Hot Money Inflows and Bank Risk-Taking:

Germany from the 1920s to the Great Depression

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[1]We thank Lasse Herbst for excellent research assistance. This research represents the authors' personal opinions and do not necessarily reflect the views of the Deutsche Bundesbank or its staff.

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*"... as the League [of Nations]'s economists argued, short-term capital flows were often "***disequilibrating** *instead of equilibrating, or instead of simply coming to a stop." That is, rather than reconciling payments imbalances,* **hot money was understood... to overshoot**."

Sources: Abdelal (2007) quoting from League of Nations (1944), *International Currency Experience*.

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- *Can we learn anything from 1920s Germany?*

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  - ... and explore the problems faced by the Reichsbank.

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  - Even Hardach (1984) who emphasised fiscal issues admitted banks "extremely vulnerable."

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  - Esp. SMEs in textile, machinery, iron and steel wares (eg. JP Bemberg AG in artificial silk).

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- Reichsbank policy overall restrictive, but at times a little looser.

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- Foreign deposits increased by a factor of 7.4 in 1925-1929.

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- **Tax avoidance** meant "foreign" funds not always foreign (James 1986).

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- The **Dawes Plan of 1924** contributed to boosting supply (Ritschl 2002, 2013).
  - Gave priority to commercial loans relative to reparations over foreign exchange.
- As a result, interest rates fell from their 1925 peak.
  - Felix Somary: "A system of short-term loans which have been granted to an extent that cannot be justified on financial grounds" (Straumann 2019).

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  - Eventually, most foreign lending through **simple deposits.** 3-month, in foreign currency (Lary 1943; Connelly 1936).

Types of foreign liabilities (RM million)

Table: Types of foreign liabilities at German banks, 1925-1933 (millions of Reichsmarks)

State at end of June	"Liabilities for clients" (trade deposits)	Foreign-owned deposits
1925	391	837
1926	300	1312
1927	521	2485
1928	1136	3768
1929	1769	4020
1930	2062	3880
1931	2068	1530
1932	1324	615
1933	1116	527

Source: Untersuchung des Bankwesens 1933, p. 512; Balderston 1993, Table 5.7, p. 144.

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$\rightarrow$ Shows **dilemmas faced by central banks in the boom phase**, not just crisis phase.

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Two empirical challenges

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   - The co-movement of inflows and risk-taking does not have a causal interpretation.

