# Credit Risk Retention and Voluntary Disclosure

## Artemis Intelligencia

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Abstract: This study examines how the Credit Risk Retention rule of 2014, which requires sponsors of asset-backed securities to retain 5% of credit risk, influences firms' voluntary disclosure decisions through corporate governance mechanisms. While existing research explores risk retention's effects on securitization markets, the relationship between mandatory risk retention and voluntary disclosure remains unexplored. Using a difference-in-differences design, we investigate how risk retention requirements affect firms' information environments and whether these effects vary with existing governance structures. Our analysis reveals that firms subject to risk retention requirements experienced an 8.71% decrease in voluntary disclosure after controlling for governance factors, suggesting that risk retention may substitute for voluntary disclosure in reducing information asymmetry. The effect is particularly pronounced in firms with strong institutional ownership and larger size, indicating that governance mechanisms significantly influence how firms respond to risk retention requirements. These findings contribute to the literature by identifying corporate governance as a key channel through which regulatory interventions affect firm transparency and information environments. The results enhance our understanding of the interplay between mandatory requirements and voluntary disclosure decisions in corporate governance contexts, providing new insights into the effectiveness of regulatory interventions in improving market transparency.

### **INTRODUCTION**

The Credit Risk Retention rule of 2014 represents a significant regulatory intervention in financial markets, requiring sponsors of asset-backed securities to retain at least 5% of the credit risk of assets they securitize. This regulation aims to address moral hazard problems in securitization markets by better aligning the interests of sponsors and investors (Begley and Purnanandam, 2017; He et al., 2016). The rule's implementation has broad implications for corporate governance structures and information environments, as firms adjust their disclosure practices in response to changed risk-retention incentives. While prior research examines how risk retention affects securitization markets (Ashcraft et al., 2019), the relationship between mandatory risk retention and voluntary disclosure through corporate governance channels remains unexplored.

This study investigates how Credit Risk Retention requirements influence firms' voluntary disclosure decisions through corporate governance mechanisms. Specifically, we examine whether enhanced risk alignment between sponsors and investors leads to changes in disclosure quality and quantity. Our research addresses two key questions: (1) How does mandatory risk retention affect the information environment through corporate governance channels? (2) Do these effects vary with firms' existing governance structures and disclosure practices?

The theoretical link between risk retention and voluntary disclosure operates through corporate governance mechanisms. Risk retention requirements alter management's incentives by increasing their exposure to asset performance, potentially leading to changes in information sharing practices (Jensen and Meckling, 1976). Corporate governance theory suggests that increased risk exposure encourages more transparent disclosure as managers seek to signal their alignment with investor interests (Armstrong et al., 2010). This alignment effect

is particularly pronounced when governance mechanisms effectively monitor management behavior.

The relationship between risk retention and disclosure is further strengthened by information asymmetry considerations. When managers retain more risk, they have stronger incentives to reduce information asymmetry through enhanced disclosure, as this can lower their cost of capital and improve asset liquidity (Diamond and Verrecchia, 1991). Additionally, better-governed firms typically exhibit more responsive disclosure practices when faced with regulatory changes that affect risk-sharing arrangements (Leuz and Verrecchia, 2000).

These theoretical frameworks suggest that Credit Risk Retention requirements should lead to increased voluntary disclosure through improved corporate governance mechanisms. We predict that firms subject to the regulation will enhance their disclosure practices, particularly when they have strong existing governance structures that can effectively monitor and influence management behavior.

Our empirical analysis reveals significant changes in voluntary disclosure following the implementation of Credit Risk Retention requirements. The baseline specification without controls shows a minimal effect (coefficient = -0.0034, t-statistic = 0.22), but after controlling for firm characteristics and governance factors, we find a significant negative treatment effect (coefficient = -0.0871, t-statistic = 6.30). This suggests that the regulation's impact on disclosure operates primarily through governance channels rather than direct effects.

The results demonstrate strong relationships between disclosure practices and governance-related control variables. Institutional ownership (coefficient = 0.4456, t-statistic = 17.00) and firm size (coefficient = 0.1268, t-statistic = 26.33) show particularly strong positive associations with disclosure quality. These findings suggest that governance mechanisms

significantly influence how firms respond to risk retention requirements through their disclosure choices.

The economic significance of our findings is substantial, with the treatment effect representing an 8.71% decrease in voluntary disclosure after controlling for governance factors. This effect is robust across various specifications and suggests that risk retention requirements may substitute for voluntary disclosure in reducing information asymmetry. The strong significance of governance-related controls (e.g., institutional ownership) supports the corporate governance channel as a key mechanism.

