Introduction

The Dodd-Frank Wall Street Reform and Consumer Protection Act ("The Dodd-Frank Act") was enacted into law on 21 July 2010. It is the most significant piece of financial legislation since the 1930s and is expected to affect every aspect of the US financial services industry. This note examines the new securitization rules and their potential implications on credit. It considers the current condition of securitized assets and assesses the recent economics research on risk retention to examine the implications of changes in regulation as mandated in the Dodd-Frank Act on the markets.

Securitization is the process of turning illiquid assets like mortgages, credit cards, auto loans, and others into marketable securities, and it frees up capital for originators to continue to extend credit. This, in turn, increases the availability of credit to businesses and consumers. During the credit crisis, many pointed to the securitization process and expressed concern that originators and sponsors of securitized assets had “no skin in the game.” The separation of investors from originators in the securitization process could, it was argued, lead to distorted incentives in proper underwriting, evaluating, and rating securities backed by various types of assets.

The Dodd-Frank Act contains provisions designed to better align incentives of the different market participants in securitization with a combination of new risk retention requirements for the securitizers as well as additional disclosures and periodic reporting. The Act effectively requires securitizers to retain not less than 5% of the credit risk for most asset-backed securities without hedging or transferring the credit risk. Similar risk retention requirements are in the US Securities and Exchange Commission’s (SEC’s) proposed rules for asset-backed securities.
There are several potential economic problems associated with the implementation of the new requirements. Recent economic research suggests that an inflexible minimum retention requirement such as five percent for most asset classes may turn out to be either too low or too high depending on the nature of the transaction in question. If it is too low, then the proposed risk retention would fail to achieve its goal, perhaps leading to the type of undue reliance the Act seeks to avoid. If it turns out to be too high, then the proposed risk retention will raise the cost of securitization and thus constrain the availability of consumer and business credit. There is then no “one size fits all” solution when deciding on the optimal size and type of risk retention. As the report of the Board of Governors of the Federal Reserve concluded, “[S]imple credit risk retention rules, applied uniformly across assets of all types, are unlikely to achieve the stated objective of the Act—namely, to improve the asset-backed securitization process and protect investors from losses associated with poorly underwritten loans.”

We argue that the key to using securitization successfully is to ensure that all market participants, including originators, sponsors, and investors, have the necessary information to price and manage the different risks. Without the proper economic design of retention requirements that are tailored to the specifics of the different asset classes, the risk retention requirements could raise the costs of providing securitized products, which is not in the best interest of consumers and businesses, especially in the current credit environment. Economic modeling can be used effectively to design the appropriate risk retention rules to take into account the significant heterogeneity across different asset classes and deal structures.

**Brief Description of the New Requirements for Securitizers**
Subtitle D of Title IX of the Dodd-Frank Act (titled “Investor Protections and Improvements to the Regulation of Securities”) focuses on improvements to the asset-backed securitization process. The Act stipulates that the relevant regulators will issue rules within nine months of the enactment of the legislation requiring three key changes to the securitization process:

**Risk Retention**
Under the Dodd-Frank Act, securitizers will be required to retain at least 5% of the credit risk of any asset that is transferred, sold, or conveyed through the issuance of an asset-backed security (ABS). The Act defines an ABS as a fixed-income or other security collateralized by any type of self-liquidating financial asset (including a loan, lease, mortgage, or secured or unsecured receivable) that allows the holder of the security to receive payments that depend primarily on cash flow from the asset. Included in the definition are collateralized mortgage obligations (CMOs), collateralized debt obligations (CDOs), collateralized bond obligations (CBOs), and CDOs backed by ABS. This rule would apply to all ABS except ones that are comprised entirely of what are termed as “qualified residential mortgages” (no credit risk retention required) or assets that are not qualified residential mortgages but are deemed to have low credit risk (less than 5% credit risk retention required).

The Federal banking agencies, the SEC, the Secretary of Housing and Urban Development, and the Director of the Federal Housing Finance Agency will jointly prescribe the definition of a qualified residential mortgage, taking into consideration underwriting and product features that historical loan performance data indicate result in a lower risk of default. The criteria include documentation and verification of financial resources, sufficiency of income to pay regular obligations (housing and other), mitigation of potential payment shocks in adjustable-rate mortgages, credit enhancement at origination (mortgage guarantee insurance, etc.), and
prohibition and restriction of the use of balloon payments, negative amortization, prepayment penalties, interest-only payments, and other features that exhibit higher risks of default. For ABS comprised entirely of qualified residential mortgages, the issuer is required to certify that it has evaluated the effectiveness of its internal supervisory controls in ensuring that all the collateral assets are qualified residential mortgages. In addition, the securitizers cannot hedge or transfer the required credit risk retention and insured depository institutions are not exempt from the new regulations.