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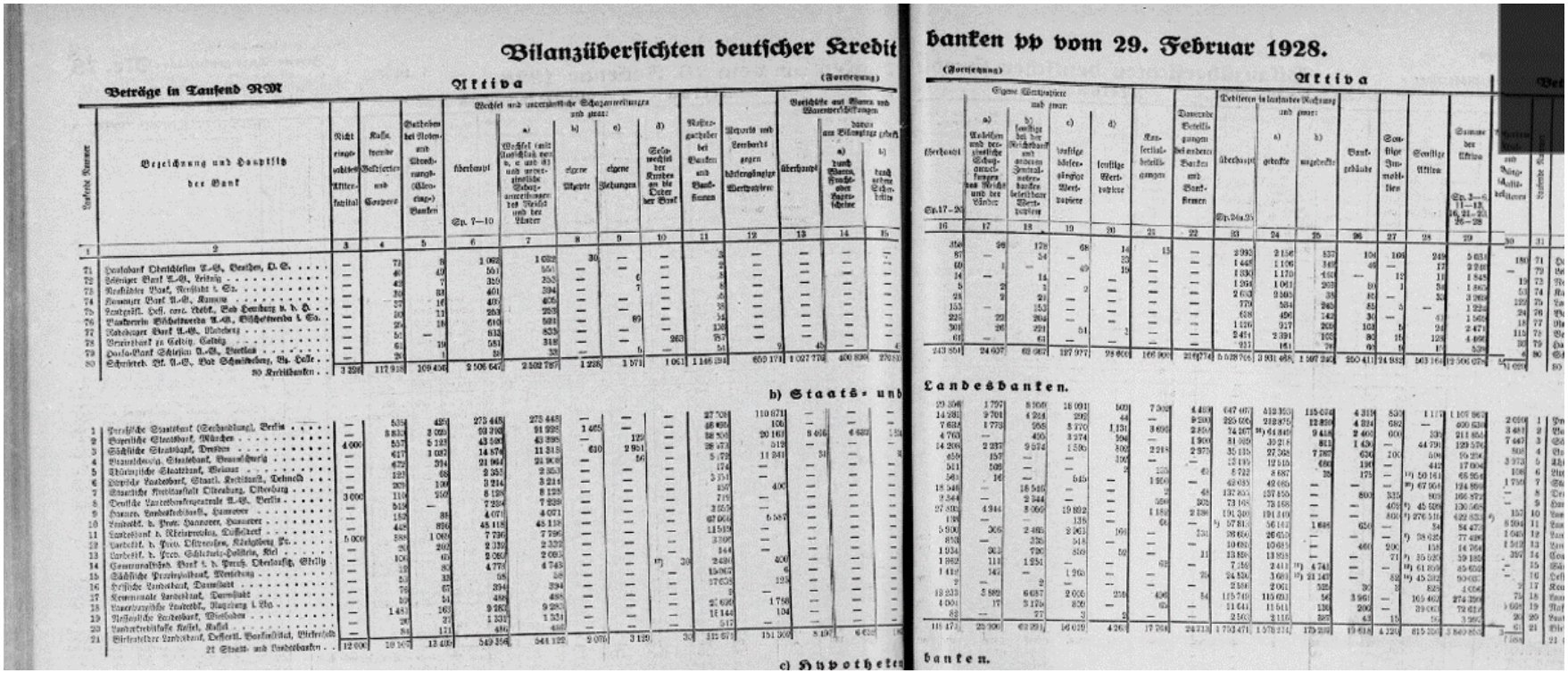
Deutscher Reichsanzeiger und Preußischer Staatsanzeiger



Bilanzübersichten deutscher Kredit