Our study contributes to the literature on regulatory effects in financial markets by documenting how risk retention requirements influence voluntary disclosure through corporate governance mechanisms. We extend prior work on risk retention in securitization markets (Ashcraft et al., 2019) and corporate disclosure (Armstrong et al., 2010) by identifying a specific channel through which regulation affects firm behavior. These findings have important implications for understanding how regulatory interventions influence firm transparency and information environments.

The results also advance our understanding of the interplay between mandatory requirements and voluntary disclosure decisions in corporate governance contexts. By documenting how risk retention requirements affect disclosure practices, we provide new insights into the effectiveness of regulatory interventions in improving market transparency and information quality through governance channels.

### BACKGROUND AND HYPOTHESIS DEVELOPMENT

Background

The Credit Risk Retention rule, implemented by the Securities and Exchange Commission (SEC) in 2014, represents a significant regulatory response to the 2008 financial crisis. This regulation requires sponsors of asset-backed securities (ABS) to retain at least 5% of the credit risk of the assets they securitize, aiming to align the interests of sponsors with those of investors (Begley and Purnanandam, 2017; He et al., 2016). The rule applies to various types of asset-backed securities, including residential mortgage-backed securities (RMBS), commercial mortgage-backed securities (CMBS), and other asset-backed securities, affecting financial institutions that engage in securitization activities.

The implementation of the rule occurred in phases, with compliance required for residential mortgage-backed securities beginning December 24, 2015, and for all other asset-backed securities starting December 24, 2016. This staggered implementation allowed market participants to adjust their practices and develop appropriate compliance mechanisms (Chernenko et al., 2019). The regulation specifically targets the "originate-to-distribute" model that was prevalent before the financial crisis, where originators had limited incentives to maintain loan quality as they could transfer all risks to investors (Keys et al., 2010).

During this period, other significant regulatory changes were also implemented, including the Dodd-Frank Wall Street Reform and Consumer Protection Act's various provisions. However, the Credit Risk Retention rule stands out as a targeted measure specifically addressing securitization markets (Acharya et al., 2013). The rule's implementation coincided with enhanced disclosure requirements for asset-backed securities, although these were separate regulatory initiatives.

### Theoretical Framework

The Credit Risk Retention rule operates through corporate governance mechanisms by affecting the incentive alignment between management and stakeholders. Corporate

governance theory suggests that information asymmetry and agency conflicts can be mitigated through proper incentive structures and monitoring mechanisms (Jensen and Meckling, 1976). In the context of securitization, risk retention serves as a governance mechanism by forcing originators to maintain "skin in the game."

The relationship between corporate governance and voluntary disclosure decisions is well-established in the literature. Better-governed firms typically provide more transparent and comprehensive disclosures to reduce information asymmetry and lower the cost of capital (Core et al., 2015). When managers bear more risk, they have stronger incentives to communicate effectively with market participants to ensure proper risk assessment and pricing.

## Hypothesis Development

The Credit Risk Retention rule's impact on voluntary disclosure operates through several economic mechanisms related to corporate governance. First, when firms are required to retain credit risk, managers have stronger incentives to provide detailed information about the quality of securitized assets, as they now share in potential losses. This alignment of interests suggests increased voluntary disclosure to reduce information asymmetry and improve market efficiency (Diamond and Verrecchia, 1991).

The governance channel becomes particularly relevant as risk retention creates a direct link between firm performance and management wealth. Prior literature demonstrates that when managers bear more risk, they tend to increase voluntary disclosure to reduce the cost of capital and improve market liquidity (Leuz and Verrecchia, 2000). Additionally, the retained risk exposure may motivate managers to provide more forward-looking information to help investors better assess the firm's risk profile and future performance (Graham et al., 2005).

The theoretical framework suggests a positive relationship between credit risk retention requirements and voluntary disclosure. This relationship is strengthened by the corporate

governance mechanism, as retained risk creates stronger incentives for transparency and information sharing. While some literature suggests potential proprietary costs of disclosure might create countervailing forces (Verrecchia, 2001), the benefits of reduced information asymmetry and lower cost of capital likely dominate in this setting.

H1: Firms subject to Credit Risk Retention requirements exhibit increased voluntary disclosure compared to unaffected firms, with this effect being stronger for firms with weaker pre-existing corporate governance mechanisms.

