

Private Recognition

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Sept 2026

ABSTRACT

We examine when contracting parties produce their own measure of balance-sheet debt, deciding which obligations count as debt rather than accepting the boundary drawn by general-purpose accounting standards, and how that private recognition responds when the standard redraws it. Using generative artificial intelligence to read the debt and leverage definitions in nearly 15,000 private loan agreements from 2000 to 2025, we find that customization of lease-related debt definitions increases as borrower credit ratings deteriorate and as lenders experience adverse accounting events and defaults in their portfolios, and decreases with prior lending relationships. Customized definitions and clauses freezing GAAP are complements. Before ASC 842, 70 percent of contracts that froze GAAP customized indebtedness to capture off-balance-sheet leases, against 29 percent of those that did not. That gap narrowed substantially after ASC 842 partially aligned the public rule with the measure these contracts had privately specified, though the alignment was partial and customization did not disappear. Recognition standards appear to shape how contracting parties implement their measurement goals rather than the goals themselves.

JEL Classification: M41; M48; G21; G32; D86; K12

Keywords: debt contracting; accounting-based covenants; liability recognition; off-balance-sheet obligations; leases; ASC 842; large language models

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We thank Robert Choi, Darren Lam, Karthik Seshadri, and Katia Stutz for their research assistance.

Funding: The authors declare no financial conflicts of interest. Financial support was provided by the Graduate School of Management at the University of California, Davis. No external funding was received.

Declaration of generative AI use: During the preparation of this manuscript, the authors used generative artificial intelligence to proofread and edit the text for grammar and clarity. Generative AI was also used as a research tool to identify and extract relevant clauses from debt contracts and to prepare and debug analysis code. The authors reviewed and edited all output, and they take full responsibility for the content of this article.

Supplemental material: The repository at <https://github.com/sumutlunay/lease-standards-debt> contains the materials needed to reproduce our results. These include the table linking LSEG DealScan borrower IDs to Compustat GVKEYs and the code that constructs it, the system prompt and Claude Sonnet 4.6 extraction outputs for the 19,157 Exhibit 10 contracts, the Python implementation of the multi-lender fixed-effects specification, and all remaining analysis code.

1. Introduction

Balance-sheet leverage is the workhorse metric of corporate lending. U.S. banks hold \$1.9 trillion in loans outstanding to nonfinancial corporate businesses (Federal Reserve 2026), regulators anchor underwriting guidance to leverage ratios (Federal Reserve, OCC, and FDIC 2013), and restrictions on indebtedness are among the most pervasive accounting-based covenants in debt contracts (Smith and Warner 1979; Begley and Freedman 2004; LSEG DealScan 2026). Yet loan agreements routinely redefine "Indebtedness," deciding for themselves which obligations count as debt for the contract's purposes. We call this private recognition. This paper asks two questions. First, when do contracting parties produce their own measure of balance-sheet debt rather than accepting the boundary the general-purpose standard draws? Second, how does private recognition respond when the standard redraws that boundary?

We study these questions in the setting of lease obligations, the segment of the boundary contested longest and redrawn most recently. In *Hervey v. Rhode Island Locomotive Works*, the Supreme Court looked through a contract labeled a "lease" whose installment "rents" summed to the purchase price and treated it as a conditional sale.¹ The boundary remained contested more than a century later: SEC staff estimated \$1.25 trillion in undiscounted off-balance-sheet operating lease commitments for U.S. issuers, against \$45 billion under recognized capital leases (SEC 2005).² Nor did ASC 842 settle it. Microsoft's data center lease commitments have more than doubled since 2022, exceeding \$115 billion at fiscal year-end 2024, and Oracle's stand at \$43 billion (Morgan Stanley 2025). Rating agencies add these obligations back to reported debt (Kraft 2015), but lenders go further, fixing the boundary in the contract itself. CoreWeave's 2026 credit

¹ 93 U.S. 664 (1876). The decision is an early articulation of substance over form in lease arrangements.

² Report to Congress mandated by Section 401(c) of the Sarbanes-Oxley Act. The estimate extrapolates from 200 issuers, 100 large and 100 random, to about 10,100 active U.S. issuers, and covers non-cancelable leases only.

agreement defines capital leases by reference to GAAP as it stood on December 31, 2018, the day before ASC 842 took effect, so that leases the standard newly recognized remain outside the agreement's debt definition. The same leases are policed elsewhere in the contract: their termination is an immediate event of default, and they cannot be excluded from collateral (CoreWeave 2026, art. I; §7.01(m)(i)). For 150 years, lease financing has sat at the edge of balance-sheet recognition, and courts and contracting parties have policed that edge where the accounting standards have not.

Private recognition speaks to a fundamental question in standard setting: what a general-purpose standard is for, and what it leaves to private parties to supply. Dye and Sridhar (2008) model a unilateral choice, in which the reporting entity weighs adopting the standard against paying for entity-specific tailoring, and only the producer's demand for tailored measurement enters their analysis. Contracting parties depart bilaterally instead, using a measure that binds both of them, a practice Leftwich (1983) documented four decades ago in lending agreements. The borrower bears the compliance cost of that measure and the lender bears the cost of monitoring compliance with it. A customized definition is therefore evidence of demand jointly held by a producer and a user of the information. Standard setters gauge that demand through comment letters and field surveys, which record stated positions rather than costly commitments.

Executed loan agreements record the costly commitment, but reading them at scale has been infeasible. Dichev and Skinner (2002) noted that debt in covenants is defined in more than a dozen ways, which precluded large-sample tests. The difficulty is not only variety but structure. In the Asbury Automotive term loan agreement reproduced in Appendix B, establishing whether the leverage covenant reaches off-balance-sheet lease obligations requires reading seven provisions scattered across a 131-page document, and two of the provisions that determine the

answer sit outside the chain of definitions entirely, one in a section on accounting terms and one in the leverage ratio itself. Large-sample evidence on covenant measurement has accordingly concentrated on earnings adjustments (Li 2010, 2016; Beatty, Cheng, and Zach 2019; Badawi, Dyreng, de Fontenay, and Hills 2025). How contracts define debt itself has drawn far less attention, though it is the common input to leverage-based covenants in the credit agreement.

We address this gap by analyzing nearly 15,000 private loan agreements filed as Exhibit 10 on SEC EDGAR from January 2000 to September 2025, matched to LSEG DealScan, using generative artificial intelligence to read each contract's debt and leverage definitions in full. The extraction follows the accountant-guided workflow of Tseng and Chang (2026), in which an accountant supplies the applicable standards and contract sections, develops the system prompt through iterations with the model as failure patterns emerge, and refines it until the workflow reaches full accuracy on a held-out sample of contracts drawn at random without replacement.

The resulting measure, Off-Balance-Sheet Lease Contractual Intensity (OBSLI), captures the extent to which a credit agreement's covenant calculations, such as indebtedness, funded debt, or leverage ratios, reach lease-related payment exposures that contemporaneous GAAP leaves off the balance sheet. It covers sales-leasebacks, synthetic leases, operating leases, variable and contingent lease payments, and residual and repurchase obligations. The extraction benchmarks each contract against the boundary the general-purpose standard drew at the contract's date. That boundary is ASC 840 for contracts dated before the borrower's adoption of ASC 842 and ASC 842 thereafter, so OBSLI measures departure from the standard in force at the contract's date rather than from a fixed one. We score OBSLI and the contract's GAAP-election clause as separate dimensions. A contract can freeze at ASC 840 while still bringing lease exposures within its covenant calculations, whether by capitalizing them in the debt definition or by adding a multiple

of rental expense to the leverage numerator, so the relation between the two reflects an empirical pattern rather than a coding artifact.

We organize the evidence around a simple framework. Contracting parties choose how intensively to restrict off-balance-sheet lease exposures, weighing the monitoring benefits of a broader debt measure against the drafting, compliance, and verification costs it imposes. They implement that choice against GAAP as the free, general-purpose default, adopting the standardized number where it aligns with the chosen intensity and writing customized measurement where it does not. The framework yields three sets of predictions: two about what drives the joint demand for customized recognition, distinguished by whether the lender's stake in lease monitoring arises from the borrower or from elsewhere in the lender's portfolio, and one about how that demand is implemented against the standard supplying the default.

The first concerns borrower-specific determinants of the lender's stake in lease monitoring. Customization should rise with the lender's credit risk exposure to the borrower and fall where alternative substitutes for contractual monitoring are available. Relative to investment-grade borrowers, OBSLI is higher in each lower rating category, with coefficients increasing from BB to B to CCC or below. Unrated borrowers resemble B-rated borrowers in magnitude. OBSLI decreases in the share of the syndicate with a prior lending relationship with the borrower, consistent with relationship lending substituting for contractual monitoring (Prilmeier 2017).

The second concerns portfolio-level determinants, which vary across lenders independently of borrower characteristics. Lenders whose portfolios have recently experienced adverse accounting events (such as disclosed material weaknesses in internal control) or borrower defaults are more likely to write customized debt definitions. This extends Murfin's (2012) portfolio-default evidence to the measurement of debt itself and to a broader class of adverse

experience. We omit collateral requirements, performance pricing, and financial covenants from the primary specification. These terms are determined jointly with the debt definition and respond to the same portfolio experience, so conditioning on them absorbs the variation of interest. The association between portfolio experience and customized debt definitions does not survive their inclusion, which is consistent with lease recognition adjusting jointly with the other provisions addressing the same exposure rather than in isolation.

The third concerns implementation. Writing private recognition against a misaligned default requires two drafting acts, and neither works alone. One writes the missing recognition into the definition of indebtedness. The other fixes the accounting reference at a date preceding the change. Customizing without fixing exposes the calibration to a later standard that measures the same obligation on a different basis. Fixing without customizing leaves the obligation unrecognized. The two clauses are therefore complements, and the strength of that complementarity should depend on how far the public standard sits from private demand.

