



Securitization, competition and monitoring



Jung-Hyun Ahn^a, Régis Breton^{b,c,*}

^a NEOMA Business School, Dept. of Finance, Rouen Campus, 1, rue du Maréchal Juin, BP 215, 76825 Mont-Saint-Aignan Cedex, France

^b Banque de France, 35-1537 DGO-DSF, 31, rue Croix des Petits Champs, 75049 PARIS Cedex 01, France

^c CNRS, Laboratoire d'Economie d'Orléans, France

ARTICLE INFO

Article history:

Received 24 July 2012

Accepted 14 November 2013

Available online 1 December 2013

JEL classification:

G21

L12

L13

Keywords:

Securitization

Loan sales

Banking competition

Monitoring

Rent extraction

ABSTRACT

We analyze the impact of loan securitization on competition in the loan market. Using a dynamic loan market competition model where borrowers face both exogenous and endogenous costs to switch between banks, we uncover a competition softening effect of securitization that allows banks to extract rents in the primary loan market. By reducing monitoring incentives, securitization mitigates winner's curse effects in future stages of competition thereby decreasing *ex ante* competition for initial market share. Due to this competition softening effect, securitization can adversely affect loan market efficiency while leading to higher equilibrium profits for banks. This effect is driven by primary loan market competition, not by the exploitation of informational asymmetries in the secondary market for loans. We also argue that banks can use securitization as a strategic response to an increase in competition, as a tool to signal a reduction in monitoring intensity for the sole purpose of softening *ex ante* competition. Our result suggests that securitization reforms focusing exclusively on informational asymmetries in markets for securitized products may overlook competitive conditions in the primary market.

© 2013 Elsevier B.V. All rights reserved.

1. Introduction

The financial crisis triggered by the US subprime mortgage sector has had an unprecedented negative impact on the real economy and on the banking sector. There is widespread consensus that losses related to securitized products such as MBS or CDOs were at the heart of the financial crisis, and a number of discussions have followed among practitioners, academics and regulators concerning how to reform securitization activities.¹

Indeed, several recent empirical studies suggest that higher securitization activity is associated with a reduction in loan quality. Evidence along this line has been documented for subprime mortgages (Dell'Ariccia et al., 2008; Mian and Sufi, 2009; Keys et al., 2010; Purnanandam, 2011) as well as for corporate loans (Berndt and Gupta, 2009; Gaul and Stebunovs, 2009). This literature argues that the originate-to-distribute (OTD) model of lending based on securitization was a main cause of the crisis. When

lenders and securitizers retain insufficient skin in the game, incentives get distorted along the securitization chain, leading to lax monitoring and screening, as well as intentional sales of low quality loans. Theoretical contributions with opaque secondary markets have analyzed these incentive dilution effects (Morrison, 2005; Parlour and Plantin, 2008).

This negative view of securitization raises a fundamental question. According to contemporary banking theory, screening and monitoring are at the core of banks' expertise (Bhattacharya and Thakor, 1993). Reduction in those core activities should therefore lead to an erosion in value creation by, and ultimately profits of banks. One may thus ask why, unless there are huge direct benefits, banks' increasing participation in the OTD model before the crisis was not penalized by decreasing profits or share prices.

In this paper, we argue that higher securitization can allow banks to make more profits by extracting rents from their borrowers in the primary loan market. An alternative explanation, consistent with the above cited papers, is that originating banks exploit investors' inability to understand and price securitized products. In other words, banks' profits are simply the counterpart of (future) losses by unsuspecting final investors in the secondary market. However, this reasoning hinges on the notion that buyers of securitized products are unsophisticated investors, contradicting the fact that many buyers were themselves banking institutions. We

* Corresponding author at: Banque de France, 35-1537 DGO-DSF, 31, rue Croix des Petits Champs, 75049 PARIS Cedex 01, France. Tel.: +33 1 42 92 38 22; fax: +33 1 42 92 26 23.

E-mail addresses: jung-hyun.ahn@neoma-bs.fr (J.-H. Ahn), regis.breton@banque-france.fr (R. Breton).

¹ See for example American Securitization Forum et al. (2008), ECB (2008), Franke and Krahen (2008).

find it more natural to explore potential rent extraction from other agents that are much less sophisticated than banks: clients in the primary loan market.

Our paper analyzes the interaction between securitization and loan market competition and points to a softening competition effect of securitization. Specifically, we consider a simple duopoly model of the loan market where banks compete for borrowers over two periods. The framework has two main ingredients: borrowers face exogenous costs when switching from one bank to its competitor, and banks strategically choose the intensity of monitoring of their borrowers during the first period. As monitoring entails private information, the initial lending bank (which will be referred to as the relationship bank) has an informational advantage in the second period, when competing with the outside bank that tries to poach its first-period clients. A key aspect of the framework is that, due to the presence of switching costs, banks earn profits from poaching their competitors clients. In equilibrium, banks make positive profits equal to these poaching profits.

In this setup, we show that securitization has a competition softening effect. Selling to outsiders the cash flow that will be generated by (a fraction of) the loan portfolio reduces banks' monitoring incentives, in line with the papers on the dark side of securitization. As a side effect, banks have less private information about their own clients, which in equilibrium makes poaching more profitable, because of the less acute informational asymmetry that exists between the relationship bank and the outside bank. In turn, the *ex ante* (first period) market share becomes less important, as banks can more profits from poaching in the second period. Eventually, this softens *ex ante* competition, leading to higher overall banking profits in equilibrium.

