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# Securitized banking and the Euro financial crisis: Evidence from the Italian banks risk-taking

Francesca Battaglia[a,1], Angela Gallo[b,*], Maria Mazzuca[c,2]

[a] *Dipartimento di Studi Aziendali e Quantitativi, Università Parthenope, Via Generale Parisi 13, 80132 Napoli, Italy*
[b] *Dipartimento di Studi Aziendali, Università degli Studi di Salerno, Via Ponte don Melillo, 84084 Fisciano (SA), Italy*
[c] *Dipartimento di Scienze Aziendali, Università della Calabria, Via p. Bucci cubo 3C, 87036 Rende (CS), Italy*

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ABSTRACT

This research explores the effects of securitization on banks equity risk exposure. A widespread opinion before the crisis of 2007–2008 was that securitization enhances financial stability. We provide empirical evidence of the impact of securitization on the market's perception of the originating banks' risk exposure before and after the crisis, in terms of systematic and idiosyncratic risk. Using a sample of Italian listed banks over the period 2000–2009, we find evidence of increasing systematic and idiosyncratic risk for originating banks, in particular in the post-crisis period. We also find that securitization increases the probability of the originator banks to contribute to a market crisis.



## 1. Introduction

Over the past decade and prior to the sub-prime financial crisis, the amount of securitization activity has impressively expanded, both in terms of the development and amount of innovative

* Corresponding author. Tel.: +39 089963122.
*E-mail addresses:* francesca.battaglia@uniparthenope.it (F. Battaglia), angallo@unisa.it (A. Gallo), maria.mazzuca@unical.it (M. Mazzuca).
1 Tel.: +39 0815474852.
2 Tel.: +39 0984492276.

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and sophisticated instruments to transfer risk and in the number of countries using such techniques. This growth has been exponential also outside the US, recording strong growth rates in Asia and Europe (see European Central Bank, 2008a), even if the credit crisis that broke out in 2007 is having a strong negative impact on the securitization market with a large decline in securitization activity (Joint Forum, 2008). The macroeconomic factors behind this expansion can be recognized in the financial market globalization, technological and financial innovations, and the general trend toward a more market-based financial system.

The main purposes for the use of securitization are to obtain additional funding and transfer risk to third-party investors, generating fee income, managing profits, or minimizing regulatory capital requirements. The literature has widely investigated the impact on banks' risk profiles of securitization activity depending on the above motivations (among others, Allen & Carletti, 2006; Ambrose, Lacour-Little, & Sanders, 2005). In this research we mainly focus on securitization as one of the main techniques to manage credit risk, since banks have dramatically increased their risk transfer activities prior to the financial crisis. Although, in principle, a properly done transfer of risk should reduce the banks' risks, the empirical evidences are mixed. On one hand, banks can shift risks outside their balance sheet as well as to achieve portfolio and funding diversification by means of transfer risk activity (European Central Bank, 2008b). On the other hand, securitization could also lead banks to take on additional risks by acquiring credit risk on the market or adopting more risky funding strategies.

We examine the relationship between securitization activity and originator banks' systematic and idiosyncratic risk over the period 2000–2009 by focusing on a sample of Italian listed banks Although the topic have been widely investigated before, this research contributes to the empirical literature on asset securitization and bank risks in several respects. First, the period of the analysis allows us to compare potentially different impacts on systematic and idiosyncratic before and after the crisis broke out.

Secondly, since the prior literature interprets the beta as a measure of systematic risk but also as a proxy of systemic risk, we use a different measure of systemic risk to verify this interpretation. In particular, in our test we use the marginal expected shortfall (MES) as a measure of the systemic risk, defined by Acharya et al., 2010 as a bank's losses in the tail of the aggregate banking sector's loss distribution. The difference between MES and beta arises from the fact that systemic risk is based on tail dependence rather than average covariance, so that it better fits the definition of systemic risk in terms of expected losses of each financial institution in a future systemic event in which the overall financial system is experiencing losses. Thirdly, despite the importance of the Italian securitization market, there is a research void on it compared to other European countries.

Our results provide evidence of positive effects of securitization on both systematic and idiosyncratic risk; in addition, after 2007 these increases appear to be relatively higher. We also find that securitization increases the probability that the analyzed banks to contribute to a market crisis, but we find no difference in the comparison of the pre-crisis and post-crisis period. This suggests that the risky exposures of these banks are still as high as before the crisis with severe implications for financial stability.

The remainder of the paper is organized as follows. In Section 2, we discuss the relevant literature. In Section 3, we describe the estimation framework, sample and data, and variables. In Section 4, we present and discuss the empirical analysis and its results. In Section 5, we debate the results of the robustness tests. In Section 6, we conclude.

## 2. Literature review

The literature considers the phenomenon of securitization from different points of view. A first stream of studies deals with the effects of securitization on the banks' lending activity and on the monetary policy (Altunbas, Gambacorta, & Marques-Ibanez, 2010; Estrella, 2002; Loutskina & Strahan, 2009).

Another strand focuses on the role that securitization has on banks' risk-taking behavior. Jiangli and Pritsker (2008) use US data for bank holding companies and find that banks active in the securitization market tend to have lower insolvency risk and higher profitability. Rajan (2005) stresses that more market-based pricing exacerbates the incentive structures driving banks and institutional