Securitisation and the bank lending channel

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This paper represents the views of the authors only and not necessarily those of the European Central Bank or the Bank of Italy

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1. Motivation

- From virtually zero a significant process of securitization activity has taken place in Europe.
 - □ This process alters the fundamental liquidity transformation and monitoring role of banks (Diamond,1984; Holström and Tirole, 1997).
 - □ We claim that the changing role of banks from "originate and hold" to "originate, repackaging and distribute" has had an impact on the monetary policy transmission mechanism via bank lending.

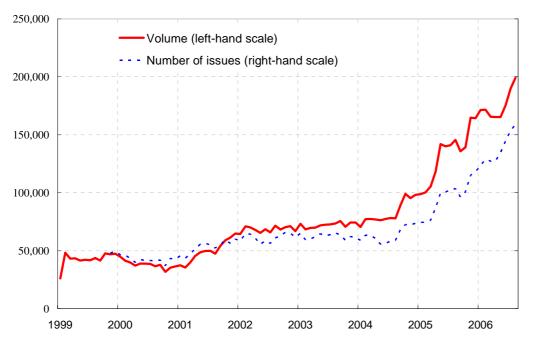
2. Securitisation in the euro area (1)

- Securitisation: process whereby individual bank loans and other financial assets are bundled together into tradable securities that are sold on to the secondary market.
- In the US the market for asset-backed securities developed during the first half of the twentieth century by means of government-sponsored agencies that issue and guarantee, but not originate, asset-backed securities.
- In contrast, the development of the asset securitization market in the euro area started in the late 1990s, after the launch of euro, and was not triggered by the introduction of specific government agencies.

2. Securitisation in the euro area (2)

Total euro-denominated Asset-Backed Securities issuance

(Monthly data; millions of EUR, Annual gross flows and numbers)



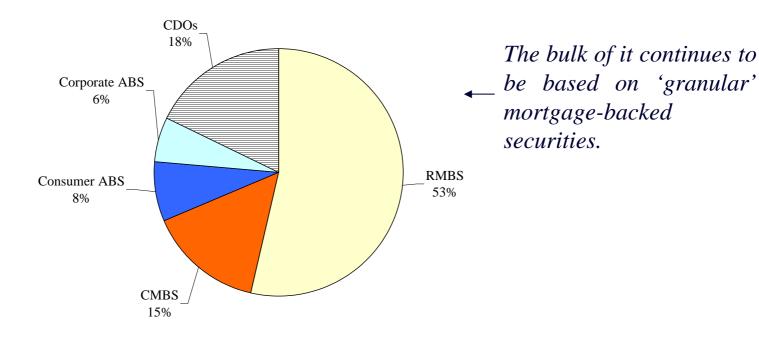
ABS issuance in euro has

← finally taken off since the introduction of the euro.

2. Securitisation in the euro area (3)

Securitisation by type of instrument in 2005

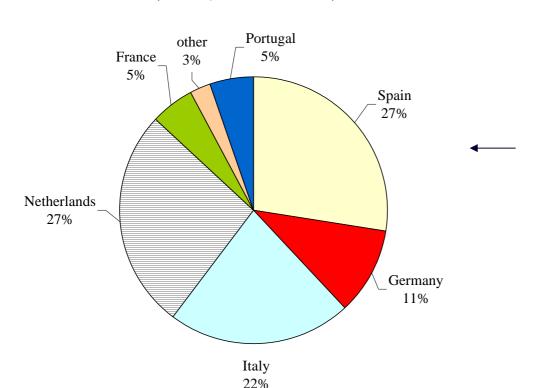
(euro-denominated, volumes, cash funded instruments only)



2. Securitisation in the euro area (4)

Securitisation by country of issuance in 2005

(volumes, CDOs are excluded)



Securitisation has taken off in most euro area countries and has been particularly strong in those countries experiencing strong increases in housing prices

3. The effects on the MTM (1)

- Securitization has reduced the fundamental role of liquidity transformation for banks: even if a project is illiquid, the underlying loan may be in principle sold on to the market.
- While the origination of loans remains to a large extent **locally based**, securitization can make the **funding** of previously illiquid loans **global** by making it tradable.
- Securitization changes the standard set up by Bernanke and Blinder (1988).

3. The effects on the MTM (2)

- Under the Bernanke and Blinder model, bonds and loans are imperfect substitutes and changes in the composition of bank assets also influence investment financing. After a monetary tightening if the reduction in deposit is not compensated by banks (by issuing CDs as in Romer and Romer, 1990) a reduction in supplied lending occurs.
- The bank lending channel literature adds to this set up claiming that after a monetary tightening, the response of supplied lending will be less severe for big, liquid and well-capitalized banks (Kashyap and Stein, 1995; Kishan and Opiela, 2000).

3. The effects on the MTM (3)

- We argue that securitization alters the standard "bank lending channel" in two ways:
 - □ Extra liquidity: banks may obtain additional liquidity independently of their securities holdings. This mechanism reduces the effectiveness of the "bank lending channel" in a complementary way to the Romer and Romer (1990) critique.
 - □ Capital relief: by removing loans from their balance-sheet, banks can obtain a regulatory capital relief which allows for a positive net effect on the loan supply.

