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Mortgage companies and regulatory arbitrage[☆]

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ABSTRACT

Mortgage companies (MCs) do not fall under the strict regulatory regime of depository institutions. We empirically show that this gap resulted in regulatory arbitrage and allowed bank holding companies (BHCs) to circumvent consumer compliance regulations, mitigate capital requirements, and reduce exposure to loan-related losses. Compared to bank subsidiaries, MC subsidiaries of BHCs originated riskier mortgages to borrowers with lower credit scores, lower incomes, higher loan-to-income ratios, and higher default rates. Our results imply that precrisis regulations had the capacity to mitigate the deterioration of lending standards if consistently applied and enforced for all types of intermediaries.

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1. Introduction

The collapse of the housing market in 2007 initiated an economic downturn with a profound impact on the world economy. The securitization market, shadow banking, and inadequate regulation are widely blamed for the deterioration of lending standards and, ultimately, the crisis.[1] While regulatory inconsistencies are known (Agarwal, Lucca, Seru, and Trebbi, 2014), little direct empirical evidence exists on how regulation affects the behavior of shadow banking credit intermediaries (Acharya, Schnabl, and Suarez, 2013; Keys, Mukherjee, Seru, and Vig, 2009). This paper shows that a regulatory gap between depository credit intermediaries (banks) and nondepository credit intermediaries (mortgage companies, MCs) altered the behavior of even regulated lenders and contributed to the deterioration of underwriting standards in the mortgage market. Our results suggest that regulations prior to 2007 had the capacity to mitigate the deterioration of precrisis lending standards, but only if applied and enforced similarly across all lenders.

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[1] See, e.g., Keys, Mukherjee, Seru, and Vig (2010); Mian and Sufi (2009; 2010), and Purnanandam (2011) for the evidence of secondary loan market impact on the deteriorating lending standards. Agarwal, Ambrose, and Yildirim (2010); Demyanyk and Van Hemert (2011), and Mayer and Pence (2008) show the significant role of subprime lending in the 2007 crisis.

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Depository institutions are subject to safety and soundness regulations, deposit insurance requirements, and consumer compliance regulations, among others. These regulations are designed to curb banks' risk-taking behavior stemming from underpriced deposit insurance.[2] The seminal banking literature, however, questions the necessity to regulate originate-to-distribute (OTD) credit intermediaries. Origination of risky loans requires soft information production and, thus, should be dominated by banks that are better ex ante screeners (Boyd and Prescott, 1986; Leland and Pyle, 1977) and more efficient ex post monitors (Diamond, 1984). OTD lenders, such as MCs, should predominantly originate loans based on hard information that they can pass to the secondary market investors (Gorton and Pennacchi, 1995; Loutskina and Strahan, 2011; Rajan, Seru, and Vig, 2015). By extension, MCs should be market-regulated to maintain high underwriting standards.

MCs are effectively market-regulated despite originating more than 50% of the mortgages in the U.S. economy (Fig. 1). They fall under a significantly smaller set of regulations as compared with banks. Even MC subsidiaries of heavily regulated bank holding companies (BHCs) enjoy weak regulations and lax enforcement of them. Not surprisingly, eight out of 15 top subprime lenders precrisis (including the largest subprime lender, HSBC Finance) were MC affiliates of BHCs and only two of said lenders were depository institutions (Table 1). All of the subprime lenders either defaulted or were restructured post 2007. This is consistent with the notion that BHCs preferred to invest in risky market via their unregulated affiliates rather than heavily regulated depository subsidiaries.

In this paper, we isolate and evaluate the impact of the regulatory gap. Our empirical strategy is based on examining the behavior of BHCs that lend through both affiliated depository institutions (ADIs) and affiliated mortgage companies (AMCs). The within-BHC analysis allows us to nonparametrically control for parent-specific heterogeneity such as access to securitization markets, economies of scale or scope in loan sales, loan inventory management, risk aversion, etc. The core assumption underlying our empirical strategy is that, absent the regulatory differences, all the loans originated and securitized through AMCs could have been originated and securitized through ADIs.[3]

Using the within-BHC strategy, we empirically evaluate the implications of three differences in the regulation of AMCs and ADIs. First, as detailed in Section 2, the safety and soundness regulations require banks to hold capital even for loans they are planning to sell. In contrast, MCs have no explicit capital requirements as they do not fall under banking regulations. BHCs can also avoid consolidating AMCs for capital requirement purposes. As a result, by lending through their AMCs, BHCs can conserve their capital.

