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Small is beautiful – but also rather risky

Impediments to European securitization

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Prepared on 3 June 2014.

Are risk weightings really the problem?

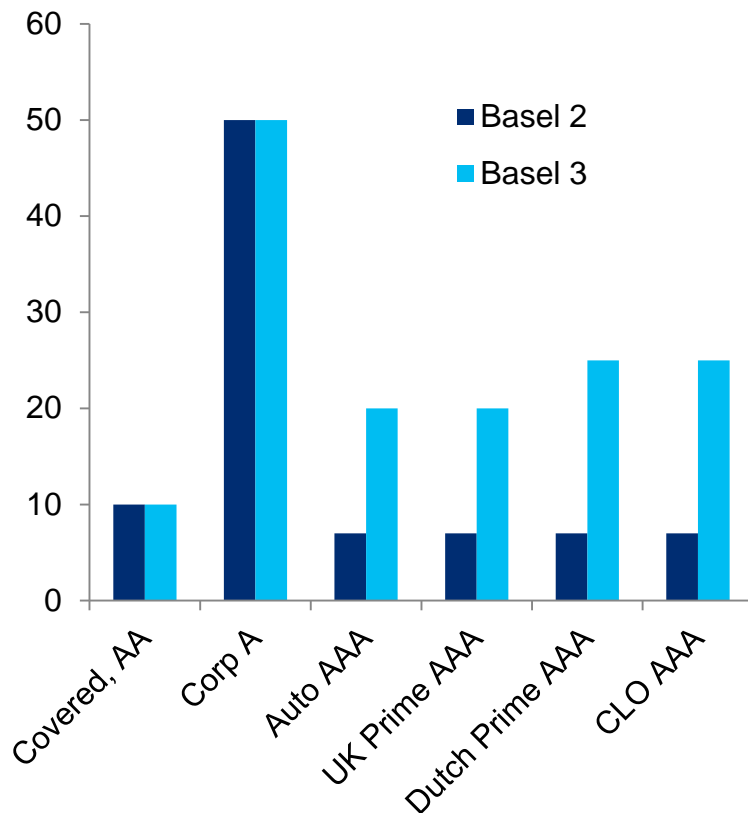
Who's buying – and who's not

SMEs – just plain risky

Capital weightings

Don't hike these...

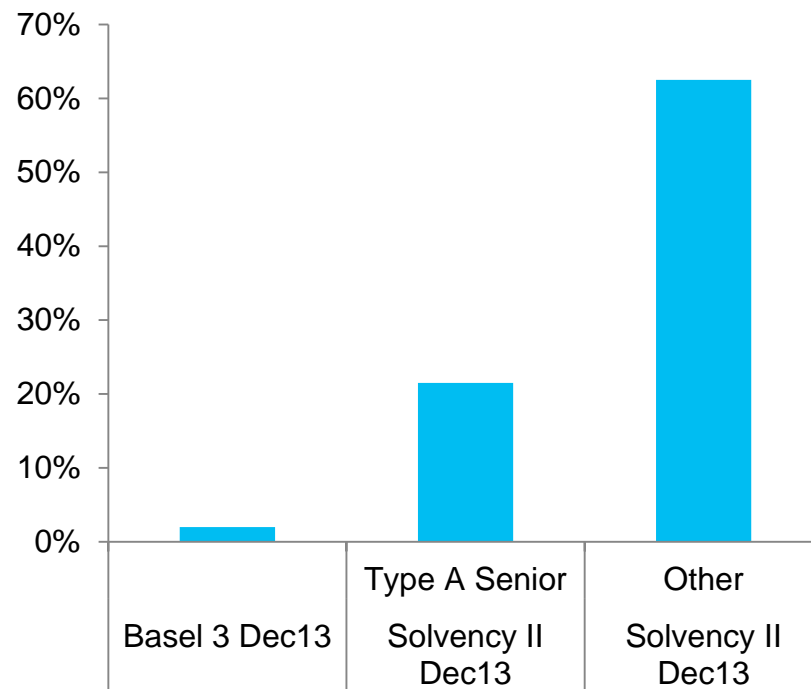
Basel risk weightings by asset class



Source: BIS, Citi Research.

...not to mention these...

Insurance capital required against AAA tranches, 5yr assets



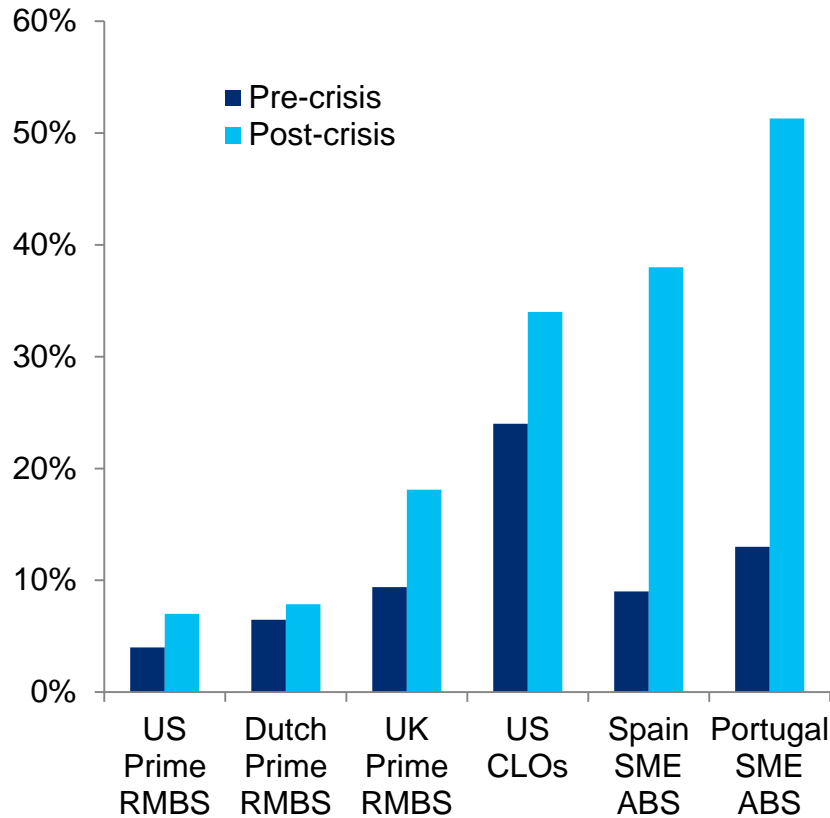
Source: Citi Research. "Type A" includes consumer ABS, RMBS, credit cards. "Other" includes supposedly non-granular (diverse) products such as CMBS and CLOs. Basel 3 number based on 25% risk weight * 8% capital.

Sharply higher risk weightings might be okay in isolation...

