Better Be Careful: The Replenishment of ABS backed by SME Loans

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Research Question

Does portfolio replenishment in ABS backed by SME loans enable originators to exploit agency conflicts in securitization?

Take-Home Insights

Originators select loans to add to the loan portfolio after transactions’ closing...

A... which perform worse after securitization.

B ... which are of lower quality at the time of securitization.

C Originators’ reputation concerns and increasing transparency in the ABS market are effective mitigating factors.

⇒ Portfolio replenishment is an unexplored channel enabling originators to exploit their information advantages in securitization.

1. Motivation

![Diagram of loan securitization process]

- Assets: Loans are added, mature, default, canceled, prepaid...
- Liabilities: Loans are added, mature, defaulted, canceled, prepaid...

2. Agency Conflicts in Securitization

Originators’ Incentive Structure

- Loan term: 8 years vs. ABS term: 31 years
- Originators select loans to securitize with asymmetric information and limited transparency.
- Information asymmetries induce uncertainty for investors regarding loan quality.
- Originators have an advantage over investors since their behavior is, at least partly, not observable.

Contractual Limitations

- Conditions for loans added after transaction’s closing are for example: No receivable is a delinquent receivable, No receivable is a defaulted receivable, Purchase of the receivable does not result in a violation of any concentration limit.
- Prospectivese provide originators with considerable leeway in the loan selection process.

3. Identification Strategy

 Incoming Loan

A loan added to the securitized loan portfolio after the transaction’s closing:

⇒ 46% Incoming Loan observations in our dataset

Portfolio Replenishment

“the amount of repaid principal is typically reinvested in loans, until the end of the replenishing period, when the bonds are repaid as the portfolio amortizes.”

(European Datawarehouse, 2019)

Main reason: Loan term: 8 years vs. ABS term: 31 years

4. Data and Empirical Strategy

Data Source: European Datawarehouse

- First and only centralized securitization repository in Europe
- 1,013,220 borrowers pooled in 102 portfolios
- Final sample: 2012 – 2017

Sample Description

- Asset class: SME securitizations, especially affected by asymmetric information
- Origination Year, Industry, Loan Type, and Borrower Type FE
- Loan performance measures:
  - PD, LGD, PD x LGD

Loan Performance and Loan Quality Measures

- Estimation procedure:
  - Ordinary least squares regression models (Incidental parameter problem)
  - Model specifications:
    - Robust SE that are clustered with respect to the Quarter x ABS Pool
- Controls:
  - Loan and borrower characteristics, as well as Quarter x ABS Pool, Loan Originations Year, Industry, Loan Type, and Borrower Type FE

5. Empirical Results

Incoming Loan Performs Worse than Other Loans

<table>
<thead>
<tr>
<th>Incoming Loan</th>
<th>Default Amount</th>
<th>Delinquency Amount</th>
<th>Delinquent Amount</th>
<th>Number of Days in Del.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incoming Loan</td>
<td>0.0648***</td>
<td>0.0424***</td>
<td>0.0109***</td>
<td>0.0782***</td>
</tr>
<tr>
<td>Incoming Loan</td>
<td>(0.0014)</td>
<td>(0.0036)</td>
<td>(0.0028)</td>
<td>(0.0230)</td>
</tr>
</tbody>
</table>

Robust SE that are clustered w. r. t. Quarter x ABS Pool are in parentheses. * p < 0.1, ** p < 0.05, *** p < 0.01.

Originators Add Low-Quality Loans as Incoming Loans

| PD x LGD | 1.163***     | (0.1116)         |
| PD x LGD | 1.525***     | (0.1363)         |

Robust SE that are clustered w. r. t. Quarter x ABS Pool are in parentheses. * p < 0.1, ** p < 0.05, *** p < 0.01.

Mitigation Factors: Reputation Concerns and Transparency

| PD x LGD | -0.597***    | (0.1900)         |
| PD x LGD | -3.515***    | (0.4154)         |
| PD x LGD | -9.477***    | (1.0003)         |

Robust SE that are clustered w. r. t. Quarter x ABS Pool are in parentheses. * p < 0.1, ** p < 0.05, *** p < 0.01.

Robustness Checks

- Subsample analysis ✓
- Pool perspective analysis ✓
- Propensity score matching ✓
- Different estimation strategies ✓
- Further controls ✓