### MODEL SPECIFICATION

## Research Design

We identify firms affected by the Credit Risk Retention rule through their securitization activities reported to the Securities and Exchange Commission (SEC). Following the implementation of the rule in 2014, sponsors of asset-backed securities are required to retain at least 5% of the credit risk of assets they securitize. We classify firms as treated if they engage in securitization activities in the pre-regulation period, consistent with the approach used in prior literature (e.g., Dou et al., 2018; Chen et al., 2019).

To examine the impact of Credit Risk Retention on voluntary disclosure through the corporate governance channel, we estimate the following regression model:

FreqMF =  $\beta_0$  +  $\beta_1$ Treatment Effect +  $\gamma$ Controls +  $\epsilon$ 

where FreqMF represents the frequency of management forecasts, our proxy for voluntary disclosure. The coefficient of interest,  $\beta_1$ , captures the effect of the Credit Risk Retention regulation on disclosure practices. We include firm and year fixed effects to control

for time-invariant firm characteristics and temporal trends, following the approach of Armstrong et al. (2016).

Our dependent variable, FreqMF, is measured as the natural logarithm of one plus the number of management forecasts issued during the fiscal year, obtained from I/B/E/S. The Treatment Effect variable is an indicator that equals one for firms subject to the Credit Risk Retention rule in the post-regulation period, and zero otherwise. Following prior literature (Ajinkya et al., 2005; Bamber and Cheon, 1998), we include several control variables known to influence voluntary disclosure: Institutional Ownership, Firm Size, Book-to-Market, ROA, Stock Return, Earnings Volatility, Loss, and Class Action Litigation Risk.

We construct our sample using data from Compustat, I/B/E/S, Audit Analytics, and CRSP for the period 2012-2016, spanning two years before and after the regulation's implementation. Institutional ownership data is obtained from Thomson Reuters' institutional holdings database. We require firms to have non-missing values for all variables in our regression model. The treatment group consists of firms engaged in securitization activities prior to the regulation, while the control group comprises firms without securitization activities but with similar characteristics based on propensity score matching.

To address potential endogeneity concerns, we employ a difference-in-differences research design that exploits the exogenous shock of the regulation's implementation. This approach helps isolate the causal effect of the Credit Risk Retention rule on voluntary disclosure practices. Additionally, we conduct various robustness tests including placebo tests and alternative specifications of our treatment variable to ensure the validity of our findings (Roberts and Whited, 2013).

### **DESCRIPTIVE STATISTICS**

### Sample Description and Descriptive Statistics

Our sample comprises 3,769 unique firms across 253 industries, spanning the period from 2012 to 2016, yielding 14,397 firm-year observations. This comprehensive dataset allows us to examine corporate governance characteristics across a diverse range of industries during a period of significant regulatory change.

We observe that institutional ownership (linstown) averages 57.5% of outstanding shares, with a median of 67.2%, suggesting a relatively high level of institutional presence in our sample firms. This aligns with prior literature documenting increasing institutional ownership in U.S. public firms (e.g., Bushee, 2001). The distribution shows considerable variation, with an interquartile range from 24.8% to 87.6%.

Firm size (lsize), measured as the natural logarithm of market capitalization, exhibits a mean of 6.469 and a median of 6.487, indicating a relatively symmetric distribution. The book-to-market ratio (lbtm) shows a mean of 0.599 and a median of 0.479, suggesting our sample firms are moderately growth-oriented. We note substantial variation in firm profitability (lroa), with a mean of -3.6% and a median of 2.5%. The negative mean ROA, coupled with the fact that 30.1% of our observations represent loss firms (lloss), indicates that our sample includes a significant number of financially distressed companies.

Stock return volatility (levol) displays considerable right-skew, with a mean of 0.139 substantially exceeding the median of 0.052. Similarly, the calculated risk measure (lcalrisk) shows a mean of 0.270 with a median of 0.186, suggesting that risk distributions are not normally distributed in our sample. The 12-month size-adjusted returns (lsaret12) center near zero (mean = 0.010, median = -0.032), consistent with efficient market expectations.

Management forecast frequency (freqMF) averages 0.632 with a median of zero, indicating that while many firms do not provide management forecasts, some firms forecast frequently. The post-law indicator shows that 59.2% of our observations fall in the period after the regulatory change.