Credit rating requirements

...if you're also hiking these

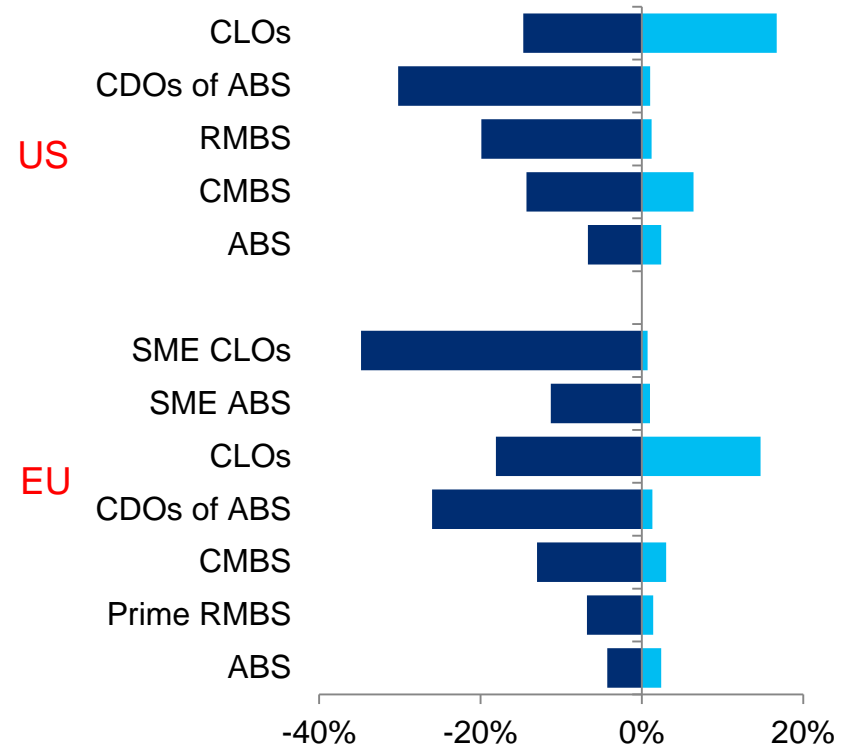
Credit enhancement required for senior-most rating, %



Source: Citi Research, Moodys.

US and EU experience not so dissimilar

Average annual rating upgrades and downgrades, %



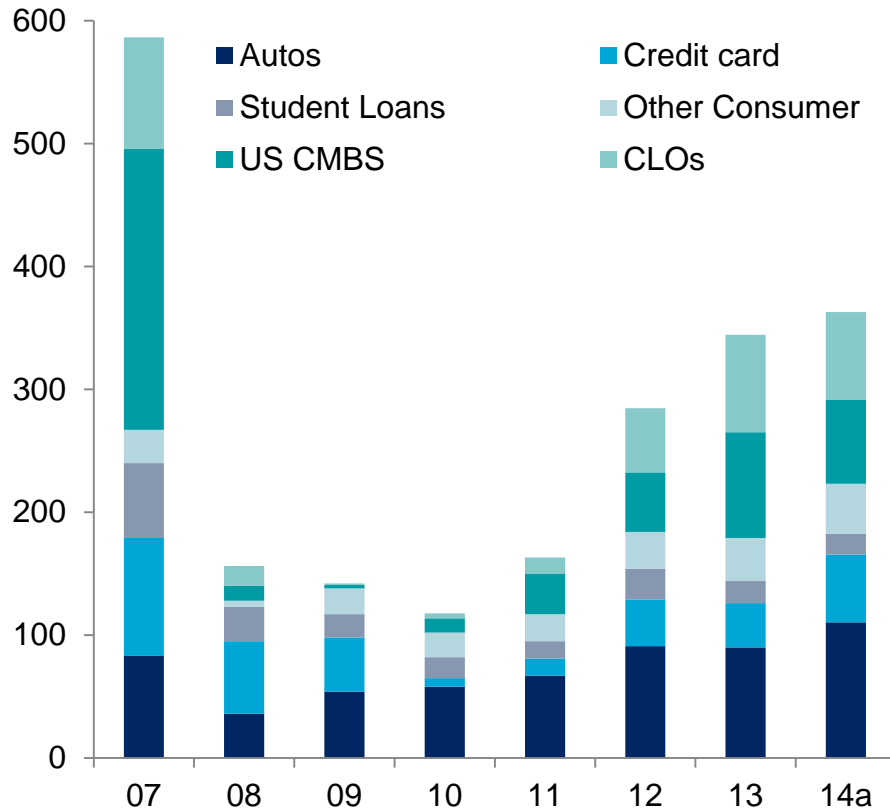
Source: Citi Research, Moodys.

...but when coupled with rating agency changes make for double-counting

Why is the US experience so different?

US securitization has rebounded

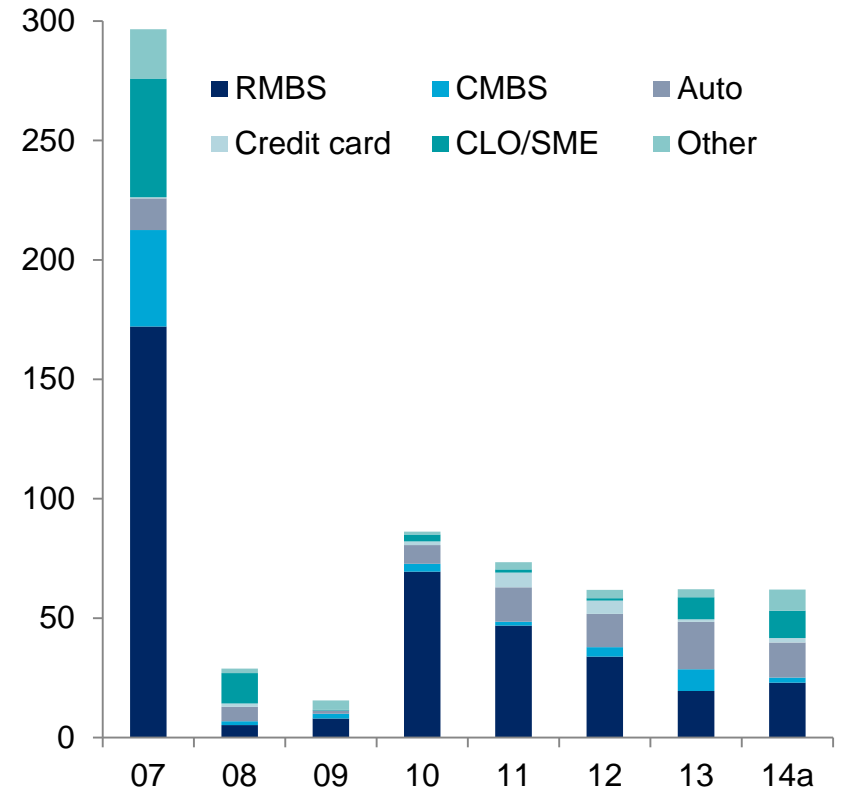
US non-agency, non-RMBS securitization issuance by type, \$bn



Source: SIFMA, Citi Research.

Yet € securitisation is flagging

€ placed (non-retained) issuance by type, €bn



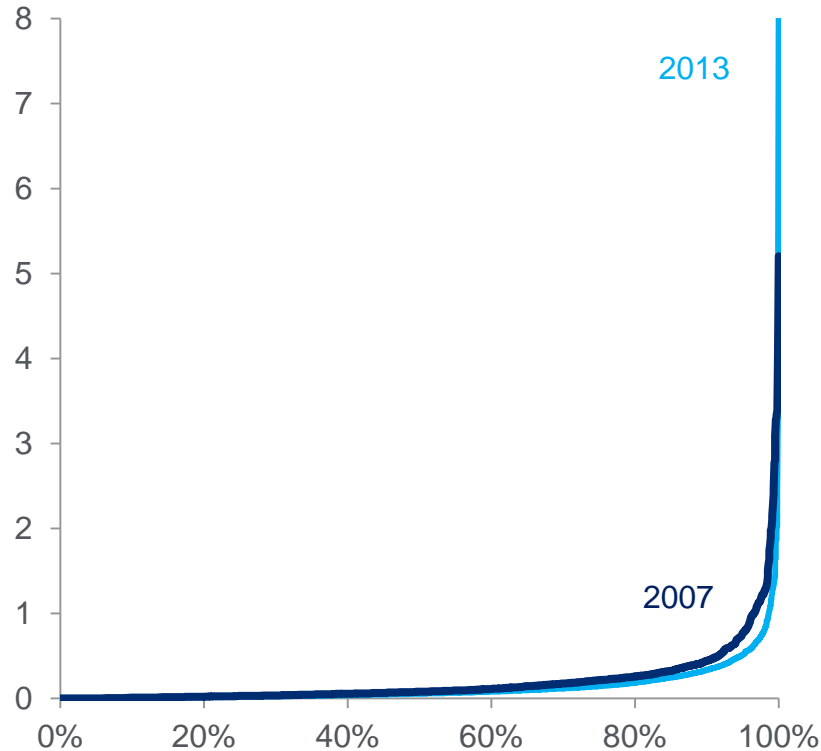
Source: Concept ABS, IFR, Citi Research.