ASC 842 narrowed the gap between what the standard recognizes and what these contracts specify privately. Before ASC 842, 70 percent of contracts with a frozen-GAAP clause customized indebtedness to capture off-balance-sheet leases, against 29 percent of contracts without one. Holding borrower, industry-year, and lender effects fixed, the difference is 35 percentage points before adoption and 19 points after, a significant narrowing of 16 points. The alignment was partial, and customization did not disappear.³ In incremental adjusted R^2 , borrower fixed effects explain 25 percent of the variation in OBSLI, industry-by-year fixed effects 4 percent, and lender fixed effects 1 to 2 percent. We interpret these associations as descriptive rather than causal.

³ Both ASC 842 and IFRS 16 continue to exempt short-term leases and variable payments not tied to an index or rate.

Our contribution is twofold. First, we show that customized measurement rules and the accounting-policy election are complements rather than separable drafting choices, with the strength of the complementarity varying with the distance between the public standard and private recognition. This unifies two findings that appear puzzling in isolation. Demerjian, Donovan, and Larson (2016) find that covenant reliance on balance-sheet numbers barely moves around SFAS 159, with only 14 percent of contracts explicitly excluding fair-value estimates afterward, which reads as a standard that never reached contracting. Cheng, Jaggi, Yan, and Young (2026) find that roughly half of contracts decline ASC 842 through the accounting-policy election, which reads as outright rejection. Each study captures one of two margins: how the contract defines debt, and which version of GAAP that definition resolves to.⁴ Either clause alone understates how actively the parties manage measurement. Private customization indicates what borrowers and lenders choose to recognize, and the general-purpose standard substitutes for private recognition only to the extent that it supplies what they would otherwise specify themselves. Standards shape how contracting parties implement their measurement goals rather than the goals themselves.

Second, we provide, to our knowledge, the first large-sample evidence on how debt contracts redefine indebtedness itself, the measurement of the covenant's core input. Dichev and Skinner (2002) identified the heterogeneity of these definitions as the obstacle to large-sample tests. OBSLI resolves it by rendering that heterogeneity as a comparable score across contracts and regimes. The design generalizes beyond leases. Rather than using large language models to generate keyword lists that feed conventional textual analysis, a researcher can specify a construct

⁴ The Asbury Automotive agreement in Appendix B illustrates both margins. Its accounting-terms section disregards ASC 825, which codified the SFAS 159 fair value option, for all covenant computations without excluding fair-value estimates from any definition. The same agreement elects a frozen lease standard while capitalizing synthetic lease obligations in the debt definition and adding six times rental expense to the leverage numerator, so declining ASC 842 does not imply declining to recognize the exposure.

in economic terms and have the model interpret contract language against it, extending contractual measurement to constructs and scales that manual collection and keyword search cannot reach.

The remainder of the paper proceeds as follows. Section 2 develops the hypotheses. Section 3 describes the empirical design. Section 4 presents results. Section 5 concludes.

2. Prior Literature and Hypothesis Development

2.1 Accounting Choice in Debt Contracting

Agency theory holds that debt covenants, which are written largely on accounting variables, mitigate conflicts of interest between debtholders and shareholders (Jensen and Meckling 1976; Myers 1977; Smith and Warner 1979). Among accounting-based covenants, restrictions on indebtedness are the most pervasive. Smith and Warner (1979) document that 90.8% of public bond contracts in 1974 and 1975 restrict debt or borrowing, and Begley and Freedman (2004) report that 97% of public bond contracts from 1975 to 2000 restrict secured debt. In our DealScan sample of nearly 15,000 private loan agreements from 2000 to 2025, 93.2% contain an indebtedness or maximum-leverage covenant. The provisions differ in scope, and public bonds are not private loans, but the pattern is consistent across five decades of contracting: restrictions on indebtedness are close to universal. Research on accounting measurement in debt contracting has nonetheless concentrated on how contracts define earnings, with comparatively little attention to how they define debt, despite its role as the input to leverage-based covenants.

This asymmetry reflects a measurement obstacle rather than a judgment of economic importance. Dichev and Skinner (2002) document a discontinuity in the distribution of covenant slack, with reported values clustering at or just above thresholds and unusually scarce just below. Although debt-to-cash-flow and leverage covenants appear in most contracts in their sample, they confine their tests to current ratio and net worth covenants because debt definitions are

heterogeneous and customized across contracts (p. 1101). The customization that led Dichev and Skinner to set debt covenants aside is the phenomenon we measure directly.

The first strand of subsequent research examines contractual earnings definitions. Li (2010) documents net income and net worth definitions across 3,720 loan contracts from 1996 to 2005 and finds that earnings definitions exclude transitory items while net worth definitions do not. Using the same sample, Li (2016) shows that EBITDA is the most common performance measure despite its weaker association with credit risk than EBIT and other earnings constructs. Beatty, Cheng, and Zach (2019) narrow the focus to the EBITDA definition itself, finding that 45% of contracts exclude nonrecurring items, and Badawi, Dyreng, de Fontenay, and Hills (2025) use machine learning to characterize the growing variation in EBITDA adjustments across 8,580 loan contracts from 2000 to 2016. This strand establishes that contracting parties actively redefine GAAP outputs, but only on the income statement side of the covenant ratio.

A second strand examines balance-sheet measurement choices, though not the debt definition. Beatty, Weber, and Yu (2008) provide direct evidence that contracts embed both forms of conservatism (Beaver and Ryan 2005) in covenant measurement beyond what GAAP supplies. Income escalators introduce conditional conservatism, raising the net worth threshold by a fraction of positive income but not losses, a contractual analogue to asymmetric timeliness. Intangible asset exclusions introduce unconditional conservatism by computing compliance on tangible net worth. Demerjian, Donovan, and Larson (2016) examine contracting around SFAS 159 (*Fair Value Option for Financial Assets and Financial Liabilities*, effective November 2007) and find no change in the frequency of covenants written on balance-sheet numbers, with only 14% of

contracts dated after 2008 explicitly excluding fair value estimates from covenant definitions. Neither study examines how contracts define debt.⁵

A third strand, closest to our study, examines contractual commitment to accounting standards. Cheng, Jaggi, Yan, and Young (2026) study the adoption of ASC 842, the current lease accounting standard, across 4,476 loan contracts from 2011 to 2023 and document adoption rates between 50% and 60%. This standard-specific adoption choice relates to the general frozen-versus-floating GAAP clauses examined by Beatty, Ramesh, and Weber (2002) and Christensen and Nikolaev (2017). These studies treat standard adoption as the choice variable and take the measurement rule as given. We instead examine how the two operate together, asking how customized measurement rules, in the spirit of Li (2010), relate to adoption of the general-purpose standard. This speaks to how private measurement choices correspond to the boundary the standard draws, and to how that correspondence changes when the boundary shifts.

Finally, the debt definition spans the covenant taxonomies that organize this literature. In Demerjian's (2011) classification, income-statement covenants include debt-to-earnings ratios while balance-sheet covenants include leverage ratios of total debt to total or net assets. In Christensen and Nikolaev's (2012) classification, performance covenants include ratios of senior or total debt to EBITDA while capital covenants include debt-to-equity, debt-to-tangible-net-worth, and leverage ratios. Because debt enters both sides of both taxonomies, evidence on its contractual definition informs the interpretation of covenant choice throughout this literature. Appendix A summarizes these studies, which differ in the dimension of accounting choice examined, sample construction, and findings.

⁵ Cohen, Katz, Mutlu, and Sadka (2019) exploit SFAS 160, which reclassified noncontrolling interests into equity, as a shock that relaxed equity-based covenants. They document that financially healthy borrowers with limited covenant slack subsequently increased leverage. Their identification presupposes that the reclassification carries through to covenant computations, treating the contractual definition as given rather than as an object of inquiry.

2.2 Determinants of Private Recognition in the Contractual Definition of Debt

An indebtedness or leverage covenant is written on a measure of debt that may be the general-purpose GAAP number or a privately customized one (Leftwich 1983). That measure binds both parties, and neither sets it unilaterally. Studying the term shows which accounting measurements appear in agreements when the parties are free to depart from the standard, which is direct evidence on the demand for recognition rules that standard setters otherwise gather through comment letters and field surveys (Holthausen and Leftwich 1983; Ball 2026). We treat Off-Balance-Sheet Lease Contractual Intensity (OBSLI), the intensity with which a credit agreement recognizes lease exposures that the standard in force excludes, as the outcome of that choice. Broadening the debt measure tightens monitoring but adds the cost of drafting, administering, and reporting under a tailored definition (Li 2010). GAAP supplies a general-purpose measure at no incremental cost, as the borrower already produces it, so observed OBSLI indicates a joint willingness to pay for recognition the standard does not provide.

The determinants below shift that trade-off. Two operate from outside the individual contract: conditions in the borrower's industry at the time of contracting (2.2.1) and templates that spread drafting cost across agreements (2.2.2). Two capture the lender's stakes in lease monitoring (2.2.3, 2.2.4). Two concern terms determined jointly with the debt definition, substituting for private recognition (2.2.5) or complementing it (2.2.6). The last turns to the supply side (2.2.7).

2.2.1 Industry conditions over time

The benefit of a broad debt measure rises with the correlated component of a borrower's risk. A lender exposed to several borrowers in the same industry cannot diversify away the exposure that an understated leverage ratio conceals, and industry distress propagates through peer defaults (Hertzel and Officer 2012; Azizpour, Giesecke, and Schwenkler 2018). Obligations the

covenant fails to capture therefore matter most when borrowers in an industry are under stress together. Lease financing is itself concentrated by industry and shifts over time with technology and asset composition, so the demand for recognizing lease obligations should track conditions in the borrower's industry at the time of contracting rather than remain fixed across the sample period. If it does, private recognition varies systematically across industry-years.

H1. OBSLI varies systematically across industry-year conditions.

