# Accounting for Leases and Portfolio Decisions of Active Corporate Bond Funds

**Haomiao (Holly) He**
California State Polytechnic University, Pomona
**Terry Shevlin**
University of California, Irvine; University of Washington
**Zheng Sun**
University of California, Irvine
**Jenny Xinjiao Guan**
Monash University

July 2025

**Abstract**

This study examines the impact of ASC 842 on the portfolio decisions of active corporate bond funds. Using monthly fund holdings of individual bonds and a six-month window centered on the implementation, we find that, shortly after the implementation of ASC 842, active corporate bond funds reduce the holdings of bonds issued by firms with significant exposure to operating lease recognition. Further analyses show that the effect is more pronounced for unsophisticated funds, high-yield funds, and issuers with overestimated imputed interest rates and more complex leasing activities. Furthermore, we find that bond funds with more issuers who have greater exposure to operating lease recognition in their holdings exhibit better performance after the implementation of ASC 842, with a larger performance increase for less sophisticated funds. These findings suggest that operating lease recognition under ASC 842 corrects the underestimation of issuers' *de facto* credit risks by active corporate bond funds and enhances the usefulness of information on operating leases in bond funds' portfolio decisions. This study is the first to highlight the impacts of ASC 842 on the portfolio decisions of active corporate bond funds and provides evidence to FASB for its post-implementation review.

**Keywords:** ASC 842, Off-Balance-Sheet Disclosure, Operating Lease Recognition, Corporate Bond Fund, Mutual Fund Portfolio Management, Mutual Fund Holdings.

**Acknowledgments:** We thank Derek Christensen, Elizabeth Chuk, Michelle Hanlon, Joanna Ho, Yawen Jiao (discussant), Ben Lourie, Brian Rountree, Kaschia Wade (discussant), Chenqi Zhu, several practitioners from fixed income asset management companies, and seminar/conference participants at the 17th Annual California Corporate Finance Conference, the 2024 SPARK conference, the 2025 HARC conference, the 2025 WDSI conference, University of California, Irvine, California State University, Fresno, and California State Polytechnic University, Pomona. We acknowledge financial support from University of California, Irvine, California State Polytechnic University, Pomona, and Monash University. Any errors in this paper are entirely our own.

## 1. Introduction

Accounting for leases has been a significant regulatory challenge for decades. Under the legacy Statement of Financial Accounting Standard (SFAS) No. 13, codified as Accounting Standards Codification (ASC) 840, lessees only recognized capital leases and disclosed operating lease payments in footnotes. A common criticism of ASC 840 is that it incentivized firms to opportunistically use operating leases, raising questions about the quality of operating lease disclosures (Abdel-Khalik, 1981; Cornaggia *et al.*, 2013; Securities and Exchange Commission [SEC], 2005).[1] The new lease accounting standard (codified as ASC 842) became effective for public companies in 2019 and supersedes ASC 840, requiring lessees to recognize operating leases on the balance sheet. The amendment aims to enhance the usefulness of lease accounting (Financial Accounting Standards Board [FASB], 2016). FASB (2021) calls for more research on how ASC 842 affects decision usefulness for various users, including credit investors, in its post-implementation review.

Responding to the call from FASB, we investigate how operating lease recognition under ASC 842 affects the portfolio decisions of active corporate bond funds, which are key credit investors in the corporate debt sector. It is important to understand how active corporate bond funds adjust their portfolios in response to ASC 842, for several reasons. First, corporate bond funds (hereafter termed "bond funds") have become major players in the debt market, holding $2.5 trillion in net assets and receiving $1.12 trillion in net flows in 2021 (Anand *et al.*, 2021; Choi *et al.*, 2020; Investment Company Institute [ICI], 2022; Jiang *et al.*, 2021a; Jiang *et al.*, 2022). Second, ASC 842 may affect users who rely on credit assessments in their decisions (Cheng *et al.*, 2022; He *et al.*, 2025). Active bond funds heavily rely on credit metrics in their investment strategies, serving as a laboratory to study the impact of ASC 842.[2] Third, despite growing interest in the decision-making process of bond funds (Huang *et al.,* 2023; Li *et al.*, 2022), little research

[1] While reporting incentive is one incentive for structuring lease contracts as operating leases, it is not the only incentive. See other incentives in Caskey and Ozel (2019), Eisfeldt and Rampini (2009), Hanlon and Heitzman (2022), and Graham *et al.* (1998).

[2] Figure 1 shows the credit analysis process of PIMCO. In-house credit analysts utilize financial information to conduct credit assessments, facilitating successful active credit portfolio management.

has explored how accounting regimes affect bond funds. Unlike equity funds, which are commonly studied in accounting research, bond funds differ in terms of their clientele, risk appetites for underlying assets, markets for trading, and search frictions. ASC 842 presents a valuable opportunity for studying the impact of accounting regimes on the decisions of active bond funds.

Prior studies find that users tend to be less attentive to footnote disclosures compared to numbers recognized on financial statements (Blankespoor *et al.*, 2020; Clor-Proell and Maines, 2014; Hirshleifer and Teoh, 2003; Müller *et al.*, 2015; Schipper, 2007). Operating leases were footnoted rather than recognized under the legacy accounting standards. Due to information constraints and processing costs, bond investors can overlook footnoted operating lease assets and liabilities, leading to overly optimistic credit metrics[3] in fundamental credit analysis and the underestimation of *de facto* credit risks for lease-intensive bond issuers. ASC 842 requires the recognition of operating leases on the balance sheet, making *de facto* credit risks more visible. Jung and Scarlat (2024) find that the implementation of ASC 842 corrects the underestimation of credit risks due to the neglect of operating lease liabilities in the overall bond market, as reflected in higher bond yields post implementation. If active bond funds faced similar problems under the legacy standard, ASC 842 can help them correct previously underestimated credit risks as evidenced by the funds reducing their holdings of *de facto* riskier bonds.

However, this prediction is not without tension. Sophisticated creditors, such as banks and credit rating agencies, may have adjusted off-balance-sheet items in their fundamental credit analysis under the legacy standard (Altamuro *et al.*, 2014; Kraft, 2015; Graden, 2018). If active bond funds had fully adjusted for off-balance-sheet operating leases, they would not react to ASC 842. For some sophisticated users, pre-implementation adjustments can be overly harsh. For example, He *et al.* (2025) show that banks, key players in the private debt market, over-protect against pre-ASC 842 operating lease uncertainties and issue more favorable consensus bank ratings after the implementation of ASC 842. If active bond funds were similarly over-protective before the implementation of ASC 842, they would increase their holdings of *de facto* risky

[3] Under the legacy accounting standard, the off-balance-sheet operating leases can lower reported debt-to-equity ratios (leverage) and increase reported return on assets (profitability), leading to overly optimistic credit metrics.

bonds post-ASC 842. Given limited empirical evidence on how active bond funds treat operating leases under different reporting regimes, it is an empirical question *ex ante* whether and how the implementation of ASC 842 affects the portfolio decisions of these funds.

To address this question, we collect individual bond funds' monthly portfolio holdings data from Morningstar and apply a generalized difference-in-differences (DID) design with a six-month window centered on the implementation of ASC 842. The combination of monthly holdings data and the short-window sample enhances our confidence in attributing changes in portfolio decisions of bond funds to the implementation of ASC 842. For each fund-bond-month observation, post periods are defined as holding report months following the bond issuer implementing the new lease standard. We then compare the changes in bond funds' holdings of bonds issued by firms with significant exposure to operating lease recognition to the changes in their holdings of bonds issued by firms with limited exposure to operating lease recognition.

By analyzing the monthly holdings of 2,493 unique bonds issued by 409 unique firms in the portfolios of 289 unique active bond funds, we find that the new lease accounting standard decreases a bond fund's monthly holdings of a treatment bond in their portfolios by 4.7% of the sample mean. The magnitude of this effect is economically comparable to the impact of bond rating, given that a one-standard-deviation improvement in bond rating implies an increase in a bond fund's monthly percentage holding equal to 3.8% of the sample mean.[4] The results suggest that the implementation of the new lease standard reduces bond fund holdings in bond issuers heavily exposed to operating lease recognition. Our difference-in-differences design relies on the parallel-trend assumption. We plot the coefficients of the interactions between event month dummies and the treatment dummy using dynamic effect analysis. The plot does not reveal significant trends in the pre-period, validating the parallel-trend assumption.

We conduct cross-sectional tests to uncover the underlying mechanisms. Our first cross-sectional test examines whether the treatment effects vary with fund sophistication (*Sophistication Channel*). We find

[4] We compare the economic significance of our variable of interest to bond ratings because bond ratings are a critical credit metric for active bond funds when formulating their investment strategies.

that the treatment effect is stronger for less sophisticated funds, proxied by small funds and funds less diversified into alternative investments. Our next cross-sectional test examines whether the treatment effect is driven by the correction of incorrect adjustments of operating leases in funds' in-house fundamental credit analyses (*Information Channel*). As in-house credit analysis is not directly observable, we take two steps to conduct this cross-sectional test. First, we find stronger treatment effects for high-yield bond funds, where fundamental credit analyses are more critical to portfolio management (Jiang *et al.*, 2021b; van Doorn, 2025).[5] We then investigate when funds tend to misinterpret operating lease information prior to ASC 842. We find stronger treatment effects when operating lease liabilities are easily underestimated (e.g., issuers use overstated imputed interest rates) and when lease disclosures are too complex to be understood by sophisticated users, such as regulators (e.g., SEC comment letters on lease reporting).

To more confidently attribute our results to the improved decision usefulness brought by ASC 842, we conduct several analyses to address alternative hypotheses. First, implementing ASC 842 may trigger fundamental changes in issuers' operations and capital structures. To address this concern, we control for post-standard fundamental issuer changes by interacting our post-period dummy with all fundamental credit metrics and bond ratings or documented fundamental activities (such as new operating lease commitments and capital expenditure). Second, funds can reduce holdings simply to cater to investor redemptions rather than making better-informed decisions under ASC 842. This argument assumes that ASC 842 triggers fund investor redemptions. We test this underlying assumption directly and find no evidence of such redemptions. Third, bond funds can offload the *de facto* riskier bonds because they observe lower bond returns post-ASC 842. In our main analysis, we address this concern by controlling the key drivers of bond returns, i.e., rating and maturity. In an alternative analysis, we further control for monthly bond returns. These analyses yield qualitatively similar results to our main findings.

[5] Jiang et al. (2021b) highlight the importance of credit risks in the portfolio management of high-yield bond funds. Van Doorn (2025) provides direct anecdotal evidence that detailed credit analysis is essential for active high-yield bond funds to "avoid risk" and "gain confidence that purchases of bonds that temporarily trade at deep discounts to face value will work out well."

After showing that bond funds alter their portfolios by selling *de facto* risky bonds after the implementation of ASC 842, we further investigate whether selling these bonds is beneficial for bond funds by focusing on fund performance. We find that, on average, fund performance improves post-ASC 842 for bond funds that have more issuers with greater exposure to operating lease recognition in their holdings. Moreover, such improvement is more pronounced for unsophisticated funds, which benefit more from ASC 842 than sophisticated funds. These results lend further support to our argument that ASC 842 helps bond funds make better-informed decisions.

Our study contributes to a common standard-setting trade-off between recognition and disclosure, providing insights for the post-implementation review of ASC 842. James Kroeker, the FASB's vice chairman, maintains that the new lease rule "adds light to one of the last remaining crevasses of off-balance-sheet accounting." Several concurrent papers have responded to FASB's question "is the standard accomplishing its stated purpose" in its post-implementation review (FASB, 2021). Studies on the primary debt market suggest that banks modify debt contracts, loan spreads, and bank ratings in response to ASC 842 (Cheng *et al.*, 2022; He *et al.*, 2025). As for the public debt market, Jung and Scarlat (2024) investigate the impact of ASC 842 on overall bond pricing, showing a significant increase in bond yield for firms with unexpected lease liabilities following the implementation of ASC 842. Given the complexity of price discovery, our study focuses on the portfolio decisions of active bond funds rather than the aggregate market signals (like bond prices) to better understand the decision-making process. We suggest that active bond funds make better-informed portfolio decisions in response to the implementation of ASC 842.

This paper also contributes to the broader literature discussing the information constraints faced by institutional users (Ben-Rephael *et al.*, 2017; deHann *et al.*, 2015; Nekrasov *et al.*, 2023). While prior literature in this domain focuses primarily on the equity market, we identify a unique debt-market setting, to illustrate how information constraints affect institutional users. In the lease setting, early studies show that institutional users, such as credit rating agencies and banks, adjust for footnoted operating leases (Altamuro *et al.*, 2014; Graden, 2018). Based on such evidence, one might expect that institutional users in the debt market are not subject to information constraints brought about by off-balance-sheet leases and,

thus, do not respond to the adoption of ASC 842. However, our results empirically challenge this assumption. We find that a less sophisticated subgroup among active bond funds struggles with the off-the-balance-sheet accounting of operating leases. These findings align with recent evidence that institutional investors in the municipal bond market underreact to non-salient signals for increased default risks (Cornaggia *et al.*, 2022). Together, these findings highlight how information constraints can persist among institutional investors in the bond market.

Lastly, this paper contributes to an emerging area concerning how active bond funds assess corporate information to guide their portfolio decisions (Huang *et al.,* 2023; Li *et al.*, 2022). While anecdotal evidence suggests that active bond funds form security selection strategies based on fundamental credit analysis, previous studies have overlooked the role of accounting regimes in their portfolio decisions. We take an initial step to understand how active bond funds react to a mandatory change in accounting for leases. Our results highlight the role of accounting in the portfolio decisions of active bond funds.

The rest of this paper proceeds as follows. Section 2 discusses the institutional background and relevant literature. Section 3 develops our hypotheses. Section 4 presents the research methodology and sample construction. Section 5 presents the empirical results and Section 6 concludes our investigation.

## 2. Institutional Details and Relevant Prior Literature

### *2.1 Accounting for leases*

Before the fiscal year 2019, accounting for leases was regulated under SFAS No. 13, *Accounting for Leases*, which was codified as ASC 840. Under the legacy accounting standard, leases were categorized into two major types: *operating leases* and *capital leases* (*finance leases* under ASC 842). *Operating leases* were essentially considered as rentals, while *capital leases* were treated as property purchases. The balance sheet contrast between operating leases and capital leases is stark: lessees do not recognize assets or liabilities for operating leases; whereas, they recognize leased assets (less depreciation or amortization) and a lease liability obligation for capital leases.

The off-balance-sheet reporting of operating leases, combined with bright-line criteria for capitalizing leases,[6] has been criticized for encouraging managers to structure lease agreements opportunistically and deceiving users. Abdel-Khalik (1981) finds that many companies restructured their leases to avoid capitalization after the implementation of SFAS No. 13. In 2005, the SEC highlighted that there were "approximately $1.25 trillion in non-cancelable future cash obligations committed under operating leases that are not recognized on issuer balance sheets" (SEC, 2005). Ketz (2003) argues that "lease accounting has been a disaster for a very long time… corporate managers can deceive investors and creditors by reporting leases as operating leases and pretend that they do not have any lease obligations."