Ironical that the most affected market has rebounded best

Illiquidity not a problem in corporates – so why in ABS?

Corp turnover concentrated in new issues

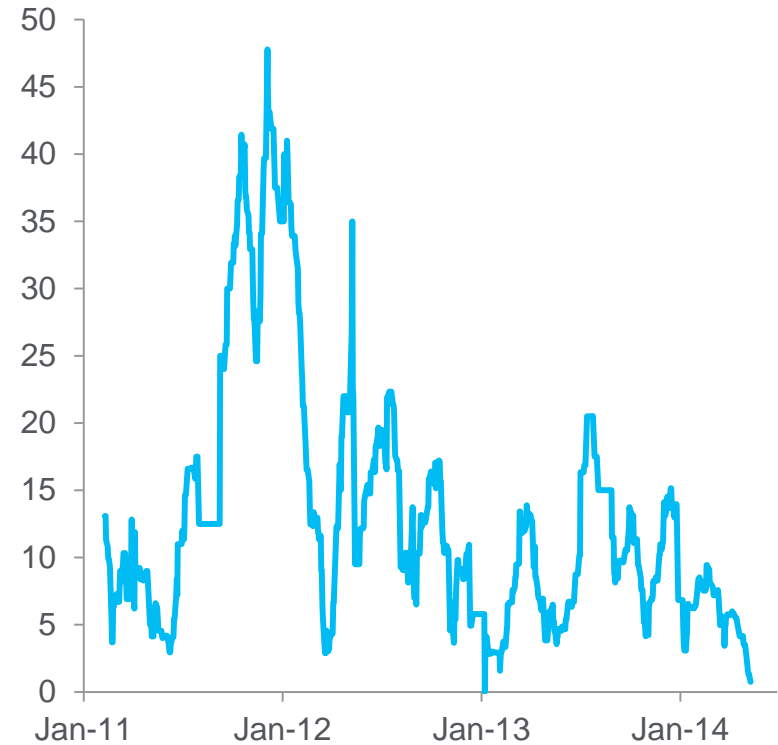
US corp bonds ranked by annual traded volume in block trades, \$bn



Source: TRACE.

Yet new issues trade cheap, not dear

Average spread premium on € new issues vs secondary, bp



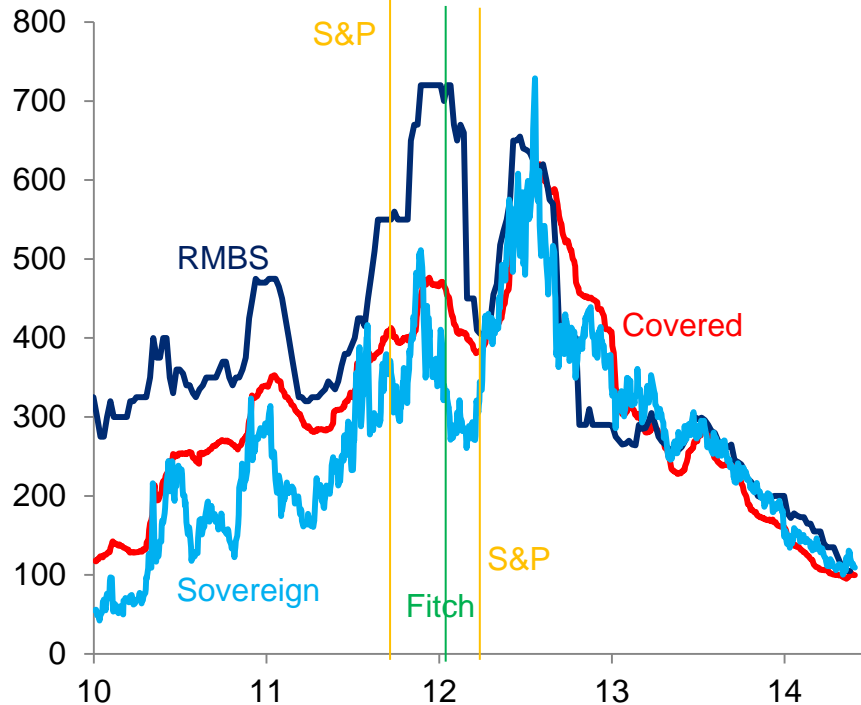
Source: Citi Research. Uses rolling sample of Citi-issued deals.

Most markets underprice liquidity risk, not overprice it

Sovereign ratings caps – there for a reason

Correlated risks, regardless of rating

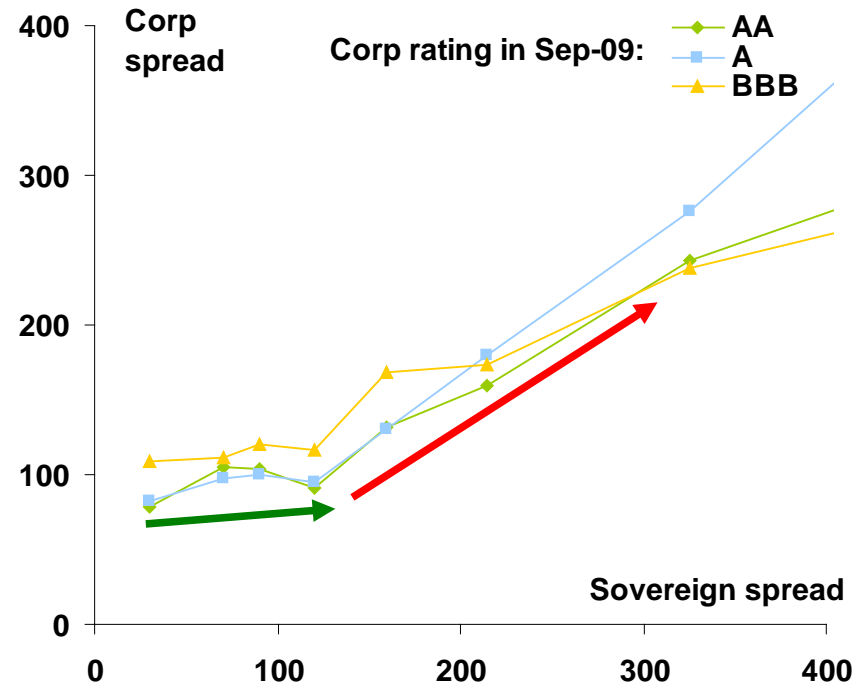
Spanish sovereign, covered, and RMBS spreads vs rating agency downgrade dates, bp



Source: Citi Research, Markit.

Sovereign sell-offs *do* affect credit too

European corporate vs sovereign spread, average, bp



Source: Citi Research, Markit. Based on 175 European IG and HY companies, 5yr CDS spread in 2010-11. See ['When sovereigns dominate corporates'](#) for details.

It's not the rating which is the problem. It's the risk.

Are risk weightings really the problem?