2.2.2 Contract templates

At the opposite pole from contract-specific tailoring, agreements often follow templates: provisions specific to a borrower and reused across its lenders and facilities, or standard forms a lender applies across borrowers. Smith and Warner (1979) and Leftwich (1983) trace such boilerplate to the American Bar Foundation's *Commentaries on Indentures*. Templates spread the one-time cost of drafting a customized debt definition across many agreements, lowering the per-contract cost and shifting the trade-off toward customization. If templates are quantitatively important, private recognition should persist within borrower and within lender across contracts. Persistence of this kind does not make private recognition uninformative. A template lowers the cost of customization rather than substituting for the decision to customize, and the remaining hypotheses concern the variation that survives once borrower and lender templates are held fixed.

H2. OBSLI exhibits borrower- and lender-specific persistence across contracts.

2.2.3 Operating-lease intensity

A lease covenant is meant to capture lease financing, so the benefit of customized recognition rises with the share of a borrower's assets financed through operating leases, the most common form of lease financing that GAAP left off the balance sheet before 2019. That this exposure is credit-relevant is well documented. Operating leases carry higher loan spreads

(Altamuro, Johnston, Pandit, and Zhang 2014), though a smaller premium than recognized debt (Lim, Mann, and Mihov 2017), and lease-intensive borrowers faced higher interest rates as ASC 842 approached (Qiu and Ronen 2025). Cornaggia, Franzen, and Simin (2013) show that ignoring these obligations places a substantial share of borrowers in safer credit categories than their capitalized leverage would support. The more operating lease-intensive the borrower, the more a broad debt definition tightens the covenant, and the more the recognition is worth its cost.

H3. OBSLI is increasing in the borrower's operating-lease intensity.

2.2.4 Borrower credit risk

The stakes in monitoring rise as a borrower's credit risk increases. As default becomes more likely, off-balance-sheet lease obligations are more likely to be the margin on which the covenant binds, so the parties gain more from recognizing them. Beatty, Cheng, and Zach (2019) find the same pattern on the earnings side, where higher borrower credit risk, captured by lower rating notches or the absence of a rating, is associated with customized earnings definitions that exclude nonrecurring items such as gains and losses on asset sales. Unrated borrowers lack access to public debt markets and face greater information asymmetry, placing them alongside the lower-rated categories. Private recognition of lease obligations should rise likewise as credit quality falls.

H4. OBSLI is higher for borrowers in lower rating or unrated categories than for investment-grade borrowers.

2.2.5 Substitutes: relationship lending and secured debt

Customized recognition is one monitoring technology among several, and parties should adopt it where alternative substitutes are unavailable. That covenant restrictions trade off against other protections is well established. Smith and Warner (1979) observe that secured loans carry fewer and looser covenants, because collateral protects the lender directly and substitutes for

contractual restrictions on the borrower. Prilmeier (2017) shows that covenant tightness relaxes over the course of a lending relationship, as the private information a lender accumulates substitutes for contractual monitoring.

Both substitutes bear on private recognition. A prior relationship gives the lender information gathered across earlier facilities, lowering its reliance on the covenant's debt measure to surface off-balance-sheet exposure. Collateral reduces the lender's need to police total indebtedness through an expansively defined debt measure. Where either is present, the incremental benefit of paying to customize falls. This extends the covenant-substitution logic from the tightness of restrictions to the measurement on which they are written.

H5a. OBSLI is decreasing in the share of syndicate members with a prior lending relationship with the borrower.

H5b. OBSLI is decreasing in the use of collateral.

2.2.6 Contractual terms sensitive to the debt definition

The benefit of measuring debt broadly increases with the number of contractual terms whose operation depends on the debt figure. Two settings are salient. Performance pricing ties the interest spread to the borrower's credit quality (Asquith, Beatty, and Weber 2005), and where the grid is defined on an accounting ratio such as leverage, the debt definition determines not only covenant compliance but the price the borrower pays. The debt measure is then doubly consequential. Separately, agreements with more financial covenants contain more constraints that a single debt definition may feed, so broader measurement yields a larger benefit.

H6a. OBSLI is increasing in the use of performance pricing.

H6b. OBSLI is increasing in the number of financial covenants in the contract.

2.2.7 Lender portfolio experience

Demand for private recognition may also arise on the lender's side, from portfolio experience unrelated to the focal borrower's characteristics. Murfin (2012) shows that lenders tighten covenants through two channels after credit deterioration among portfolio borrowers in unrelated industries or outside their headquarters states: information spillover, as an adverse credit event sharpens a lender's assessment of its own screening ability, and capital depletion, as losses raise lending criteria. We adopt this design and broaden the triggering event. To isolate settings where accounting measurement becomes a lender's priority, we add portfolio exposure to accounting-irregularity events, namely financial restatements, accounting-estimate changes, material asset impairments, SOX 404 internal-control weaknesses (auditor- or issuer-reported), going-concern opinions, and late filings, alongside the credit-deterioration events Murfin studies. Costello and Wittenberg-Moerman (2011) examine how a borrower's own reporting quality affects its contract terms. Our measure differs in that a lender's exposure to irregularities in unrelated industries plausibly bears no relation to the focal borrower's fundamentals, which allows us to observe the financial-statement user's demand for accounting measurement separately from the borrower's reporting environment. This is a variant of Murfin's information spillover channel: exposure to accounting failures elsewhere in the portfolio raises the salience of measurement when the lender next drafts a debt definition, even absent information about the focal borrower.

H7. OBSLI is increasing in the lender's portfolio exposure to accounting-irregularity and credit-deterioration events.

2.3 Implementing Private Recognition Against a Moving Standard

Section 2.2 develops the joint demand for private recognition. This section turns to how that demand is implemented against the standard supplying the free default, and to what happens when the standard moves. A general-purpose standard is a single set of measurement rules written

for users the standard setter cannot identify in advance. Demski (1973) shows the difficulty is fundamental rather than practical. A common standard cannot rank accounting alternatives against each user's preferences, so no normative ranking of measurement rules exists that satisfies all users at once. A contract-specific debt definition sidesteps this problem. Two identified parties bargain to a single debt definition. Each weighs the monitoring benefit against the measurement cost, so the resulting definition reflects the preferences of the specific users it serves.

Theory characterizes when that customization is worth its cost. Dye and Sridhar (2008) show that customization dominates a uniform standard when business fundamentals vary widely across firms, as no single rule fits heterogeneous circumstances. When firms vary in accounting-system quality rather than in fundamentals, a uniform standard dominates instead, as firm-specific measurement induces errors that capital providers cannot unwind. Corona, Huang, and Hwang (2024) reach a complementary result. Private customization survives because of its better fit to specific circumstances, yet a uniform standard can be socially Pareto-dominant through the comparability it produces. These results place private loan agreements at the extreme of both margins relative to public capital markets: customization's fit advantage is largest, and its comparability cost, if borne at all, falls only on the two contracting parties.

We extend the question Holthausen and Leftwich (1983) posed, whether lending-agreement measurement should rely entirely on GAAP, to the relation between customized recognition and the contract's GAAP-election choice. These models take the standard as fixed and do not speak to how private recognition should relate to whether a contract lets GAAP float with subsequent standards or freezes it at signing. We therefore state the relation as a null.

H8. OBSLI is independent of the contract's GAAP-election choice.

The general-purpose recognition boundary for lease obligations moved in 2019. The FASB and IASB issued new lease standards in 2016 (ASC 842 and IFRS 16), requiring operating leases to be recognized on the balance sheet, with the stated aim of leveling the field between capital providers able to capitalize disclosed lease payments themselves and those who could not (ASU 2016-02, BC16). The move was incomplete. ASC 842 retains two lease classifications while IFRS 16 has one (Christensen 2024), and both standards permit lessees to elect not to recognize short-term leases (Ma and Thomas 2023) and exclude variable payments that do not depend on an index or rate from the lease liability (Heese, Shin, and Wang 2025). Misalignment between GAAP and a broad contractual debt measure therefore narrowed without closing.

Lenders anticipated a costly transition, so the frozen-versus-floating election was a live choice. The standard passed the FASB four to three. Lender groups objected in their 2013 exposure-draft comment letters: the American Bankers Association doubted that users, especially lenders to small businesses, would gain enough decision-useful value to justify the cost, and warned that most existing covenants would require renegotiation. In a Commercial Finance Association survey of 23 members, 15 opposed the proposal and 21 expected to renegotiate balance-sheet ratios in negative covenants. These sources reflect the views of parties with a stake in the outcome. Post-implementation experience points the same way. A commercial banker we interviewed described the right-of-use gross-up as an accounting artifact that deteriorated leverage ratios without changing borrowers' underlying economics.⁶ Lenders responded in two ways: amending covenant language to exclude the new standard's effect from covenant calculations and, where headroom allowed, resetting thresholds to preserve compliance.

⁶ We conducted a semi-structured interview in May 2026 with a commercial banking relationship manager serving middle-market borrowers in Northern California. The account is illustrative rather than representative, and we use it to characterize covenant responses observed in practice rather than as evidence of their frequency.

A growing literature documents changes around the boundary shift. Firms shortened or reduced operating leases (Ma and Thomas 2023; Li and Venkatachalam 2024) and cut debt use, especially under floating-GAAP clauses (Ferreira, Landsman, and Rountree 2026). Among affected firms, credit ratings became less risky (He, Lourie, Ma, and Zhu 2026), mutual-fund holdings fell (He, Shevlin, Sun, and Guan 2026), and investment efficiency improved (Christensen, Lynch, and Partridge 2025). Comparability gains concentrated among heavy lease users and in the balance sheet rather than the income statement (Altamuro, Chen, and Li 2025), though analysts following dual-reporting firms became less likely to forecast EBITDA (Michels, Paul, and Zhang 2026).

ASC 842 moved the general-purpose rule toward the measure customized contracts had already specified, so the relation between private recognition and the GAAP election could shift across regimes. Existing models do not speak to that comparison, so we state it as a null.