banken pp vom 29. Februar 1928.

Aktiva

Landesbanken.

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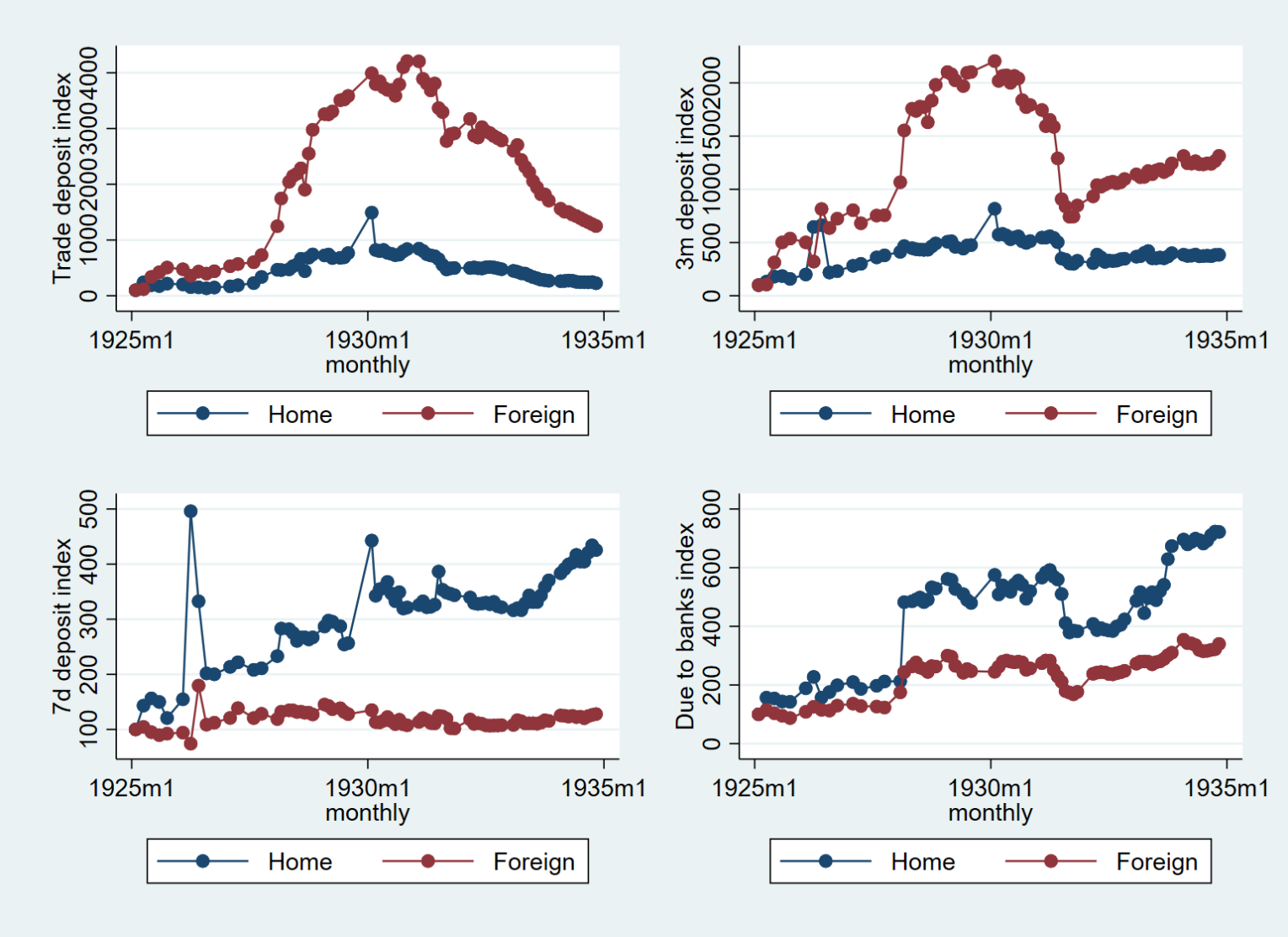
"Foreign-inflow" banks attracted specific deposit types