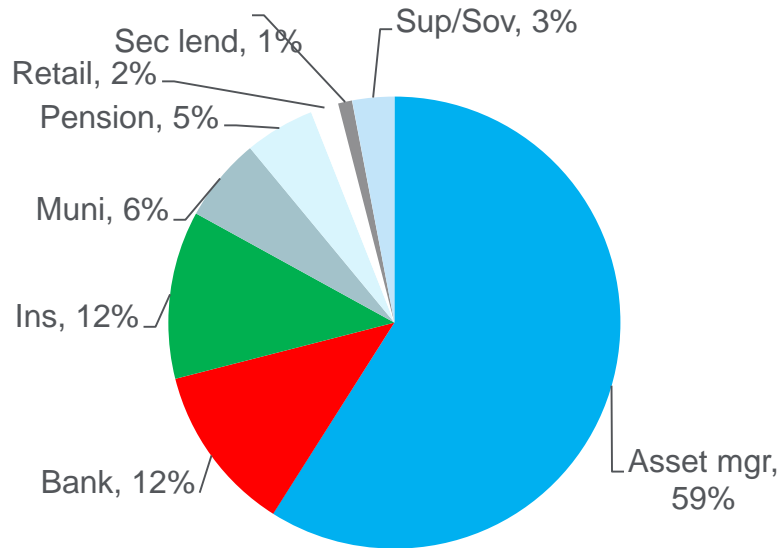
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Who buys US securitizations?

US consumer ABS buyers

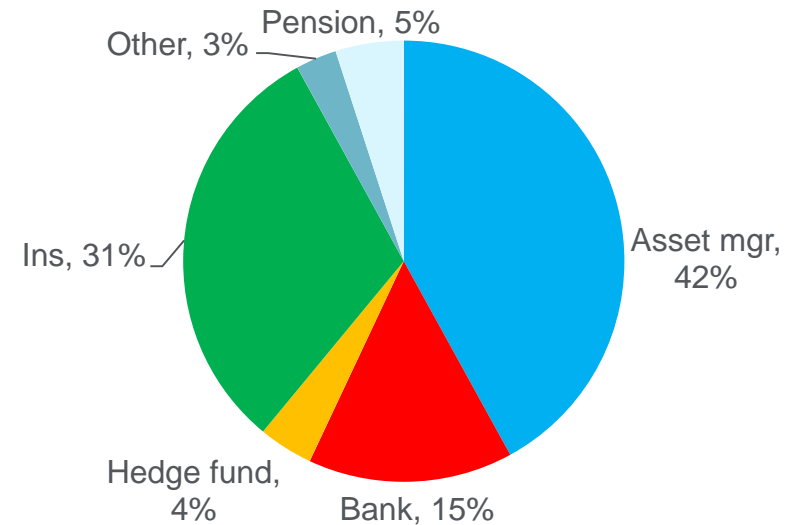
2013



Source: Citi Research. See *Regulation's Effect on Global Securitized Markets*, M. Kane et al, January 2014.

US CMBS buyers

AAA tranche, based on sample of 2013 conduit deals



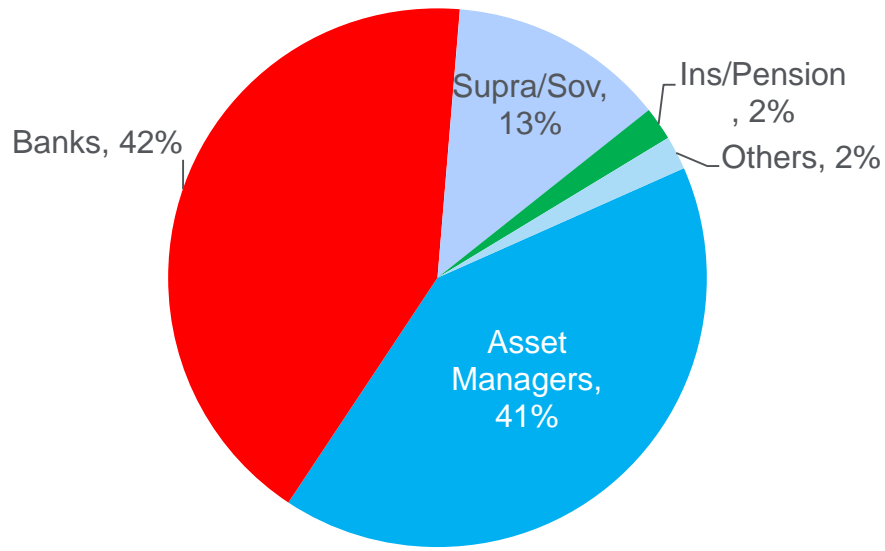
Source: Citi Research. See *Regulation's Effect on Global Securitized Markets*, M. Kane et al, January 2014.

The vast majority goes to real money

Who buys EU securitisations?

Any buyer you like – so long as it's a bank

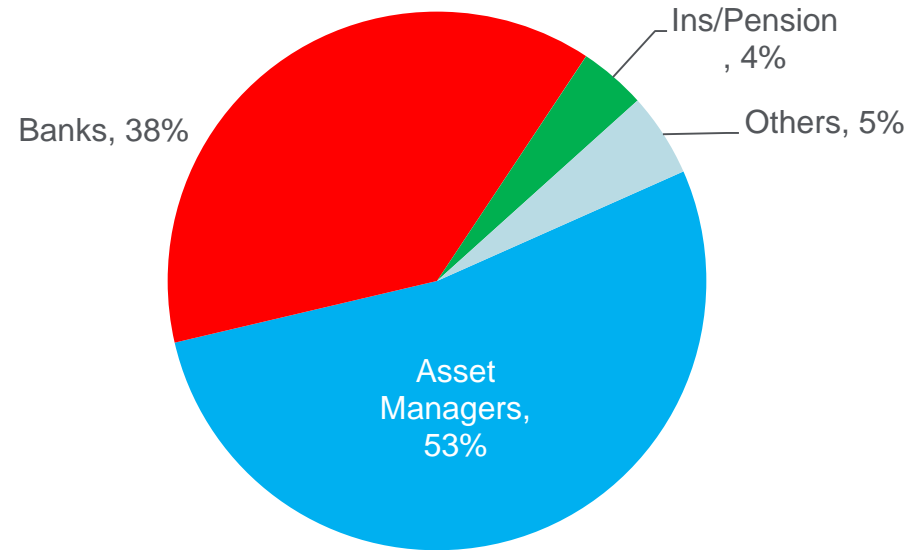
European Auto ABS Investor Base (whole pool), 2013 average



Source: Concept ABS.

Sold by banks, bought by banks

Dutch RMBS Investor Base (whole pool), 2013 average



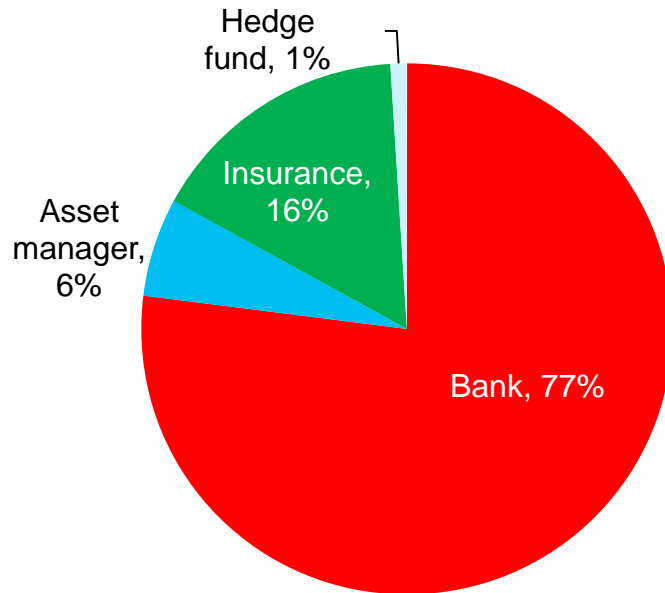
Source: Concept ABS.