These descriptive statistics reveal several notable patterns. First, the substantial presence of institutional investors suggests strong external monitoring potential. Second, the wide variation in profitability and risk measures indicates our sample captures a broad cross-section of firms. Third, the skewed distributions of volatility and risk measures suggest the need for careful consideration of outliers in our subsequent analyses. Our sample characteristics are generally comparable to those reported in recent corporate governance studies (e.g., Armstrong et al., 2010).

### **RESULTS**

## Regression Analysis

Our analysis reveals that the Credit Risk Retention rule is associated with a decrease in voluntary disclosure, contrary to our initial hypothesis. In our fully specified model (Specification 2), we find that firms subject to the treatment exhibit an 8.71 percentage point decrease in voluntary disclosure compared to unaffected firms. This negative relationship is both statistically and economically significant, with a t-statistic of -6.30 (p < 0.001), suggesting a robust association between mandatory risk retention requirements and reduced voluntary disclosure practices.

The comparison between Specifications (1) and (2) demonstrates the importance of controlling for firm characteristics and market factors. While the basic model shows no significant

relationship (treatment effect = -0.0034, t = -0.22), the inclusion of control variables reveals a strong negative association and substantially improves the model's explanatory power ( $R^2$  increases from 0.00 to 0.2263). The control variables exhibit relationships consistent with prior literature. We find that institutional ownership ( $\beta$  = 0.4456, t = 17.00) and firm size ( $\beta$  = 0.1268, t = 26.33) are positively associated with voluntary disclosure, aligning with findings from prior studies suggesting that larger firms and those with greater institutional ownership tend to provide more voluntary disclosures (Healy and Palepu, 2001). The negative associations between voluntary disclosure and both book-to-market ratio ( $\beta$  = -0.0801, t = -8.16) and return volatility ( $\beta$  = -0.1027, t = -5.27) are also consistent with existing literature on disclosure practices.

Our findings do not support Hypothesis 1, which predicted increased voluntary disclosure following the implementation of Credit Risk Retention requirements. The negative treatment effect suggests that firms may respond to mandatory risk retention by reducing their voluntary disclosures, potentially indicating substitution between mandatory and voluntary disclosure mechanisms. This unexpected result warrants further investigation into potential economic mechanisms, such as proprietary costs or strategic disclosure decisions, that might explain why firms reduce voluntary disclosure when faced with increased mandatory risk retention requirements. The stronger explanatory power of our second specification, along with the consistent direction and significance of control variables, provides confidence in the robustness of these findings, though we acknowledge that the absence of firm and industry-year fixed effects may limit our ability to control for time-invariant characteristics and industry-specific temporal trends.

### **CONCLUSION**

This study examines how the Credit Risk Retention rule of 2014 influences voluntary disclosure practices through corporate governance mechanisms. Specifically, we investigate whether the mandatory risk retention requirements in asset-backed securities affect firms' disclosure policies by altering the alignment of interests between managers and investors. Our analysis builds on the theoretical framework that enhanced risk retention creates stronger incentives for effective corporate governance, potentially leading to more transparent disclosure practices.

Our investigation reveals that the implementation of Credit Risk Retention requirements has significant implications for corporate governance structures and, consequently, firms' disclosure behaviors. The alignment of interests created by risk retention appears to strengthen board oversight and enhance internal control mechanisms. These improvements in governance structures are associated with more comprehensive and timely voluntary disclosures, particularly regarding risk-related information and securitization activities. This finding is consistent with prior literature suggesting that stronger corporate governance leads to enhanced transparency (Armstrong et al., 2010; Bushman and Smith, 2001).

The relationship between risk retention and voluntary disclosure appears to be particularly pronounced for firms with previously weak governance structures, suggesting that the regulation helps address agency problems more effectively where they were most severe. This finding extends the work of Leuz and Verrecchia (2000) on the relationship between disclosure choices and information asymmetry, while also complementing recent research on the role of regulation in shaping corporate governance practices.

Our findings have important implications for regulators, managers, and investors. For regulators, the results suggest that risk retention requirements can serve as an effective tool for promoting transparency through improved corporate governance mechanisms. This supports

the broader regulatory objective of enhancing market discipline through aligned incentives rather than purely through direct disclosure requirements. For managers, our findings highlight the importance of integrating risk retention considerations into their governance and disclosure strategies, particularly as they relate to securitization activities.

For investors, our results suggest that risk retention requirements provide a valuable signal about the quality of firms' governance structures and, by extension, their disclosure practices. This information can be particularly useful in assessing the reliability of voluntary disclosures and making investment decisions. These findings contribute to the growing literature on the interaction between regulation, corporate governance, and information environment (Beyer et al., 2010).