FASB and International Accounting Standards Board (IASB) initiated a joint project in 2006, to enhance lease reporting, and they issued two exposure drafts in 2010 and 2013 (FASB, 2010; FASB and International Financial Reporting Standards Foundation [IFRSF], 2013). While regulators and some commentators remain positive towards the impact of the new lease proposal,[7] many respondents expressed concerns in comment letters. Comiran and Graham (2016) analyze 1,454 comment letters and find that approximately 80% of the commentators were against the new lease proposal, with concerns including a high perceived compliance cost and a belief about the increase in cost of capital.

Despite the vigorous debate, the FASB released the new lease accounting standard (Accounting Standards Update No. 2016-02) in 2016, codified as ASC 842. ASC 842 mandates the capitalization of nearly all leases on the balance sheet and the disclosure of inputs to support the capitalization. Under ASC 842, a lessee recognizes both a right-of-use asset and a lease liability at the lease commencement date. ASC

[6] The two bright-line criteria for classifying leases as capital leases under ASC 840 are "the lease term is equal to 75 percent or more of the estimated economic life of the leased property" and "the present value of the minimum lease payments (excluding executory costs) equals or exceeds 90 percent of the fair value of the leased property".

[7] FASB's Vice Chairman James Kroeker said in an interview: "It's pretty easy to say it's a win for financial reporting when you increase both transparency and comparability of one of the largest – if not the largest – source of current off-balance-sheet financing" (Tysiac, 2016). The CFA Institute (2013) posited in a comment letter that "the update to the lease accounting standards proposed in the Revised ED provides an opportunity for the Boards to enhance the transparency of lease contracts and to improve comparability of financial statements across the globe…Capitalization of leases will enable different market participants (i.e., investors, auditors, academics, preparers) to better assess the lease obligation and, therefore, the total financial leverage of reporting companies."

842 also eliminates the bright-line rule for classifying leases as *finance leases* (formerly known as *capital leases* under ASC 840).

Moreover, ASC 842 expands lease-related footnote disclosures. Under the legacy standard, lessees were required to disclose future lease payments for each of the next five years, along with a lump-sum thereafter portion, separately for operating leases and capital leases. ASC 842 goes further, by mandating lessees to disclose the weighted average discount rate used in measuring the lease liability, the weighted average remaining lease term, and several additional quantitative items.[8] ASC 842 also enhances the qualitative disclosure of lease transactions, including the information about leases that have not commenced but that create significant rights and obligations, lease transactions between related parties, and the significant judgments and assumptions made.

The FASB allowed for an extended transition period of more than two years to implement ASC 842. ASC 842 became effective for fiscal years beginning after December 15, 2018, with early implementation being permitted. For a public company, the first fiscal year under ASC 842 was 2019. In 2021, the FASB issued a call for more research on the post-implementation review of ASC 842. The objectives of the FASB's post-implementation review were to: (1) determine whether the new lease standard is accomplishing its stated purpose; (2) evaluate the implementation and continuing compliance costs; and (3) provide feedback to improve the standard-setting process.

### *2.2 Corporate bond mutual funds*

As shown in Figure 2, the total net assets of corporate bond mutual funds have trended up steadily. According to the ICI (2022), corporate bond funds grew from managing approximately $350 billion total net assets in 2000 to approximately $2.5 trillion by the end of 2021, suggesting an average annual growth rate of around 11%. This growth rate is roughly twice that of governmental and municipal bond funds combined over the same period.

[8] Additional quantitative items include total lease costs, the cash flows arising from lease transactions, supplemental non-cash information on lease liabilities arising from right-of-use assets, maturity analysis of undiscounted lease liabilities, and the amount of short-term lease commitments.

Despite their growing prominence, research on corporate bond funds has been quite limited. Most studies on mutual funds and institutional investors in the accounting literature tend to focus on equity funds rather than bond funds. Corporate bond funds differ from equity funds in several respects.

First, fund investors can be a different clientele, due to different preferences for underlying assets. Corporate bonds exhibit distinct return and risk characteristics compared to stocks, and they offer investors fixed income streams, with their prices factoring in yield curve risks, credit risks, and liquidity risks (Chen and Qin, 2017; Giesecke *et al.*, 2011; Lin *et al.*, 2011).

Second, equity funds and corporate bond funds have different relationships between fund performance and investor flows. Equity funds have convex flow-performance sensitivity (i.e., a greater sensitivity of inflows to good past performance than the sensitivity of outflows to bad past performance) (Goldstein *et al.*, 2017; Lynch and Musto, 2003). Corporate bond funds exhibit concave flow-performance sensitivity (i.e., a greater sensitivity of outflows to poor past performance than the sensitivity of inflows to good past performance), suggesting that poor performance triggers investor redemption, similar to a "bank run" and contributing to financial fragility (Choi *et al.*, 2020; Goldstein *et al.*, 2017; Jiang *et al.*, 2022; Jiang *et al.*, 2021a).[9] Due to its potential implications for financial stability, regulators, practitioners, and academia have demonstrated an interest in the liquidity management of underlying assets within corporate bond funds (Jiang *et al.*, 2021a; Schrimpf *et al.*, 2021).

Third, whilst most stocks are traded on exchanges, corporate bond trading has largely migrated to a dealer-oriented "over-the-counter" market dominated by large institutional investors since the 1940s. Participants in this market mainly consist of insurance companies, pension funds, and mutual funds. Insurance companies and pension funds have different investment objectives from bond mutual funds, targeting their internal liabilities and absorbing bonds into their stable "buy-and-hold" portfolios soon after issuance (Aramonte and Mano, 2022; Bessembinder *et al.*, 2008). Bond mutual funds aim to maximize their

[9] The concave flow-performance sensitivity mainly results from the liquidity mismatch between short-term investor flows, which can occur on a daily basis, and long-term holdings, which consist of bonds with durations spanning years, leading to fund asset fire sales in response to large investor redemptions.

total return and adjust bond holdings based on risk factors or investor flows (Aramonte and Mano, 2022; Dudley, 2016; Jones, 2012).

Fourth and finally, given that over-the-counter corporate bond trades tend to be large and infrequent, search frictions and transaction costs are higher in the bond market than in the stock market (Bessembinder *et al.*, 2008; Feldhutter, 2012; Huang *et al.*, 2023). Bond funds have strong incentives to exploit the information asymmetry in the bond market and adopt active management strategies. To effectively select creditworthy issues, active bond funds largely rely on fundamental credit analysis conducted by in-house credit analysts (Soronow, 2012).

Although prior studies show that accounting information affects bond prices (Bhojraj and Swaminathan, 2009; Even-Tov, 2017; Jung and Scarlat, 2024), bond prices are aggregate signals of all the information available in the bond market. As Lee (2001) points out, price discovery is a complex procedure. The unique features above make active corporate bond funds (which are under-researched in the accounting literature) a valuable 'laboratory' for studying whether and how active bond funds use accounting information to facilitate their portfolio decisions.

**3. Hypotheses Development**

Active bond funds conduct in-house fundamental credit analyses using financial ratios when assessing issuers' credit risks to form their portfolios (Soronow, 2012).[10] Lease capitalization affects users' assessments of financial ratios and risks (Elam, 1976; Bowman, 1980; Ely, 1995; Finnerty *et al*., 1980; Imhoff *et al*., 1993). Under the legacy standard, operating leases were disclosed in footnotes rather than being recognized on financial statements.

Some sophisticated users adjust for footnoted operating leases with an as-capitalization estimation procedure (Altamuro *et al.*, 2014; Graden, 2018). However, processing constraints (i.e., the capacity constraints stemming from users' limited resources to fully process disclosures) (Blankespoor *et al.*, 2020)

[10] Per the author's interview with practitioners in active fixed income funds, three of the key risks that bond funds consider in their portfolio decisions are interest risk, liquidity risk, and credit risk. When active bond funds assess credit risks, in-house credit analysts primarily base their internal recommendations on financial ratios in fundamental credit analyses.

can lead to incorrect adjustments and underestimated off-balance-sheet operating leases. Sophisticated credit users possess cognitive processing limits related to lease disclosures (Hales *et al.*, 2012),[11] underweighting footnote disclosures compared to accounting numbers recognized in financial statements (Aboody, 1996; Clor-Proell and Maines, 2014; Hirshleifer and Teoh, 2003; Müller *et al.*, 2015; Blankespoor *et al.*, 2020). Altamuro *et al.* (2014) find that operating lease adjustments concentrate in sophisticated banks, suggesting that less sophisticated banks struggle to adequately adjust for off-balance-sheet operating leases. Similarly, less sophisticated active bond funds may underweight off-balance-sheet operating leases in their fundamental credit analysis, generating overly optimistic credit metrics (higher ROA and/or lower leverage) and underestimating *de facto* credit risks for issuers with intensive operating lease usage disguised in footnote disclosures.[12] By requiring operating leases to be capitalized on the balance sheet, ASC 842 can correct these misperceptions and encourage these bond funds to offload *de facto* risky bonds (*Sophistication Channel*).

In addition to the processing constraints faced by funds, the nature of off-balance-sheet operating lease adjustment can increase disclosure processing costs for active bond funds and trigger disagreements regarding the true value of operating leases among these funds. Disclosure processing costs (hereafter termed 'processing costs') are defined as the costs of monitoring for, acquiring, and analyzing firm disclosures (Blankespoor *et al.,* 2020). Whilst sophisticated users attempt to adjust for operating leases under the legacy standard, the as-if capitalization process of operating leases involves complex estimations (Altamuro *et al.*, 2014; Imhoff *et al.*, 1993). For example, the as-if capitalization method with a present value model requires credit users to calculate the present value of future minimum lease payments disclosed in the footnote with a discount rate and then treat this estimated operating lease as an asset or a liability.

[11] Applying experimental methods, Hales *et al.* (2012) show that lenders exhibit functional fixation and are subject to presentation effects, meaning that they are less willing to lend to firms that are required to capitalize lease renewal options than to firms that are not required to capitalize renewal options.

[12] Per the author's interview with practitioners in active fixed income funds, active bond funds can adjust for off-balance-sheet items in credit analyses. However, different bond funds can adjust for these items with different levels of effort. For example, some in-house credit analysts can use heuristics to adjust for off-balance-sheet operating leases, while other analysts can conduct sensitivity tests with different scenarios.

The accuracy of the estimation can depend on the estimation of imputed interest rates, which involves a lot of assumptions and is not easy to estimate accurately (Altamuro *et al.*, 2014; Binfare *et al.*, 2025; Imhoff *et al.*, 1993). Therefore, estimating off-balance-sheet operating leases in the as-if capitalization process triggers higher "analyzing" costs (higher processing costs) compared to recognized operating leases.

Higher processing costs, due to various estimation methods, can lead to larger disagreements in the true value of operating leases among bond investors. Theoretical models suggest that investors with strong disagreements about fundamental values can over-hold risky assets (Fama and French, 2007; Harrison and Kreps, 1978). Thus, when faced with complex as-if capitalization of off-balance-sheet operating leases, bond funds can over-invest in *de facto* risky bonds under the legacy standard. Operating lease recognition resolves the disagreement about the valuation of operating leases in the as-if capitalization process, reducing the processing costs and helping bond funds offload *de facto* risky bonds (*Information Channel*).

The two channels support the prediction that active bond funds reduce holdings of *de facto* risky bonds (i.e., bonds issued by firms with high exposure to operating lease recognition) after the implementation of ASC 842. Survey and anecdotal evidence also support the prediction. In a survey conducted by Deloitte, the majority of corporate respondents showed concern that ASC 842 would negatively affect firms' balance sheets and impair firms' ability to borrow (Deloitte, 2014). The National Association of Realtors expressed the same concern in its comment letter, pointing out that recognizing operating leases can "bloat" the balance sheet and reduce "the overall borrowing capacity of many commercial real estate lessees". The prediction that bond funds can avoid bonds issued by firms with higher exposure to operating lease recognition, after the implementation of ASC 842, is consistent with these firms' concerns.

However, this prediction is not without tension. As mentioned earlier, sophisticated users adjust for off-balance-sheet operating leases. We know little from the literature about how well active bond funds assess accounting information under different reporting regimes. If active bond funds have fully adjusted for off-balance-sheet operating leases, we should expect that there is no change in fund holdings of *de facto* risky bonds after the implementation of ASC 842. Active bond funds can even increase holdings of *de facto*

risky bonds after the implementation of ASC 842. He *et al.* (2025) show that banks over-protect themselves in the pre-implementation period and issue more favorable consensus bank ratings after the implementation of ASC 842. Active bond funds can be subject to similar over-protection in the pre-implementation period and increase holdings of *de facto* risky bonds after the implementation of ASC 842. Given the above, we state our hypothesis in the null form:

***Hypothesis: Active bond funds do not change the holdings of bonds issued by firms with significant exposure to operating lease recognition after the implementation of ASC 842.***

## 4. Sample Selection and Research Design

### *4.1 Sample*

We source data from the databases described below. We obtain security-level fund holdings from Morningstar. Morningstar provides portfolio identifiers that can be linked to fund tickers, security-level holdings at the end of the month, security identifiers (CUSIP), security types (equity, bond, cash, mortgage, etc.), and other security-level information. For fixed-income securities, Morningstar provides month-end portfolio levels of holdings (in par amounts and the market value of the bond) and the change in bond holdings (in par amounts of the bond).

Following Goldstein *et al.* (2017), we use Lipper Objective Codes from the CRSP Mutual Fund to identify corporate bond funds[13] and exclude index corporate bond funds, exchange traded funds, and exchange traded notes. Because we need detailed information on the historical holdings of these active bond funds, we link the fund holdings in Morningstar with fund characteristics in CRSP by the fund TICKER and keep non-missing-holding securities. We obtain bond characteristics, such as issue maturity, issuance date, amount outstanding, coupons, bond types, and bond ratings, from the Mergent FISD database. We obtain issuing firms' accounting fundamentals from the Compustat/CRSP Merged Annual (hereafter "CCM") database. We merge the Morningstar holdings of active bond funds with the Mergent FISD

[13] To be identified as a corporate bond fund, a mutual fund should have a Lipper Objective Code in the set ("A", "BBB", "HY", "SII", "SID", "IID").

database by bond issue CUSIP and required holdings to be corporate bonds. We further match this merged data with CCM using issuer CUSIP and require reported holdings to be matched to the most recently available financial report.

To mitigate concerns about the potential misclassification of Lipper Objective Codes, we further require bond funds to invest at least 10% of the total market value in corporate bonds. We restrict our sample to funds that provide monthly holdings information to Morningstar.[14] During 2018-2020, around 60% of unique active bond funds report their holdings monthly to Morningstar, corresponding to 80% of the fund-month-end observations among the active bond funds. Restricting our sample to monthly-reporting funds allows us to pin down the effect of ASC 842 within a short window, centered on the implementation month, i.e., three months before the implementation and three months after the implementation. The implementation month (Month 0) is defined as the first month in which the fund's holdings report is issued following the release date of the financial report, when the new lease standard came into effect. Month 0 is excluded from the sample, to ensure that the bond funds can fully incorporate the new lease information into their decisions and provide a clear distinction between pre-period and post-period. The short sample window allows us to alleviate concerns about confounding factors that might arise in a longer window.

