

# Domestic banks as lightning rods? Home bias and information during Eurozone crisis

Orkun Saka

*London School of Economics and Political Science*

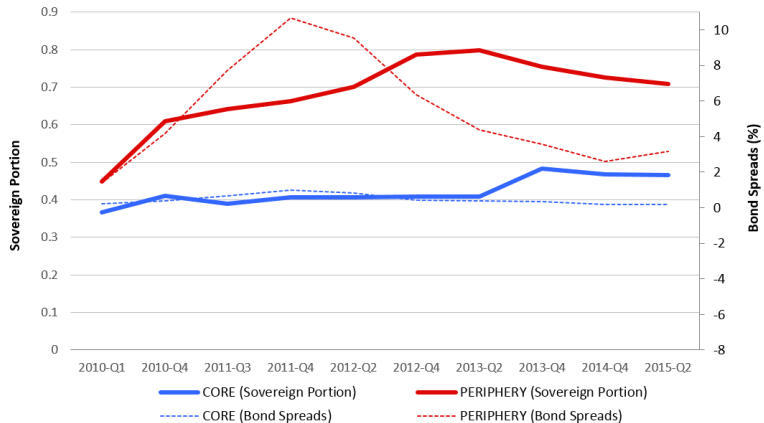
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# SOVEREIGNS AND BANKS IN EUROZONE

- ▶ Deathly loop between sovereign and bank credit risks
  - ▶ Acharya, Drechsler and Schnabl (2014, JF)
- ▶ A silver lining for the link between governments and domestic banks?
  - ▶ Large literature on the role of distance in banks' lending behaviour (Mian, 2006 JF)
  - ▶ "Daily exposure to local news stories, firsthand knowledge of the local economy, and personal relationships with key people at the issuing body" (Butler, 2008 RFS)
  - ▶ *First study showing that soft information matters for banks' sovereign bond exposures*

# BANKS' HOME BIAS



# MOTIVATION

Why do we see rising home bias in crisis-country banks?

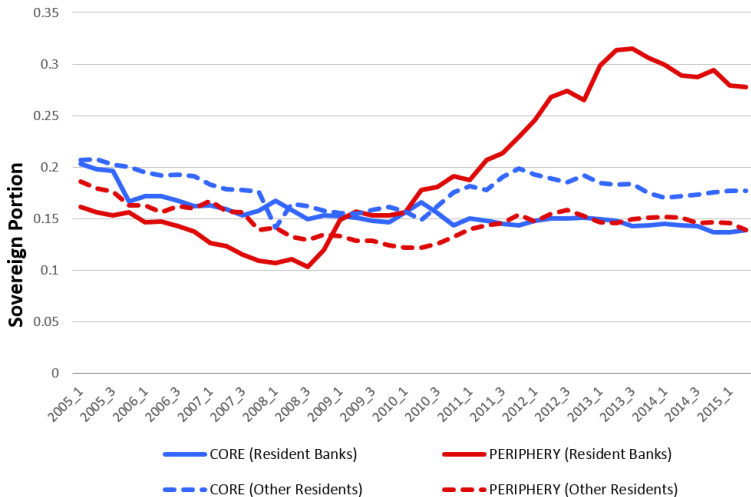
# LITERATURE: MORAL SUASION

- ▶ Governments in difficulty pressuring domestic banks
- ▶ High correlations between “government relatedness” and domestic sovereign bond holdings
  - ▶ De Marco and Macchiavelli (2015)
  - ▶ Becker and Ivashina (2018)
  - ▶ Ongena, Popov and Van Horen (2019)
- ▶ This paper: information channel
  - ▶ Evidence from *private* debt
  - ▶ Evidence from *foreign banks’* sovereign exposures
  - ▶ Evidence from *non-Greek* exposures
  - ▶ Evidence from *post-crisis* episode (2013-2015)