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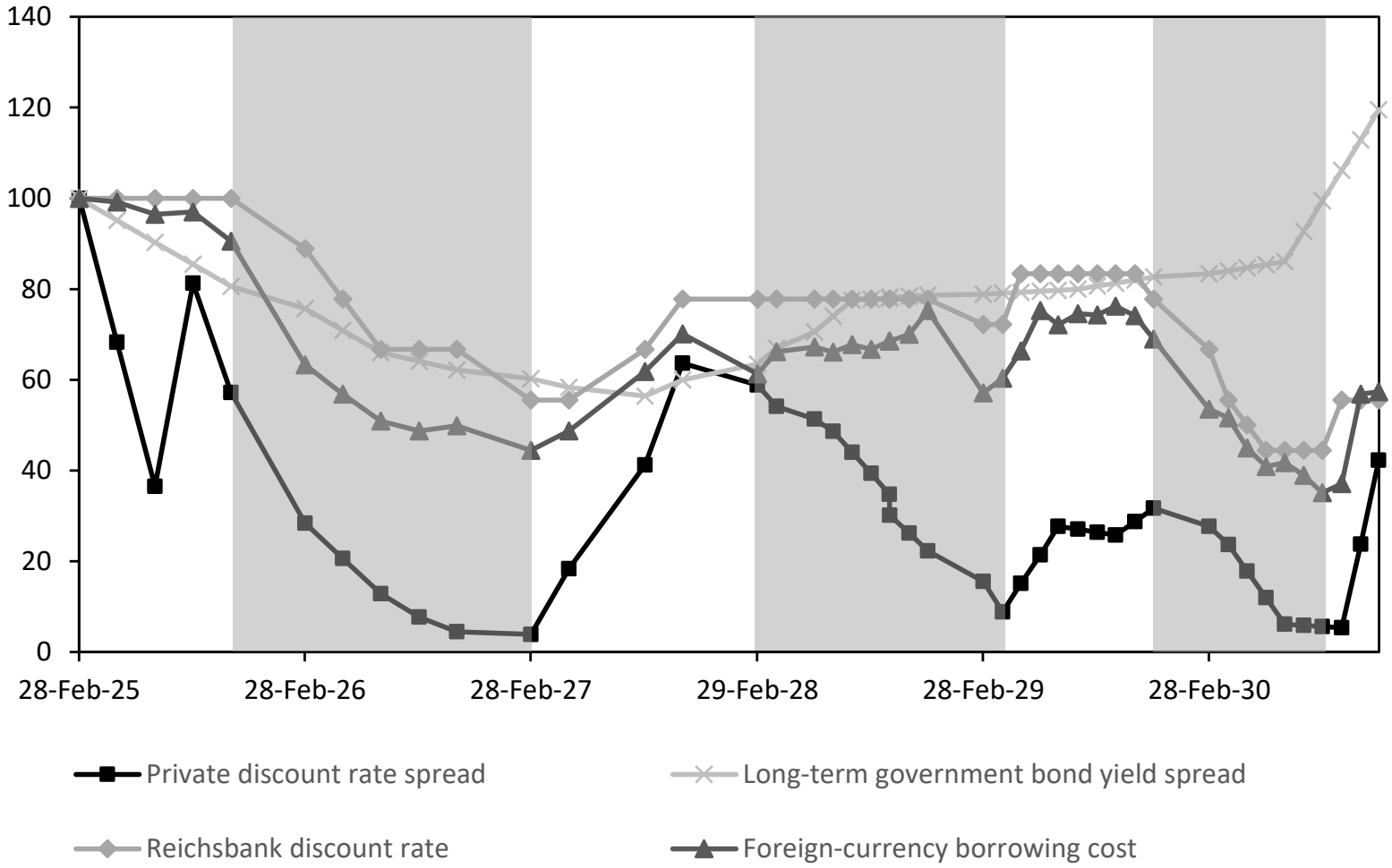
Panel analysis: months of falling spread