We exclude non-standard bonds[15], bonds retired during the sample period, bonds issued by financial firms,[16] bonds issued by firms with no data available in the pre-period or the post-period of the sample, and bonds issued by firms with no operating leases being recognized after the implementation of ASC 842,[17] as well as observations with missing controls. The final sample consists of 92,346 fund-bond-month

[14] A similar method, including the 10% threshold and monthly reporting frequency of corporate bond funds, is applied in Huang *et al.* (2023), who study how corporate bond funds' trading responds to corporate news events.
[15] Non-standard bonds include bonds denominated in foreign currency, bonds that are privately placed, Yankee bonds, pay-in-kind bonds, convertible bonds, asset-backed bonds, and puttable bonds.
[16] Corporate bonds can be issued by industrial, financial, or service firms. Since financial firms have different financial statements and are usually lessors rather than lessees, who are mainly affected by the new lease standard, we remove corporate bonds issued by financial firms in our analysis.
[17] Operating leases are pervasively used in practice. Firms without assets recognized for operating leases, namely "right-of-use assets," account for a relatively small portion in our sample, which is around 10% of the sample before excluding these firms.

observations, corresponding to 289 unique funds and 2,493 unique bonds issued by 409 unique firms. Table 1 shows the sample selection procedure.

### *4.2 Research Design*

To investigate the effect of implementing ASC 842 on the portfolio decisions of active bond funds, we take advantage of the bond issuers' implementation of ASC 842, by their fiscal year ends and their differential exposure to operating lease recognition under ASC 842. We employ a generalized difference-in-differences framework, where the treatment (control) group consists of bonds issued by firms with recognized operating leases above (below) the sample-median in the portfolio of individual funds. We track the monthly fund holdings of treatment bonds and control bonds in a six-month window centered on the implementation of ASC 842. This identification strategy effectively compares the fund holdings *before* and *after* the implementation of the new lease accounting standard for the treatment and control bonds.

In the main analysis, we estimate the following model (where the subscripts *i*, *j*, *y*, and *t* denote bond, fund, fiscal year, and fund holding report year-month-end, respectively):

$$Holding\_Pct_{j,i,t} = \beta_0 + \beta_1 Post_{i,t} \times Large\_ROUA_i + \sum \varphi_k Controls_{i(j),t} + \gamma_i + \mu_j + \eta_y + \delta_t + \epsilon_{i,t} \quad (1)$$

The unit of observation is the fund-bond-month. The dependent variable is *Holding_Pct*, i.e., the percentage fund holdings (in par amount) of bond *i* at the end of holding report year-month *t* scaled by the beginning total net assets (TNA) of fund *j*.[18] This holding measure is commonly used to capture portfolio decisions of mutual funds in the mutual fund literature (Jiang *et al.*, 2021a). The main variable of interest is the interaction term $Post \times Large\_ROUA$. $Post$ is an indicator variable set to be one for post-implementation months, where the implementation month (Month 0) is the first holding report month following the release month of the annual filing prepared under ASC 842, as indicated by "ACCTCHG"="ASU16-02", and zero otherwise. The implementation year-month ("Month 0") is the holding reporting year-month-end following the issuer's release of the first 10-K report prepared under ASC 842. $Large\_ROUA$ is an indicator which is

[18] Following the corporate bond fund literature, we use the par amount, rather than the market value of bonds, to capture bond holdings.

set to be one if the issuer of bond *i* has larger exposure to operating lease recognition under ASC 842, i.e., if the bond issuer has above-median first recognized unscaled right-of-use assets ("ROUANT"), corresponding to operating lease recognition after the implementation of ASC 842. We use unscaled ROUANT instead of scaling it by total assets or total liabilities because total assets and total liabilities change with the implementation of ASC 842 and do not serve as solid scalars. Instead of scaling ROUANT to get rid of the size effect, we control for *Size,* as mentioned in the following paragraph.

The *Controls* are a group of variables that prior studies have found to be associated with bond creditworthiness and bond fund holdings. Following Altamuro *et al.* (2014) and Huang *et al.* (2023), we include a comprehensive set of common issuer-level characteristics that correlate with issuer credit risks and are incorporated into the bond funds' portfolio decisions. They are also closely aligned with the variables used by S&P (2006) during the rating process. These specific issuer-level control variables include *Size* (natural logarithm of market value), *Ebit_Cov* (ratio of EBIT to interest expenses), *Freecash* (ratio of free cash flows to total debt), *Debt_ EBITDA* (ratio of total debt to EBITDA), *Leverage* (ratio of total debt to the sum of total debt and total equity), and *Idiosyncratic_Risk* (idiosyncratic volatility calculated using the Fama-French-Carhart four factor model). Following Choi *et al.* (2020) and Huang *et al.* (2023), we control for bond-level time-variant characteristics that are associated with credit assessment of the bond and the portfolio decisions of corporate bond funds, including *Bond_Rating* (average bond ratings provided by three credit rating agencies converted to rank orders), *No_Bond_Rating* (an indicator for none of three credit rating agencies providing bond ratings), *Bond_Age* (the natural logarithm of the number of months from the issuance of the bond plus one), and *Maturity* (the natural logarithm of months to maturity of the bond). Following Jiang *et al.* (2021a) and Huang *et al.* (2023), we also control for fund-level time-variant characteristics that affect bond fund holdings, including *Retail_Shr* (the fraction of fund assets held by retail investors), *Fund_Size* (the natural logarithm of TNA at the beginning of the month), *Fund_Age* (the natural logarithm of years from inception of the fund at the beginning of the month), and *Fund_Turnover* (the minimum of aggregated sales or aggregated purchases of securities).

Model (1) includes funds, bonds, holding report year-months, and fiscal year fixed effects. The inclusion of fund fixed effects allows for the control of time-invariant fund characteristics which could, potentially, affect funds' portfolio decisions, such as fund investment styles and fund manager preferences. Including bond fixed effects allows for the control of time-invariant bond characteristics, which could, potentially, affect portfolio decisions, such as coupon rate and bond offering size. Fiscal year fixed effects account for fiscal-year-specific characteristics, including some macroeconomic factors that happen in the annual operating cycle of a firm. Holding report year-month fixed effects account for factors specific to fund holding report year-months, including potential systematic shocks that happened to the bond market or the fund industry clustering in a certain reporting year-month, such as occurred with COVID-19 exposure. Bond fixed effects and fiscal-year fixed effects subsume the main effects of $Large\_ROUA$ and $Post$. We cluster standard errors at the bond issuer level to account for potential correlation among bond holdings by the same issuer. All continuous variables are winsorized at 1% and 99% levels.

The main coefficient of interest is $\beta_1$. If bond funds reduce the holdings of bonds issued by firms with significant exposure to recognized operating leases after the issuer implements the new lease standard, then $\beta_1$ should be negative. For control variables, we expect that an average fund tends to hold bonds issued by less risky firms and with fewer liquidity risks; we also expect that larger funds have smaller percentage holdings of each individual bond, which improves portfolio diversification and reduces the price impacts of trading.

### *4.3 Descriptive Statistics*

Table 2 reports the descriptive statistics for the sample. The average percentage holding (in par amount) of individual bonds is 0.17 percent of portfolio total net assets. This average is reasonable, given the diversified nature of corporate bond fund holdings, and matches the typical percentage holdings disclosed in Form NPort-P of bond funds. Given that the *Post* variable is defined as one for Month 1 to Month 3 (three event months for each fund-bond), while being defined as zero for Month -3 to Month -1 (three event months for each fund-bond), the mean of *Post* is slightly greater than 50%. *Large_ROUA* is

calculated at issuer level and is set to be one if the issuer has the above-median first recognized unscaled right-of-use assets after the implementation among unique sample firms with non-missing right-of-use assets after the implementation. The mean of *Large_ROUA* is approximately 70% (which is above 50%), indicating that issuers with large operating lease assets have more bonds outstanding in the sample.

Regarding control variables, on average, bonds in portfolios of active bond funds are issued by larger and healthier firms and have investment-grade ratings (over "BBB-/Baa3"). On average, active bond funds in the sample have $5 billion in total net assets, are 20 years old, have an annual turnover ratio of 157%,[19] and have about 20% of fund assets held by retail investors.

## 5. Empirical Results

### *5.1 Operating Lease Recognition and Holdings of Active Corporate Bond Funds*

Table 3 reports the results for our main difference-in-differences test for estimating Equation (1). In Column (1), we only control for fixed effects and exclude additional control variables. Column (2) presents the results of estimating the full model. If the change in lease accounting standards triggers the reduction in bond fund holdings of bonds issued by firms with significant exposure to operating lease recognition, then the coefficient on *Post* × *Large_ROUA* should be negative. We find that, following the implementation of ASC 842, bond funds reduce percentage holdings of a bond issued by firms significantly exposed to operating lease recognition by an average of 0.008 (coefficient estimate for the variable of interest *Post* × *Large_ROUA* = -0.008, *t*-stat= -2.72). In terms of economic magnitude, the results from Column (2) indicate that the new lease accounting standard decreases a bond fund's monthly percentage holdings of a treated bond in their portfolios by 4.7% (=0.008/0.17) of the sample mean, or 3.6% (=0.008/0.278) of the sample's standard deviation. This economic magnitude is comparable to *Bond_Rating*, measured in bond rating notches, which is a common credit metric that affects the investment strategies of bond funds. A back-of-envelope calculation indicates that a one-standard-deviation improvement in bond

[19] Corporate bond funds have a high turnover ratio. This is comparable to the turnover ratio documented in other papers. In Jiang *et al.* (2021a), the turnover ratio of corporate bonds is 114%.

rating notches implies an increase in a bond fund's monthly percentage holding equal to 3.8% of the sample mean.[20] These results suggest that the change in lease accounting standard has an economically significant impact on bond fund holdings, consistent with the prediction that active bond funds offload *de facto* risky bonds issued by firms with significant exposure to operating lease recognition, post-ASC 842.

As for the control variables, the results for *Leverage* are consistent with the intuition that firms with lower leverage are safer, so their bonds are more likely to be held by bond funds; the results for *Bond_Age* and *Maturity* are consistent with the intuition that new bonds with better liquidity are more likely to be held by bond funds; and the results for *Fund_Size* are consistent with the intuition that larger funds tend to have more diversified portfolios and allocate smaller weights to individual bonds in their portfolios.

***5.2 Dynamic Effects***

Our identification strategy comes from the comparison of the changes in bond fund percentage holdings of individual bonds issued by treated and control firms, following the implementation of the new lease accounting standard. An important identifying assumption is that, in the absence of the changes in the new lease accounting standard, treatment and control groups would exhibit similar trends in bond fund percentage holdings (i.e., parallel trends). We employ the procedure described in Bertrand and Mullainathan (2003) to validate this assumption and examine the dynamic effect of the new lease accounting standard on bond fund holdings.

Specifically, we re-estimate Equation (1) after replacing the *Post* indicator with five indicator variables capturing time relative to the change in the lease accounting standard: $Pre_2$, $Pre_1$, $Post_1$, and $Post_{2+}$. These indicators are defined for event months Month -2 through Month 1, plus an indicator for Month 2 onwards. Since the sample period includes six event months centered on the implementation (Month 0), Month -3 serves as the benchmark period. These five indicators only enter the regression as interactions

[20] 3.8%=0.002×3.27/0.17, with 0.002 being the coefficient of *Bond_Rating* in Table 3 Column (2), 3.27 being the standard deviation of *Bond_Rating*, and 0.17 being the mean of *Holding_Pct*.

with the treatment indicator, $Large\_ROUA$, as their main effects are absorbed by fiscal year fixed effects. Formally:

$$Holding\_Pct_{j,i,t} = \beta_0 + \sum_{\tau=1}^{\tau=2} \beta_{1,\tau} \times Pre_{i,t} \times Large\_ROUA_i + \sum_{\tau=1}^{\tau=2+} \beta_{1,\tau} \times Post_{i,t} \times Large\_ROUA_i + \sum \varphi_k Controls_{i(j),t} + \gamma_i + \mu_j + \eta_y + \delta_t + \epsilon_{i,t} \quad (2)$$

We plot the point estimates and 90% confidence intervals of $\beta_1$ in Figure 3. The coefficients on $Pre_2 \times Large\_ROUA$ and $Pre_1 \times Large\_ROUA$ are statistically insignificant for bond fund percentage holdings. This evidence indicates that, prior to the implementation of the new lease accounting standard, the estimated treatment effects are statistically indistinguishable from zero and do not change significantly, validating the parallel-trend assumption. Moreover, coefficients on $Post_1 \times Large\_ROUA$ and $Post_{2+} \times Large\_ROUA$ are significantly negative, suggesting a significant decrease in bond fund holdings of treatment bonds in the months following the implementation of ASC 842. The sharp decrease further enhances our confidence in attributing the change in fund holdings to operating lease recognition under ASC 842. Overall, these findings strengthen our inferences by mitigating concerns related to different pre-existing trends in our variables of interest for treatment and control bonds.

***5.3 Cross-Sectional Heterogeneity – Sophistication Channel***

We test the *Sophistication Channel* with the potential processing constraints that funds can face: fund size and fund portfolio diversification. Similar to Altamuro *et al.* (2014), which uses bank size to capture bank sophistication, we use fund size to form our first proxy for fund sophistication. Chen *et al.* (2024) suggest that large corporate bond funds have better liquidity management and performance due to their greater bargaining power and lower search costs, indicating that large corporate bond funds are more sophisticated than small corporate bond funds. We create an indicator variable *Small_Fund*, which is set to be one if the fund has a below-median fund size among all fund-issuer observations at the end of the most recent month in the pre-period of each bond issuer, and zero otherwise. Fund size is the natural logarithm of fund total net assets (in millions of dollars) at the beginning of the month.

The sophistication of active funds can also be captured by the extent of their portfolio diversification. Active bond funds can diversify into asset classes other than corporate bonds, to better manage portfolio risks. Diversification into alternative asset classes requires highly sophisticated asset management skills from a fund's perspective (Basile, 2016; Dreu and Bikker, 2009). We create an indicator variable *Small_Alternative*, which is set to be one if the fund has below-median holdings in alternative asset classes as the end of the most recent month in the pre-period, and zero otherwise. Alternative asset classes are asset classes other than stock, bonds, and cash. If the fund does not report holdings at the asset-class level, the value is set to be 'missing' and excluded from the regression.

To test the *Sophistication Channel*, we estimate the following model:

$$\begin{aligned} Holding\_Pct_{j,i,t} = {} & \beta_0 + \beta_1\, Post_{i,t} \times Large\_ROUA_i \\ & + \beta_2\, Post_{i,t} \times Small\_Fund_j\,(Small\_Alternative_j) \\ & + \beta_3\, Large\_ROUA_i \times Small\_Fund_j(Small\_Alternative_j) \\ & + \beta_4\, Post_{i,t} \times Large\_ROUA_i \times Small\_Fund_j(Small\_Alternative_j) \\ & + \sum \varphi_k Controls_{i(j),t} + \gamma_i + \mu_j + \eta_y + \delta_t + \epsilon_{i,t} \end{aligned} \quad (3)$$

We predict $\beta_4$, the coefficient on the triple interaction term $Post \times Large\_ROUA \times Small\_Fund\,(Small\_Alternative)$, to be negative if small funds (funds with small weights of alternative asset classes) experience a larger decrease in fund holdings for treated bonds after the bond issuer implements the new lease accounting standard. Table 4 presents the results of estimating Equation (3). In Column (1) and (3), we exclude additional control variables. Column (2) and (4) present the results of estimating the full model. Across both columns, the coefficients on the triple interaction term $Post \times Large\_ROUA \times Small\_Fund\,(Small\_Alternative)$ are negative and statistically significant. The coefficients on $Post \times Large\_ROUA$ remain negative but are insignificant in all columns, indicating that sophisticated funds experience no change in holdings of bonds issued by firms significantly impacted by operating lease recognition in response to ASC 842. These results suggest that the treatment effect is concentrated in unsophisticated funds, which benefit more from a better understanding of operating leases

after the implementation of the new lease standard and more significantly reduce the holding of bonds issued by firms with greater exposure to operating lease recognition.