# LITERATURE: SECONDARY MARKETS

- ▶ Governments are less likely to default if debt is held by domestic agents
  - ▶ Broner, Martin and Ventura (2010, AER)
  - ▶ Gennaioli, Martin and Rossi (2014b, JF)
- ▶ Empirical support is limited:
  - ▶ Banks in 191 countries holding more government securities before/during crises (Gennaioli, Martin and Rossi, 2014a)
  - ▶ Crisis-country government debt has been reallocated to banks in politically more influential Euro countries (Brutti and Saure, 2016, JEEA)
- ▶ This paper:
  - ▶ No sign of rising home bias for other domestic *non-bank agents*
  - ▶ Use of home country *political strength* as a control

# LITERATURE: SECONDARY MARKETS



# LITERATURE: RISK-SHIFTING

- ▶ Weakly-capitalised banks may prefer high-yielding risky assets
  - ▶ Acharya and Steffen (2015, JFE)
  - ▶ Horvath, Huizinga and Ioannidou (2015)
- ▶ Are all weakly capitalized banks located in crisis-countries?
  - ▶ Weak-capitalization might be a government choice (Crosignani, 2015)
- ▶ This paper:
  - ▶ Weak evidence for risk-shifting in general
  - ▶ Use of *risk-shifting* as a control



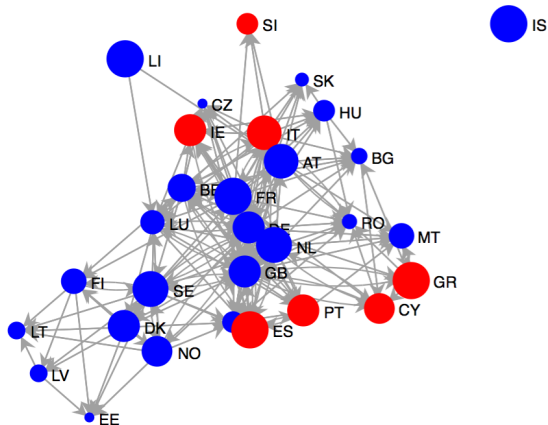
# THIS PAPER: INFORMATIONAL ASYMMETRIES

- ▶ One of the most conventional (albeit lately-forgotten) theories of home bias in asset markets
- ▶ Assumption: Domestic agents have larger initial information endowments relative to foreigners
  - ▶ Brennan and Cao (1997, JF): trend-following behaviour of foreign agents
  - ▶ Van Nieuwerburgh and Veldkamp (2009, JF): endogenous and costly information acquisition
  - ▶ Dziuda and Mondria (2012, RFS): sophisticated fund managers with locally-biased investors

# THIS PAPER: INFORMATIONAL ASYMMETRIES

- ▶ Empirical evidence on informational-distance
  - ▶ Coval and Moskowitz (1999, JF; 2001, JPE): geographical proximity within US
  - ▶ Grinblatt and Keloharju (2001, JF): physical location, culture, language within Finland
  - ▶ Hau (2001, JF): location and language for German stocks
  - ▶ Portes and Rey (2005): geographical distance proxying bank branches, telephone and tourist traffic
- ▶ This paper:
  - ▶ Constructing similar *information proxies*
  - ▶ Extending the evidence to *banks' government bond portfolios*

# BANK BRANCH NETWORK IN EUROPE



● crisis = 0

● crisis = 1

● own\_ratio = 0.01

● own\_ratio = 1

# EBA DISCLOSURES

<i>Disclosure date</i>	<i>Disclosure name</i>	<i>Information date</i>	<i>Number of banks covered</i>	<i>Type of credit disclosure</i>
23/07/2010	2010 EU-wide stress testing exercise (CEBS)	2010-Q1	91	Sovereign
15/07/2011	2011 EU-wide stress testing exercise (EBA)	2010-Q4	90	Sovereign & Private
08/12/2011	EU Capital exercise 2011 (EBA)	2011-Q3	65	Sovereign
03/10/2012	EU Capital exercise 2012 (EBA)	2011-Q4 & 2012-Q2	62	Sovereign
16/12/2013	2013 EU-wide transparency exercise (EBA)	2012-Q4 & 2013-Q2	64	Sovereign & Private
26/10/2014	2014 EU-wide stress testing exercise (EBA)	2013-Q4	123	Sovereign & Private
24/11/2015	2015 EU-wide transparency exercise (EBA)	2014-Q4 & 2015-Q2	105	Sovereign & Private

