The role of securitization in bank liquidity and funding management

Elena Loutskina

The Darden School of Business Administration, University of Virginia, 100 Darden Boulevard, Charlottesville, VA 22903, United States

Article info

Article history:
Received 6 April 2010
Received in revised form 13 July 2010
Accepted 13 August 2010
Available online 3 March 2011

JEL classification:
G21

Keywords:
Securitization
Bank management
Liquidity
Lending channel
Monetary policy

Abstract

This paper studies the role of securitization in bank management. I propose a new index of "bank loan portfolio liquidity" which can be thought of as a weighted average of the potential to securitize loans of a given type, where the weights reflect the composition of a bank loan portfolio. I use this new index to show that by allowing banks to convert illiquid loans into liquid funds, securitization reduces banks' holdings of liquid securities and increases their lending ability. Furthermore, securitization provides banks with an additional source of funding and makes bank lending less sensitive to cost of funds shocks. By extension, the securitization weakens the ability of the monetary authority to affect banks' lending activity but makes banks more susceptible to liquidity and funding crisis when the securitization market is shut down.

1. Introduction

Since the 1970s, the market for securitized loans in the United States has grown to dominate the mortgage market and has become an increasingly important factor in lending to both consumers and businesses (Fig. 1). In 2007, for example, $8.1 trillion of loans outstanding were financed through securitization, or about 40% of all loans outstanding. Even in the aftermath of the 2007 financial crisis, the securitization market activity by volume exceeds the size of the corporate bond market. A rapidly evolving body of academic research aims to understand whether and how securitization changed the traditional role of banks in the economy.\footnote{An earlier version of this paper was distributed under the title "Does Securitization Affect Bank Lending? Evidence from Bank Responses to Funding Shocks." I am indebted to Philip Strahan and Gary Gorton for invaluable guidance and suggestions. For helpful comments and discussions, I thank Murillo Campello, Mark Carey, Thomas Chemmanur, Robert DeYoung, Edward Kane, Alan Marcus, Jeremy Stein, and seminar participants at Boston College, University of Virginia, Indiana University, University of Texas at Dallas, Bank Structure and Competition Conference (Chicago 2006), Western Finance Association meeting (2006) and European Finance Association annual meeting (2005). I gratefully acknowledge the financial support of the Foundation, Banque de France grant in the fields of money, finance, and banking. I alone am responsible for any errors or omissions.}

\footnote{Tel.: +1 434 243 4031; fax: +1 434 243 12511. E-mail address: eloutskina@virginia.edu}

\footnote{0304-405X/$ - see front matter Published by Elsevier B.V. doi:10.1016/j.jfineco.2011.02.005}

Published by Elsevier B.V.
this strand of research by examining how securitization changed the ways individual banks manage their funding and liquidity and how these changes have in turn altered the traditional links between bank liquidity, cost of funds, and loan supply. I show, first, that securitization creates a new source of liquidity by allowing banks to convert illiquid, hard-to-sell loans into marketable securities. Second, by providing a new source of funds in the form of existing loans, securitization reduces the sensitivity of bank lending to the availability of the external sources of funds such as traditional liquid funds and deposits. As a result, securitization alleviates the impact of the local economic shocks and weakens the ability of the monetary authority to affect bank lending through open market operations. At the same time, it makes banks more vulnerable to various economic shocks when the market for securitized loans is disrupted.

I propose a new bank-specific index of “bank loan portfolio liquidity” \( (S_h) \) that effectively captures banks’ ability to sell loans. The index is a weighted average of the potential to securitize loans of a given type (based on market-wide averages), in which the weights reflect the composition of an individual bank’s loan portfolio. Thus, market trends generate time variation in the index, whereas differences in bank loan portfolio structures generate variation across institutions.

I first analyze whether securitization has reduced banks’ need to carry liquid assets to meet unexpected demands from depositors and borrowers. Using the new loan liquidity index \( (S_h) \), I show that securitization acts as a substitute for traditional liquid funds on banks’ balance sheets. Because banks choose liquidity levels and lending jointly, I adopt two approaches to adjust for this endogeneity. First, I implement the instrumental variable regressions using a synthetic instrument similar to the loan liquidity index \( (S_h) \). In constructing the instrument, I use fixed bank portfolio choices as of the beginning-of-period values. This constant-over-time loan portfolio structure removes the effect of the managers’ discretion and ensures that the instrument varies only as a result of the deepening of the securitization market. Second, I implement a difference-in-differences analysis around two sets of regulatory interventions and market shocks that significantly changed securitization market ability or willingness to absorb new loans.

The results suggest that as banks’ ability to securitize loans has increased, their holding of liquid assets on balance sheets has decreased. The magnitude of this decline is both statistically and economically significant (Fig. 2). From 1976 to 2007, the percentage of total assets held as liquid securities decreased on average by 7.33 percentage points due to the expanding secondary loan market. This decline is equivalent to roughly 69% of bank capital and cannot be explained by any time trends such as the increase in average bank size and changes in banking regulation. Because liquid funds and loans are two core components of bank assets, the decrease in the liquid funds holdings indicates a comparable increase in

---

2 For example, banks that prefer more liquid assets are likely to have both more liquid funds and a more securitizable loan portfolio (which can be achieved by, e.g., issuing more mortgages and fewer commercial and industrial loans), thus creating a positive bias in the relations between traditional liquidity levels and bank loan portfolio liquidity.
دریافت فوری متن کامل مقاله

<table>
<thead>
<tr>
<th>بهترین دانلود نسخه تمام متن مقالات انگلیسی ایران</th>
</tr>
</thead>
<tbody>
<tr>
<td>امکان دانلود نسخه ترجمه شده مقالات</td>
</tr>
<tr>
<td>پذیرش سفارش ترجمه تخصصی</td>
</tr>
<tr>
<td>امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله</td>
</tr>
<tr>
<td>امکان دانلود رایگان ۲ صفحه اول هر مقاله</td>
</tr>
<tr>
<td>امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب</td>
</tr>
<tr>
<td>دانلود فوری مقاله پس از پرداخت آنلاین</td>
</tr>
<tr>
<td>پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات</td>
</tr>
</tbody>
</table>