### *5.4 Cross-Sectional Heterogeneity – Informational Channel*

*Informational Channel* argues that the changes in funds' portfolio decisions, following the implementation of ASC 842, are driven by high analyzing costs (high processing costs) of incorporating off-balance-sheet operating lease information in bond funds' in-house fundamental credit analyses. Since the in-house fundamental credit analyses of active bond funds are not observable, we test this channel in two steps. First, we expect that the treatment effects should be stronger when fundamental credit analyses are more important and test this prediction. Also, we expect that the treatment effects are stronger when funds are dealing with more complex lease information and when they underestimate off-balance-sheet operating leases with a wrong input in the as-if capitalization process and validate these predictions.

#### *5.4.1 Importance of Fundamental Credit Analyses*

Rather than purely relying on credit ratings, active bond funds conduct their own in-house fundamental credit analysis when selecting securities.[21] Among active bond funds, high-yield funds tend to allocate more to bonds with higher credit risks and have higher exposure to credit risks (Jiang *et al.*, 2021b). Given that their underlying securities are typically more sensitive to changes in credit risks, fundamental credit analyses matter more to high-yield funds (van Doorn, 2025). Thus, to capture the importance of fundamental credit analyses in active bond funds' portfolio decisions, we create an indicator variable for high-yield funds. *HY_Fund* is a fund-level indicator and is set to be one if the Lipper Objective Code of the fund in CRSP is "HY", and zero otherwise. We run the regression below:

$$\begin{aligned} Holding\_Pct_{j,i,t} = {} & \beta_0 + \beta_1\, Post_{i,t} \times Large\_ROUA_i \\ & + \beta_2\, Post_{i,t} \times HY\_Fund_j \\ & + \beta_3\, Large\_ROUA_i \times HY\_Fund_j \end{aligned}$$

[21] Credit ratings are updated slowly and do not incorporate liquidity and market conditions (Becker and Ivashina, 2015).

$$+\beta_4\, Post_{i,t} \times\ Large\_ROUA_i \times HY\_Fund_j$$

$$+\sum \varphi_k Controls_{i(j),t} + \gamma_i + \mu_j + \eta_y + \delta_t + \epsilon_{i,t} \quad (4)$$

We predict $\beta_4$, the coefficient on the triple interaction term $Post \times\ Large\_ROUA \times HY\_Fund$, to be negative if high-yield funds experience a larger decrease in fund holdings for treated bonds after the bond issuer implements the new lease accounting standard. Panel A of Table 5 presents the results of estimating Equation (4). In Column (1), we exclude additional control variables. Column (2) presents the results of estimating the full model. In both columns, the coefficients on the triple interaction term $Post \times Large\_ROUA \times HY\_Fund$ are negative and statistically significant. The coefficients on $Post \times\ Large\_ROUA$ are insignificant for all columns, suggesting that investment-grade funds do not alter their holding decisions for issuing firms heavily impacted by operating lease recognition, in response to ASC 842. The results suggest that the treatment effects on active bond funds' portfolio decisions, in response to the new lease standard, are concentrated in high-yield funds.

*5.4.2 Lease Complexity*

Next, we examine the role of the new lease standard in correcting the underestimation of the as-if capitalized value of operating leases with more disclosed lease inputs and the role of lease complexity in other sophisticated users (e.g., SEC). If the observed decrease in fund holdings is driven by an improved understanding of lease information, then we should observe stronger treatment effects for bond issuers that are more likely to have underestimated *de facto* credit risks by undervaluing as-if capitalized operating lease liabilities (resulting in overly optimistic credit metrics) or that have more complex operating lease reporting matters that investors may struggle to understand.

Overestimation of the imputed interest rate, which leads to underestimated as-if capitalized operating leases, is not uncommon (Duke *et al.*, 2009). To capture the underestimation of as-if capitalized operating lease liabilities, we create an indicator variable *Large_Overstate_Rate*, which is set to be one if the issuing firm has a misstated imputed interest rate in the top quartile of all issuing firms in the post-period. The misstated imputed interest rate is calculated as the signed difference between the estimated

imputed interest rate using the present-value model (Altamuro *et al.*, 2014; S&P, 2006) and the disclosed weighted average interest rate (variable "WAVLR" in Compustat Snapshot) under ASC 842. This variable is a firm-specific indicator, since the months in the post-period all belong to the first fiscal year under the new lease accounting standard, and so the financial variables are constant. When the imputed interest rate is overstated, the as-if capitalized operating lease is underestimated, leading to overly optimistic credit metrics and underestimated issuers' *de facto* credit risks.

To capture the lease complexity for sophisticated users, we use the SEC as an example of a sophisticated user and create an indicator variable to capture the complexity of lease reporting in the eye of SEC prior to ASC 842. $Lease\_CL$ is set to be one if the issuing firm has received SEC-originated comment letters regarding the issuer's lease accounting within the one-year window as of the year before the implementation month, and zero otherwise. A comment letter is classified as a lease-accounting comment letter if the letter uploaded by the SEC is associated with the following types in the "Issue Taxonomy" related to accounting standards: "Lease, leasehold (FAS 13 (98) and IAS 17)", "ASU No. 2016-02", and "IFRS 16". We then estimate the following model:

$$\begin{aligned} Holding\_Pct_{j,i,t} = {} & \beta_0 + (\beta_1\, Post_{i,t} \times Large\_ROUA_i) \\ & + \beta_2\, Post_{i,t} \times Large\_Overstate\_Rate_i(Lease\_CL_i) \\ & + \beta_3\, Post_{i,t} \times Large\_ROUA_i \times Large\_Overstate\_Rate_i(Lease\_CL_i) \\ & + \sum \varphi_k Controls_{i(j),t} + \gamma_i + \mu_j + \eta_y + \delta_t + \epsilon_{i,t} \end{aligned} \quad (5)$$

We predict that $\beta_3$, the coefficient on the triple interaction term $Post \times Large\_ROUA \times Large\_Overstate\_Rate\ (Lease\_CL)$, will be negative if bond issuers that are subject to a significant overestimation of the discount rate (having more lease reporting issues questioned by SEC) experience a larger decrease in fund holdings after implementing the new lease accounting standard. Panel B of Table 5 presents the results of estimating Equation (5). In Column (1) and (3), we exclude additional control variables. Column (2) and (4) present the results of estimating the full model. For Columns (1)-(4), the coefficients on the triple interaction term $Post \times Large\_ROUA \times Large\_Overstate\_Rate(Lease\_CL)$ are negative and statistically significant. The coefficients on $Post \times Large\_ROUA$ in Column (1) and (2)

are insignificant, indicating that funds do not change the holdings of bonds issued by firms greatly impacted by operating lease recognition without an overestimation of implied interest rates in response to ASC 842. The coefficients on $Post \times Large\_ROUA$ are significantly negative in (3) and (4), suggesting that bond funds also reduce the holding of bonds issued by heavy-leasing firms without comment letters on lease issues, in response to ASC 842. The results suggest that the treatment effects on active bond funds' portfolio decisions in response to the new lease standard are mainly concentrated in issuers with greater overestimated imputed interest rates and/or issuers with more lease-related SEC comment letters.

***5.5. Alternative Hypotheses***

We conduct several additional tests to ensure the robustness of our inferences to alternative explanations and the results are presented in Table 6. First, recent studies have shown that the new lease accounting standard has significant real impacts on firms over a longer time period, leading them to reduce their reliance on operating leases to improve their fundamentals (Ferreira *et al.*, 2024; Ma and Thomas, 2023). To partially mitigate the concern about real changes that usually happen over a longer time period, we address this concern with a short-window test in our primary test. To further address this concern, we control for post-standard fundamental issuer changes. More specifically, we include the interaction term between firm-level fundamental credit metrics (*Size*, *Ebit_Cov*, *Freecash*, *Debt_EBITDA*, *Leverage*, and *Idiosyncratic_Risk*), as well as bond rating variables (*Bond_Rating* and *No_Bond_Rating*) and the *Post* indicator, in the model. The results are presented in Table 6 Panel A Column (1). We also account for post-ASC 842 changes in documented activities, i.e., new operating lease commitments and capital expenditure. We follow Ma and Thomas (2023) to capture new operating lease commitments and capital expenditures, including these variables and their interactions with a *Post* dummy in our model. The results are presented in Table 6 Panel A Column (2) and (3). These findings are consistent with our main results and help alleviate concerns that our findings are solely driven by fundamental post-implementation changes.

Second, bond funds can liquidate assets to fund investor redemptions, as reflected by the reduction in fund flows (Choi *et al.*, 2020; Goldstein *et al.*, 2017). The underlying assumption of this argument is that

fund flows for treated bonds decrease after the implementation of ASC 842 due to redemptions by fund investors. We directly test this assumption to mitigate this concern by following Goldstein *et al.* (2017) to calculate fund flows and including them as the dependent variable in Equation (1).[22] The results are reported in Panel B of Table 6. We find that fund flows do not change significantly after the implementation of ASC 842 for treated bonds. The results align with the industry wisdom that fund investors barely pay attention to the accounting changes of individual issuers when they choose mutual funds to diversify their investment, lending further support to the idea that offloading *de facto* risky bonds is a better-informed decision made by bond funds rather than their mechanically catering to fund investors.

Third, ASC 842 can also trigger changes in bond pricing (Jung and Scarlat, 2024). Since bond prices are important market signals to bond funds, it is possible that bond funds observe lower bond returns after the implementation of ASC 842 and, thus, offload *de facto* risky bonds. In our primary analysis, we control for the key determinants of bond returns, such as rating and maturity. We further control for monthly bond returns, to find qualitatively similar results. The results are reported in Panel C of Table 6.

Taken together, these results enhance our confidence in attributing the change in portfolio decisions of active bond funds to the informational shock brought about by ASC 842.

### *5.6. Fund Performance Analysis*

In the previous sections, we find that bond funds sell their holdings of *de facto* risky bonds following the implementation of ASC 842, due to alleviated information processing constraints and reduced processing costs brought about by the new lease standard. To lend further support to our argument that ASC 842 facilitates better-informed decisions among bond funds, we focus on fund performance. We specifically examine whether bond funds with greater exposure to treated bond issuers in their holdings experience better performance after the implementation of ASC 842. If so, we expect the performance improvement to

[22] In Goldstein *et al.* (2017), fund flows are calculated at the fund class level, not at the fund level. To calculate fund flows at the fund level, we aggregate fund total net assets within the fund and use the average return of all fund classes to calculate fund-level flows.

be more pronounced for unsophisticated funds, which stand to benefit more from an improved understanding of the operating lease information under the new standard.

We follow Goldstein *et al.* (2017) to calculate fund performance, which is the model-specific alpha obtained from fund excess returns regressed on a bond market factor and a stock market factor. We specifically regress bond funds' 36-month rolling-window excess returns on the excess returns of the Vanguard Total Bond Market Index and CRSP Value-Weighted Stock Index to obtain the fund alpha.[23] We then regress the fund alpha of each fund on the interaction between an indicator for a fund's exposure to *Large_ROUA* issuers and an indicator for the time when ASC 842 affected fund holdings, as well as a set of fund characteristics:

$$Fund\_Alpha_{j,t} = \beta_0 + \beta_1\, Post\_Fund_t \times LargeHold\_ROUA_j + \sum \varphi_k Controls_{j,t} + \mu_j + \delta_t + \epsilon_{i,t} \quad (6)$$

The unit of observation is the fund-month. The sample period comprises October 2019 to November 2020, the same as our main results. The dependent variable is *Fund_Alpha*, i.e., the model-specific fund alpha mentioned above. $Post\_Fund$ is an indicator, which is set to be one for holding months after February 2020, when most bond issuers disclose their first 10-K prepared under ASC 842, and zero otherwise.[24] *LargeHold_ROUA* is an indicator set to be one if the fund has an above-median number of issuers with *Large_ROUA* in the holding month right after the implementation of ASC 842, when operating leases are recognized. The *Controls* are a group of fund characteristics associated with fund performance, including *Retail_Shr* (the fraction of fund assets held by retail investors), *Fund_Size* (the natural logarithm of TNA at the beginning of the month), *Fund_Age* (the natural logarithm of years from the inception of the fund at the beginning of the month), *Fund_Turnover* (the minimum of aggregated sales or aggregated purchases of

[23] We obtain monthly fund returns from CRSP, which reports fund returns at the fund share class level rather than at the portfolio level. Since our fund-level analysis involves portfolio holdings' exposure to *Large_ROUA* issuers, we use a single portfolio return calculated by averaging the returns of all share classes belonging to the same portfolio after weighting the returns of each share class by the assets of each share class.

[24] We choose February 2020 when defining $Post\_Fund$ because most sample issuing firms implement ASC 842 in this holding report month (235 firms out of 409 sample firms). In an untabulated analysis, we also use January 2020 as an alternative cutoff, the earliest holding report month when the first group of sample issuing firms start to implement ASC 842 (94 firms out of 409 sample firms). The results remain qualitative the same.

securities), and *Flow* (monthly fund flows). We include fund fixed effects to control for time-invariant fund characteristics and holding report year-month fixed effects to control for potential systematic shocks to the bond fund market. The main effects, $Post\_Fund$ and *LargeHold_ROUA*, are subsumed by fund fixed effects and holding report year-month fixed effects.

We expect $\beta_1$ to be positive and significant if the performance of bond funds with greater exposure to *Large_ROUA* issuers in their holdings improves after the implementation of ASC 842. We report the results in Table 7 Column (1). Indeed, we find $\beta_1$ to be positive and marginally significant, suggesting that funds with greater exposure to *Large_ROUA* issuers in holdings perform better after the implementation of ASC 842. This result reflects the average effect of operating lease recognition under ASC 842 on bond fund performance. We further investigate whether the improvement in fund performance is more pronounced for unsophisticated funds, given that these funds should benefit more than sophisticated ones, from better-informed decisions. We run the regression below to investigate this issue.

$$\begin{aligned} Fund\_Alpha_{j,t} = {} & \beta_0 + \beta_1\, Post\_Fund_t \times LargeHold\_ROUA_j \\ & + \beta_2\, Post_t \times Small\_Fund_j\,(Small\_Alternative_j) \\ & + \sum \varphi_k Controls_{j,t} + \mu_j + \delta_t + \epsilon_{i,t} \end{aligned} \quad (7)$$

$Small\_Fund$ and $Small\_Alternative$ are defined in the same way as in Section 5.3. We predict $\beta_2$ to be positive and significant if unsophisticated funds benefit more. We report the results in Table 7 Column (2) and (3). Indeed, we find $\beta_2$ to be positive and marginally significant in Column (2) and significant in Column (3), suggesting that unsophisticated funds benefit more from operating lease recognition under ASC 842.