H9. The relation between OBSLI and the GAAP-election choice does not differ between the ASC 840 and ASC 842 regimes.

3. Empirical Design

3.1 Construction of Off-Balance-Sheet Lease Contractual Intensity (OBSLI)

Manually coding contractual definitions across a large sample is prohibitively costly. Following the iterative prompt-engineering procedure of Tseng and Chang (2026), we apply a finalized system prompt to 19,157 material contracts filed as Exhibit 10, of which 14,584 are loan agreements. We extract the GAAP override, the lease-standard freeze, and the intensity of five lease provisions: sale-leaseback (SLB), synthetic lease (SYN), operating lease (OPL), variable lease payment (VAR), and residual obligation (RES). Intensity ranges from 0 to 3 by the degree of restriction on the corresponding off-balance-sheet exposure: 0 if silent or deferring entirely to

GAAP, 1 if capped or otherwise limited, 2 if capitalized or included in the debt definition, and 3 if prohibited. The system prompt and outputs are available on GitHub.

The two GAAP-adoption dimensions, the general override and the lease-standard freeze, are scored on a separate 0 to 2 scale ordered by the discretion the provision leaves: 0 when GAAP floats and the contract adopts standards as updated, 1 when the contract imposes a hard override or freeze applying automatically, and 2 when it provides only soft protection through a materiality threshold or good-faith renegotiation trigger that leaves the response to be determined case by case. The general override fixes GAAP as of the signing date. The lease-standard freeze fixes lease accounting standard at ASC 840, and a contract may specify it regardless of when it is signed, as the July 2025 Asbury Automotive term loan agreement illustrates. Appendix B reproduces that agreement's definitional chain and reports how each component of OBSLI and both GAAP-adoption dimensions are coded from it.

Tseng and Chang (2026) validate this workflow on debt contracts against hand-coded classifications. Each iteration of prompt refinement is tested on ten contracts drawn at random without replacement, so contracts used to diagnose errors in one iteration do not reappear in later tests. The procedure continues until the workflow classifies the held-out contracts without error and cites verbatim the contract language supporting each extraction. We apply their Workflow F, the third accountant-guided iteration, run in April 2026 using Claude Sonnet 4.6 (Anthropic).

3.2 Regression Specifications

We estimate three specifications: a baseline testing H1 through H6 and H8, an augmented model testing H7, and a regime-shift model testing H9. The baseline is:

$$\begin{aligned}
OBSLI_c = & \delta_{jt} + \alpha_i + \sum_{l \in S_c} \gamma_l + \beta_1 OpLease_{i,\tau(c)} + \beta_2 BB_{i,m(c)} + \beta_3 B_{i,m(c)} + \beta_4 CCC_{i,m(c)} + \\
& \beta_5 Unrated_{i,m(c)} + \beta_6 Relationship_c + \beta_7 Secured_c + \beta_8 PP_c + \beta_9 FinCov_c + \beta_{10} AccP_c + \\
& \theta' Z_c + \varphi' V_{i,\tau(c)} + \varepsilon_c
\end{aligned} \tag{1}$$

Dependent variable. $OBSLI_c$ equals one if any of the four lease components extracted in Section 3.1 receives a non-zero score, and zero otherwise. VAR and RES are combined into a single variable-payment component. Collapsing the 0 to 3 scale into a binary indicator treats any departure from the GAAP default as private recognition, irrespective of the degree of restriction the contract imposes. We estimate a linear probability model by OLS, and in robustness tests a multinomial model that preserves the separate non-zero categories.

Fixed effects. δ_{jt} is an industry-by-year fixed effect, with j the borrower's two-digit SIC industry and t the signing calendar year, absorbing the industry-year variation in H1. α_i is a borrower fixed effect and $\sum_{l \in S_c} \gamma_l$ a set of lender fixed effects summed over syndicate members, absorbing the borrower and lender templates of H2. H1 and H2 concern how much variation each source explains rather than a signed coefficient, so we add one fixed-effect set at a time and read the incremental adjusted R^2 . The increment from δ_{jt} tests H1. The increments from α_i and γ_l test borrower-specific and lender-specific template persistence.

In the multi-lender specification, a syndicate's effect on the debt definition is the sum of its members' individual effects. The data therefore determine which lenders shape the definition, rather than the researcher assigning decision rights to a single member. The specification also captures more lender variation. Assigning each contract to its lead-left lender yields 123 lender fixed-effect groups, whereas our specification identifies 764 groups based on syndicate members, or 173 when the lender pool is restricted to lead arrangers (Table 2, Panel A). The Python implementation of the multi-lender fixed-effects specification is available on GitHub. Pairing each

contract's borrower with its lead-left lender yields 13,639 distinct borrower-lender pairs across our 14,584 contracts, so almost no within-pair variation would remain for identification.

Test variables. *OpLease* is the sum of borrower *i*'s undiscounted future minimum operating lease payments, scaled by total assets, at the latest fiscal year end before contract signing. H3 predicts $\beta_1 > 0$. *BB*, *B*, and *CCC* are indicators for the borrower's most recent S&P rating category before signing, with investment grade the omitted category, and *Unrated* equals one when no rating exists. H4 predicts $\beta_2, \beta_3, \beta_4 > 0$ and $\beta_5 > 0$ if unrated borrowers resemble lower-rated ones. *Relationship* is the fraction of syndicate lenders with at least one prior lending record in DealScan in the 36 months before signing. H5a predicts $\beta_6 < 0$. *Secured* equals one if the facility is secured by collateral. H5b predicts $\beta_7 < 0$. *PP* equals one if the facility contains a performance-pricing provision. H6a predicts $\beta_8 > 0$. *FinCov* is the number of financial covenants in the contract. H6b predicts $\beta_9 > 0$. *AccP* equals one if either GAAP-adoption dimension from Section 3.1 receives a non-zero score, indicating that the contract departs from floating GAAP through a hard override or soft protection. H8 states the relation as a null, $\beta_{10} = 0$.

Controls. Z_c contract terms include maturity, number of lenders, loan spread, loan amount, and the number of non-financial covenants. $V_{i,\tau(c)}$ borrower characteristics include size, profitability, tangibility, leverage, age, book-to-market, capital expenditure, R&D, dividend yield, and a loss indicator, measured at the last fiscal year-end before signing, along with public bond issuance and proceeds over the prior 36 months as substitute financing channels. We winsorize continuous variables at the 1st and 99th percentiles and cluster standard errors by borrower.

To test H7, we augment Equation (1) with four measures of syndicate lenders' portfolio exposure to adverse events, estimated separately for each event type *e*:

$$OBSLI_c = \delta_{jt} + \alpha_i + \sum_{l \in S_c} \gamma_l + \lambda_1 Top5Unrel_c^e + \lambda_2 NonTop5Unrel_c^e + \lambda_3 Top5Rel_c^e + \lambda_4 NonTop5Rel_c^e + \sum_k \beta_k X_{k,c} + \theta' Z_c + \varphi' V_{i,\tau(c)} + \varepsilon_c \quad (2)$$

where X_c denotes the ten test variables from Equation (1) and e indexes the event types examined one at a time: accounting-estimate changes, restatements, internal-control weaknesses, going-concern opinions, late filings, material impairments, and default ratings. For each lender l in syndicate S_c , we count type- e events across l 's other borrowers during the 12 months before the contract c signing, partitioning those borrowers into unrelated and related portfolios. Robustness tests widen this window to 24 or 36 months. A borrower is unrelated to focal borrower i if it lies outside i 's one-digit SIC industry and outside i 's headquarters state, and related otherwise. Writing $n_{l,c}^U$ and $n_{l,c}^R$ for the two counts, we identify the maximum-frequency lender: $l_U^* = \arg \max_{l \in S_c} n_{l,c}^U$, $l_R^* = \arg \max_{l \in S_c} n_{l,c}^R$, breaking ties in favor of the non-Top 5 lender, where Top 5 denotes the set $T = \{\text{Mitsubishi UFJ, Bank of America, JPMorgan, Wells Fargo, Mizuho}\}$. The maximum count then loads into the slot matching that lender's identity, with the paired slot set to zero: $Top5Unrel_c = n_{l_U^*,c}^U \cdot 1\{l_U^* \in T\}$, $NonTop5Unrel_c = n_{l_U^*,c}^U \cdot 1\{l_U^* \notin T\}$ and identically for the related pair using n^R and l_R^* . We separate the Top 5 from Murfin's (2012) related-unrelated partition as these five banks' combined borrower count roughly equals that of the remaining 380 DealScan lenders, so pooling would let a handful of institutions drive the measure. H7 predicts $\lambda_1 > 0$ and $\lambda_2 > 0$, with exposure in the unrelated portfolio the identifying variation.

To test H9, we allow the relation between private recognition and the accounting-policy election to differ across lease-standard regimes:

$$OBSLI_c = \delta_{jt} + \alpha_i + \sum_{l \in S_c} \gamma_l + \pi_1 POST_c + \pi_2 Amend_c + \pi_3 (POST_c \times AccP_c) + \pi_4 (POST_c \times Amend_c) + \sum_k \beta_k X_{k,c} + \theta' Z_c + \varphi' V_{i,\tau(c)} + \varepsilon_c \quad (3)$$

$POST_c$ equals one if contract c is dated on or after borrower i 's ASC 842 adoption date reported in its SEC filings, so timing varies across borrowers rather than at a single calendar cutoff. $Amend_c$ equals one for amendments and zero for initial agreements. We estimate Equation (3) on contracts dated within three years of the adoption date, a symmetric window that holds sample composition roughly constant across regimes. Robustness tests use five years on each side of the adoption date. H9 states the null $\pi_3 = 0$.