Senior tranche demand still heavily dependent on banks

Why are CLOs so different?

US – dominated by banks

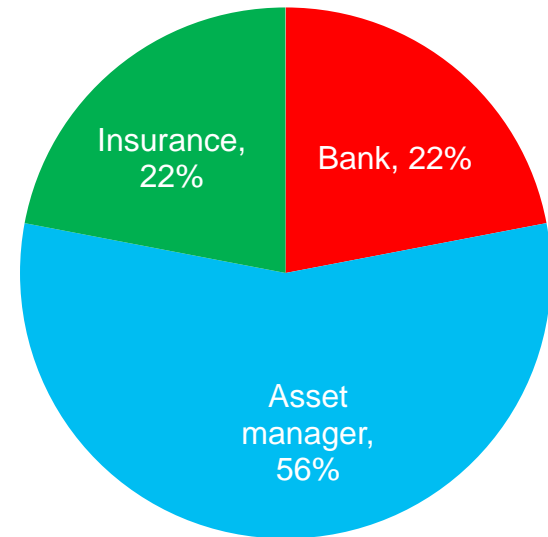
US CLO AAA investor base, sample of 2013 deals



Source: Citi Research.

EU – banks much smaller

€ CLO AAA investor base, sample of 2013 deals



Source: Citi Research.

US banks buy CLOs; in Europe they buy govies instead

Comparing the options

RMBS efficient only in the core

Spreads and risk weightings by asset class under Basel 3

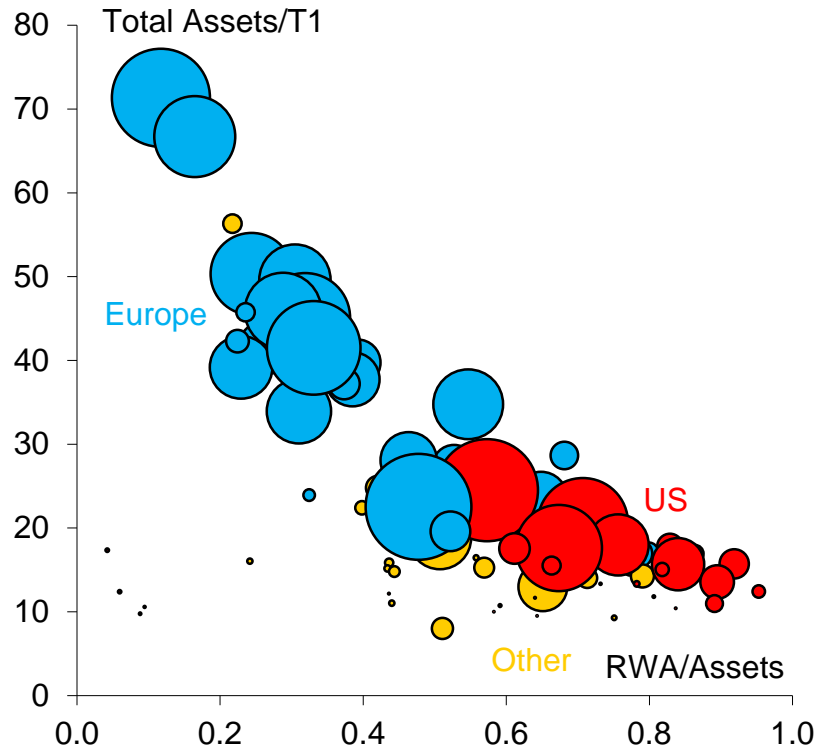
Region	Sector	Currency	Rating	ASW Spread	Risk Weight	Indicative Return on	
						Capital	LCR Eligible?
UK	Sovereign	GBP	AAA	-14	0%	0%	Yes, Level 1
	Covered	GBP	AAA	25	10%	31%	Yes, Level 2A
	Prime RMBS	GBP	AAA	55	25%	28%	Yes, Level 2B
	NC RMBS	GBP	AAA	100	25%	50%	Yes, Level 2B
Netherlands	Sovereign	EUR	AAA	-13	0%	0%	Yes, Level 1
	Covered	EUR	AAA	4	10%	5%	Yes, Level 2A
	RMBS	EUR	AAA	60	25%	30%	Yes, Level 2B
France	Sovereign	EUR	AA	-7	0%	0%	Yes, Level 1
	Covered	EUR	AAA	2	10%	2%	Yes, Level 2A
	RMBS	EUR	AAA	65	25%	33%	Yes, Level 2B
Italy	Sovereign	EUR	BBB	88	0 - 50%	22%	Yes, Level 1
	Covered	EUR	A+	50	20%	31%	No
	RMBS	EUR	AA	110	50%	28%	Yes, Level 2B
Spain	Sovereign	EUR	BBB	79	0 - 50%	20%	Yes, Level 1
	Covered	EUR	A	53	20%	33%	No
	RMBS	EUR	A	105	75%	18%	No
Germany	Auto ABS	EUR	AAA	35	18%	25%	No
Europe	Euro CLO 2.0	EUR	AAA	140	25%	70%	No
US	Sovereign	USD	AAA	-10	0%	0%	Yes, Level 1
	Agency MBS	USD	AAA	9	0 - 20%	23%	Yes, Level 2A
	CLO	USD	AAA	145	20%	91%	No

US banks buy MBS and CLOs;
EU banks buy covered and periph sovs

The role of the leverage ratio

Global bank ratios - 2007

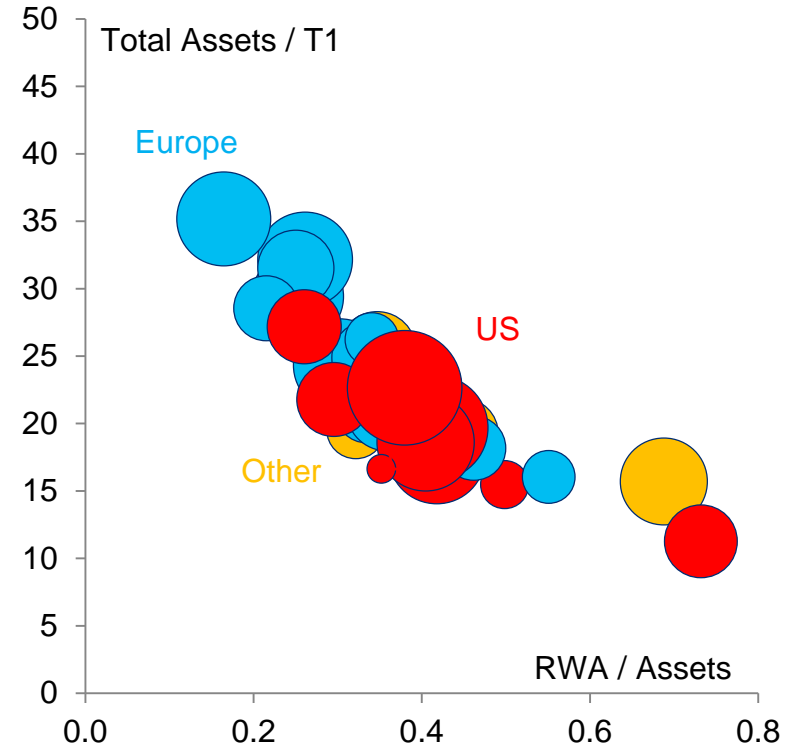
Bubbles sized by total assets



Source: Citi Research, Bloomberg. Uses GAAP and IFRS balance sheets without adjustment.

Global bank ratios - 2013

Bubbles sized by total assets



Source: Citi Research, FDIC. Uses IFRS-harmonized balance sheets for US banks.

Leverage is crippling AAA demand – especially in Europe

Are risk weightings really the problem?