Taken together, the results indicate that the performance of bond funds with large holdings exposed to operating lease recognition improves, following the implementation of ASC 842. Such improvement is mainly driven by the unsophisticated funds, lending further support to our mechanism regarding alleviated information processing constraints from the fund's perspective.

### *5.7. Robustness Checks*

We have shown that our main results are robust to several alternative specifications. First, our sample period overlaps with the COVID-19 outbreak, which could pose a threat to our results. To address this issue in our primary analysis, we control for time fixed effects to account for firm-invariant COVID-19 risks. To further mitigate concern about time-varying COVID-19 risks, we obtain firm-specific and time-varying COVID-19 risk measures following Hassan *et al.* (2023) and control for COVID-19 risks in our model. We report the results in Panel A of Table 8 and continue to find similar results. Moreover, we examine several alternative fixed effects. To account for time-varying fund characteristics, we replace fund fixed effects and holding report year-month fixed effects with fund by holding report year-month fixed effects (Fund × Holding Report Year-Month FE) in Table 8 Panel B Column (1). We also replace fund fixed effects and fiscal year fixed effects with fund by fiscal year fixed effects (Fund × Fiscal Year FE) in Table 8 Panel B Column (2). Since the shock occurs at the issuer level, we replace the bond fixed effects with issuer fixed effects in Table 8 Panel B Column (3). The results remain similar.

## 6. Conclusion

In this study, we examine the impact of operating lease recognition under the new lease standard on the portfolio decisions of active corporate bond funds. We take advantage of monthly fund holdings to form a short-window sample surrounding the implementation of the new lease standard and apply the generalized difference-in-differences framework. We document that, in a six-month window centered on the implementation of ASC 842, active bond funds reduce the holdings of bonds issued by firms with significant exposure to operating lease recognition, which are *de facto* riskier securities in fund portfolios, following the implementation of the new standard. Further analyses support the idea that this reduction is because ASC 842 alleviates the processing constraints faced by certain active bond funds and reduces the processing costs of operating lease capitalization.

In closing, our study documents the significant impact of the new lease accounting rule on the portfolio decisions of a set of prominent market participants in the public debt sector: active corporate bond

funds. This study adds to the long-standing standard-setting trade-off between recognition and disclosure, as well as the emerging literature that explores the information sources utilized by active bond funds in their decision-making processes. Our findings are likely to be of interest to mutual funds, debt market participants, and regulators alike.

**References**


Abdel-Khalik AR (1981) *The economic effects on lessees of FASB Statement No. 13, Accounting for leases. Samford, Conn.*: Financial Accounting Standards Board.

Aboody D (1996) Market valuation of employee stock options. *J. Accounting Econom.* 22(1-3): 357-391.

Altamuro J, Johnston R, Pandit S, Zhang H (2014) Operating leases and credit assessments. *Contemporary Accounting Res.* 31(2): 551-580.

Anand A, Jotikasthira C, Venkataraman K (2021) Mutual fund trading style and bond market fragility. *Rev. of Financial Stud.* 34(6): 2993-3044.

Aramonte S, Mano N (2022) Insurance companies as liquidity providers: The case of corporate-bond mutual funds. Working paper, Bank for International Settlements, Switzerland.

Basile I (2016) Portfolio Diversification Policies: Alternative Asset Classes. In Basile I, Ferrari P (eds.), *Asset Management and Institutional Investors*. Contributions to Finance and Accounting, 399–411. Springer, Cham. https://doi.org/10.1007/978-3-031-59819-7_11

Becker B, Ivashina V (2015) Reaching for yield in the bond market. *J. Finance* 70(5): 1863-1902.

Ben-Rephael A, Da Z, Israelsen RD (2017) It depends on where you search: Institutional investor attention and underreaction to news. *Rev. Financial Stud.* 30(9): 3009-3047.

Berndt A, Watford C (2015) The credit analysis process: From in-depth company research to selecting the right instrument. *VettaFi Advisor Perspectives*. Accessed June 21, 2025, https://www.advisorperspectives.com/commentaries/2015/05/06/the-credit-analysis-process-from-in-depth-company-research-to-selecting-the-right-instrument

Bertrand M, Mullainathan S (2003) Enjoying the quiet life? Corporate governance and managerial preferences. *J. Political Econom.* 111(5): 1043-1075.

Bessembinder H, Kahle KM, Maxwell WF, Xu D (2008) Measuring abnormal bond performance. *Rev. Financial Stud.* 22(10): 4219-4258.

Bessembinder H, Maxwell W, Venkataraman K (2006) Market transparency, liquidity externalities, and institutional trading costs in corporate bonds. *J. Financial Econom.* 82(2): 251-288.

Bhojraj S, Swaminathan B (2009) How does the corporate bond market value capital investments and accruals? *Rev. Accounting Stud.* 14: 31-62.

Binfare M, Connolly RA, Grigoris F, Liu CH (2025) A new lease on firm behavior. *J. Corp. Finance* 94: 102793.

Blankespoor E, deHaan E, Marinovic I (2020) Disclosure processing costs, investors' information choice, and equity market outcomes: A review. *J. Accounting Econom.* 70(2-3): 101344.

Bowman RG (1980) The debt equivalence of leases: An empirical investigation. *Accounting Rev.* 55(2): 237-253.

Caskey J, Ozel NB (2019) Reporting and non-reporting incentives in leasing. *Accounting Rev.* 94(6): 137-164.

CFA Institute (2013). Re: Comment Letter on FASB & IASB Lease Accounting Exposure Drafts. Accessed July 3, 2025, https://fasb.org/page/ShowPdf?path=LEASES2.ED.0620.CFA%20INSTITUTE%20CDPC%20SANDRA%20J.%20PETERS%20AND%20ASHWINPAUL%20C.%20SONDHI%20r.pdf.

Chen Y, Du M, Sun Z (2024) Large funds and corporate bond market fragility. Working Paper, Texas A&M University, Texas.

Chen Y, Qin N (2017) The behavior of investor flows in corporate bond mutual funds. *Management Sci.* 63(5): 1365-1381.

Cheng L, Jaggi J, Yan M Y, Young S (2022) Debt contracting and changes to the accounting for leases: Implications of Accounting Standards Codification 842. Working paper, University of Arizona, Arizona.

Choi J, Hoseinzade S, Shin SS, Tehranian H (2020) Corporate bond mutual funds and asset fire sales. *J. Financial Econom.* 138(2): 432-457.

Clor-Proell SM, Maines LA (2014) The impact of recognition versus disclosure on financial information: A preparer's perspective. *J. Accounting Res.* 52(3): 671-701.

Comiran F, Graham CM (2016) Comment letter activity: A response to proposed changes in lease accounting. *Res. Accounting Regul.* 28(2): 109-117.

Cornaggia KJ, Franzen LA, Simin TT (2013) Bringing leased assets onto the balance sheet. *J. Corp. Finance* 22: 345-360.

Cornaggia K, Hund J, Nguyen G (2022) Investor attention and municipal bond returns. *J. Financial Markets* 60: 100738.

deHaan E, Shevlin T, Thornock J (2015) Market (in) attention and the strategic scheduling and timing of earnings announcements. *J. Accounting Econom.* 60(1): 36-55.

Deloitte (2014) Lease accounting survey - Preparing for implementation. Accessed June 21, 2025, https://www.iasplus.com/en/publications/us/other/leases-survey.

Dreu JD, Bikker JA (2009) Pension fund sophistication and investment policy. Working paper, RBS, United Kingdom.

Dudley W (2016) Market and Funding Liquidity – An Overview. Accessed June 21, 2025, https://www.bis.org/review/r160502a.htm

Duke JC, Hsieh SJ, Su Y (2009) Operating and synthetic leases: Exploiting financial benefits in the post-Enron era. *Adv. Accounting* 25(1): 28-39.

Eisfeldt AL, Rampini AA (2009) Leasing, ability to repossess, and debt capacity. *Rev. Financial Stud*. 22(4): 1621-1657.

Elam R (1976) Capitalization of leases and the predictability of financial ratios: A reply. *Accounting Rev.* 51(2): 413.

Ely KM (1995) Operating lease accounting and the market's assessment of equity risk. *J. Accounting Res.* 33(2): 397-415.

Even-Tov O (2017) When does the bond price reaction to earnings announcements predict future stock returns? *J. Accounting Econom.* 64(1): 167-182.

Fama EF, French KR (2007) Disagreement, tastes, and asset prices. *J. Financial Econom.* 83(3): 667-689.

Feldhütter P (2012) The same bond at different prices: identifying search frictions and selling pressures. *Rev. Financial Stud.* 25(4): 1155-1206.

Ferreira PP, Landsman WR, Rountree B (2024) Capital structure effects associated with the new lease accounting standard. Working Paper, Rice University, Texas.

Financial Accounting Standards Board (FASB) and International Financial Reporting Standards Foundation (IFRSF) (2013) *Staff Paper: Summary of Feedback on the 2013 ED Leases*. Norwalk, CT: FASB.

FASB (2010) Staff Draft of an Exposure Draft on Financial Statement Presentation. Norwalk, CT: FASB.

FASB (2016) Accounting Standards Update No. 2016-02. Accessed June 21, 2025, https://fasb.org/Page/ShowPdf?path=ASU+2016-02_Section+A.pdf&title=UPDATE+2016-02%E2%80%94LEASES+%28TOPIC+842%29+SECTION+A%E2%80%94LEASES%3A+AMENDMENTS+TO+THE+FASB+ACCOUNTING+STANDARDS+CODIFICATION%3Csup%3E%C2%AE%3C%2Fsup%3E&acceptedDisclaimer=true&Submit=.

FASB (2021) PIR Process Activity Plans for Lease. Accessed June 21, 2025. https://fasb.org/Page/ShowPdf?path=PIR_Process_Plans_REV_20210218.pdf.

Finnerty JE, Fitzsimmons RN, Oliver TW (1980) Lease capitalization and systematic risk. *Accounting Rev.* 55(4): 631-639.

Giesecke K, Longstaff FA, Schaefer S, Strebulaev I (2011) Corporate bond default risk: A 150-year perspective. *J. Financial Econom.* 102(2): 233-250.

Graden B (2018) Do Lenders Uniformly Capitalize Operating Leases in Debt Covenants? *J. Accounting & Finance*. 18(5)2: 2158-3625.

Goldstein I, Jiang H, Ng DT (2017) Investor flows and fragility in corporate bond funds. *J. Financial Econom.* 126(3): 592-613.

Graham JR, Lemmon ML, Schallheim JS (1998) Debt, leases, taxes, and the endogeneity of corporate tax status. *J. Finance* 53(1): 131-162.

Hales JW, Venkataraman S, Wilks TJ (2012) Accounting for lease renewal options: The informational effects of unit of account choices. *Accounting Rev.* 87(1): 173-197.

Hanlon M, Heitzman S (2022) Corporate debt and taxes. *Annu. Rev. Financial Econom.* 14: 509-534.

Harrison JM, Kreps DM (1978) Speculative investor behavior in a stock market with heterogeneous expectations. *Q. J. Econom.* 92(2): 323-336.

Hassan TA, Hollander S, Van Lent L, Schwedeler M, Tahoun A (2023) Firm-level exposure to epidemic diseases: Covid-19, SARS, and H1N1. *Rev. Financial Stud.* 36(12): 4919-4964.

He H, Lourie B, Ma MS, Zhu C (2025) Operating lease recognition and credit assessment by banks. Working paper, California State Polytechnic University, Pomona, California.

Hirshleifer D, Teoh SH (2003) Limited attention, information disclosure, and financial reporting. *J. Accounting Econom.* 36(1-3): 337-386.

Huang AG, Wermers R, Xue J (2023) "Buy the rumor, sell the news": Liquidity provision by bond funds following corporate news events. Working paper, University of Waterloo, Canada.

Imhoff EA, Lipe R, Wright DW (1993) The effects of recognition versus disclosure on shareholder risk and executive compensation. *J. Accounting Auditing Finance* 8(4): 335-368.

Investment Company Institute (ICI) (2022) Investment Company Fact Book. Accessed June 21, 2025, https://www.ici.org/system/files/2022-05/2022_factbook.pdf.

Jiang H, Li D, Wang A (2021a) Dynamic liquidity management by corporate bond mutual funds. *J. Financial Quant. Anal.* 56(5): 1622-1652.

Jiang H, Li Y, Sun Z, Wang A (2022) Does mutual fund illiquidity introduce fragility into asset prices? Evidence from the corporate bond market. *J. Financial Econom.* 143(1): 277-302.

Jiang H, Li Y, Zheng L (2021b) Beware of Chasing Yield: Bond Fund Yield, Flows and Performance. Working Paper, Michigan State University, Michigan.

Jones FJ (2012) Overview of Fixed Income Portfolio Management. In Fabozzi FJ, Martellini L, Priaulet P (eds.) *Advanced Bond Portfolio Management: Best Practices in Modeling and Strategies* 1-19. https://doi.org/10.1002/9781119201151.ch1.

Jung T, Scarlat E (2024) The effect of ASC 842 leases on bond yields. *Finance Res. Lett.* 67: 105944.

Ketz JE (2003) *Hidden financial risk: Understanding off-balance sheet accounting*. Wiley.

Kraft P (2015) Rating agency adjustments to GAAP financial statements and their effect on ratings and credit spreads. *Accounting Rev.* 90(2): 641-674.

Lee CM (2001) Market efficiency and accounting research: a discussion of 'capital market research in accounting' by S.P. Kothari. *J. Accounting Econom*. 31(1-3): 233-253.

Li X, Wang Y, Wei JZ (2022) Do corporate bond mutual funds possess skills? Evidence from trading around earnings announcements. Working Paper, University at Albany, SUNY, New York.

Lin H, Wang J, Wu C (2011) Liquidity risk and expected corporate bond returns. *J. Financial Econom.* 99(3): 628-650.

Lynch AW, Musto DK (2003) How investors interpret past fund returns. *J. Finance* 58(5): 2033–2058.

Ma MS, Thomas WB (2023) Economic consequences of operating lease recognition. *J. Accounting Econom.* 75(2-3): 101566.

Müller MA, Riedl EJ, Sellhorn T (2015) Recognition versus disclosure of fair values. *Accounting Rev.* 90(6): 2411-2447.

Nekrasov A, Teoh SH, Wu S (2023) Limited attention and financial decision-making. In Hilary G, McLean D. (eds) *Handbook of Financial Decision Making* 17-35. Edward Elgar Publishing.

Schipper K (2007) Required disclosures in financial reports. *Accounting Rev*. 82(2): 301-326.

Schrimpf A, Shim I, Shin HS (2021) Liquidity management and asset sales by bond funds in the face of investor redemptions in March 2020. *BIS Bulletin No 39.* Accessed June 21, 2025, https://www.bis.org/publ/bisbull39.pdf.

Securities and Exchange Commission (SEC) (2005) Report and recommendations pursuant to section 401c of the Sarbanes-Oxley Act of 2002 on arrangements with off-balance sheet implications, special purpose entities, and transparency of filings by issuers. Washington, DC: SEC.