The regulators are to define the permissible forms of risk retention and minimum duration of risk retention required. The regulators for residential mortgage assets will be the Federal banking agencies, the SEC, the Secretary of Housing and Urban Development, and the Federal Housing Finance Agency. For other assets, the Federal banking agencies and the SEC will jointly prescribe the regulations. The regulations will be prescribed no later than 270 days after the date of enactment of the Dodd-Frank Act. The regulations are to become effective for securitizers and originators after one year for ABS backed by residential mortgages and two years for all other classes of ABS.

**Additional Disclosure Requirements**

Each ABS issuer will be required to disclose additional information on the collateral. Issuers will need to disclose either asset-level or loan-level data, based on whichever is necessary for investors to independently perform due diligence, and include (i) a unique identifier for each loan broker or originator, (ii) the nature and extent of the compensation for each broker or originator, and (iii) the amount of risk retention by the originator and securitizer of the assets. The SEC will set standards regarding the format of the data provided by the issuers to allow for comparisons across securities in similar types of asset classes.

In addition, the rating agencies will be required to include in any report accompanying a credit rating a description of the representations, warranties, and enforcement mechanisms available to investors and how these differ from the representations, warranties, and enforcement mechanisms in issuances of similar securities. Securitizers will also be required to disclose fulfilled and unfulfilled repurchase requests across all trusts, aggregated by the securitizer. This is to allow investors the ability to identify asset originators with clear underwriting deficiencies. The regulations will be prescribed by the SEC no later than 180 days after the date of the enactment of the Act.

**Due Diligence Analysis**

ABS issuers will be required to perform a review of the assets underlying the ABS and disclose the nature of the review in the registration statement. The regulations will be prescribed by the SEC no later than 180 days after the date of the enactment of the Act.

As noted, before the Dodd-Frank Act became law, the SEC proposed rules in April 2010 to revise the disclosure, reporting, and offering process for ABS. More specifically, the SEC proposes to make “risk retention” a part of the eligibility conditions for use of shelf registration by ABS issuers. Under the proposal, a new Form SF-3 would require the sponsor or an affiliate of the sponsor to retain a net economic interest in each securitization in one of the two following ways:
such person will retain a minimum of five percent of the nominal amount of each of the
tranches of securities sold or transferred to investors, net of hedge positions that are directly
related to the securities; or
in the case of revolving asset master trusts, such person will retain a minimum of five percent
of the nominal amount of the securitized exposures net of hedge positions that are directly
related to the securities or exposures taken by such sponsor or affiliate, provided that the
originator’s interest and securities held by investors are collectively backed by the same pool
of receivables. In other words, a sponsor would be required to retain a claim on the cash
flows of securitized assets equivalent to at least five percent of those paid to investors.

The net economic interest is to be measured at issuance and maintained on an ongoing basis.6

The sponsor’s retention of five percent of each tranche available to investors is meant to create
a “vertical slice” that is held by the sponsor instead of horizontal ones such as the residual
equity tranche that some sponsors have held in the past. The SEC reasons that investors in
a particular tranche can have differing incentives from those of the sponsor and from those
of investors in other tranches, and so requiring a piece of each tranche aligns the sponsor’s
incentives with those of all the investors.7 The goal of both proposed risk retention methods
is to provide that the sponsor has a direct, shared interest with all of the third-parties in the
performance of the underlying assets.

The SEC also argues that the proposed risk retention will align incentives between the sponsors
and the investors and thus will help substitute the investment-grade credit rating requirement in
the ABS shelf eligibility.8

As regulators work to issue rules that will affect all financial institutions involved in
securitization, it is important to assess the current status of the credit markets as well as the
forms and economic implications of the new retention requirements. This note does not
examine the merits or need for regulations. Instead, it focuses on the implications of the new
risk retention requirements and the challenges in implementation given the current status of the
credit markets.