- ▶ A rare dataset with banks' actual government bond holdings (unlike Bankscope, SNL or BIS)
- ▶ 147 banks: covering 65% of total banking assets in EEA and 50% in each member country
- ▶ Comparison with Altavilla et al. (2017) & Ongena et al. (2019)
  - ▶ Less frequency (biannual vs monthly)
  - ▶ Finer granularity (full country-breakdown vs domestic/foreign dichotomy)
  - ▶ Wider sample of banks (including non-Eurozone)

# DEPENDENT VARIABLE

- ▶ Main variable of interest:

$$\text{SovereignPortion}_{b,c,t} = \frac{\text{NominalExposure}_{b,c,t}}{\sum_b \text{NominalExposure}_{b,c,t}}$$

# ALTERNATIVE DEPENDENT VARIABLE

- ▶ CAPM correction (Coeurdacier & Rey, 2012, JEL):

$$SovereignPortionCAPM_{b,t} = \frac{\sum_c NominalExposure_{b,c,t}}{\sum_{b,c} NominalExposure_{b,c,t}}$$

$$Bias_{b,c,t} = \frac{SovereignPortion_{b,c,t} - SovereignPortionCAPM_{b,t}}{1 - SovereignPortionCAPM_{b,t}}$$

## OTHER VARIABLES

- ▶ To include private forms of debt:  
 $DebtPortion_{d,b,c,t}$  ( $SovereignPortion_{b,c,t}$  &  $RetailPortion_{b,c,t}$ )
- ▶ To include non-bank private residents:  
 $DomesticPortion_{c,k,t}$  ( $ResidentBanks_k$  &  $OtherResidents_k$ )
- ▶ Domestic dummy:  $Domestic_{l,c}$
- ▶ Crisis dummy:  $Crisis_{c,t}$  ( $spreads > 400bps$  &  $Euro$ )
  - ▶  $StressedBank_{l,t}$
- ▶ Information variables:
  - ▶ Direct:  $Branches_{l,c}$ ,  $Mergers_{l,c}$ ,  $Press_{l,c}$ ,  $Language_{l,c}$
  - ▶ Indirect:  $Distance_{l,c}$ ,  $Border_{l,c}$ ,  $Colony_{l,c}$ ,  $Legal_{l,c}$

# SUMMARY STATISTICS

<i>Variables</i>	<i>Mean</i>	<i>Median</i>	<i>Std. Deviation</i>	<i>Min</i>	<i>Max</i>	<i>Observations</i>	<i>Source</i>
<i>SovereignPortion (in bps)</i>	120	0	466	0	9725	23,268	EBA
<i>SovereignPortionBias (in bps)</i>	-1	-37	468	-755	9720	23,268	EBA
<i>RetailPortion (in bps)</i>	121	0	688	0	10000	13,509	EBA
<i>SovereignPortion (Domestic - in bps)</i>	1256	919	1281	0	8407	831	EBA
<i>SovereignPortionBias (Domestic - in bps)</i>	1150	720	1279	-137	8405	831	EBA
<i>RetailPortion (Domestic - in bps)</i>	1644	753	2078	0	10000	497	EBA
<i>DomesticPortion (ResidentBanks - in bps)</i>	1891	1974	1047	84	4509	242	Bruegel
<i>DomesticPortion (OtherResidents - in bps)</i>	1864	1983	1309	17	5834	242	Bruegel
<i>Bond Spreads (in bps)</i>	254	144	335	-96	2883	280	Datastream
<i>Crisis dummy (Spread &gt; 400bps)</i>	0.12	0	0.33	0	1	280	Datastream
<i>Branches</i>	220	0	1864	0	28718	616	SNL Financial
<i>Mergers</i>	5	0	34	0	610	616	SDC Platinum
<i>Press</i>	0.07	0.03	0.12	0.00	0.95	616	Factiva
<i>Language</i>	0.07	0.00	0.26	0.00	1.00	616	Mayer & Zignago (2011)
<i>Colony</i>	0.07	0.00	0.25	0.00	1.00	616	Mayer & Zignago (2011)
<i>Distance</i>	6.90	7.22	1.47	0.00	8.49	616	MapQuest
<i>Border</i>	0.13	0.00	0.33	0.00	1.00	616	Mayer & Zignago (2011)
<i>Legal</i>	0.30	0.00	0.46	0.00	1.00	616	La Porta et al. (2008)