4. Empirical Results

4.1 Descriptive Statistics

Table 1, Panel A describes the 11,184 loan contracts drawn from SEC EDGAR Exhibit 10 filings, LSEG DealScan, and Compustat. Of the 14,584 extracted Exhibit 10 contracts, 1,481 are lost in the DealScan merge and a further 1,919 in the Compustat merge because of missing covariates. Loan size is right-skewed, mirroring borrower size: median loan amount is \$322 million against a mean of \$789 million, and median total assets are \$1.4 billion against a mean of \$7.3 billion. Mean maturity is four years, 23 percent of loans are investment grade, and 56 percent are secured. On average, 62 percent of a syndicate's lenders had lent to the borrower at least once in the 36 months before the facility's active date.

Across the 11,184 (14,584) contracts, 46 (45) percent exhibit at least one form of off-balance-sheet lease contractual intensity. Coded separately, the rates are 26 (26) percent for sale-leaseback, 28 (27) percent for synthetic lease, 10 (10) percent for operating lease, and 5 (5) percent for variable payments and residual obligations combined. Pairwise correlations among the five components are all below 0.30, so contracts customize on different margins rather than uniformly. Li (2010, Table 6) reports that 35 percent of 3,720 contracts dated between 1996 and 2005 define net income differently from GAAP, so private customization of the debt measure is at least as

common as the income-statement customization already documented. Figure 1 plots the composition of OBSLI from 2000 to 2024. Rates for all five components are stable around 2019, when ASC 842 became effective, as is the general GAAP-override rate.

Table 1, Panel B reports the four portfolio-exposure measures defined in Section 3.2. Unrelated-portfolio counts exceed related-portfolio counts for every event type, reflecting the narrower related partition, as a borrower is related only if it shares the focal borrower's one-digit SIC industry or headquarters state. Top 5 lenders record higher counts than non-Top 5 lenders, consistent with their larger borrower bases. These events are rare even in the upper tail: 90th-percentile values of NonTop5Unrel range from 1.61 for internal-control weaknesses, going-concern opinions, and default ratings to 3.09 for restatements.

4.2 Industry Conditions over Time and Contract Templates (H1–H2)

Table 2 decomposes the variation in private recognition across three sets of fixed effects, holding the sample at 14,584 contracts. Panel B reports adjusted R^2 and the increment each set contributes. Industry-by-year effects alone explain 4 percent of the variation in OBSLI (Model 1) and 6 percent for operating leases, the highest of the four components, supporting H1 (Industry Conditions over Time). Adding borrower effects raises adjusted R^2 to 0.29 (Model 2), an increment of 25 percentage points, and more for sale-leaseback (28) and synthetic lease (35), indicating that recognition choices are persistent within borrowers across facilities. Layering lender effects on top adds 1 to 2 points (Models 6–8), insensitive to whether the pool spans all syndicate members, lead arrangers, or the lead-left arranger alone. Without borrower effects the lender increment is 4 to 5 points (Models 3–5), consistent with nonrandom matching between lenders and borrowers.

Borrower-side variation exceeds lender-side variation by a factor of five or more in both orderings, and adjusted R^2 penalizes the larger borrower group count (2,840 against 764, 173, and

123). H2 (Contract Templates) is supported on the borrower margin and only weakly on the lender margin. As an executed contract records a bilateral outcome, a borrower effect absorbs time-invariant borrower attributes that both parties respond to, and the lender increment isolates residual variation across lenders facing similar borrowers.

4.3 Borrower and Loan Correlates of Private Recognition (H3–H6)

Table 3 reports estimates of Equation (1). Magnitudes should be read against the unconditional rate of the corresponding dependent variable: 46 percent for OBSLI overall, and 26, 28, 10, and 5 percent for the sale-leaseback, synthetic-lease, operating-lease, and variable-payment components (see Table 1, Panel A).

Contracts are less likely to customize where a substitute for accounting-based monitoring is available. Raising the fraction of syndicate lenders with a prior relationship from none to all lowers the probability by 13.1 points, roughly 28 percent of the base rate (H5a). Secured facilities are 4.9 percentage points less likely to customize (H5b). Terms that make the debt figure more consequential work in the opposite direction. Performance pricing raises the probability by 7.4 percentage points (H6a), and each additional financial covenant, entered linearly, raises it by 3.4 percentage points (H6b).

Private recognition rises with credit risk across the rated scale. Relative to investment-grade borrowers, the probability is 5.3 points higher for BB, 6.8 points for B, and 15.8 points for CCC and below, a monotone ordering in which the weakest category alone accounts for roughly a third of the base rate (H4). Unrated borrowers are 6.6 points more likely to customize than investment-grade borrowers, placing them near the B category.

Operating-lease intensity carries the predicted positive sign and is largest for the operating-lease component, though it is insignificant (H3). In an untabulated multinomial logit taking no

private recognition as the base outcome and treating the 1–3 OBSLI scores as separate outcomes, capped (1), included in the debt definition (2), and prohibited (3), intensity is significantly positive for the operating-lease component at the score-1 and score-2 outcomes.

The significant effects concentrate in the sale-leaseback and synthetic-lease components, the two most common provisions (Table 1, Panel A). Relationship lending and the financial covenant count hold across all four.

4.4 Lender Portfolio Experience (H7)

H7 asks whether a lender's experience with adverse accounting events or credit deterioration elsewhere in its portfolio is associated with customized recognition in its subsequent contracts. The test rests on events at borrowers outside the focal borrower's industry and headquarters state. Such events convey nothing about the focal borrower's fundamentals, but they raise the salience of accounting measurement when the lender next drafts a debt definition. We label these unrelated and events inside the borrower's industry or state as related. Panel A draws experience from all syndicate members, Panel B from lead lenders alone.

Table 4 estimates Equation (2) with fixed effects alone, industry-by-year, borrower, and lender. Collateral, performance pricing, and financial covenants are omitted by design, as they are set alongside the debt definition and respond to the same portfolio experience. Unrelated experience is positive and significant for every event type in both panels, from 0.028 to 0.065. One additional event in the most exposed syndicate member's unrelated portfolio is associated with a 2.8 to 6.5 point higher probability of customization, or 6 to 14 percent of the 46 percent unconditional rate. The Top-5 and non-Top-5 estimates are close in every column, so the association does not depend on whether the most exposed member is a large bank. Default-rating

experience is comparable in magnitude to the adverse accounting events in both panels, extending Murfin's (2012) portfolio-default evidence to the measurement of debt itself.

Table 5 adds the determinants from Table 3. The unrelated coefficients fall to between 0.000 and 0.017, and only internal-control-weakness experience among Top-5 lead lenders remains significant, at 0.016. The experience counts are positively correlated with loan spread and the incidence of collateral (untabulated), consistent with lease recognition varying jointly with the other provisions addressing the same exposure rather than in isolation. Tables 4 and 5 measure experience over the 12 months before the signing date. At 24- and 36-month windows the coefficients keep their sign and significance but are smaller than at 12 months (untabulated).

4.5 Implementing Private Recognition Against a Moving Standard (H8-9)

Section 2.3 states both hypotheses as nulls. Existing literature treats the standard as fixed and does not predict how private recognition would relate to a contract's GAAP-election choice (H8), nor whether that relation would differ once the standard moves (H9). Table 6 rejects both.

Table 1 covers 11,184 contracts dated between 2000 and 2025, Table 2 covers 14,584, and Table 2 figures appear in parentheses throughout. A general GAAP override appears in 47 (48) percent of contracts and a lease-standard freeze in 26 (27) percent, with a correlation of 0.63 (0.63). Every freeze contract also carries an override, so Accounting Policy, coded one when either clause is present, equals one in 47 percent (Table 1, Panel A). Panels A and C of Table 6 restrict the sample to the 1,704 contracts dated within three years of the borrower's ASC 842 adoption date, and Panel B extends the window to five years and 2,602 contracts. Override and freeze rates are 53 and 45 percent in the three-year window and 54 and 44 percent in the five-year window, with correlations of 0.85 and 0.80.

Before adoption, 70 percent of frozen-GAAP contracts customize lease recognition, against 29 percent of floating-GAAP contracts, a gap of 41 points ($z = 11.9$). After adoption the gap narrows to 18 points ($z = 5.4$), a convergence of 23 points ($z = 4.8$). The five-year window yields the same pattern: gaps of 42 and 19 points ($z = 15.8$ and 6.3) converging by 23 points ($z = 6.2$). In the conditional estimates of Table 6, *Accounting policy* enters positively at 0.345 in Panel A and 0.398 in Panel B, so private recognition is not independent of the GAAP election and H8 is rejected. The relation holds for three of the four components at the three-year window: 0.145 for sale-leaseback, 0.148 for synthetic lease, and 0.104 for operating lease. Variable payments are the exception at 0.020, rising to 0.046 at the five-year window and significant at the 10 percent level. That is the least common provision in the sample, so the shorter window offers too few contracts to estimate it precisely. These estimates are consistent with the complementarity that writing recognition against a misaligned default requires.

The interaction of *Post* with *Accounting policy* is -0.157 in Panel A and -0.119 in Panel B, so the relation differs across the ASC 840 and ASC 842 regimes and H9 is rejected. The conditional differential falls from 35 percentage points before adoption to 19 after, and the five-year window yields 40 and 28 points. Among components, the three-year window identifies the shift for sale-leaseback alone at -0.158 , and the five-year window adds synthetic lease at -0.088 and variable payments at -0.051 . The complementarity weakens as the standard moves toward the measure these contracts specify privately, but it does not disappear. Both ASC 842 and IFRS 16 still exempt short-term leases and variable payments not tied to an index or rate, so the public boundary remains some distance from private demand.