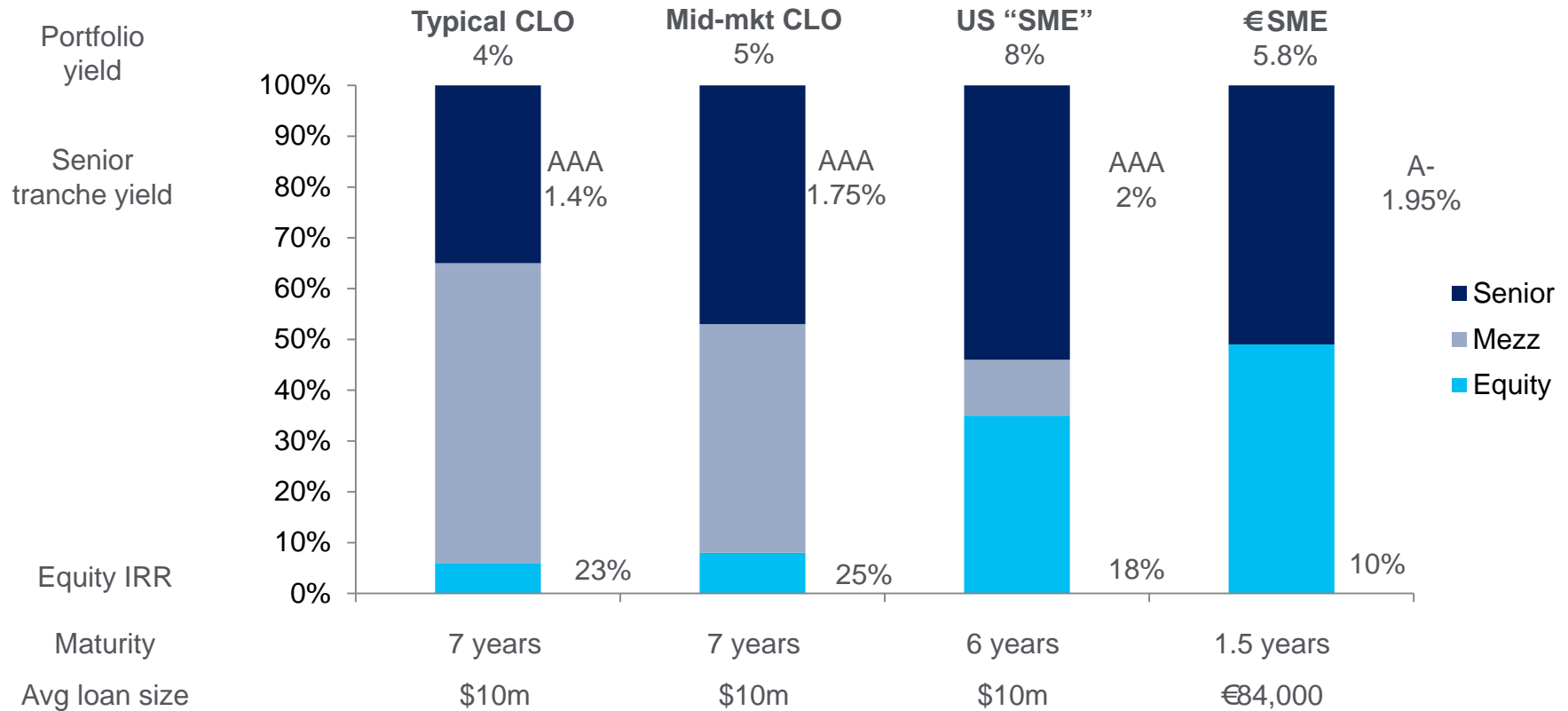
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Contrasting capital structures

Small is not beautiful

Typical CLO capital structures and tranche yields



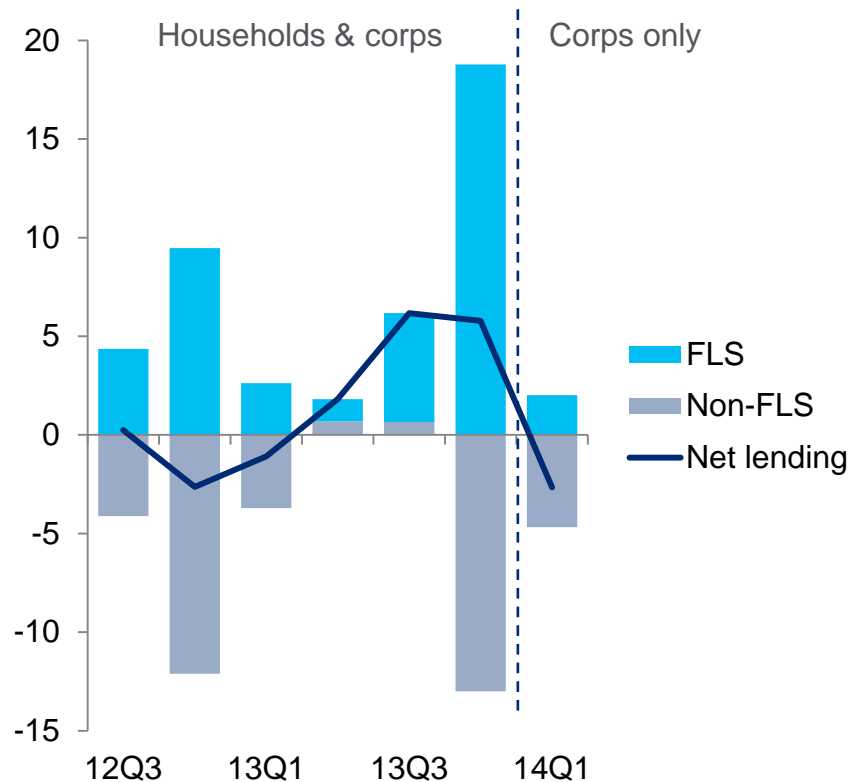
Source: Citi Research. Mid-market based on NXT CLO 2014, US CME on Cerberus ' CLO of distressed loans and €SME on Gamma Atlantes SME No. 3.

SMEs require a far larger equity tranche

Funding for (not) lending

Lots of funding, little lending

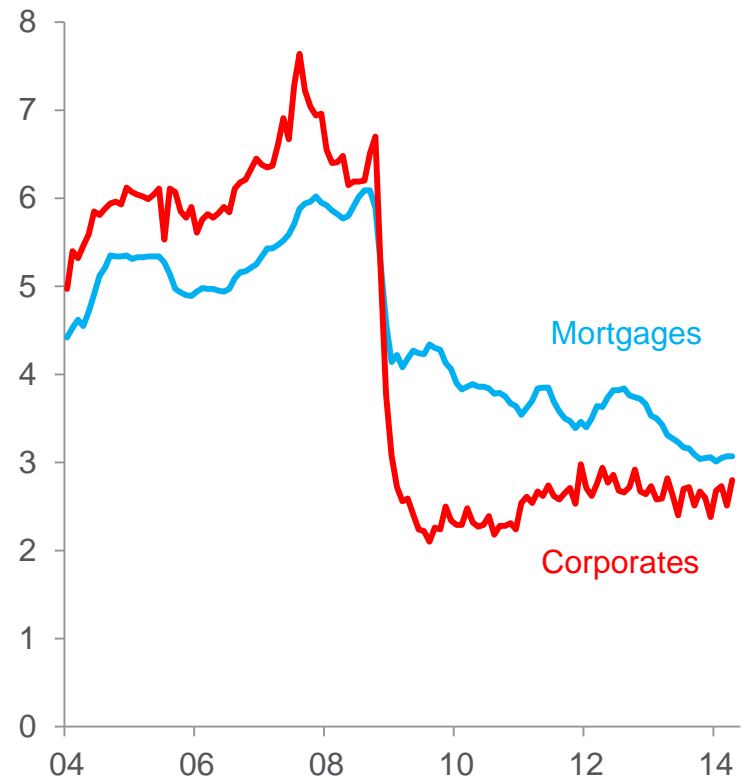
Net lending under Funding-for-Lending, £bn



Source: Bank of England.