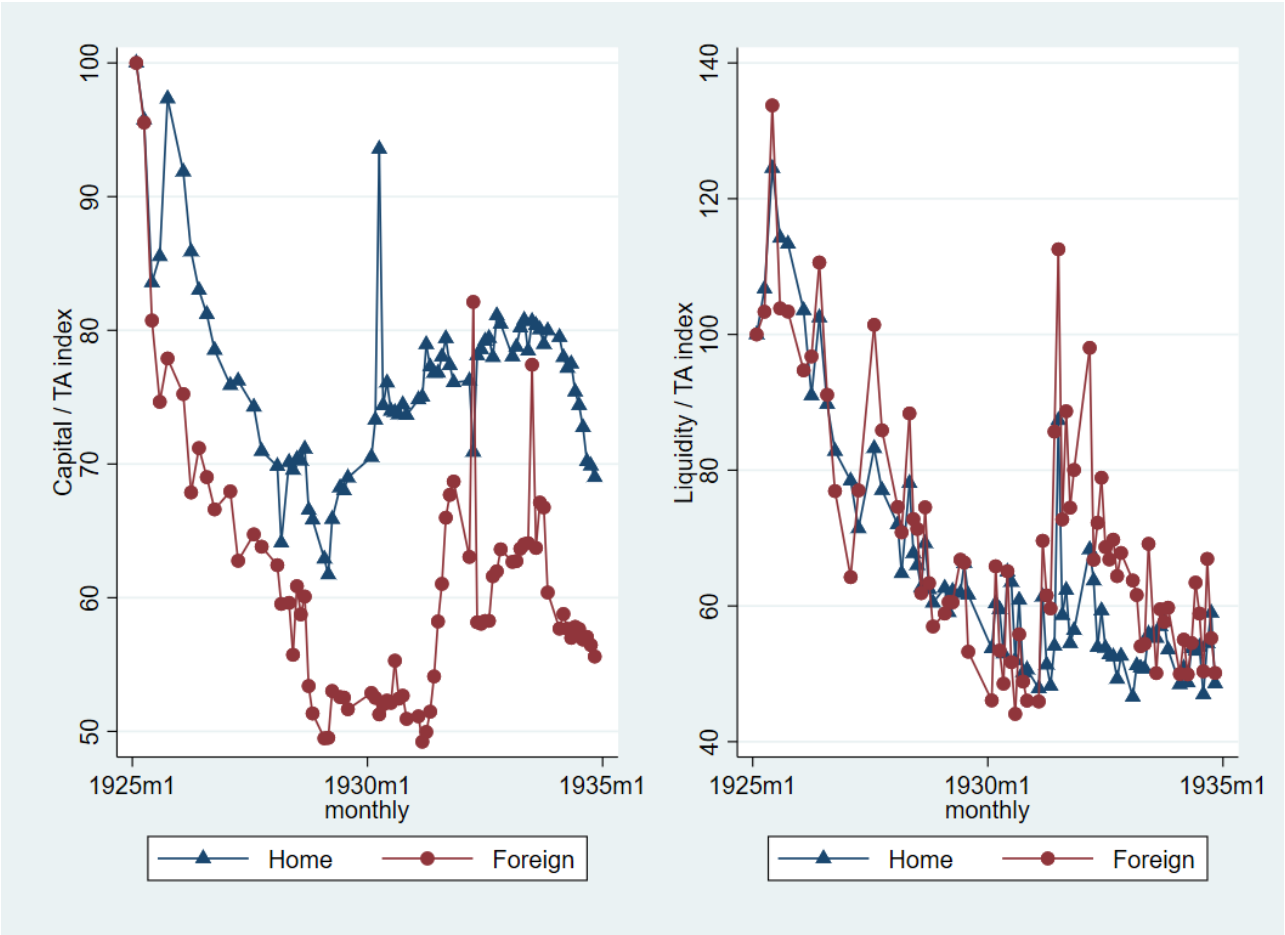
Panel analysis: predictors of risk-taking