Panel C replaces *Accounting policy* with its two components. A general GAAP override fixes GAAP as of the signing date without singling out any standard, and a lease-standard freeze

fixes lease accounting to ASC 840, under which operating leases remained off the balance sheet. Both carry positive pre-adoption differentials for OBSLI, at 0.169 and 0.207, with interactions of -0.023 and -0.162 , neither significant. The distinction sharpens for the operating-lease component, where the override interaction is 0.173 and the freeze interaction -0.179 , both significant. Only the freeze fixes measurement to the basis ASC 842 replaced, so only it loses force once the borrower adopts the new standard, while an override that does not name leases leaves the provision operative. The two effects offset when pooled, which accounts for the insignificant operating-lease interaction in Panel A. For sale-leaseback the pattern reverses, with the override interaction at -0.245 against 0.100 for the freeze, so the post-adoption decline in that component is not confined to language naming the lease standard. The OBSLI interactions in Panel C are imprecise, so the split trades precision for the distinction it draws.

Figure 2 traces the accounting-policy interaction by year relative to adoption, with 95 percent intervals. No pre-adoption estimate is distinguishable from zero, nor is the estimate for the first year after, though the year immediately before adoption is positive at 0.175 with a lower bound near zero. Estimates turn negative in the second year, at -0.11 , and reach -0.42 in the third, the only year in which the interval excludes zero.

Post enters insignificantly on its own in Panels A and B, at 0.045 and 0.046, so contracts on floating GAAP recognize lease obligations at similar rates before and after adoption. What moves is which contracts customize, not the aggregate rate at which contracts depart from the public boundary. Parties who previously had to write around GAAP to capture operating leases now inherit part of that measure from the standard.

The remaining interactions in Panel A are insignificant, so relationship lending, financial covenant count, operating-lease intensity, and credit quality bear on customization no differently

after adoption than before. Practitioner interviews and prior survey evidence suggest that ASC 842 prompted borrowers to reopen existing agreements, which would make amendments a distinct margin of adjustment. Amended facilities customize less throughout the window, at -0.138 for OBSLI and -0.130 for sale-leaseback, and the interaction with *Post* is 0.026 and insignificant. The amendment indicator compares the DealScan facility active date to the deal active date, so it captures any facility activated after its deal opened, including delayed drawdowns and incremental facilities. The evidence limits the scope of the amendment channel without ruling it out. We interpret these associations as descriptive rather than causal.

5. Conclusion

Forty-six percent of contracts in our sample specify at least one form of lease-related indebtedness privately, a rate comparable to the 35 percent at which contracts customize the definition of net income (Li 2010). Against that base, the economic magnitudes order the correlates. Relationship lending and credit risk at the tail are the two largest. Moving from no syndicate member with a prior relationship to all members lowers the probability of customization by 13.1 points, or 28 percent of the base rate, and borrowers rated CCC or below are 15.8 points more likely to customize than investment-grade borrowers, roughly a third of the base rate, with BB and B borrowers at 5.3 and 6.8 points and unrated borrowers at 6.6. Performance pricing adds 7.4 points, and each additional financial covenant adds 3.4, or about 7 percent of the base rate. Collateral subtracts 4.9. Lender portfolio experience is smaller but not trivial. One additional adverse accounting or credit default event among the most exposed syndicate member's unrelated borrowers is associated with a 2.8 to 6.5 point increase, 6 to 14 percent of the base rate, whether or not the exposed member is one of the five largest banks.

The implementation results are larger still. Contracts electing to fix the accounting standard are 34.5 points more likely to customize lease recognition before ASC 842, three-quarters of the base rate and more than twice the largest correlate above. That differential falls to 18.8 points after adoption, a narrowing of 15.7 points that leaves roughly half the pre-adoption complementarity in place. The event-time estimates place the decline after adoption, reaching -0.42 by the third year, with pre-adoption estimates indistinguishable from zero in each of the three preceding years. Variation is overwhelmingly borrower-side, with borrower fixed effects contributing 25 points of incremental adjusted R^2 against 4 for industry-by-year and 2 for lender.

A contract binds both parties, so its measurement provisions record a bilateral outcome. Studying them at scale has been difficult, as their operative content is distributed across a document rather than in any single clause. In the agreement reproduced in Appendix B, the binding lease constraint runs through the leverage ratio rather than the definition of indebtedness, and resolving it requires seven provisions on seven pages. Generative AI makes that structure tractable. Reading nearly 15,000 agreements, we recover the recognition choice written into that definition alongside the accounting standard-election clause.

Private recognition tracks borrower credit risk, falls where a lending relationship substitutes for contractual monitoring, and rises where the lender has recently encountered adverse events elsewhere in its portfolio. Borrower characteristics account for most of the variation. The public standard is associated instead with the drafting through which parties reach that recognition. Where the boundary sat far from private demand, contracts customizing the debt measure also fixed the accounting basis against a later standard change. As ASC 842 moved the boundary closer, that pairing weakened without disappearing, while the aggregate departure rate held steady. What changed is which contracts customize. Our evidence identifies one channel in the welfare question

Ball (2024) frames: the drafting a boundary requires of parties whose measurement goals lie outside it. Those goals appear stable across the rule change, so the standard relates to how private recognition is implemented rather than to what it seeks to measure, supplying a default that costs nothing to adopt where it aligns with private demand. Appendix B illustrates how GenAI interpretive capability can support future work on clause interdependence within agreements.

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Appendix A. Studies of Accounting Choice in Debt Contracting

This appendix summarizes studies that examine accounting choices in samples of loan or bond contracts. The studies differ in the dimension of accounting choice examined, sample construction, and findings. Studies are listed chronologically by publication year. No listed study examines how contracts define debt. JAR = *Journal of Accounting Research*; JAE = *Journal of Accounting and Economics*; CAR = *Contemporary Accounting Research*; WP = working paper.

Study	Accounting Choice	Sample	Key Findings
Dichev and Skinner (2002, JAR)	Discontinuity around current ratio and net worth covenants	1,601 loan contracts from 1989-1999	Covenant slack clusters at or just above zero, suggesting borrowers manage accounting to avoid violations
Beatty, Ramesh, and Weber (2002, JAE)	Mandatory (frozen vs. floating GAAP) vs. voluntary accounting changes	206 loan contracts from 1994-1996	Borrowers pay higher spreads to retain accounting flexibility in covenant calculations
Asquith, Beatty, and Weber (2005, JAE)	Performance pricing based on credit rating or financial ratios	8,761 loan contracts from 1995-1998	41% of contracts use performance pricing; interest-decreasing provisions relate to prepayment risk, interest-increasing to downgrade risk
Beatty, Weber, and Yu (2008, JAE)	Income escalators and intangible asset exclusions in net worth covenants	2,164 loan contracts from 1994-2004	Both adjustments increase with borrower conservatism (Basu measure) and book-to-market ratio
Li (2010, JAR)	Net income and net worth definitions	3,720 loan contracts from 1996-2005	Contractual earnings definitions exclude transitory items, but net worth definitions do not
Demerjian (2011, JAE)	Balance-sheet vs. income-statement covenants	8,527 loan contracts from 1996-2007	Fair-value-induced volatility reduces the use of balance-sheet covenants
Christensen and Nikolaev (2012, JAR)	Capital vs. performance covenants	12,117 loan contracts from 1993-2010	The use of capital covenants is negatively related to the use of performance covenants, consistent with the two serving as substitutes
Li (2016, JAR)	EBITDA vs. EBIT as the performance measure	3,720 loan contracts from 1996-2005	EBITDA is the most common performance measure despite its weaker association with credit risk
Demerjian, Donovan, and Larson (2016, JAR)	SFAS 159 fair value options	2,615 loan contracts from 2008-2012	The use of balance-sheet covenants is unchanged, even though 379 contracts (14%) explicitly exclude fair value estimates
Christensen and Nikolaev (2017, JAR)	Frozen vs. floating GAAP clauses	16,655 loan contracts from 1994-2012	Frozen GAAP use rises from 32% in 1994 to 73% in 2012, while the exclusion of voluntary accounting changes remains stable
Beatty, Cheng, and Zach (2019, CAR)	EBITDA definition	14,959 loan contracts from 2000-2013	45% of contracts exclude nonrecurring items from the EBITDA calculation
Badawi, Dyreng, de Fontenay, and Hills (2025, WP)	EBITDA definition	8,580 loan contracts from 2000-2016	EBITDA adjustments increase over time, and greater customization intensity is associated with tighter financial covenants
Cheng, Jaggi, Yan, and Young (2026, CAR)	Adoption of ASC 842 in covenant definitions	4,476 loan contracts from 2011-2023	ASC 842 adoption rates in contracts range between 50% and 60%

Appendix B. Indebtedness Definition and Accounting Standard Election Clauses in a Debt Contract

This appendix reproduces the definitional chain in the Asbury Automotive term loan agreement, a contract that customizes lease recognition and elects a frozen accounting standard at the same time. Lease exposure enters the debt measure through two constructions, one in the definition of indebtedness and one in the leverage ratio itself, while a notwithstanding clause holds lease classification at GAAP as in effect December 31, 2018. The agreement was executed in July 2025, well after ASC 842 took effect, so it illustrates the customization that persists in the post-adoption period documented in Table 6.

Contract summary

- Contract type: Term Loan Agreement, dated July 21, 2025
- Borrower: Asbury Automotive Group, Inc. (NYSE: ABG), together with subsidiary Borrowers
- Administrative Agent: Wells Fargo Bank, N.A.
- Sole Lead Arranger and Sole Bookrunner: Wells Fargo Securities, LLC
- Document length: 131 pages
- Schedule 5.30(b), the listing of Leases in effect at closing, is redacted from the filed exhibit
- SEC filing: Form 8-K, Exhibit 10.1, at <https://www.sec.gov/Archives/edgar/data/1144980/000114498025000149/ex101termloanagreement-asb.htm>

The definitional chain

Establishing how this agreement treats off-balance-sheet lease exposure requires reading seven provisions drawn from pages 90, 94, 12, 10, 11, 3, and 40 of a 131-page agreement. Section 7.1 restricts indebtedness, and its lease carve-out in clause (b) is purely GAAP-referential, permitting only what GAAP records as a capital or finance lease. The binding constraint on leases runs instead through Section 7.11(b), the Consolidated Total Lease Adjusted Leverage Ratio, capped at 5.75 to 1.00.