# SOME SIMPLE FINDINGS

Are existing theories satisfactory enough?

## RISE IN HOME BIAS

Dependent Variable:	<i>SovereignPortion</i>				<i>SovereignPortionBias</i>			
	<i>I</i>	<i>II</i>	<i>III</i>	<i>IV</i>	<i>V</i>	<i>VI</i>	<i>VII</i>	<i>VIII</i>
<i>Domestic</i>	1,257*** [10.430]	1,257*** [10.276]	1,127*** [9.363]	1,126*** [9.210]	1,273*** [10.511]	1,273*** [10.356]	1,143*** [9.437]	1,143*** [9.284]
<i>Domestic x Crisis</i>			1,093*** [3.755]	1,102*** [3.680]			1,095*** [3.753]	1,101*** [3.670]
Fixed Effects								
<i>Bank</i>	Yes		Yes		Yes		Yes	
<i>ExpCountry x Time</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Bank x Time</i>		Yes		Yes		Yes		Yes
Clustering	Bank	Bank	Bank	Bank	Bank	Bank	Bank	Bank
Adj-R-sq	0.244	0.236	0.264	0.256	0.243	0.229	0.262	0.249
N	23268	23268	23268	23268	23268	23268	23268	23268

# RISK-SHIFTING & HOME BIAS

Dependent Variable:	<i>SovereignPortion</i>		<i>SovereignPortion</i>	
	<i>I</i>	<i>II</i>	<i>III</i>	<i>IV</i>
<i>Domestic</i>	1,227*** [10.186]	1,125*** [9.204]	1,244*** [10.263]	1,141*** [9.278]
<i>StressedBank x Crisis</i>	291*** [4.089]	85*** [3.162]	291*** [4.073]	85*** [3.089]
<i>StressedBank x Crisis x Domestic</i>		1,041*** [3.543]		1,040*** [3.532]
Fixed Effects				
<i>ExpCountry x Time</i>	Yes	Yes	Yes	Yes
<i>Bank x Time</i>	Yes	Yes	Yes	Yes
Clustering	Bank	Bank	Bank	Bank
Adj-R-sq	0.241	0.256	0.234	0.249
N	23268	23268	23268	23268

## BANK VS NON-BANK RESIDENTS

Dependent Variable:	<i>DomesticPortion</i>			
	<i>I</i>	<i>II</i>	<i>III</i>	<i>IV</i>
<i>Crisis</i>	-89 [-0.333]	-922*** [-3.609]	-1,009*** [-3.623]	
<i>Crisis x ResidentBanks</i>		1,667** [3.000]	1,842*** [3.375]	1,842** [2.440]
Fixed Effects				
<i>Country</i>	Yes	Yes	Yes	
<i>Time</i>	Yes	Yes		
<i>Creditor</i>	Yes	Yes		
<i>Creditor x Time</i>			Yes	Yes
<i>Country x Time</i>				Yes
Clustering	Country	Country	Country	Country
R-sq	0.024	0.146	0.167	0.248
N	484	484	484	484