Soronow D (2012) Capturing the Credit Alpha. In Fabozzi FJ, Martellini L, Priaulet P (eds.) *Advanced Bond Portfolio Management: Best Practices in Modeling and Strategies,* 407-417. https://doi.org/10.1002/9781119201151.ch17.

Standard & Poor's (S&P) (2006) Corporate rating criteria. *Standard & Poor's Rating Services*. Accessed June 21, 2025, https://www.scribd.com/document/250037815/corporate-ratings-2006.

Tysiac K (2016) FASB issues lease accounting standard. *Journal of Accountancy*. Accessed July 3, 2025, https://www.journalofaccountancy.com/news/2016/feb/fasb-issues-leases-standard-201613941.html.

van Doorn P (2025) How high-yield bond funds like these can lower your investment risk. MarketWatch. Accessed July 3, 2025, https://www.marketwatch.com/story/how-high-yield-bond-funds-like-these-can-lower-your-investment-risk-24385288.

**Appendix A. Variable Definitions**

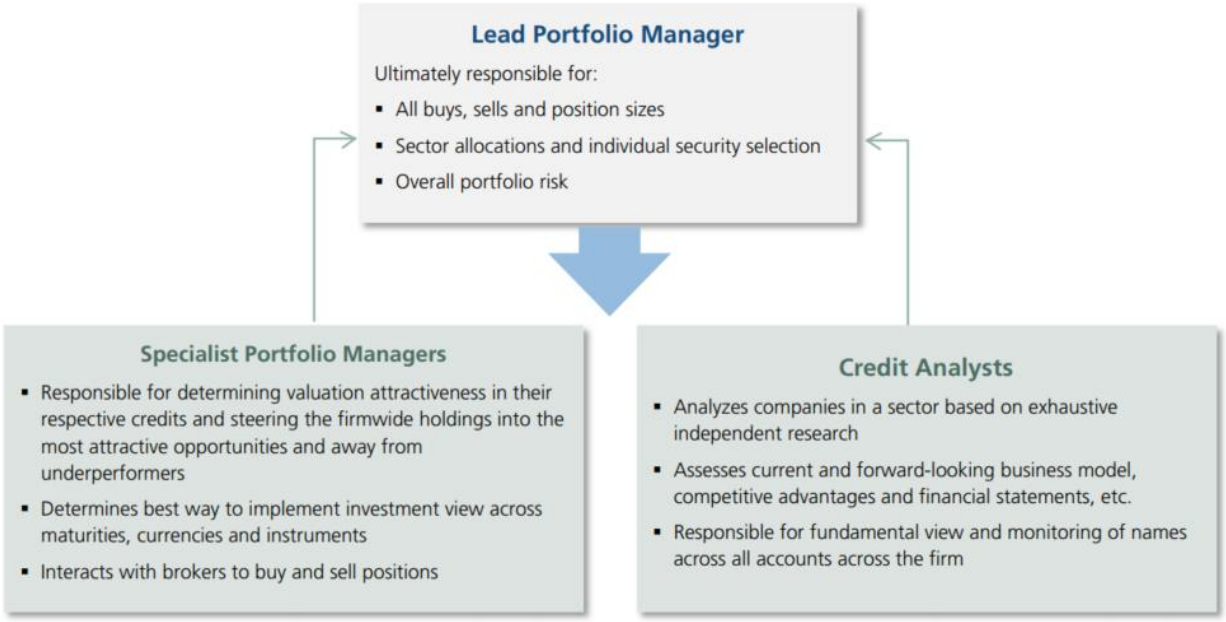
| Variable | Definition |
|---|---|
| *Holding_Pct* | Percentage fund holdings (in par amount) of the bond at the month end scaled by beginning total net assets (TNA) of the fund. The calculation is as follows: $\frac{Holdings_{i,j,t}}{Fund\ TNA_{j,t-1}} \times 100$ where *i* denotes bond, *j* denotes fund, and *t* denotes the month of the reported holding. Data source: Morningstar. |
| *Post* | An indicator set to be one for post-implementation months, where the implementation month (Month 0) is the first holding report month following the release month of the annual filing prepared under ASC 842, as indicated by "ACCTCHG"="ASU16-02", and zero otherwise. Data source: Morningstar and Compustat. |
| *Large_ROUA* | An indicator set to be one if an issuing firm has above-median first recognized unscaled right-of-use-assets ("ROUANT") after the implementation of ASC 842, and zero otherwise. The median is the sample median of the first recognized right-of-use assets among unique firms that have right-of-use assets after the implementation of ASC 842. Data source: Compustat. |
| *Size* | The natural logarithm of market value of the firm at the end of the most recent fiscal year. Data source: Compustat. |
| *Ebit_Cov* | EBIT scaled by interest expense of the firm at the end of the most recent fiscal year. Compustat tags: (OIADP + NOPI+ XINT)/XINT. Data source: Compustat. |
| *Freecash* | Free cash flow scaled by total debt at the end of the most recent fiscal year. Compustat tags: (OANCF-CAPX) / (DLC + DLTT). Data source: Compustat. |
| *Debt_EBITDA* | Total debt scaled by EBITDA at the end of the most recent fiscal year. Compustat tags: (DLC + DLTT) / OIBDP. Data source: Compustat. |
| *Leverage* | Total debt scaled by the sum of total debt and equity at the end of the most recent fiscal year. Compustat tags: (DLC + DLTT) / (DLC + DLTT + SEQ + MIBT). Data source: Compustat. |
| *Idiosyncratic_Risk* | Idiosyncratic volatility calculated using the Fama-French-Carhart four factor model with a 30-day estimation window at the beginning of the month. Data source: CRSP. |
| *Bond_Rating* | The bond-specific consensus credit ratings converted into rank orders (C=1, CC/Ca=2, … , AA+/Aa1=20, AAA/Aaa=21). The consensus credit rating is the average of the most recent bond ratings provided by three bond rating agencies (S&P, Moody's, and Fitch) at the beginning of the holding report month. It is set to be zero for firms without bond ratings. Data source: Mergent FISD. |
| *No_Bond_Rating* | An indicator equal to one if the bond has no rating from either of the three bond rating agencies (S&P, Moody's, and Fitch), and zero otherwise. Data source: Mergent FISD. |
| *Bond_Age* | The natural logarithm of the number of months from the issuance of the bond plus one. Data source: Mergent FISD. |
| *Maturity* | The natural logarithm of months to maturity of the bond. Data source: Mergent FISD. |
| *Retail_Shr* | Fraction of fund assets held by retail investors. It is set to zero if there are no fund assets held by retail investors. Data source: CRSP. |

| | |
|---|---|
| *Fund_Size* | The natural logarithm of fund total net assets (in millions of dollars) at the beginning of the month. When there are multiple share classes within the fund, the TNA is aggregated across all share classes. Data source: CRSP. |
| *Fund_Age* | The natural logarithm of years from inception of the fund at the beginning of the month. When there are multiple share classes within a fund, the inception of the fund is the date of inception of the oldest share class. Data source: CRSP. |
| *Fund_Turnover* | Fund turnover ratio defined as the minimum of aggregated sales or aggregated purchases of securities, divided by the average 12-month TNA of the fund. When there are multiple share classes within the fund, *Fund_Turnover* is the weighted average across all share classes, with weights to be the month-begin TNA of the share class relative to the total month-begin TNA of the fund. Data source: CRSP. |
| *Small_Fund* | An indicator set to be one if the fund has a below-median fund size among all fund-issuer observations as the end of the most recent month in the pre-period of each bond issuer, and zero otherwise. Data source: CRSP. |
| *Small_Alternative* | An indicator set to be one if the fund has below-median holdings in alternative asset classes at the end of the most recent month in the pre-period, and zero otherwise. Alternative asset classes are asset classes other than stock, bonds, and cash. If the fund does not report holdings at the asset-class level, the value is set to be missing. Data source: CRSP. |
| *HY_Fund* | An indicator set to be one if the Lipper Objective Code of the fund in CRSP is "HY", and zero otherwise. Data source: CRSP. |
| *Large_Overstate_Rate* | An indicator set to be one if the issuing firm has a misstated imputed interest rate above the top quartile of all issuing firms in the post-period. The misstated imputed interest rate is calculated as the signed difference between the imputed interest rate under the S&P method used to estimate capitalized operating leases and the disclosed weighted discount rate ("WAVLR") under ASC 842. The S&P method calculates the imputed interest rate as interest expense divided by average debt outstanding. Data source: Compustat Snapshot. |
| *Lease_CL* | An indicator set to be one if the issuing firm has received SEC-originated comment letters regarding the issuer's lease accounting within the one-year window as of the year before the implementation month, and zero otherwise. A comment letter is classified as a lease-accounting comment letter if the letter uploaded by SEC is associated with the following types in the "Issue Taxonomy" related to accounting standards: "Lease, leasehold (FAS 13 (98) and IAS 17)", "ASU No. 2016-02", and "IFRS 16". Data source: Audit Analytics. |
| *New_Oplease* | The new operating lease commitment calculated as total operating lease commitment at the end of the year (MRCT+MRCTA) less operating lease commitment carried over from the prior year (MRCT+MRCTA-MRC1), scaled by lagged total sales. Data source: Compustat. |
| *Capex* | Capital expenditures (CAPX) scaled by lagged total sales. Data source: Compustat. |
| *Flow* | Fund flows at the end of the holding reporting month multiplied by 100. It is calculated as follows: $$\frac{Fund\ TNA_{j,t} - Fund\ TNA_{j,t-1}\ \times (1+R)}{Fund\ TNA_{j,t-1}} \times 100$$ where *j* denotes fund, and *t* denotes the month of reported holding. *Fund TNA* is total net assets aggregated across all fund classes within a fund and *R* is the average fund return of all fund classes within a fund. Data source: CRSP. |

| | |
|---|---|
| *Bond_Ret* | Monthly bond returns pre-calculated using the last price at which a bond was traded in a given month and accrued coupon interest in the WRDS Bond Returns file. Data source: WRDS Bond Return. |
| *Covid_Risk* | Firm-quarter text-based COVID-19 risk, pre-calculated and provided in Hassan *et al.* (2023). This measure is a refined measure constructed by the proposition of the conversation devoted to COVID-19 in firms' transcripts of earnings conference calls. We match the holding months to the corresponding quarters. For the periods before the COVID-19 outbreak, this measure is typically set to zero in the original dataset as firms typically do not mention COVID-19 in their earnings conference calls. Data Source: https://www.firmlevelrisk.com/. |
| *Fund_Alpha* | Alpha from the 36-month rolling-window time-series regressions of the excess return of fund *j* on the excess return of the Vanguard Total Bond Market Index and the excess return of CRSP Value-Weighted Stock Index. We require the fund to have at least 24 months of returns to calculate the rolling-window alpha. The risk-free rate is the 3-month Treasury Bill Second Market Rate. Data Source: CRSP and FRED. |
| *Post_Fund* | An indicator set to be one for holding months after February 2020, when most bond issuers disclose their first 10-K prepared under ASC 842, and zero otherwise. Data Source: Morningstar. |
| *LargeHold_ROUA* | An indicator set to be one if the fund has an above-median number of issuers with *Large_ROUA* in the holding month right after the implementation of ASC 842 when operating leases are recognized. Data Source: Morningstar and Compustat. |

**FIGURE 1**

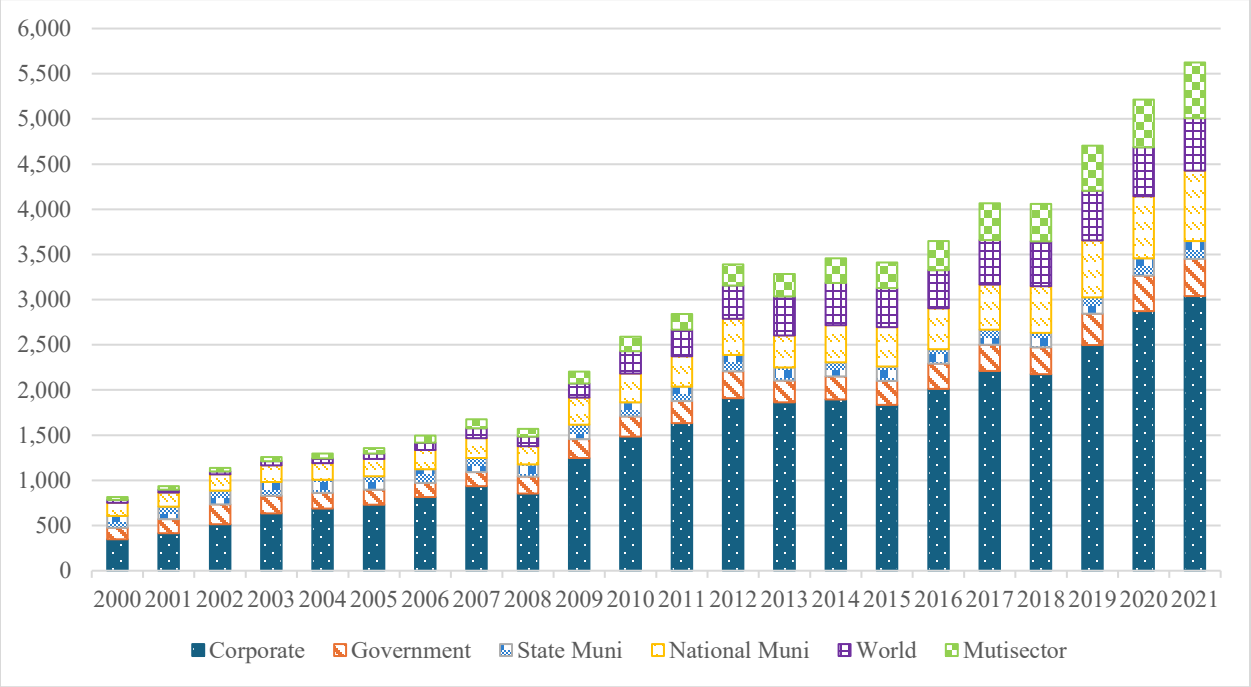
**Company Research Conducted by Multiple PIMCO Investment Professionals in Every Client Portfolio**




This figure illustrates the credit analysis process of PIMCO, a leader in the active corporate bond fund industry. This figure is sourced from Figure 1 in Berndt and Watford (2015).