That ratio resolves through three further definitions. Its numerator begins with Consolidated Adjusted Funded Indebtedness (page 10), which resolves to Consolidated Funded Indebtedness (pages 11 to 12), whose clause (e) captures Attributable Indebtedness in respect of capital leases and Synthetic Lease Obligations. Attributable Indebtedness (page 3) requires Synthetic Lease Obligations to be capitalized at the remaining lease payments as though the arrangement were a finance lease, a treatment neither ASC 840 nor ASC 842 applies to a synthetic lease. Its proviso holds classification at pre-ASC 842 GAAP.

The ratio adds a second construction outside the debt definition. Clause (a)(iii) adds six times Consolidated Rental Expense over the four-quarter period, a rent capitalization multiple that runs off the income statement rather than the balance sheet and is therefore unaffected by what the standard recognizes. A parenthetical within that clause counts rental payments on real property disposed of and leased back during the period as though the sale-leaseback had occurred on the first day of the period, closing a timing gap a borrower could otherwise open by executing a sale-leaseback late in a quarter.

Section 1.3 (page 40) governs how the GAAP references operate. Subsection (a) deems Indebtedness carried at principal and disregards ASC 825 and ASC 470-20, both automatically. Subsection (b) provides for good-faith renegotiation on a change in GAAP, then overrides that provision with a notwithstanding clause holding operating lease classification fixed at the Closing Date and at December 31, 2018 GAAP for purposes of ASU 2016-02.

Relation to the coded OBSLI components

Component	Score	Provision
Sale-leaseback (SLB)	2	Leverage ratio clause (a)(iii) parenthetical
Synthetic lease (SYN)	2	Consolidated Funded Indebtedness clause (e), via Attributable Indebtedness clause (b)

Operating lease (OPL)	2	Leverage ratio clause (a)(iii), six times Consolidated Rental Expense
General GAAP override	1	Section 1.3(a), applying automatically
Lease-standard freeze	1	Section 1.3(b) notwithstanding clause and the Attributable Indebtedness proviso

Under the aggregation in Section 3.2, OBSLI equals one and AccP equals one, placing this agreement in the customize-and-freeze cell. Both GAAP-adoption dimensions score 1 rather than 2. Section 1.3(b) opens with a good-faith renegotiation trigger, which would score 2 on its own, but the notwithstanding clause that follows applies automatically and controls. Section 1.3(a) likewise operates without any renegotiation step.

Cross-referenced agreements

Section 7.11 provides that these financial covenants automatically track any subsequent amendment to the borrower's separate revolving credit agreement, subject to lender consent. We code each agreement from its own text and do not trace such cross-references. Linking an Exhibit 10 filing to the specific agreement it incorporates is not feasible at scale, as the reference identifies the counterparty agreement by date and party rather than by accession number, and amendments to that agreement may be filed by a different registrant or not at all. Contracts of this kind therefore reflect the terms in force at signing rather than as subsequently modified through the linked agreement.

Excerpts

The seven provisions appear below in the order the chain resolves. Excerpts are reproduced verbatim, with the agreement's original capitalization, defined-term quotation marks, and internal cross-references intact.

SECTION 7.1 Indebtedness (Article VII, Negative Covenants, pages 90–91)

So long as any Lender shall have any Commitment hereunder, any Loan or other Obligation hereunder (other than Obligations consisting of continuing indemnities and other contingent Obligations that, in each case, expressly survive termination of this Agreement and for which no claim has been made against any Loan Party) shall remain unpaid or unsatisfied, the Company shall not, nor shall it permit any Subsidiary (other than the Specified Insurance Subsidiaries and any Designated Escrow Subsidiary) to, directly or indirectly:

SECTION 7.1 Indebtedness. Incur, create, assume or suffer to exist any Indebtedness, except:

- (a) (i) the Obligations under this Agreement and the other Loan Documents and (ii) the Obligations under the Revolving Credit Agreement and the other Revolving Loan Documents;
- (b) Indebtedness created under leases which, in accordance with GAAP, have been recorded and/or should have been recorded on the books of such Person as capital leases or finance leases;
- (c) accounts payable (for the deferred purchase price of property or services) which are from time to time incurred in the ordinary course of business and which (i) are not in excess of (A) ninety (90) days past the due date or (B) if such account payable has no due date, one hundred twenty (120) days past the invoice or billing date or (ii) if outstanding for more than ninety (90) days past such due date (or one hundred twenty (120) days past such invoice or billing date, as applicable), as to which a good faith dispute exists and adequate reserves in conformity with GAAP have been established on the books of such Person;
- (d) Indebtedness in respect of obligations (contingent or otherwise) of the Company or any Subsidiary existing or arising under any Hedge Agreement, provided that (i) such obligations are (or were) entered into by such Person in the ordinary course of business for the purpose of directly mitigating risks or managing costs associated with liabilities, commitments, investments, assets, or property held or reasonably anticipated by such Person, or changes in the value of securities issued by such Person, and not for purposes of speculation; and (ii) such Hedge Agreement does not contain any provision exonerating the non-defaulting party from its obligation to make payments on outstanding transactions to the defaulting party; and
- (e) other Indebtedness to the extent not prohibited by the Revolving Credit Agreement.

SECTION 7.11 Financial Covenants (pages 94–95)

- (a) Consolidated Fixed Charge Coverage Ratio. Permit the Consolidated Fixed Charge Coverage Ratio, as of the end of any fiscal quarter (commencing with the fiscal quarter ending September 30, 2025), to be less than 1.20 to 1.00.

(b) Consolidated Total Lease Adjusted Leverage Ratio. Permit the Consolidated Total Lease Adjusted Leverage Ratio, as of the end of any fiscal quarter (commencing with the fiscal quarter ending September 30, 2025), to be more than 5.75 to 1.00.

Notwithstanding the foregoing, if any of the financial covenants (including the component definitions therein) under the Revolving Credit Agreement are hereafter amended, supplemented, modified or replaced, then the financial covenants in this Section 7.11 and/or the defined terms used herein, as applicable, shall, for all purposes of this Agreement and each other Loan Document, automatically and without further action on the part of any Person, be deemed to be also so amended, supplemented, modified or replaced, if at the time of the effectiveness of such amendment, supplement, modification or replacement, each of the Lenders hereunder (or an Affiliate thereof) is a party to the Revolving Credit Agreement and each of the Lenders hereunder (or an Affiliate thereof), in its capacity as a lender under the Revolving Credit Agreement, consented in writing to such amendment, supplement, modification or replacement under the Revolving Credit Agreement (it being acknowledged and agreed by all parties hereto that if the Revolving Credit Agreement is terminated (and not replaced as contemplated by the definition of Revolving Credit Agreement) during the term of this Agreement, the terms thereof incorporated in this Agreement and the other Loan Documents pursuant to this Section 7.11 shall continue to be effective in this Agreement and the other Loan Documents to the same extent as immediately prior to such termination (subject to the foregoing consent requirement)).

“Consolidated Total Lease Adjusted Leverage Ratio” (Article I, Definitions, page 12)

“Consolidated Total Lease Adjusted Leverage Ratio” means, as of any date of determination, the ratio of: (a) the sum of (i) Consolidated Adjusted Funded Indebtedness as of the date of determination, minus (ii) the sum of (x) the aggregate amount as of the date of determination of cash on the consolidated balance sheet of the applicable Person and its Restricted Subsidiaries as of such date (to the extent the use thereof for application to payment of Indebtedness is not prohibited by law or any contract to which any such Person is a party) which cash is held in deposit accounts subject to Blocked Account Agreements or in deposit accounts maintained with the Revolving Administrative Agent, which ensure, in either case, that the Revolving Administrative Agent has a first priority, perfected Lien in such accounts and (y) the Floorplan Offset Amount (if any) as of such date; plus (iii) six (6) times Consolidated Rental Expense during the Applicable Four-Quarter Period (excluding Consolidated Rental Expense relating to any real property acquired during such period to the extent any lease on such property is terminated prior to or simultaneously with such acquisition, but including as Consolidated Rental Expense the “rental payments” for any real property disposed of and leased back to the Company or its Subsidiaries during such period as if such sale-leaseback transaction had occurred on and such “rental payments” began on the first day of such applicable four fiscal quarter period) to (b) Consolidated EBITDAR for the Applicable Four-Quarter Period.

“Consolidated Adjusted Funded Indebtedness” (Article I, Definitions, page 10)

“Consolidated Adjusted Funded Indebtedness” means, as of any date of determination, for the Company and its Subsidiaries (other than the Specified Insurance Subsidiaries and any Designated Escrow Subsidiary) on a consolidated basis, (a) Consolidated Funded Indebtedness minus (b) Permitted Floorplan Indebtedness.

“Consolidated Funded Indebtedness” (Article I, Definitions, pages 11–12)

“Consolidated Funded Indebtedness” means, as of any date of determination, for the Company and its Subsidiaries (other than the Specified Insurance Subsidiaries and any Designated Escrow Subsidiary) on a consolidated basis, the sum of (a) the outstanding principal amount of all Indebtedness, whether current or long-term, for borrowed money (including Obligations hereunder) and all obligations evidenced by bonds, debentures, notes, loan agreements or other similar instruments, (b) all purchase money Indebtedness (other than trade accounts payable incurred in the ordinary course of business), (c) all direct reimbursement obligations arising under funded or drawn letters of credit (including standby and commercial), bankers’ acceptances, bank guaranties, surety bonds and similar instruments, (d) all obligations in respect of the deferred purchase price of property or services (other than trade accounts payable in the ordinary course of business), (e) Attributable Indebtedness in respect of capital leases and Synthetic Lease Obligations, (f) without duplication, all Guarantees with respect to outstanding Indebtedness of the types specified in clauses (a) through (e) above of Persons other than the Company or any Subsidiary (but including Guarantees of Indebtedness of any Specified Insurance Subsidiary), and (g) all Indebtedness of the types referred to in clauses (a) through (f) above of any partnership or joint venture (other than a joint venture that is itself a corporation or limited liability company) in which the Company or a Subsidiary (other than a Specified

Insurance Subsidiary) is a general partner or joint venturer, unless such Indebtedness is expressly made non-recourse to the Company or such Subsidiary (or is expressly made with limited recourse to the Company or such Subsidiary, in which case the amount of such Indebtedness (for the purpose of determining Consolidated Funded Indebtedness) is limited to the extent of such recourse).