## PUBLIC VS PRIVATE DEBT

Dependent Variable:	DebtPortion				DebtPortionBias			
	I	II	III	IV	V	VI	VII	VIII
<i>Domestic</i>	1,414*** [10.053]				1,436*** [10.141]			
<i>Domestic x Retail</i>		1,667*** [8.313]	1,539*** [7.747]	1,522*** [7.578]		1,696*** [8.373]	1,568*** [7.816]	1,553*** [7.664]
<i>Domestic x Sovereign</i>		1,263*** [10.348]	1,123*** [9.068]	1,134*** [9.288]		1,279*** [10.427]	1,139*** [9.133]	1,148*** [9.344]
<i>Domestic x Crisis</i>			1,180*** [3.645]	1,348*** [2.641]			1,185*** [3.636]	1,328** [2.590]
<i>Domestic x Crisis x Sovereign</i>				-260 [-0.588]				-222 [-0.503]
Fixed Effects								
<i>Bank x Time</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>ExpCountry x Time</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Sector</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Clustering	Bank	Bank	Bank	Bank	Bank	Bank	Bank	Bank
Adj-R-sq	0.209	0.213	0.228	0.229	0.206	0.210	0.225	0.225
N	36777	36777	36777	36777	36777	36777	36777	36777

# IDENTIFYING THE INFORMATION CHANNEL

## Baseline Model:

$$\begin{aligned} \text{SovereignPortion}_{l,b,c,t} = & \beta_1 (\text{SovereignRisk}_{c,t} \times \text{Information}_{l,c}) \\ & + \theta_{b,t} + \gamma_{c,t} + \mu_{l,c} + \varepsilon_{l,b,c,t} \end{aligned}$$

- ▶ Two layers:
  1. Informational distance measured directly and indirectly
  2. Sovereign risk measured through bond spreads
- ▶ This strategy helps me control for  $\mu_{l,c}$ 
  - ▶ Controlling for country-specific average “Home Bias”
  - ▶ Controlling for all constant bilateral relationships
  - ▶ Identification mainly via time variation in spreads
- ▶ Conservative approach: focusing on *foreign banks*

# INFORMATION CHANNEL (DIRECT)

Dependent Variable:	SovereignPortion							
	IA	IB	IIA	IIB	IIIA	IIIB	IVA	IVB
Sample:	Full	Foreign	Full	Foreign	Full	Foreign	Full	Foreign
<i>SovRisk x Branches</i>	0.016*** [5.302]	0.067*** [2.957]						
<i>SovRisk x Mergers</i>			0.677*** [3.786]	1.649*** [2.716]				
<i>SovRisk x Press</i>					146.980*** [4.176]	45.248** [2.240]		
<i>SovRisk x Language</i>							77.261*** [6.340]	34.284*** [3.519]
Fixed Effects								
<i>Bank x Time</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>ExpCountry x Time</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>HomeCountry x ExpCountry</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Clustering	Bank	Bank	Bank	Bank	Bank	Bank	Bank	Bank
Adj-R-sq	0.517	0.225	0.513	0.224	0.513	0.223	0.514	0.224
N	23,268	22,437	23,268	22,437	23,268	22,437	23,268	22,437

# INFORMATION CHANNEL (INDIRECT)

Dependent Variable:	SovereignPortion							
	VA	VB	VIA	VIB	VIIA	VIIIB	VIIIA	VIIIB
Sample:	Full	Foreign	Full	Foreign	Full	Foreign	Full	Foreign
<i>SovRisk x Colony</i>	68.186*** [5.471]	28.298*** [2.877]						
<i>SovRisk x Distance</i>			-18.206*** [-4.756]	-11.388** [-2.566]				
<i>SovRisk x Border</i>					71.815*** [4.553]	17.012* [1.876]		
<i>SovRisk x Legal</i>							10.629*** [3.398]	4.065 [1.423]
Fixed Effects								
<i>Bank x Time</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>ExpCountry x Time</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>HomeCountry x ExpCountry</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Clustering	Bank	Bank	Bank	Bank	Bank	Bank	Bank	Bank
Adj-R-sq	0.513	0.224	0.516	0.224	0.513	0.223	0.510	0.223
N	23,268	22,437	23,268	22,437	23,268	22,437	23,268	22,437



