SECURITISATION, BANK CAPITAL AND FINANCIAL REGULATION: EVIDENCE FROM EUROPEAN BANKS

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Overview of the paper

Research Question. Study how securitiser banks manage their capital position, when transferring and when retaining the credit risk of the underlying assets

Motivating Facts. The change in the securitisation strategy of European banks in crisis time:

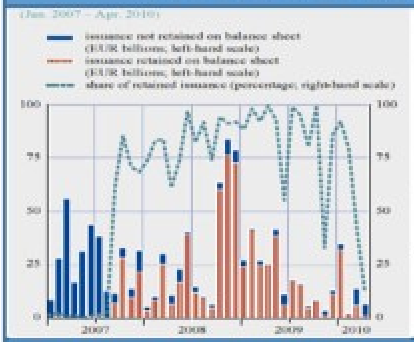
- until mid-2007, transfer the credit risk of the underlying assets;
- during crisis, retain the issued ABSs to increase availability of central bank eligible collateral

Liquidity needs of banks during crisis → Banks securitised and retained eligible ABSs → Banks had to keep capital buffers for tranche retention

Main Finding. In crisis time, when securitising, banks with ex-ante weaker liquidity obtained more positive variations in risk-based capital ratios, in part. after the issuance of eligible ABSs

Rationale. Banks could still get higher prudential solvency ratios if retained securitisation exposures were subject to lower risk weights than underlying securitised assets

ABS retention during the crisis



1. Most ABS issuances retained from mid-2007 to start-2010
2. Peak in issuance and retention in post-Lehman quarter (after full allotment policy)

ECB, 2010, Fin. Stab. Rev.

Securitisation, Credit Risk and Capital Ratios

Focus on the risk-based capital ratio

When securitising, originator can decide to:

1. Transfer completely the credit risk
   CapRatio ⇧
2. Retain part of the credit risk
   - ***explicit support*** (incl. tranche retention)
     - ✓ *If* $RWA_{SECUR}=RWA_{ASSETS}$ *CapRatio* =
     - ✓ *If* $RWA_{SECUR}<RWA_{ASSETS}$ *CapRatio* ⇧
   - ***implicit recourse*** (post-sale support)
     CapRatio ⇩

Data Description

Combine on quarterly basis (1999Q1-2010Q4):

- tranche-lev. data on sec. issuances (17,114 tr.)
- balance sheet info for originator banks

Empirical Analysis: Bank-Level

- **Baseline Specification:**

$$y_{it} = \alpha_i + \delta_t + \beta\, SECUR_{it-1} + \gamma\, BANKCON_{it-1} + u_{it}$$

y_{it} : *CapRatio* = Regulatory Capital/Risk-Weighted Assets
LevCAP = Regulatory Capital/Tot Assets
LevCE = Tot Comm Equity/Tot Assets

$SECUR_{it-1}$: Securitisation Issuances/Tot Assets

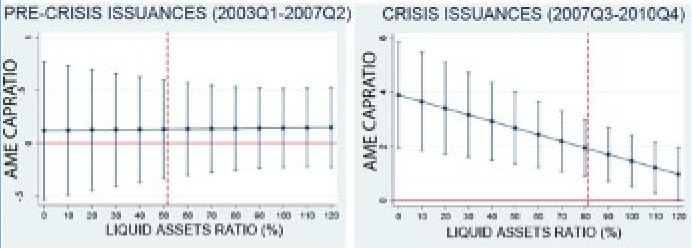
- **For distinct measures of bank solvency:**

ECON. EFFECT	Time Sample	CapRatio	LevCAP	LevCE
1 St. Dev. Incr. in Securit. Ratio	1999Q1-2010Q4	+0.439***	+0.248***	-0.151**
	2003Q1-2007Q2	+0.116	+0.096	+0.02
*** p<0.01, ** p<0.05	2007Q3-2010Q4	+1.204**	+0.167	-0.072

Differ. across ratios driven by: 1) **definition of capital instr.** (*numer.*); 2) **risk weights** (*denom.*)

Empirical Analysis: Funding Liquidity

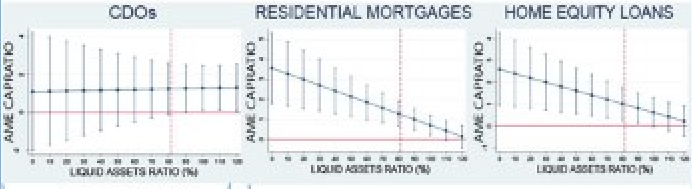
- **Bank-level heterogeneity in funding liquidity:** Interact with Liquid Assets/Depos & ST Borr. (results robust to other liquidity measures)



- ***Pre-crisis***: ex-ante funding liquidity not relev. for capital management of securitiser banks
- ***Crisis***: ↓ liquidity ⇨ ↑ post-sec. incr. *CapRatio* (while no signif. change in bank leverage)
- Crisis liquidity and capital arbitrage incentives?

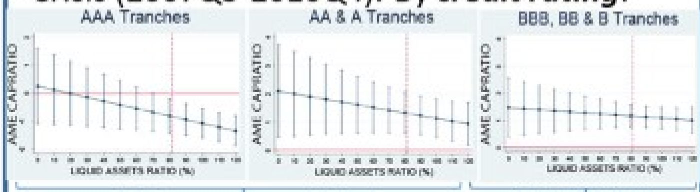
Empirical Analysis: Security-Level

- Classify distinct classes of securitisation prod. for asset type/rating (→ collateral eligibility)
- Crisis (2007Q3-2010Q4). By ***asset type***:



CDOs [Not elig.] — No variation
ABSs [Elig.] — ↓ Liq. ↑ Post-Sec. incr. CapRatio

- Crisis (2007Q3-2010Q4). By ***credit rating***:



AAA, AA & A [Eligible]; BBB, BB & B [Not elig.]

Key Contributions

1. The **definition of capital ratios** may change sign and size of variations in bank solvency → lev. ratio complementary to risk-based ratio
2. Weaker **liquidity position** of originators may reinforce incentives for **capital arbitrage**
3. Compare capital **arbitrage advantages** from issuance of **different securitisation products**