Those results have two broad implications. First, we highlight an additional effect—a rent extraction, or surplus distribution effect—of securitization, thereby contributing to the literature on the *consequences* of securitization. As we discuss in Section 3.5, due to the competition softening effect, under certain conditions securitization can increase banks' profits but worsens overall loan quality and loan market efficiency. As mentioned above, this increase in profits is not driven by the exploitation of informational asymmetries in the secondary market for loans, but by rent extraction in the primary market. Secondly, our results suggest that banks can strategically use loan securitization to soften the effect of loan market competition, thereby contributing to the literature on the *motivation* for securitization. We show that, because of the competition softening effect, securitization can be used as a response to an (exogenous) increase in competition. In our model, securitization is used as a tool to signal a reduction in the intensity of monitoring, which in turn mitigates *ex ante* competition as competitor banks know that they can poach their rival's borrowers in a future round of competition. As we argue in Section 4.3, this may explain the concomitant increase in competition, massive securitization, and reduction in credit standard that took place before the crisis.

Regarding policy implications, our results suggest that new regulations that only target securitization markets may not be sufficient. In the US, the main recommendations (on securitization) of the Dodd–Frank Wall Street Reform and Consumer Protection Act enacted on July 2010 require better information disclosure on securitized products, and more skin in the game for securitizers through a 5% minimum retention of the securitized portfolio. The European Union has also adopted a similar proposal requiring originators to hold at least 5% of the securitized portfolio.² As such, these reforms focus exclusively on the problems related to

informational asymmetries between sellers and buyers in the secondary market. However, this line of prescription may overlook the other side of securitization activity: the market for the underlying asset (in particular the loan market).

The rest of the article is as follows. In the reminder of this section we discuss related literature. Section 2 presents the general environment of the model. Section 3 proceeds with the equilibrium analysis and shows how securitization affects competition, monitoring and loan market efficiency. Section 4 discusses some broad implication of the competition softening effect, and in particular how the increase in securitization can be related to an increase in competition. Most proofs are relegated to [Appendices A and B](#).

1.1. Related literature

Our paper is related to several strands of the literature. First of all, it is related to the literature on the relationship between securitization/loan sales and bank monitoring. [Morrison \(2005\)](#) and [Parlour and Plantin \(2008\)](#) showed that such credit risk transfer instruments reduce banks incentives to monitor their borrowers when there is informational asymmetry between loan-selling banks and buyers, a situation that is harmful in terms of social welfare. In our article, we demonstrate similar results regarding monitoring incentives and social welfare. However, the reduction in monitoring is neither an unintended consequence of securitization nor motivated by the exploitation of informational asymmetries in the secondary loan market, as suggested in their models, but by the intention to soften competition. Our analysis thus sheds light on the current discussion on regulations in the securitization market, and suggests a new dimension that policy makers must consider.

On the other hand, our study is also obviously related to the literature on the motivation of loan securitization. One commonly held idea concerning the rationale for securitization is banks' perspective on risk management, according to which banks use securitization to transfer or diversify credit risks ([Allen and Carletti, 2006](#), [Wagner and Marsh, 2006](#), etc.). Another well-known argument is that of the regulatory arbitrage associated with capital requirements ([Acharya et al., 2013](#); [Calomiris and Mason, 2004](#); [Carlstrom and Samolyk, 1995](#); [Duffee and Zhou, 2001](#); [Nicolo and Pelizzon, 2008](#)). Given that capital is more costly than debt, the retention of a proportion of capital for loans in a balance sheet creates additional cost for banks. By taking this loan off their balance sheet, they can save their capital. A third argument is related to the more efficient recycling of bank funds ([Gorton and Pennacchi, 1995](#); [Parlour and Plantin, 2008](#)). With a constraint on funds, retaining a loan until maturity involves an opportunity cost if banks have other more profitable lending opportunities. By using securitization, banks can recuperate their funds earlier, and redeploy them in another investment project. We offer a novel explanation of why banks securitize their loans: banks can strategically use securitization to soften competition in the primary loan market.

Thirdly, this article is related to the literature concerning the link between relationship banking and loan market competition. [Peterson and Rajan \(1995\)](#) show that banks have a greater incentive to develop their relationship with new borrowers when loan markets are less competitive and more concentrated. [Boot and Thakor \(2000\)](#) show that banks may refocus on relationship lending in order to survive in the face of interbank competition, because this allows banks to shield their rent better. However, we show that a relationship banking orientation can increase *ex ante* competition in order to capture more new clientele so as to extract rent in the future, which in turn reduces overall profit. We hence add a dynamic perspective to the link between relationship banking and loan market competition.

² For more details, see IX.D. of the Dodd–Frank Act “Improvements to the Asset-Backed Securitization Process” and Article 122a, [European Parliament \(2009\)](#).

Download English Version:

<https://daneshyari.com/en/article/5089053>

Download Persian Version:

<https://daneshyari.com/article/5089053>

[Daneshyari.com](https://daneshyari.com)