# INFORMATION CHANNEL (DIRECT)

## Controlling for risk-shifting and political strength:

Dependent Variable:	SovereignPortion							
	IA	IB	IIA	IIB	IIIA	IIIB	IVA	IVB
Sample:	Full	Foreign	Full	Foreign	Full	Foreign	Full	Foreign
<i>SovRisk x Branches</i>	0.016*** [5.201]	0.067*** [2.937]						
<i>SovRisk x Mergers</i>			0.657*** [3.756]	1.666*** [2.651]				
<i>SovRisk x Press</i>					142.615*** [4.039]	45.078** [2.242]		
<i>SovRisk x Language</i>							75.809*** [6.250]	34.693*** [3.555]
<i>StressedBank x Crisis</i>	47.266* [1.826]	10.039 [0.636]	67.837*** [2.809]	12.954 [0.814]	45.031* [1.954]	4.522 [0.279]	51.603** [2.362]	3.285 [0.202]
<i>EuroShare x Crisis</i>	-73.667 [-0.570]	-40.004 [-0.366]	-79.751 [-0.636]	-31.931 [-0.284]	151.350 [1.247]	44.723 [0.428]	270.578** [2.195]	106.651 [1.047]
<i>GermanBank x Crisis</i>	25.291 [0.726]	17.908 [0.550]	26.320 [0.779]	16.493 [0.510]	-24.597 [-0.761]	-0.073 [-0.002]	-47.230 [-1.425]	-11.724 [-0.384]
Fixed Effects								
<i>Bank x Time</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>ExpCountry x Time</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>HomeCountry x ExpCountry</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Clustering	Bank	Bank	Bank	Bank	Bank	Bank	Bank	Bank
Adj-R-sq	0.517	0.224	0.513	0.223	0.513	0.223	0.514	0.224
N	23,268	22,437	23,268	22,437	23,268	22,437	23,268	22,437

# INFORMATION CHANNEL (DIRECT)

## Controlling for RS+PS / Eurozone banks:

Dependent Variable:	SovereignPortion							
	IA	IB	IIA	IIB	IIIA	IIIB	IVA	IVB
Sample:	Full	Foreign	Full	Foreign	Full	Foreign	Full	Foreign
SovRisk x Branches	0.016*** [5.274]	0.070*** [3.017]						
SovRisk x Mergers			0.677*** [3.873]	1.925*** [3.269]				
SovRisk x Press					189.506*** [4.824]	77.723*** [3.165]		
SovRisk x Language							85.711*** [6.641]	40.648*** [4.129]
Extra Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fixed Effects								
Bank x Time	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
ExpCountry x Time	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
HomeCountry x ExpCountry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Clustering	Bank	Bank	Bank	Bank	Bank	Bank	Bank	Bank
Adj-R-sq	0.531	0.219	0.526	0.217	0.528	0.217	0.528	0.218
N	18,872	18,198	18,872	18,198	18,872	18,198	18,872	18,198

# INFORMATION CHANNEL (DIRECT)

*Controlling for RS+PS / Eurozone banks / No exposures to Greece:*

Dependent Variable:	SovereignPortion							
	IA	IB	IIA	IIB	IIIA	IIIB	IVA	IVB
Sample:	Full	Foreign	Full	Foreign	Full	Foreign	Full	Foreign
SovRisk x Branches	0.015*** [5.008]	0.071*** [3.016]						
SovRisk x Mergers			0.635*** [3.744]	2.070*** [3.317]				
SovRisk x Press					199.731*** [4.317]	70.634*** [3.133]		
SovRisk x Language							107.891*** [4.167]	31.790** [2.603]
Extra Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fixed Effects								
Bank x Time	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
ExpCountry x Time	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
HomeCountry x ExpCountry	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Clustering	Bank	Bank	Bank	Bank	Bank	Bank	Bank	Bank
Adj-R-sq	0.538	0.224	0.533	0.222	0.534	0.222	0.534	0.221
N	18,198	17,548	18,198	17,548	18,198	17,548	18,198	17,548