FLS was supposed to benefit corporates?

Average yield on new UK loans, %



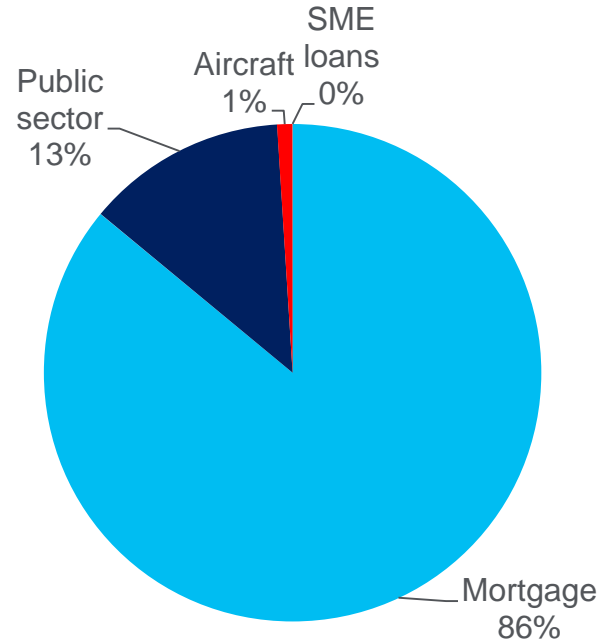
Source: Bank of England.

SME spreads reflect their risk, not banks' funding costs

SME covered bonds

SME covered – decidedly unpopular...

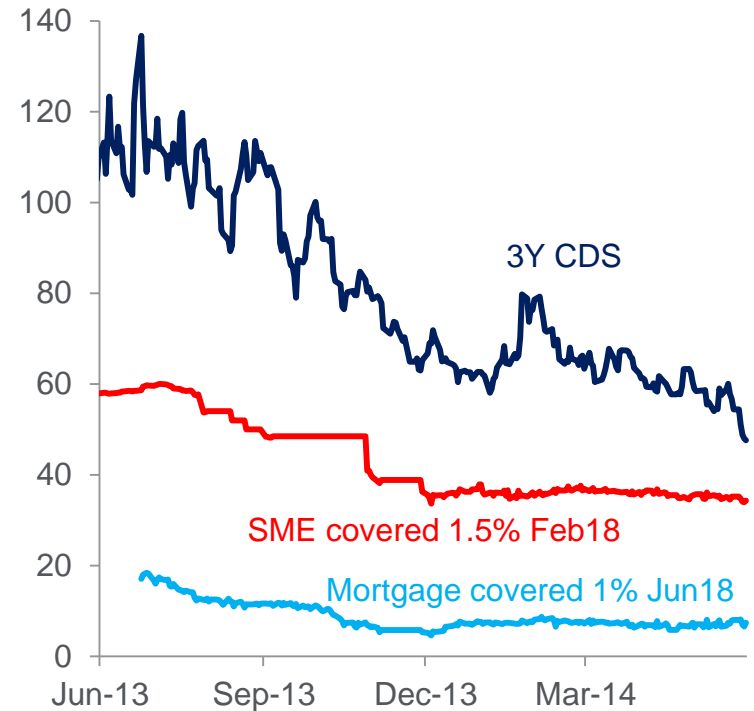
€ covered bond outstandings by collateral type, %



Source: Citi Research.

...despite a significant spread pick-up

CMZB regular and SME covered bond spreads, bp



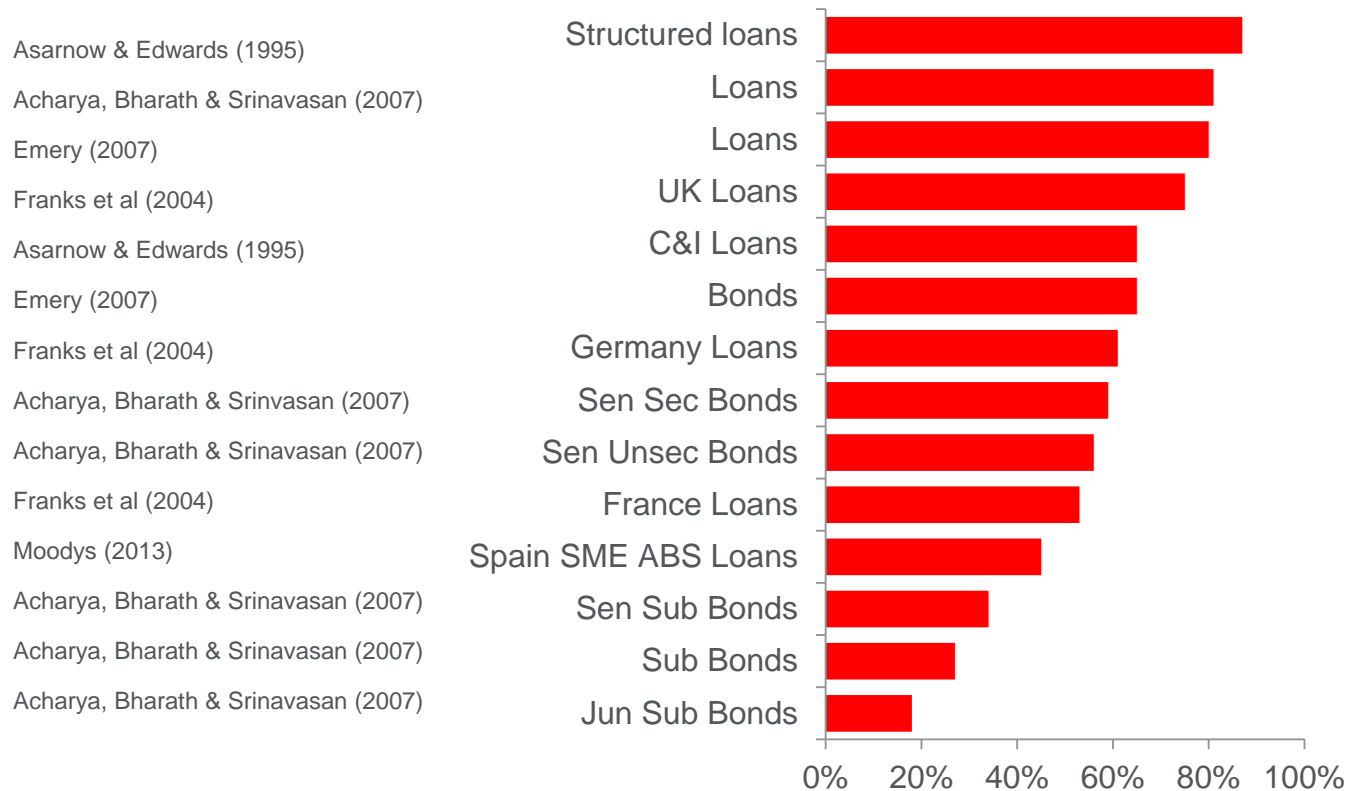
Source: Citi Research, Markit.