**FIGURE 2**

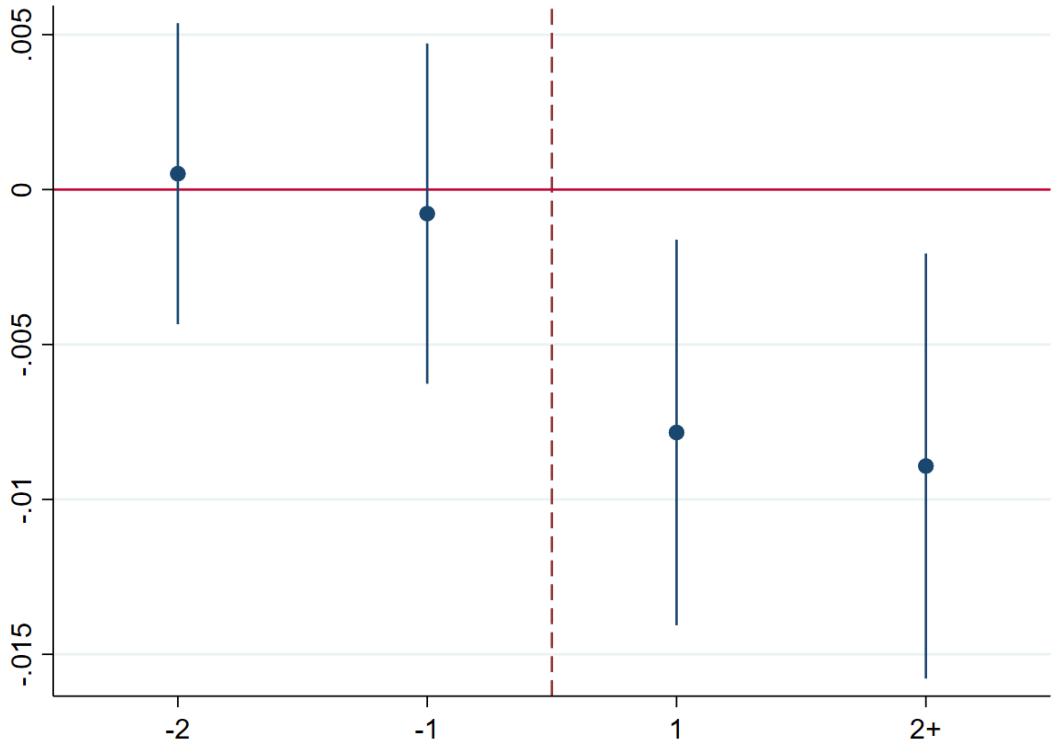
**Trend of Bond Fund Assets across Investment Objectives**




This figure plots the total net assets (in billions of USD) of bond mutual fund groups by their investment objectives for 2000 to 2021. Data Source: ICI (2022). Available at https://www.icifactbook.org/.

**FIGURE 3**

**Operating Lease Recognition and Bond Fund Holdings: Dynamic Impacts**




The figure depicts the estimated coefficients of the interaction terms in the following model, which we use to investigate the differential bond fund percentage holdings of bonds issued by firms with significant exposure to operating lease recognition and bonds issued by firms with limited exposure to operating lease recognition surrounding the adoption of the new lease accounting standard.

$$Holding\_Pct_{j,i,t} = \beta_0 + \sum_{\tau=1}^{\tau=2} \beta_{1,\tau} \times Pre_{i,t} \times Large\_ROUA_i + \sum_{\tau=1}^{\tau=2+} \beta_{1,\tau} \times Post_{i,t} \times Large\_ROUA_i + \sum \varphi_k Controls_{i(j),t} + \gamma_i + \mu_j + \eta_y + \delta_t + \epsilon_{i,t}$$

Specifically, we plot the coefficient estimates and 90% confidence intervals of the interactions term between event month indicators from Month -2 onward and the dummy indicator for significant exposure to operating lease recognition. Month 2+ indicates Month 2 and Month 3. Standard errors are clustered at the issuer level.

**Table 1. Sample Selection**

| Sample selection | Observations |
|---|---|
| Fund-bond-month end of active corporate bond holdings in overlap with firms in Compustat/CRSP Merged Annual database with event months [-3,3] surrounding the implementation month | 223,406 |
| **Fund characteristics:** | |
| Exclude funds with corporate bond holding accounts for less than 10% of total market value of portfolios | (316) |
| Exclude funds that are not reporting monthly | (40,717) |
| **Bond characteristics:** | |
| Exclude non-standard bonds | (5,086) |
| Exclude bonds that have retired during the sample period | (3,776) |
| **Issuer characteristics:** | |
| Exclude financial issuing firms | (42,863) |
| Exclude issuing firms that have no pre-periods or post-periods | (4,269) |
| Exclude issuing firms without recognized operating lease assets ("ROUANT") | (12,831) |
| **Control variables:** | |
| Exclude missing values of controls | (4,998) |
| **Implementation month:** | |
| Exclude implementation month (Event_month 0) | (16,204) |
| **Final sample** | 92,346 |

This table presents our sample selection procedure for the main analysis. The final sample consists of 92,346 fund-bond-month observations. The sample consists of six months, centered around the implementation month of ASC 842. The implementation month ("Month 0") is the holding reporting month following the issuer's release of the first 10-K report prepared under ASC 842 and is excluded from the sample.

**Table 2. Descriptive Statistics**

| Variable | N | Mean | S.D. | Min | P25 | Median | P75 | Max |
|---|---|---|---|---|---|---|---|---|
| *Holding_Pct* | 92,346 | 0.170 | 0.278 | 0.000 | 0.018 | 0.066 | 0.199 | 1.755 |
| *Post* | 92,346 | 0.583 | 0.493 | 0.000 | 0.000 | 1.000 | 1.000 | 1.000 |
| *Large_ROUA* | 92,346 | 0.762 | 0.426 | 0.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| *Size* | 92,346 | 10.330 | 1.726 | 6.136 | 9.176 | 10.510 | 11.780 | 13.810 |
| *Ebit_Cov* | 92,346 | 8.183 | 6.589 | -3.490 | 4.504 | 6.501 | 9.771 | 38.920 |
| *Freecash* | 92,346 | 0.156 | 0.191 | -0.276 | 0.067 | 0.130 | 0.213 | 0.982 |
| *Debt_EBITDA* | 92,346 | 3.583 | 1.757 | 0.492 | 2.459 | 3.178 | 4.453 | 10.140 |
| *Leverage* | 92,346 | 0.620 | 0.251 | 0.177 | 0.470 | 0.568 | 0.722 | 1.467 |
| *Idiosyncratic_Risk* | 92,346 | 0.022 | 0.018 | 0.005 | 0.010 | 0.016 | 0.024 | 0.104 |
| *Bond_Rating* | 92,346 | 12.480 | 3.266 | 3.000 | 10.670 | 13.000 | 14.500 | 20.000 |
| *No_Bond_Rating* | 92,346 | 0.004 | 0.062 | 0.000 | 0.000 | 0.000 | 0.000 | 1.000 |
| *Bond_Age* | 92,346 | 3.142 | 1.177 | 0.000 | 2.485 | 3.401 | 3.989 | 5.303 |
| *Maturity* | 92,346 | 4.438 | 0.926 | 1.946 | 3.932 | 4.382 | 5.193 | 6.114 |
| *Retail_Shr* | 92,346 | 0.212 | 0.310 | 0.000 | 0.000 | 0.079 | 0.266 | 1.000 |
| *Fund_Size* | 92,346 | 7.184 | 1.862 | 2.128 | 5.887 | 7.336 | 8.427 | 10.950 |
| *Fund_Age* | 92,346 | 2.744 | 0.807 | 0.000 | 2.303 | 2.944 | 3.296 | 4.190 |
| *Fund_Turnover* | 92,346 | 1.567 | 1.519 | 0.180 | 0.590 | 1.030 | 1.860 | 6.920 |
| *Small_Fund* | 92,333 | 0.301 | 0.459 | 0.000 | 0.000 | 0.000 | 1.000 | 1.000 |
| *Small_Alternative* | 91,060 | 0.451 | 0.498 | 0.000 | 0.000 | 0.000 | 1.000 | 1.000 |
| *HY_Fund* | 92,346 | 0.213 | 0.410 | 0.000 | 0.000 | 0.000 | 0.000 | 1.000 |
| *Large_Overstate_Rate* | 84,368 | 0.193 | 0.394 | 0.000 | 0.000 | 0.000 | 0.000 | 1.000 |
| *Lease_CL* | 92,346 | 0.008 | 0.092 | 0.000 | 0.000 | 0.000 | 0.000 | 1.000 |

This table reports the summary statistics of our main sample, including the number of observations, mean, standard deviation, minimum, bottom quartile, median, top quartile, and maximum. The sample of our main analysis consists of 92,346 fund-bond-month observations. Continuous variables are winsorized at the 1 percent and 99 percent levels. All variables are defined in Appendix A.

**Table 3. Operating Lease Recognition and Bond Fund Holdings: Baseline Results**

| | *Holding_Pct* | |
|---|---|---|
| | (1) | (2) |
| *Post* × *Large_ROUA* | -0.009*** | -0.008*** |
| | (-3.15) | (-2.72) |
| *Size* | | 0.005 |
| | | (1.20) |
| *Ebit_Cov* | | 0.000 |
| | | (0.27) |
| *Freecash* | | 0.003 |
| | | (0.36) |
| *Debt_EBITDA* | | -0.001 |
| | | (-0.79) |
| *Leverage* | | -0.035* |
| | | (-1.81) |
| *Idiosyncratic_Risk* | | -0.033 |
| | | (-0.51) |
| *Bond_Rating* | | 0.002 |
| | | (0.87) |
| *No_Bond_Rating* | | 0.017 |
| | | (0.79) |
| *Bond_Age* | | -0.011** |
| | | (-2.41) |
| *Maturity* | | 0.060*** |
| | | (3.32) |
| *Retail_Shr* | | 0.041 |
| | | (1.19) |
| *Fund_Size* | | -0.063*** |
| | | (-9.66) |
| *Fund_Age* | | -0.017 |
| | | (-1.54) |
| *Fund_Turnover* | | -0.001 |
| | | (-0.79) |
| Constant | 0.174*** | 0.381*** |
| | (127.02) | (3.39) |
| Fund FE | Yes | Yes |
| Bond FE | Yes | Yes |
| Holding Report Year-Month FE | Yes | Yes |
| Fiscal Year FE | Yes | Yes |
| Observations | 92,346 | 92,346 |
| Adjusted R-squared | 0.689 | 0.690 |

This table examines the impact of implementing ASC 842 on the holdings of active corporate bond funds. The dependent variable *Holding_Pct* is the percentage fund holdings of bond *i* at the end of holding report year-month *t* scaled by the beginning total net assets (TNA) of fund *j*. The main variable of interest is the interaction term $Post \times Large\_ROUA$. $Post$ is an indicator variable set equal to one for holding reporting

year-month *t* after the issuer of bond *i* starts releasing 10-K filing prepared under ASC 842, as indicated by "ACCTCHG"="ASU16-02" in the Compustat/CRSP Merged Annual database. $Large\_ROUA$ is an indicator set to be one if the issuer of bond *i* has significant exposure to operating lease recognition under ASC 842, that is, if the bond issuer has above-median first recognized unscaled right-of-use assets ("ROUANT") corresponding to operating lease recognition after the implementation of ASC842. Column (1) includes the variable of interest, fund fixed effects, bond fixed effects, holding year-month fixed effects, and fiscal year fixed effects. Column (2) further includes all control variables. We cluster standard errors by the issuing firm of the bond. All variables are defined in Appendix A. *,**, and *** indicate significance levels at less than 10%, 5%, and 1% based on two-tailed t-tests.

**Table 4. Cross-sectional Heterogeneity: Sophistication Channel**

| | *Holding_Pct* | | | |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| *Post × Large_ROUA* | -0.002 | -0.000 | 0.000 | 0.001 |
| | (-0.68) | (-0.14) | (0.16) | (0.28) |
| *Post × Small_Fund* | 0.015** | 0.016** | | |
| | (2.22) | (2.33) | | |
| *Large_ROUA × Small_Fund* | 0.032*** | 0.032*** | | |
| | (2.87) | (2.94) | | |
| *Post × Large_ROUA × Small_Fund* | -0.024*** | -0.025*** | | |
| | (-3.06) | (-3.18) | | |
| *Post × Small_Alternative* | | | 0.002 | 0.001 |
| | | | (0.49) | (0.23) |
| *Large_ROUA × Small_Alternative* | | | 0.025** | 0.023** |
| | | | (2.37) | (2.16) |
| *Post × Large_ROUA × Small_Alternative* | | | -0.024*** | -0.022*** |
| | | | (-3.79) | (-3.49) |
| *Size* | | 0.005 | | 0.005 |
| | | (1.16) | | (1.00) |
| *Ebit_Cov* | | 0.000 | | 0.000 |
| | | (0.38) | | (0.37) |
| *Freecash* | | 0.003 | | 0.007 |
| | | (0.35) | | (0.77) |
| *Debt_EBITDA* | | -0.001 | | -0.001 |
| | | (-0.74) | | (-1.07) |
| *Leverage* | | -0.035* | | -0.029 |
| | | (-1.80) | | (-1.50) |
| *Idiosyncratic_Risk* | | -0.032 | | 0.013 |
| | | (-0.49) | | (0.21) |
| *Bond_Rating* | | 0.002 | | 0.002 |
| | | (0.95) | | (1.05) |
| *No_Bond_Rating* | | 0.019 | | 0.022 |
| | | (0.85) | | (0.97) |
| *Bond_Age* | | -0.011** | | -0.011** |
| | | (-2.40) | | (-2.58) |
| *Maturity* | | 0.059*** | | 0.047*** |
| | | (3.29) | | (2.71) |
| *Retail_Shr* | | 0.041 | | 0.036 |
| | | (1.18) | | (1.02) |
| *Fund_Size* | | -0.063*** | | -0.056*** |
| | | (-9.77) | | (-8.61) |
| *Fund_Age* | | -0.016 | | -0.007 |
| | | (-1.43) | | (-0.77) |
| *Fund_Turnover* | | -0.001 | | -0.001 |
| | | (-0.97) | | (-0.70) |
| Constant | 0.165*** | 0.375*** | 0.160*** | 0.346*** |
| | (52.38) | (3.34) | (41.64) | (3.00) |

| | | | | |
|---|---|---|---|---|
| Fund FE | Yes | Yes | Yes | Yes |
| Bond FE | Yes | Yes | Yes | Yes |
| Holding Report Year-Month FE | Yes | Yes | Yes | Yes |
| Fiscal Year FE | Yes | Yes | Yes | Yes |
| Observations | 92,333 | 92,333 | 91,060 | 91,060 |
| Adjusted R-squared | 0.690 | 0.691 | 0.683 | 0.684 |

This table examines the moderating effect of the sophistication channel. The dependent variable *Holding_Pct* is the percentage fund holdings of bond *i* at the end of holding report year-month *t* scaled by the beginning total net assets (TNA) of fund *j*. We capture less sophisticated funds by *Small_Fund* in Column (1) and (2) and *Small_Alternative* in Column (3) and (4). *Small_Fund* is an indicator set to be one if the fund has below-median fund size among all fund-issuer observations as the end of the most recent month in the pre-period of each bond issuer, and zero otherwise. *Small_Alternative* is an indicator set to be one if the fund has below-median holdings in asset classes other than traditional investments, including stock, bonds, and cash as the end of the most recent month in the pre-period, and zero otherwise. Column (1) and (3) include the variable of interest, fund fixed effects, bond fixed effects, holding year-month fixed effects, and fiscal year fixed effects. Column (2) and (4) further include all control variables. We cluster standard errors by issuing firm of the bond. All variables are defined in Appendix A. *,**, and *** indicate significance levels at less than 10%, 5%, and 1% based on two-tailed t-tests.