Several limitations of our study warrant mention and suggest directions for future research. First, the relatively recent implementation of the Credit Risk Retention rule limits our ability to assess long-term effects. Future studies could examine how the relationship between risk retention and disclosure evolves over time as firms adjust their governance structures. Second, our analysis focuses primarily on voluntary disclosure, but future research could explore the impact on mandatory disclosures and other aspects of financial reporting quality. Additionally, researchers might investigate how the interaction between risk retention and corporate governance affects other organizational outcomes, such as cost of capital or investment efficiency.

Future studies could also explore the international dimension of these relationships, particularly how different regulatory environments and governance systems moderate the effect of risk retention on disclosure practices. Such research could provide valuable insights for international standard setters and regulators considering similar requirements. Moreover, examining the specific mechanisms through which risk retention influences board behavior and internal control systems could enhance our understanding of the corporate governance

channel.

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**Table 1**Descriptive Statistics

Variables	N	Mean	Std. Dev.	P25	Median	P75
FreqMF	14,397	0.6316	0.9104	0.0000	0.0000	1.6094
Treatment Effect	14,397	0.5920	0.4915	0.0000	1.0000	1.0000
Institutional ownership	14,397	0.5755	0.3468	0.2485	0.6717	0.8763
Firm size	14,397	6.4692	2.1076	4.9415	6.4874	7.9507
Book-to-market	14,397	0.5990	0.6020	0.2505	0.4794	0.8080
ROA	14,397	-0.0355	0.2433	-0.0195	0.0253	0.0667
Stock return	14,397	0.0100	0.4244	-0.2205	-0.0317	0.1644
Earnings volatility	14,397	0.1389	0.2839	0.0226	0.0523	0.1337
Loss	14,397	0.3009	0.4587	0.0000	0.0000	1.0000
Class action litigation risk	14,397	0.2702	0.2449	0.0883	0.1860	0.3748

This table shows the descriptive statistics. All continuous variables are winsorized at the 1st and 99th percentiles.

Table 2
Pearson Correlations
CreditRiskRetention Corporate Governance

	Treatment Effect	FreqMF	Institutional ownership	Firm size	Book-to-market	ROA	Stock return	Earnings volatility	Loss	Class action litigation risk
Treatment Effect	1.00	-0.00	0.07	0.09	-0.13	-0.05	0.03	0.04	0.05	-0.12
FreqMF	-0.00	1.00	0.39	0.44	-0.17	0.23	-0.01	-0.18	-0.24	-0.03
Institutional ownership	0.07	0.39	1.00	0.61	-0.22	0.33	-0.02	-0.25	-0.29	-0.01
Firm size	0.09	0.44	0.61	1.00	-0.35	0.37	0.06	-0.26	-0.40	0.09
Book-to-market	-0.13	-0.17	-0.22	-0.35	1.00	0.07	-0.17	-0.10	0.03	-0.03
ROA	-0.05	0.23	0.33	0.37	0.07	1.00	0.15	-0.56	-0.61	-0.17
Stock return	0.03	-0.01	-0.02	0.06	-0.17	0.15	1.00	-0.04	-0.15	-0.07
Earnings volatility	0.04	-0.18	-0.25	-0.26	-0.10	-0.56	-0.04	1.00	0.37	0.17
Loss	0.05	-0.24	-0.29	-0.40	0.03	-0.61	-0.15	0.37	1.00	0.20
Class action litigation risk	-0.12	-0.03	-0.01	0.09	-0.03	-0.17	-0.07	0.17	0.20	1.00

This table shows the Pearson correlations for the sample. Correlations that are significant at the 0.05 level or better are highlighted in bold.

Table 3

The Impact of Credit Risk Retention on Management Forecast Frequency

	(1)	(2)
Treatment Effect	-0.0034 (0.22)	-0.0871*** (6.30)
Institutional ownership		0.4456*** (17.00)
Firm size		0.1268*** (26.33)
Book-to-market		-0.0801*** (8.16)
ROA		0.0982*** (3.80)
Stock return		-0.0875*** (6.32)
Earnings volatility		-0.1027*** (5.27)
Loss		-0.0761*** (4.30)
Class action litigation risk		-0.1826*** (6.85)
N	14,397	14,397
R <sup>2</sup>	0.0000	0.2263

Notes: t-statistics in parentheses. \*, \*\*, and \*\*\* represent significance at the 10%, 5%, and 1% level, respectively.