Investors prefer mortgages – for good reason

SME risk statistics

Assessing loan and bond recoveries

by asset, variety of time periods



- Academic evidence on SME default and recovery rates mixed
- Greater risk at small firms likely offset by increased collateralization
- After costs, SME recoveries likely significantly lower
- Risk reflected in cost of most loan guarantee schemes, typically 1% (EIF) to 2% (US SBA, UK EFG)

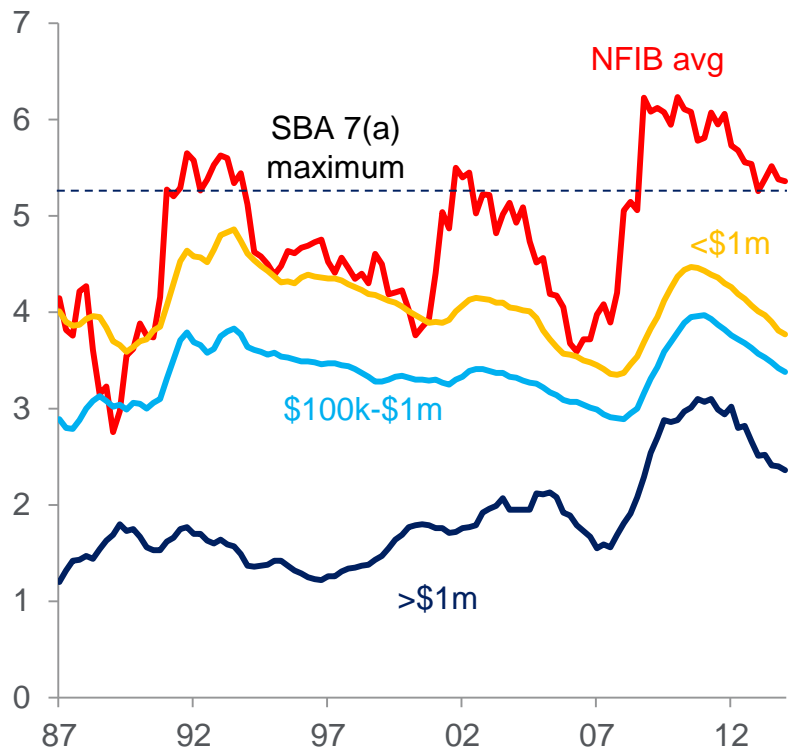
Source: Adapted from "The determinants of bank loan recovery rates", H. Khieu & D. Mullineaux, Sep 2009.

SMEs recover less – especially after expenses

Why does the US seem to work so much better?

Small loans are riskier than large ones

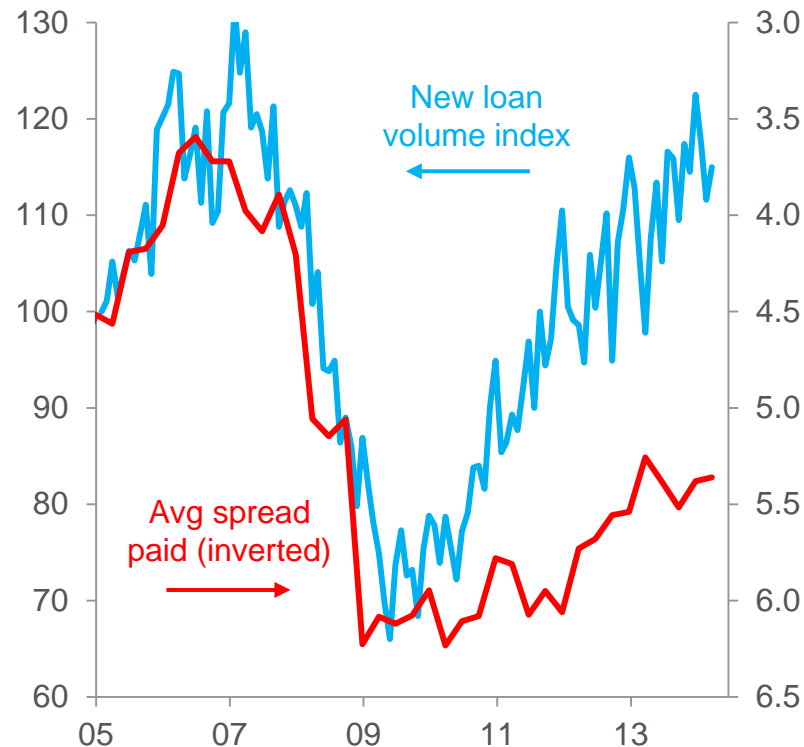
US small business loan rates, spread to Fed Funds, %



Source: NFIB survey of small businesses, Federal Reserve Senior Loan Officer survey, sba.gov.

But high rates have not deterred borrowing

Paynet small business new loan volume index (2005=100) vs NFIB average loan spread paid (% over Fed Funds)



Source: Thomson Reuters, NFIB, Haver Analytics.

It's not through lower rates or large SME ABS volumes

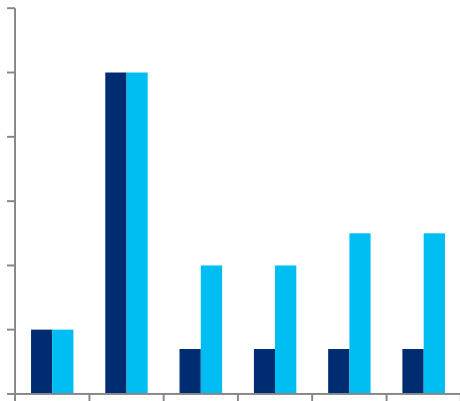
So what can the ECB do?

Action	Benefit	Cost
Recapitalize banks	Banks free to lend to SMEs directly, as in US	Governments can't face cost
Unconditional LTRO	Floods system with liquidity	Banks just buy govies; limited benefit to SMEs
LTRO conditional on SME lending	Appearance of doing something	As in UK FLS, take-up likely limited
Reduce Solvency 2 weights	Increased insurance demand for RMBS	SMEs benefit only indirectly
Reduce Basel 3 weights	Banks encouraged to buy AAAs	Banks still constrained on leverage; SMEs benefit only indirectly
Relax leverage ratio	Increased demand for AAAs	System becomes overly dependent on banks and leverage
ECB buys or finances senior tranches at subsidised rates	Large take-up of securitization	Significant balance sheet risk
ECB buys bank bonds	Bank funding costs reduced; avoids monetary financing	SMEs benefit only indirectly; significant balance sheet risk
ECB buys govt bonds	Large size possible; ought to benefit currency	Politically contentious; SMEs benefit only indirectly

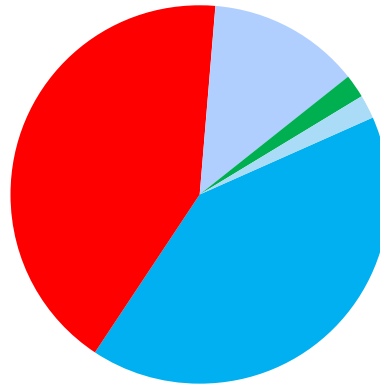
Most actions likely to inflate markets but not the economy

Conclusion

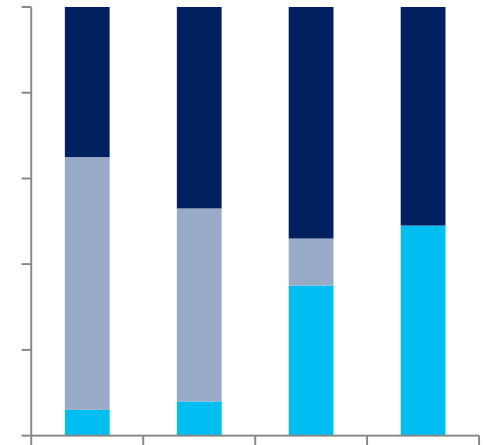
Yes, the risk weights
are too high



And Europe is still too
dependent on banks



More securitization ≠
more SME lending



SMEs: credit returns fail to match political importance

Appendix A-1

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