Table: Fixed effects panel regression model, falling spread periods (1925-1930)

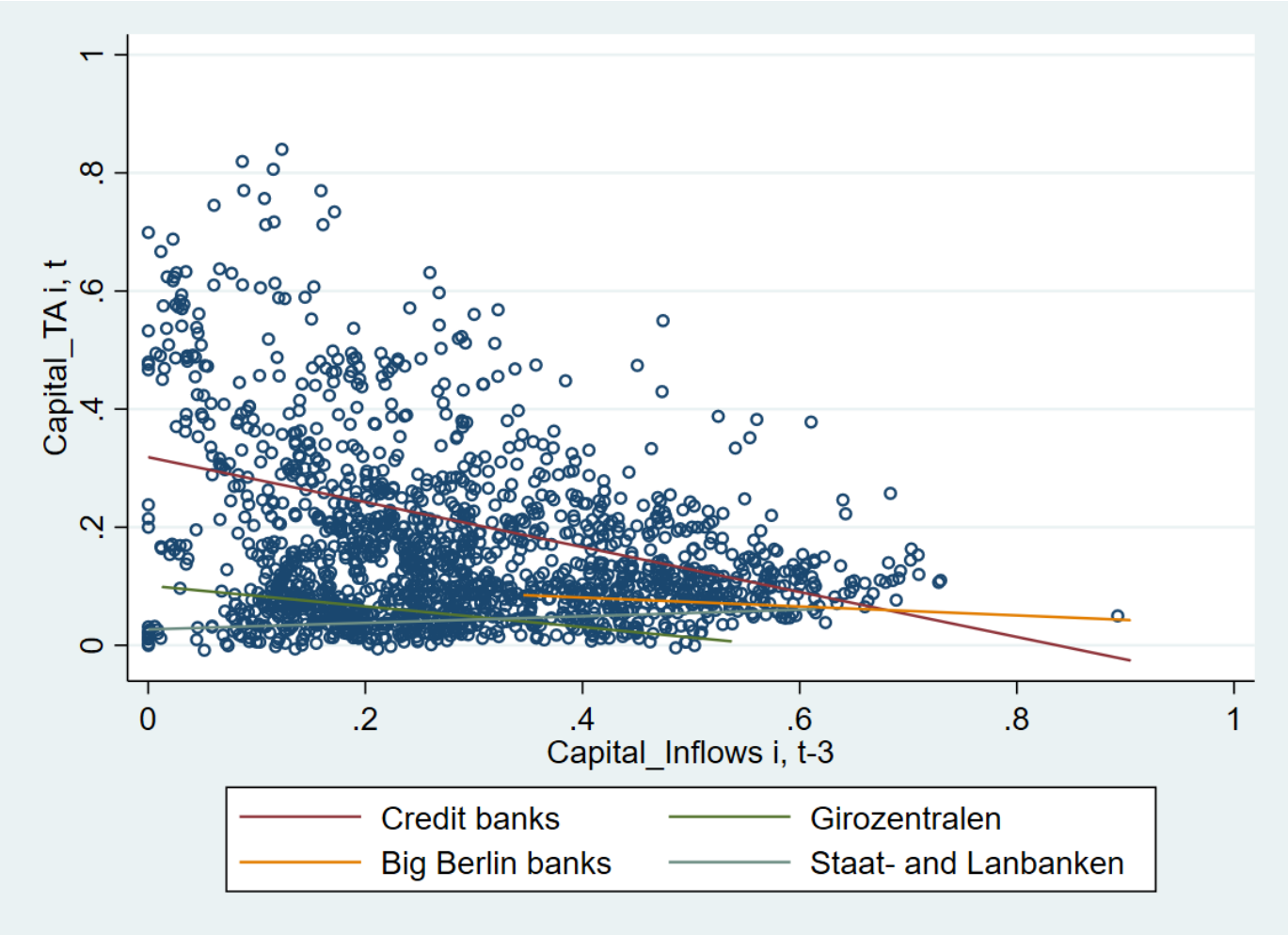
	Capital_TA	*Capital_TA*	*Capital_TA*	*Liquidity_TA*	*Liquidity_TA*	*Liquidity_TA*
$Capital\_Inflows_{t-3}$	-0.078***	-0.0781***	-0.114***	0.024	0.027*	0.047
	(0.015)	(0.015)	(0.017)	(0.016)	(0.016)	(0.031)
$Dom\_Deposits_{t-3}$		-0.0153			0.006***	
		(0.012)			(0.002)	
$Capital\_Inflows_{t-3}$			0.087			0.023
$*BigBerlin$			(0.077)			(0.016)
$Capital\_Inflows_{t-3}$			0.139***			0.019**
$*Giro$			(0.054)			(0.009)
$Capital\_Inflows_{t-3}$			0.141***			0.021**
$*StaatLand$			(0.037)			(0.009)
Reichsbank	-0.005	-0.005	-0.005	0.004	0.003	0.003
	(0.005)	(0.005)	(0.005)	(.004)	(0.002)	(0.002)
$RM\backslash USD$	-0.000	-0.000	0.000	0.000	0.000	0.000
	(0.001)	(0.001)	(0.000)	(0.001)	(0.000)	(0.000)
Other controls	Yes	Yes	Yes	Yes	Yes	Yes
Constant	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,670	1,670	1,670	1,670	1,670	1,670
N	137	137	137	137	137	137

Notes: Falling rates periods only. *** significant at $\alpha = 0.01$, ** significant at $\alpha = 0.05$, * significant at $\alpha = 0.10$. Standard errors in parentheses.

"Foreign-inflow banks" ended up more levered, but not less liquid



The effect was stronger among "typical" credit banks



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  - But case for endogeneity stronger $\rightarrow$ exclude liquidity.

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IV analysis in the pre-crisis cross-section

Table: 2SLS regression, February 1929

Dependent	*Capital_TA*	*Capital_TA*	*Capital_TA*
Instrument	*lnTA_25m2*	*lnTA_25m8*	*lnTA_26m8*
ForeignInflowBank	-0.195***	-0.241***	-0.271***
	(0.062)	(0.059)	(0.063)
Constant	-0.0539	-0.139	-0.002
	(0.807)	(0.854)	(0.915)
Controls	Yes	Yes	Yes
10% Stock-Yogo critical value	16.38	16.38	16.38
1st Stage F-statistic	43.9	50.35	51.6
1st Stage P-value	0.000	0.000	0.000
Observations	69	95	106

Notes: *** significant at $\alpha = 0.01$, ** significant at $\alpha = 0.05$, * significant at $\alpha = 0.10$.