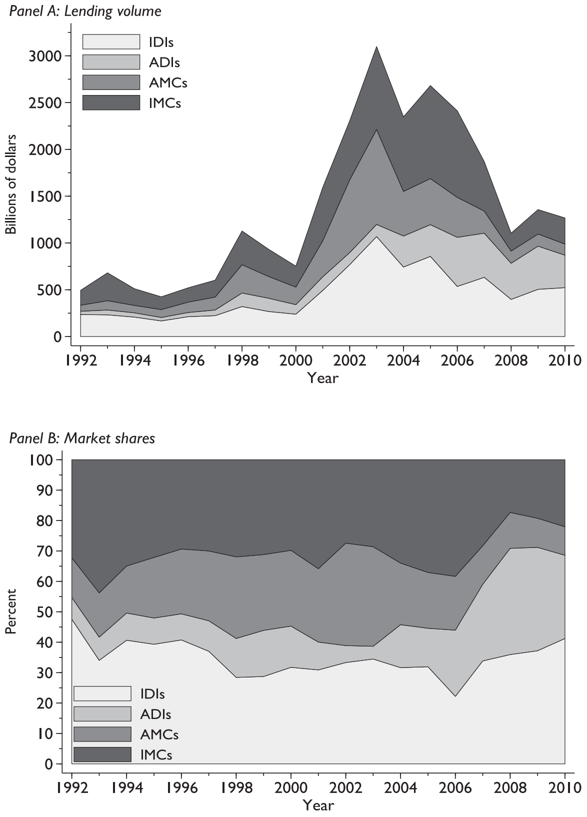

Fig. 1. Lending volumes by lending institution type. The figure shows lending volumes in billions of dollars for independent depository institutions (IDIs), bank holding company (BHC) depository subsidiaries (affiliated depository institutions, ADIs), BHC nonbank mortgage subsidiaries (affiliated mortgage companies, AMCs), and independent mortgage companies (IMCs). Panel B depicts the market shares of respective financial intermediaries. Data source: Home Mortgage Disclosure Act.

Second, ADIs have to recognize loan impairments as soon as they occur. The performance of their loan portfolios affects the parent BHCs' capital requirements, loan-loss provisions, and the price of deposit insurance. AMCs are guided by generally accepted accounting principles (GAAP) and have considerable flexibility in recognizing losses. They can sit on nonperforming loans in the expectation of working them out or selling them to a special scratch-and-dent desk entity. Moreover, AMCs are structured as limited liability entities, thus keeping a BHC exposure to an AMC's lending activities limited to its equity investment. As a result, a parent BHC does not have to provision for or recognize losses from AMC loan portfolios to the full extent.[4]

[2] Flannery (2007, p. 4) argues that "left to themselves, banks would accept too large a default probability, so supervisors design constraints to increase bank safety." The regulations should be binding to ensure their effectiveness.

[3] To better understand our empirical strategy, consider a world with a regulatory regime that is uniform across MCs and depository institutions. In this world, the loans originated by AMCs have to be fully consolidated, the capital provisioned for, checked for consumer compliance regulations, etc. In other words, AMC loans would put the same strain on a BHC's capital requirements or risk-management needs as ADI loans. Banning regulatory differences, we thus question the need for BHCs to establish separate legal entities such as MCs.

[4] Consistent with this notion, the court documents show that when BNC Mortgage filed for Chapter 11 protection in 2008, its parent corporation, Lehman Brothers, recorded only $54 million in charges and goodwill write-downs despite BNC having almost $1 billion in liabilities.

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