Securitization and the Credit Crisis – Where We are Today
Before we examine the risk retention requirements and the alignment of incentives, it is useful
to consider briefly the current status of securitization and credit markets. Since the credit crisis
started in 2007, the market contraction has affected various credit classes, not just subprime
borrowers.9 Recent data suggest a negative relation between securitization rates and yield
spreads—a measure of the cost of credit—for all products other than conventional conforming
mortgages and credit card receivables. An extreme situation exists in the case of subprime
mortgages. As Figure 1 illustrates, between January and September 2007, the subprime
securitization rate dropped to almost zero, while the mortgage yield spread increased by 52%.10
Figure 2 shows, in the same time period, the mortgage yield spread for jumbo mortgages
increased by 68% and the securitization rate dropped by 41%. When discussing the role of
securitization, it is critical for regulators and market participants to keep in mind the impact
on the cost of credit to consumers for mortgages, auto loans, credit cards, or other products.
Figures 1 and 2 illustrate the securitization rate and the cost of credit for subprime and jumbo
loans as examples.
Figure 1. **Subprime Mortgages—Securitization Rate and Yield Spread**  
Monthly Data from January 1999 to June 2008

Notes and Sources:  
Data are from LoanPerformance and the Federal Reserve.  
Securitization rates are based on loans originated and securitized by month of loan origination.  
Yield spreads are based on the difference between initial mortgage rates on subprime loans and 10-Year Constant Maturity Treasury rates.

Figure 2. **Jumbo Mortgages—Securitization Rate and Yield Spread**  
Monthly Data from January 1999 to December 2007

Notes and Sources:  
Data are from LoanPerformance, Inside Mortgage Finance, and the Federal Reserve.  
Securitization rates are based on loans originated and securitized by month of loan origination.  
Yield spreads are based on the difference between initial mortgage rates on jumbo loans and 10-Year Constant Maturity Treasury rates.
Despite the plethora of Federal programs since 2007 to increase the availability of credit, the credit problem remains as illustrated in Figure 3 below. Figure 3 shows the annual percentage change in manufacturing and industrial loans at US commercial banks from January 2005 to June 2010. The data show that manufacturing and industrial lending rates have declined in 2009 and 2010 relative to prior years and is clear evidence that the credit problem persists.

Figure 3. Annual Percentage Change in Commercial and Industrial Loans at US Commercial Banks
Weekly Data from 5 January 2005 to 2 June 2010

Economic Analysis of the Risk Retention Requirements
Given the current freeze in securitization as illustrated above, regulators now face the daunting task of writing rules for securitizers to comply with the Dodd-Frank Act’s requirements. The new risk retention requirements seem to imply that a “one size fits all” approach could apply to different classes of securitized products. However, there is no economic basis for the particular choice of five percent as the amount of risk retained and recent academic literature shows that there is no “one size fits all” when deciding on the optimal size and type of risk retention for the various securitized products. A “one size fits all” approach may not align incentives as policy makers had envisioned.

First, recent economic analysis of tranche retention shows that different retention mechanisms can have different effects on the incentives of the originator/sponsor to screen borrowers and that there is no “one size fits all” approach in terms of risk retention. The recent work of Fender and Mitchell (2009), for example, shows that business cycle risk impacts various retention mechanisms in different ways. The authors find that the retention of the equity tranche may lead to lower screening efforts by the originator if a downturn in the business cycle is likely to occur following such retention. Based on their findings, the authors argue that it is not possible to determine in advance an optimal amount of retention for securitization transactions as the amount will differ across transactions and market segments.
A recent IMF study finds that the optimal retention scheme, defined in terms of which tranches are retained and their thickness, depends critically on reasonable assumptions about the quality of the loan pool and the economic conditions expected during the life of the securitization. The IMF study proposes that a better way to align incentives is to develop a matrix of risk retention rules that varies by type and quality of assets, the structure of the securities, and the expected economic conditions.15

Second, academics have examined and reviewed the role of securitization—specifically the originate-to-distribute model—and there is an ongoing debate among academics as to whether the model led to lower underwriting standards. For example, while Berndt and Gupta (2008)16 and Keys, Mukherjee, et al. (2008)17 argue that securitization led to a decline in lending standards, Bhardwaj and Sengupta (2010)18 conclude that there was no marked decline in underwriting standards after 2004.

Third, the requirement to hold the five percent interest net of hedging for each transaction presents clear practical difficulties for securitizers. The process of hedging exposure to changes in interest rates and other risks is already quite complicated. Adding the complication of modeling and hedging exposure to account for a retained interest net of hedging will present additional hurdles for the sponsors given the different types of securities they usually hold and the current freeze in many securitization activities.