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Appendix

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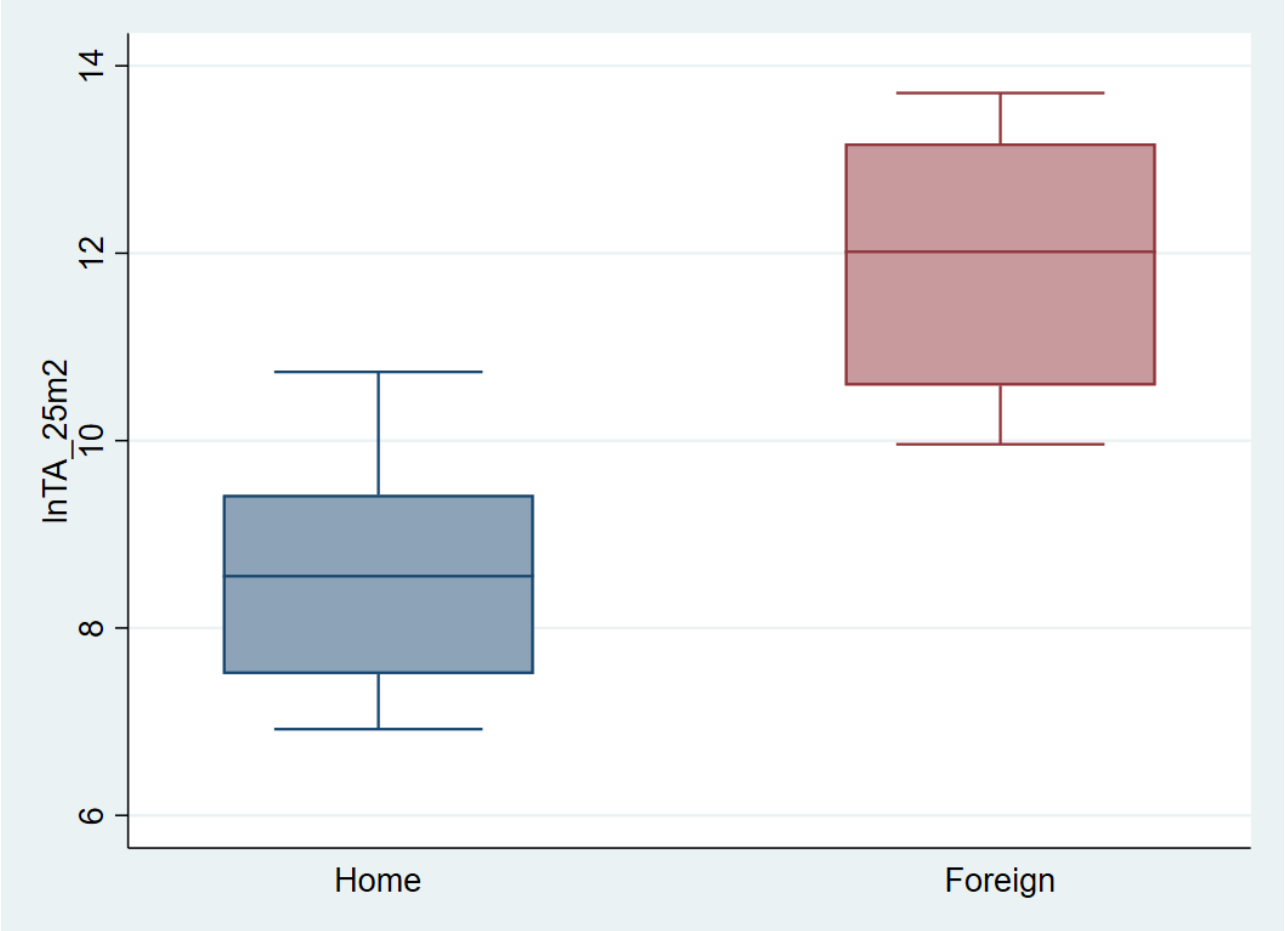
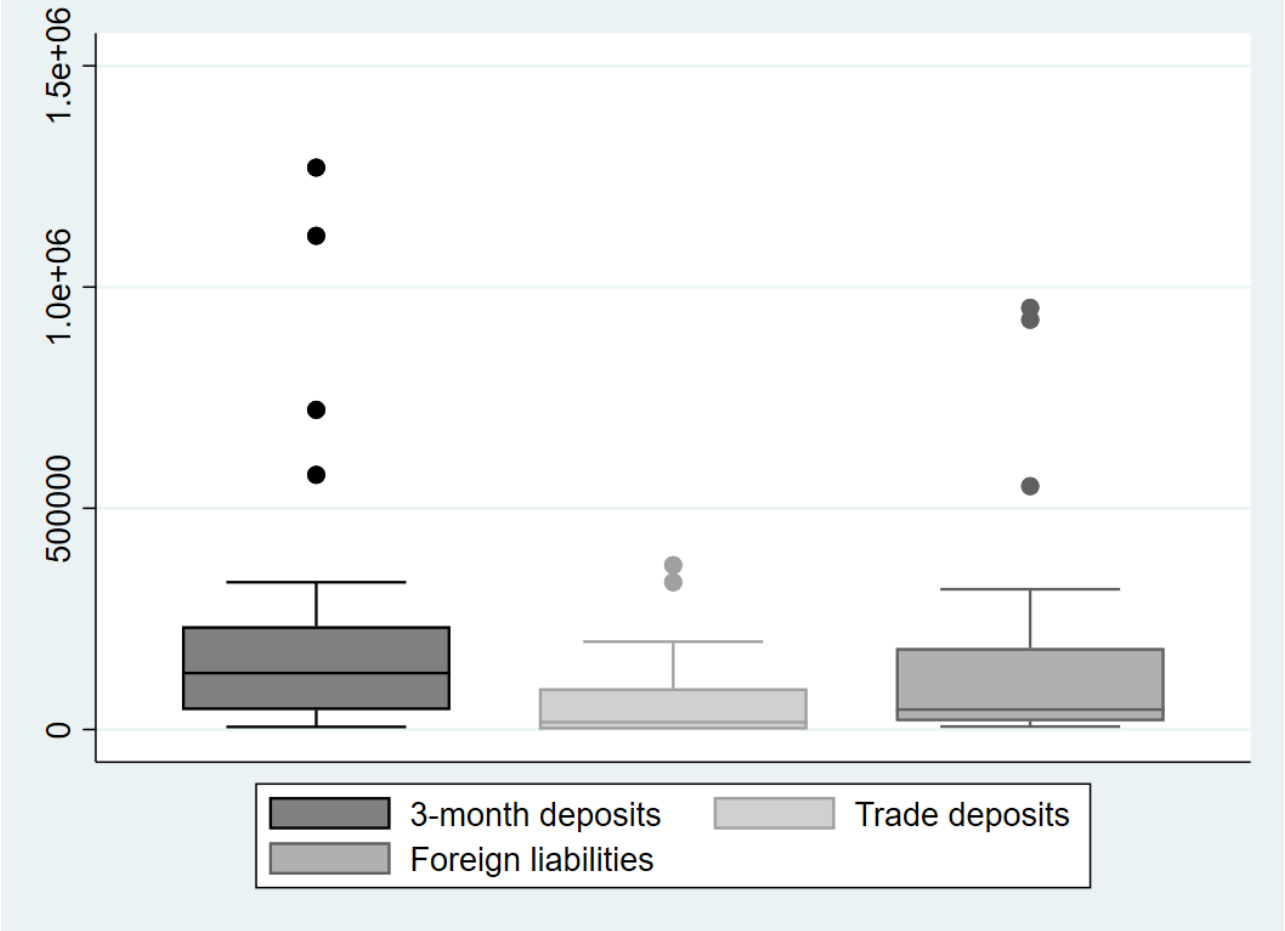


Foreign liabilities exceeded trade deposits



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- In this case, size would have a direct effect on liquidity $\rightarrow$ include size control in liquidity regression, see next slide.