**Table 5. Cross-sectional Heterogeneity: Informational Channel**

*Panel A. Importance of Fundamental Credit Analysis*

| | *Holding_Pct* | |
|---|---|---|
| | (1) | (2) |
| *Post × Large_ROUA* | -0.002 | -0.002 |
| | (-0.75) | (-0.65) |
| *Post × HY_Fund* | 0.010* | 0.006 |
| | (1.73) | (1.07) |
| *Large_ROUA × HY_Fund* | 0.003 | 0.004 |
| | (0.22) | (0.29) |
| *Post × Large_ROUA × HY_Fund* | -0.026** | -0.027*** |
| | (-2.59) | (-2.70) |
| *Size* | | 0.006 |
| | | (1.16) |
| *Ebit_Cov* | | 0.000 |
| | | (0.81) |
| *Freecash* | | 0.006 |
| | | (0.62) |
| *Debt_EBITDA* | | -0.001 |
| | | (-0.44) |
| *Leverage* | | -0.030 |
| | | (-1.55) |
| *Idiosyncratic_Risk* | | -0.002 |
| | | (-0.03) |
| *Bond_Rating* | | 0.001 |
| | | (0.78) |
| *No_Bond_Rating* | | 0.016 |
| | | (0.74) |
| *Bond_Age* | | -0.011** |
| | | (-2.35) |
| *Maturity* | | 0.059*** |
| | | (3.34) |
| *Retail_Shr* | | 0.038 |
| | | (1.11) |
| *Fund_Size* | | -0.065*** |
| | | (-9.81) |
| *Fund_Age* | | -0.019* |
| | | (-1.67) |
| *Fund_Turnover* | | -0.001 |
| | | (-0.65) |
| Constant | 0.171*** | 0.389*** |
| | (79.18) | (3.34) |
| Fund FE | Yes | Yes |
| Bond FE | Yes | Yes |
| Holding Report Year-Month FE | Yes | Yes |
| Fiscal Year FE | Yes | Yes |
| Observations | 92,346 | 92,346 |

| | | | | |
|---|---|---|---|---|
| Adjusted R-squared | | 0.689 | | 0.690 |

*Panel B. Lease Complexity*

| | *Holding_Pct* | | | |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| *Post × Large_ROUA* | -0.005 | -0.005 | -0.009*** | -0.008*** |
| | (-1.59) | (-1.39) | (-3.08) | (-2.65) |
| *Post × Large_Overstate_Rate* | 0.012** | 0.011** | | |
| | (2.11) | (2.02) | | |
| *Post × Large_ROUA × Large_Overstate_Rate* | -0.015** | -0.012* | | |
| | (-2.23) | (-1.85) | | |
| *Post × Lease_CL* | | | 0.020** | 0.018* |
| | | | (2.49) | (1.71) |
| *Post × Large_ROUA × Lease_CL* | | | -0.040*** | -0.037** |
| | | | (-3.23) | (-2.42) |
| *Size* | | 0.008* | | 0.005 |
| | | (1.67) | | (1.21) |
| *Ebit_Cov* | | 0.000 | | 0.000 |
| | | (0.02) | | (0.31) |
| *Freecash* | | 0.007 | | 0.003 |
| | | (0.68) | | (0.36) |
| *Debt_EBITDA* | | -0.001 | | -0.001 |
| | | (-0.79) | | (-0.73) |
| *Leverage* | | -0.022 | | -0.036* |
| | | (-1.14) | | (-1.84) |
| *Idiosyncratic_Risk* | | -0.032 | | -0.036 |
| | | (-0.43) | | (-0.54) |
| *Bond_Rating* | | 0.001 | | 0.001 |
| | | (0.49) | | (0.77) |
| *No_Bond_Rating* | | 0.038* | | 0.015 |
| | | (1.69) | | (0.70) |
| *Bond_Age* | | -0.013*** | | -0.011** |
| | | (-2.76) | | (-2.43) |
| *Maturity* | | 0.066*** | | 0.061*** |
| | | (3.41) | | (3.36) |
| *Retail_Shr* | | 0.056 | | 0.041 |
| | | (1.11) | | (1.19) |
| *Fund_Size* | | -0.056*** | | -0.063*** |
| | | (-7.71) | | (-9.66) |
| *Fund_Age* | | -0.020* | | -0.017 |
| | | (-1.80) | | (-1.54) |
| *Fund_Turnover* | | -0.001 | | -0.001 |
| | | (-1.01) | | (-0.80) |
| Constant | 0.172*** | 0.285** | 0.174*** | 0.380*** |
| | (110.13) | (2.36) | (127.30) | (3.39) |
| Fund FE | Yes | Yes | Yes | Yes |

| | | | | |
|---|---|---|---|---|
| Bond FE | Yes | Yes | Yes | Yes |
| Holding Report Year-Month FE | Yes | Yes | Yes | Yes |
| Fiscal Year FE | Yes | Yes | Yes | Yes |
| Observations | 84,368 | 84,368 | 92,346 | 92,346 |
| Adjusted R-squared | 0.691 | 0.692 | 0.689 | 0.690 |

This table examines the moderating effect of the informational channel. The dependent variable *Holding_Pct* is the percentage fund holdings of bond *i* at the end of holding report year-month *t* scaled by the beginning total net assets (TNA) of fund *j*. Panel A shows the importance of fundamental credit analysis with *HY_Fund*. *HY_Fund* is an indicator set to be one if the Lipper Objective Code of the fund in CRSP is "HY", and zero otherwise. Panel B examines the lease complexity with *Large_Overstate_Rate* in Column (1) and (2) and *Lease_CL* in Column (3) and (4). *Large_Overstate_Rate* is an indicator set to be one if the issuing firm has a misstated imputed interest rate above the top quartile of all issuing firms in the post-period. *Lease_CL* is an indicator set to be one if the issuing firm has received SEC-originated comment letters regarding the issuer's lease accounting within the one-year window in the year before the implementation month, and zero otherwise. Column (1) and (3) include the variable of interest, fund fixed effects, bond fixed effects, holding year-month fixed effects, and fiscal year fixed effects. Column (2) and (4) further include all control variables. We cluster standard errors by issuing firm of the bond. All variables are defined in Appendix A. *,**, and *** indicate significance levels at less than 10%, 5%, and 1% based on two-tailed t-tests.

**Table 6. Alternative Hypotheses**

*Panel A. Control for Fundamental Changes*

| | *Holding_Pct* | | |
|---|---|---|---|
| | (1) | (2) | (3) |
| *Post × Large_ROUA* | -0.006* | -0.008*** | -0.009*** |
| | (-1.72) | (-2.76) | (-2.91) |
| *Post × Size* | 0.001 | | |
| | (0.45) | | |
| *Post × Ebit_Cov* | -0.000 | | |
| | (-0.85) | | |
| *Post × Freecash* | 0.013 | | |
| | (1.02) | | |
| *Post × Debt_EBITDA* | -0.000 | | |
| | (-0.31) | | |
| *Post × Leverage* | -0.003 | | |
| | (-0.54) | | |
| *Post × Idiosyncratic_Risk* | 0.059 | | |
| | (0.33) | | |
| *Post × Bond_Rating* | -0.001 | | |
| | (-0.91) | | |
| *Post × No_Bond_Rating* | 0.003 | | |
| | (0.19) | | |
| *Post × New_Oplease* | | -0.017 | |
| | | (-0.55) | |
| *Post × Capex* | | | -0.002 |
| | | | (-0.45) |
| *New_Oplease* | | 0.011 | |
| | | (0.37) | |
| *Capex* | | | 0.007 |
| | | | (1.04) |
| Controls | Yes | Yes | Yes |
| Constant | 0.360*** | 0.388*** | 0.379*** |
| | (3.30) | (3.33) | (3.36) |
| Fund FE | Yes | Yes | Yes |
| Bond FE | Yes | Yes | Yes |
| Holding Report Year-Month FE | Yes | Yes | Yes |
| Fiscal Year FE | Yes | Yes | Yes |
| Observations | 92,346 | 87,255 | 92,148 |
| Adjusted R-squared | 0.690 | 0.694 | 0.691 |

*Panel B. Fund Flow Reactions*

| | *Flow* |
|---|---|
| | (1) |
| *Post* × *Large_ROUA* | -0.194 |
| | (-1.30) |
| Controls | Yes |
| Constant | -74.596*** |
| | (-7.56) |
| Fund FE | Yes |
| Bond FE | Yes |
| Holding Report Year-Month FE | Yes |
| Fiscal Year FE | Yes |
| Observations | 92,335 |
| Adjusted R-squared | 0.403 |

*Panel C. Control for Bond Return*

| | *Holding_Pct* |
|---|---|
| | (1) |
| *Post* × *Large_ROUA* | -0.006* |
| | (-1.82) |
| *Bond_Ret* | 0.003 |
| | (0.50) |
| Controls | Yes |
| Constant | 0.372*** |
| | (3.15) |
| Fund FE | Yes |
| Bond FE | Yes |
| Holding Report Year-Month FE | Yes |
| Fiscal Year FE | Yes |
| Observations | 73,394 |
| Adjusted R-squared | 0.721 |

This table presents the results of alternative explanations. Panel A examines whether our results are purely driven by post-standard issuers' fundamentals changes. Column (1) includes the interaction of *Post* with credit ratios and bond ratings to account for post-standard changes in credit metrics. Column (2) includes *New_Oplease* and its interaction with *Post* to account for post-standard changes in new operating lease commitments. Column (3) includes *Capex* and its interaction with *Post* to account for post-standard changes in capital expenditure. We follow Ma and Thomas (2023) to calculate *New_Oplease* and *Capex*. Panel B directly tests the underlying assumption that implementing ASC 842 triggers fund investor redemptions. The outcome variable is *Flow*, which captures fund investor flow. Panel C reports the results after controlling for monthly bond return. In all panels, we cluster standard errors by bond issuer. All variables are defined in Appendix A. *,**, and *** indicate significance levels at less than 10%, 5%, and 1% based on two-tailed t-tests.

**Table 7. Fund Performance Analysis**

| | *Fund_Alpha* | | |
|---|---|---|---|
| VARIABLES | (1) | (2) | (3) |
| *Post_Fund* × *LargeHold_ROUA* | 0.062* | 0.055* | 0.053* |
| | (2.04) | (1.86) | (1.88) |
| *Post_Fund* × *LargeHold_ROUA* × *Small_Fund* | | 0.023* | |
| | | (1.83) | |
| *Post_Fund* × *LargeHold_ROUA* × *Small_Alternative* | | | 0.028** |
| | | | (2.21) |
| *Retail_Shr* | -0.004 | -0.005 | -0.013 |
| | (-0.10) | (-0.13) | (-0.31) |
| *Fund_Size* | -0.015 | -0.014 | 0.013 |
| | (-0.41) | (-0.37) | (0.36) |
| *Fund_Age* | 0.083 | 0.082 | 0.046 |
| | (1.55) | (1.53) | (0.81) |
| *Fund_Turnover* | -0.018* | -0.017* | -0.015 |
| | (-1.83) | (-1.80) | (-1.60) |
| *Flow* | 0.000 | 0.000 | 0.000 |
| | (0.06) | (0.01) | (0.23) |
| Constant | -0.420 | -0.428 | -0.493* |
| | (-1.54) | (-1.56) | (-1.83) |
| Fund FE | Yes | Yes | Yes |
| Holding Report Year-Month FE | Yes | Yes | Yes |
| Observations | 3,139 | 3,133 | 3,010 |
| Adjusted R-squared | 0.967 | 0.967 | 0.969 |

This table presents the impact of ASC 842 on fund performance. The sample consists of 3,139 fund-month observations spanning from October 2019 to November 2020. The dependent variable, *Fund_Alpha*, is the alpha from the 36-month rolling-window time-series regressions of the excess return of fund *j* on the excess returns of the Vanguard Total Bond Market Index and the CRSP Value-Weighted Stock Index. We require the fund to have at least 24 months of returns to calculate the rolling-window alpha. The risk-free rate that we use to calculate excess returns is the 3-month Treasury Bill Second Market Rate. In Column (1), the main variable of interest is the interaction term *Post_Fund* × *LargeHold_ROUA*. *Post_Fund* is an indicator equal to one for holding months after February 2020, when most bond issuers disclose their first 10-K prepared under ASC 842, and zero otherwise. *LargeHold_ROUA* is an indicator set to be one if the fund has an above-median number of issuers with *Large_ROUA* in the holding month right after the implementation of ASC 842, when operating leases are recognized. In Column (2) and (3), we further add the triple interactions between *Post_Fund* × *LargeHold_ROUA* and indicators to capture unsophisticated funds, namely *Small_Fund* and *Small_Alternative* defined similarly as in Table 4. In all columns, we control for fund-level characteristics that affect fund performance as well as fund fixed effects and holding report year-month fixed effects. We cluster standard errors by funds and holding report year-month. All variables are defined in Appendix A. *,**, and *** indicate significance levels at less than 10%, 5%, and 1% based on two-tailed t-tests.

**Table 8. Robustness checks**

*Panel A. Control for COVID-19 Impact*

| | *Holding_Pct* |
|---|---|
| | (1) |
| *Post* × *Large_ROUA* | -0.008** |
| | (-2.47) |
| *Covid_Risk* | -0.002 |
| | (-0.14) |
| Controls | Yes |
| Constant | 0.375*** |
| | (3.31) |
| Fund FE | Yes |
| Bond FE | Yes |
| Holding Report Year-Month FE | Yes |
| Fiscal Year FE | Yes |
| Observations | 91,324 |
| Adjusted R-squared | 0.689 |

*Panel B. Alternative Fixed Effects*

| | *Holding_Pct* | | |
|---|---|---|---|
| | (1) | (2) | (3) |
| *Post* × *Large_ROUA* | -0.011*** | -0.012*** | -0.008* |
| | (-3.05) | (-3.06) | (-1.94) |
| Constant | -0.043 | 0.558*** | 0.654*** |
| | (-0.43) | (4.26) | (7.18) |
| Controls | Yes (No fund-level controls) | Yes | Yes |
| Fund FE | No | No | Yes |
| Bond FE | Yes | Yes | No |
| Issuer FE | No | No | Yes |
| Holding Report Year-Month FE | No | Yes | Yes |
| Fiscal Year FE | Yes | No | Yes |
| Fund × Holding Report Year-Month FE | Yes | No | No |
| Fund × Fiscal Year FE | No | Yes | No |
| Observations | 92,346 | 92,346 | 92,346 |
| Adjusted R-squared | 0.707 | 0.697 | 0.661 |

Panel A presents the results after controlling for *Covid_Risk*, a measure pre-calculated in Hassan *et al.* (2023) to capture COVID-19's perceived impact on the uncertainty of a firm's economic outlook. Panel B presents the results with alternative fixed effects. Specifically, Column (1) controls for fund by holding report month fixed effects (Fund × Holding Report Year-Month FE). All fund-level controls, including *Retail_Shr*, *Fund_Size*, *Fund_Age*, as well as *Fund_Turnover*, are subsumed by the fund by holding report month fixed

effects. Column (2) controls for fund by fiscal year fixed effects (Fund × Fiscal Year FE). Column (3) replaces the bond fixed effects with issuer fixed effects. In all panels, we cluster standard errors by bond issuer. All variables are defined in Appendix A. *,**, and *** indicate significance levels at less than 10%, 5%, and 1% based on two-tailed t-tests.