4. Data (1)

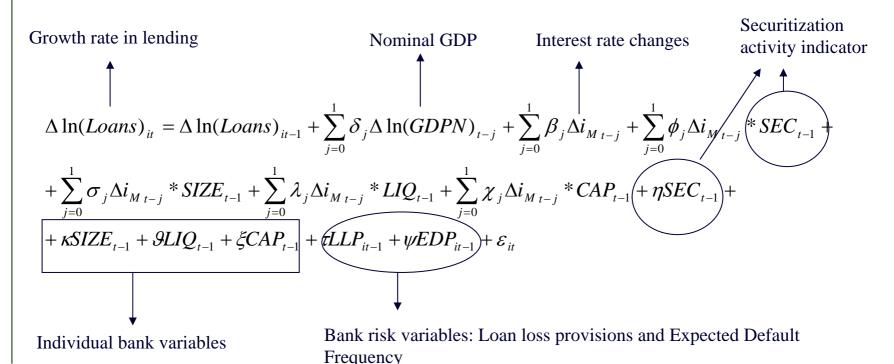
- Banks' individual data, from Bankscope, from 1999 to 2005 to cover the single currency.
- Unbalanced sample of around 3,000 banks accounting for a total of about 75% of bank lending outstanding in the euro area.
- Data on individual securitization deals have been matched with the financial statements of each bank originating the deal.

4. Data: two measures for risk (2)

- We have also inserted two control variables accounting for risk. These two variables could alter banks' ability and willingness to grant credit.
 - 1. Loan-loss provisions as a percentage of loans: ex-post accounting measure of credit risk.
 - 2. Expected default frequency (EDF): forward-looking indicator estimator of credit risk computed by Moody's KMV.

4. The econometric model (3)

• Our empirical specification builds on Kashyap and Stein (1995), Ehrmann et al. (2003) and Ashcraft (2007). In addition we incorporate the effect of securitisation and risk.



 $\bullet i=1,...,N$ and t=1,...,T where N is the number of banks and T is the year.

5. Results (1)

Securitization activity has a direct and positive impact on the average growth rate of supplied lending.

This effect is conditional upon business and overall liquidity conditions in the markets: It tends to be higher during economic upswings.

5. Results (2)

In normal times securitization reduces the effectiveness of the Bank Lending Channel: banks that are more active in the securitization market are more insulated from monetary policy changes.

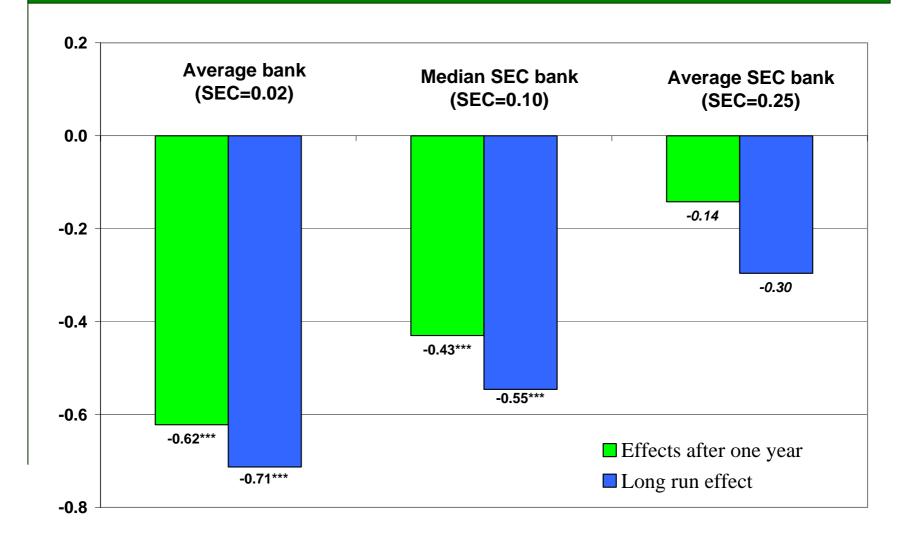
■ By how much? Insulation depends on the degree of activism on the market. It is very high if a bank tends to securitize around one quarter of her assets.

5. Results (3)

However the insulation or sheltering effect of securitisation on the bank Lending Channel seems to be quite cyclical and stronger during upwings.

Bank risk also matters for the transmission mechanism.

5. Results: effect of a one percent increase of the monetary policy rate on bank lending (4)



6. What to say about the recent turmoil?

- The crisis has changed market sentiment about the use of structured product. In the last months the volume of securitization activity has dramatically reduced.
- There is now a greater uncertainty (in the sense of Frank Knight) about the use of these finance products and a general lack of transparency on what is on banks' balance sheets. The question: Has the "Originate, repackaging and distribute" model come to an end?
- In our opinion the crisis of the OTD model will change the structure of banking, but it is hard to imagine that the industry will abandon securitization. We can imagine a reduction in activity that brings back the model of some years.
- For example, what does it happen to supplied lending if the volume of securitized loans come back to 2005 (a reduction of 20%) or to the average over the period 1998-2006 (-60%)?

7. Conclusions

- We find that the changing role of banks from "originate and hold" to "originate, repackage and distribute" reduces the effectiveness of BLC of monetary policy. However, this effect is conditional upon business cycle and liquidity conditions.
- However, our results show that the effects of securitization are far from complete insulating loan supply from monetary policy changes. Bank's risk profile has a notable impact on loan supply highlighting the importance of financial stability from a monetary policy perspective.
- Simulations show that the impact of the recent turmoil on loan supply also depends on how severe will be the reduction in securitization activity and probably more importantly their actual and perceived risk positions.