0.020)	(0.765)	(0.856)	(0.019)	(0.019)	(0.838)	(0.786)
Observations	1,194	1,194	1,194	1,006	1,189	1,189	1,189	1,001
Sum of lagged coeffs. of $\Delta Cred$	0.12	0.14	4.35	4.75	0.09	0.12	3.86	2.78
Test for sum of lags=0 (p-val)	0.170	0.122	0.092	0.151	0.295	0.187	0.143	0.300
Sum of lagged coeffs. of $\Delta Cred^*$	1.13	1.07	36.10	34.99	-0.10	-0.17	-4.43	-43.18
Test for sum of lags=0 (p-val)	0.003	0.005	0.001	0.001	0.799	0.668	0.712	0.001
Sum of lagged coeffs. of $\Delta Cred^*$ x $FinOpen$					0.90	0.81	48.90	65.47
Test for sum of lags=0 (p-val)					0.001	0.002	0.000	0.000
Test for CFE		0.95		2406		0.96		1356
p-value		0.563		0.000		0.538		0.000
R^2	0.03	0.05	0.13	0.17	0.07	0.09	0.22	0.36
AUROC	0.76	0.82	0.77	0.81	0.81	0.87	0.85	0.89
Standard error	0.05	0.04	0.04	0.04	0.04	0.03	0.03	0.03

Note. Robust standard errors between parentheses, robust-standard-error-based p-values between brackets. $\Delta Cred$ is the growth rate of real lending by domestic banks to domestic households and non-financial corporations, deflated using CPI. For each country and year, $\Delta Cred^*$ is the average of $\Delta Cred$ for the $N-1$ remaining countries in the sample, weighted by PPP-adjusted GDP. We consider 3 lags of both $\Delta Cred$ and $\Delta Cred^*$ (instead of the 5 lags considered in the main specification). $FinOpen$ is the lag of a proxy for financial openness, namely a country's gross external liabilities as a share of GDP. All specifications include country fixed effects. *CFE* stands for country fixed effects. AUROC stands for Area Under the Receiving Operating Characteristic curve, a measure of the binary classification ability of the model. Sample covers 38 countries over 1970-2011. The dependent variable is a dummy variable capturing banking crises.

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