# INFORMATION CHANNEL (DIRECT)

*Controlling for RS+PS / Eurozone banks / No exposures to Greece / No Greek banks:*

Dependent Variable:	SovereignPortion							
	IA	IB	IIA	IIB	IIIA	IIIB	IVA	IVB
Sample:	Full	Foreign	Full	Foreign	Full	Foreign	Full	Foreign
<i>SovRisk x Branches</i>	0.015*** [4.986]	0.071*** [2.975]						
<i>SovRisk x Mergers</i>			0.630*** [3.746]	1.979*** [3.117]				
<i>SovRisk x Press</i>					260.589*** [4.567]	110.946** [2.446]		
<i>SovRisk x Language</i>							141.064*** [4.136]	36.085 [1.415]
Extra Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fixed Effects								
<i>Bank x Time</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>ExpCountry x Time</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>HomeCountry x ExpCountry</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Clustering	Bank	Bank	Bank	Bank	Bank	Bank	Bank	Bank
Adj-R-sq	0.540	0.222	0.534	0.220	0.537	0.219	0.537	0.219
N	17,550	16,900	17,550	16,900	17,550	16,900	17,550	16,900

# INFORMATION CHANNEL (DIRECT)

## *Post-crisis period:*

Dependent Variable:	SovereignPortion							
	IA	IB	IIA	IIB	IIIA	IIIB	IVA	IVB
Sample:	Full	Foreign	Full	Foreign	Full	Foreign	Full	Foreign
<i>SovRisk x Branches</i>	0.018*** [5.071]	0.109** [2.416]						
<i>SovRisk x Mergers</i>			0.915*** [3.873]	3.231** [2.584]				
<i>SovRisk x Press</i>					207.196** [2.103]	120.195** [2.385]		
<i>SovRisk x Language</i>							134.050*** [2.741]	43.273* [1.860]
<b>Fixed Effects</b>								
<i>Bank x Time</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>ExpCountry x Time</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>HomeCountry x ExpCountry</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Clustering	Bank	Bank	Bank	Bank	Bank	Bank	Bank	Bank
Adj-R-sq	0.492	0.182	0.490	0.181	0.489	0.181	0.490	0.181
N	12,908	12,447	12,908	12,447	12,908	12,447	12,908	12,447

# ROBUSTNESS CHECKS

- ▶ Combining all sub-sample restrictions
- ▶ Re-defining the dependent variable:
  - ▶  $SovereignPortionBias_{l,b,c,t}$
  - ▶  $Log(1 + NominalExposure)_{l,b,c,t}$
  - ▶  $SovereignPortionECB_{l,b,c,t}$
- ▶ Different crisis definitions:
  - ▶ Thresholds (300bps, 500bps)
  - ▶ Fast-moving crisis (1-month rolling yields)
  - ▶ Bond spreads
  - ▶ CDS spreads

# IMPLICATIONS

- ▶ How much does information matter for Europe?
  - ▶ Initial home bias & costly information acquisition (Van Nieuwerburgh and Veldkamp, 2009, JF)
  - ▶ Panic and market overreaction in the Eurozone (De Grauwe and Ji, 2013; Saka et al., 2015)
- ▶ Policy advice:
  - ▶ Too much emphasis on blaming governments/banks
  - ▶ Regulatory changes or debt pooling: sufficient?
  - ▶ More transparency & cross-border banking

# CONCLUSION

- ▶ Using a novel dataset, this paper challenges the alternative arguments of the recent literature
  - ▶ Debt is reallocated to domestic banks at the peak of the crisis
  - ▶ Risk-shifting contributes to rising home bias but its effect is negligible in size
  - ▶ No rising home bias for domestic non-bank agents
  - ▶ Private forms of debt (at least) equally suffer from rising home bias
  - ▶ *The paper shows for the first time that informationally-closer foreign banks increase their relative exposures as sovereign risk rises*



THANKS FOR YOUR ATTENTION!