Discussion
Securitization can be an effective mechanism to increase the availability of credit and reduce its costs to consumers and businesses. In addition, tranching of maturity, priority, and credit allows risks to be more closely matched to investors’ needs. The key to using securitization successfully is to ensure that all market participants, including originators, sponsors, and investors, have the necessary information to price and manage the different risks.

Without the proper economic design of retention requirements that are catered to the specifics of the different securities classes, the new risk retention requirements could raise the costs of providing securitized products, which is not in the best interest of consumers and businesses. The IMF stresses these issues and argues:

While many incentive problems in securitization remain to be resolved, without the replacement of maturing securitized products, banks face a contraction of their funding sources, which may exacerbate already tight credit conditions. At the same time, as banks continue to repair their balance sheets in the current environment, the absence of a risk transfer mechanism is likely to perpetuate deleveraging pressures rather than alleviate them.19

Regulators now face the daunting task of writing rules for securitizers to comply with the Dodd-Frank Act’s requirements, and the new risk retention requirements suggest that a “one size fits all” approach could apply to different classes of securitized products. A review of the economic evidence indicates that the contraction in the credit markets observed since 2007 may be exacerbated by strict adherence to a 5% risk retention requirement. By weighing the economic consequences of different approaches, and incorporating flexible guidelines for the retention of risk throughout a structure, regulators may be able to limit the unintended consequences of the retention requirement.
Given the current conditions of the securitization markets and the supply of credit, it is critical for regulators to assess the implications of the amount and forms of risk retentions, an analysis that economists are well equipped to address. Recent research informs the regulatory process, but further research is needed to determine the unintended consequences, such as a reduction in credit or a skewed distribution of risk that may result from a "one size fits all" approach. An economic analysis of the different forms and amount of retention, as well as the effect of different levels of retention on the supply and demand for credit, is needed to help regulators calibrate the rules to minimize negative effects and align incentives as Congress intends. By employing economic analysis, policymakers will ensure that the new rules address the alignment of incentives.
Bibliography


**Notes**

1. Faten Sabry is a Senior Vice President with NERA Economic Consulting. The author thanks Sharon Brown-Hruska for her insightful comments, and Sungi Lee and Anmol Sinha for their excellent research assistance. All errors are those of the author alone.

2. Under the Dodd-Frank Act, “the term ‘securitizer’ means either (a) an issuer of an asset-backed security; or (b) a person who organizes and initiates an asset-backed securities transaction by selling or transferring assets, either directly or indirectly, including through an affiliate, to the issuer; and the term ‘originator’ means a person who (a) through the extension of credit or otherwise, creates a financial asset that collateralizes an asset-backed security; and (b) sells an asset directly or indirectly to a securitizer.”


6. The term “Federal banking agencies” is defined as the Office of the Comptroller of the Currency, the Board of Governors of the Federal Reserve System, and the Federal Deposit Insurance Corporation.


8. “The Future of Securitization: How to Align Incentives?” (September 2009). See also, Peter M. DeMarco, “The Pooling and Tranching of Securities: A Model of Informed Intermediation” (October 2003) and Janet Mitchell, “Financial Intermediation Theory and Implications for the Sources of Value in Structured Finance Models” (July 2005) (suggesting that sophisticated investors are the ones more likely to buy the riskier and more information sensitive tranches as they are more capable of analyzing the various risks involved).


10. We understand that securitization of subprime mortgages has come to a halt since 2007.

11. This seems to be the case for mortgages, at least.

12. Ingo Fender and Janet Mitchell, “Incentives and Tranche Retention in Securitization: A Screening Model” (September 2009) (available at http://ssrn.com/abstract=1481663 (hereinafter “Fender and Mitchell 2009”)) (stating that a “one size fits all” approach “could end up being ineffective or raising costs in ways detrimental to the goal of a sustained market revival.”).

13. See Fender and Mitchell 2009 and Ingo Fender and Janet Mitchell, “The Future of Securitization: How to Align Incentives?” (September 2009). See also, Peter M. DeMarco, “The Pooling and Tranching of Securities: A Model of Informed Intermediation” (October 2003) and Janet Mitchell, “Financial Intermediation Theory and Implications for the Sources of Value in Structured Finance Models” (July 2005) (suggesting that sophisticated investors are the ones more likely to buy the riskier and more information sensitive tranches as they are more capable of analyzing the various risks involved).


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