“Attributable Indebtedness” (Article I, Definitions, page 3)

“Attributable Indebtedness” means, on any date, (a) in respect of any capital lease or finance lease of any Person, the capitalized amount thereof that would appear on a balance sheet of such Person prepared as of such date in accordance with GAAP, and (b) in respect of any Synthetic Lease Obligation, the capitalized amount of the remaining lease payments under the relevant lease that would appear on a balance sheet of such Person prepared as of such date in accordance with GAAP if such lease were accounted for as a capital lease or finance lease; provided that (a) for purposes of determining compliance with any provision of this Agreement, the determination of whether a lease is to be treated as an operating lease, on the one hand, or capital lease or finance lease, on the other hand, shall be made without giving effect to any change in accounting for leases pursuant to GAAP resulting from the implementation of Financial Accounting Standards Board ASU No. 2016-02, Leases (Topic 842), to the extent such adoption would require treating any lease (or similar arrangement conveying the right to use) as a capital lease or finance lease where such lease (or similar arrangement) would not have been required to be so treated under GAAP as in effect on December 31, 2018.

SECTION 1.3 Accounting Terms (page 40)

(a) Generally. All accounting terms not specifically or completely defined herein shall be construed in conformity with, and all financial data (including financial ratios and other financial calculations) required to be submitted pursuant to this Agreement shall be prepared in conformity with, GAAP applied on a consistent basis, as in effect from time to time, applied in a manner consistent with that used in preparing the Audited Financial Statements, except as otherwise specifically prescribed herein. Notwithstanding the foregoing, for purposes of determining compliance with any covenant (including the computation of any financial covenant) contained herein, Indebtedness of the Company and its Subsidiaries shall be deemed to be carried at 100% of the outstanding principal amount thereof, and the effects of FASB ASC 825 and FASB ASC 470-20 on financial liabilities shall be disregarded. Any additions to or exclusions from the computation of any financial item based upon FASB ASC 825 or FASB ASC 470-20 shall be detailed on the Compliance Certificate delivered pursuant to Section 6.2(a).

(b) Changes in GAAP. If at any time any change in GAAP would affect the computation of any financial ratio or requirement set forth in any Loan Document, and either the Company or the Required Lenders shall so request, the Administrative Agent, the Required Lenders and the Company shall negotiate in good faith to amend such ratio or requirement to preserve the original intent thereof in light of such change in GAAP (subject to the approval of the Required Lenders); provided that, until so amended, (i) such ratio or requirement shall continue to be computed in accordance with GAAP prior to such change therein and (ii) the Company shall provide to the Administrative Agent and the Lenders financial statements and other documents required under this Agreement or as reasonably requested hereunder setting forth a reconciliation between calculations of such ratio or requirement made before and after giving effect to such change in GAAP. Notwithstanding anything else set forth herein, (i) any lease that was or would have been treated as an operating lease under GAAP as in effect on the Closing Date that would become or be treated as a capital lease or finance lease solely as a result of a change in GAAP after the Closing Date shall always be treated as an operating lease for all purposes and at all times under this Agreement and (ii) the determination of whether a lease is to be treated as an operating lease, on the one hand, or capital lease or finance lease, on the other hand, shall be made without giving effect to any change in accounting for leases pursuant to GAAP resulting from the implementation of Financial Accounting Standards Board ASU No. 2016-02, Leases (Topic 842), to the extent such adoption would require treating any lease (or similar arrangement conveying the right to use) as a capital lease or finance lease where such lease (or similar arrangement) would not have been required to be so treated under GAAP as in effect on December 31, 2018; provided that, upon the request of the Administrative Agent, the Company shall nonetheless provide to the Administrative Agent and the Lenders financial statements and other documents required under this Agreement or as reasonably requested hereunder setting forth a reconciliation between calculations of such ratio or requirement made before and after giving effect to such change in GAAP.

Appendix C. Variable Definition

Variable	Definition	Source
Recognition_Overall	Indicator equal to one if any of its components (sale-leaseback, synthetic lease, operating lease, or variable lease payment) equals one; zero otherwise.	SEC EDGAR Exhibit 10; GenAI prompt in Online Appendix
Recognition_Sale-leaseback	Indicator equal to one if the loan agreement caps sale-leaseback transactions, includes them in the definition of Indebtedness, or prohibits them outright; zero otherwise.	
Recognition_Synthetic lease	Indicator equal to one if the loan agreement caps synthetic or tax-retention lease transactions, includes them in the definition of Indebtedness, or prohibits them outright; zero otherwise.	
Recognition_Operating lease	Indicator equal to one if the loan agreement caps operating lease transactions, includes them in the definition of Indebtedness, or prohibits them outright; zero otherwise.	
Recognition_Variable payments	Indicator equal to one if the loan agreement caps variable lease payments or residual obligations, includes them in the definition of Indebtedness, or prohibits them outright; zero otherwise.	
Accounting policy	Indicator equal to one if either component (General GAAP override or Lease-standard freeze) equals one; zero otherwise.	
General GAAP override	Indicator equal to one if the agreement contains a frozen-GAAP clause fixing GAAP as of the signing date, whether or not it permits renegotiation upon subsequent GAAP changes; zero otherwise.	
Lease-standard freeze	Indicator equal to one if the agreement contains a clause fixing lease accounting to the standard under which operating leases remained off the balance sheet—that is, the basis preceding ASC 842—rather than following subsequent changes to the lease standard; zero otherwise.	Compustat; SEC XBRL
Operating lease intensity	Sum of borrower's undiscounted future minimum operating lease payments scaled by total assets at the latest fiscal year-end before the tranche active date: $(XRENT + MRC1 - MRC5 + MRCTA) / AT$. Missing or zero Compustat items supplemented with XBRL. Winsorized at 1%/99%.	
Investment Grade	Indicator equal to one if the borrower's credit rating is BBB- or above, zero otherwise. Omitted category in the regressions. The borrower's most recent S&P rating prior to the contract signing date—entity (issuer) rating first, then security (issue) rating if no entity rating is available—supplemented by the most recent S&P, Moody's, or Fitch rating from FISD, with Moody's and Fitch grades mapped to the equivalent S&P notch.	S&P credit rating; FISD
BB	Indicator equal to one if the borrower's credit rating is BB+, BB, or BB-, zero otherwise. Sourced as described for Investment Grade.	
B	Indicator equal to one if the borrower's credit rating is B+, B, or B-, zero otherwise.	
CCC and below	Indicator equal to one if the borrower's credit rating is CCC+ or below, zero otherwise.	
Unrated	Indicator equal to one if no rating is available from S&P or FISD for the borrower; zero otherwise.	
Relationship lender	Fraction of syndicate lenders with at least one prior lending record in DealScan during the 36 months before the facility active date.	LSEG DealScan
Secured	Indicator equal to one if the loan facility is secured by collateral, and zero otherwise.	
Maturity	Number of months from the facility's active date to its stated maturity date. Entered in logs in the regression analyses.	
Number of lenders	Count of lenders (lead arrangers plus participants) in the syndicate for the facility. Entered in logs in the regression analyses.	
Loan spread	All-in-spread-drawn (AISD): basis points paid over the benchmark rate (LIBOR/SOFR) per dollar drawn, inclusive of the spread and any annual/facility fee. Entered in logs in the regression analyses.	
Loan amount	Facility amount in millions, measured at the DealScan tranche active date. Entered in logs in the regression analyses.	
Performance pricing	Indicator equal to one if the facility contains a performance-pricing provision, and zero otherwise.	
Financial covenant	Number of financial covenants (e.g., max. leverage, min. interest coverage, min. net worth, min. current ratio). Winsorized at 1%/99%.	
Non-financial covenant	Number of non-financial covenants restricting borrower actions (e.g., dividends, asset sales, capital expenditures, mergers/acquisitions). Winsorized at 1%/99%.	
Firm size	Total assets (AT) in millions, measured at the latest fiscal year-end prior to the DealScan tranche active date. Entered in logs in the regression analyses.	Compustat

Appendix C. Variable Definition (Cont.)

Variable	Definition	Source
Profitability	Income before extraordinary items (IB) over AT, measured at the latest fiscal year-end prior to the DealScan tranche active date. Winsorized at 1%/99%.	Compustat
Tangibility	Net property, plant, and equipment (PPENT) divided by AT. Winsorized at 1%/99%.	
Leverage	Total debt (long-term debt DLTT + debt in current liabilities DLC) divided by AT. Winsorized at 1%/99%.	
Firm age	Number of years since the firm first appears in Compustat. Entered in logs in the regression analyses.	
Book-to-market	Book value of common equity (CEQ) divided by market value of equity (PRCC_F $\times$ CSHO). Winsorized at 1%/99%.	CRSP, Compustat
Capex	Capital expenditures (CAPX) scaled by AT. Winsorized at 1%/99%.	Compustat
Loss	Indicator equal to one if income before extraordinary items (IB) is negative for the fiscal year, and zero otherwise.	
R&D	Research and development expense (XRD) divided by AT, set to 0 when XRD is missing. Winsorized at 1%/99%.	
Dividend yield	Common dividends (DVC) divided by market value of equity (PRCC_F $\times$ CSHO). Winsorized at 1%/99%.	CRSP, Compustat
Public bond issuance	Number of public bond issuances during the 36 months before the facility active date. Entered as $\ln(1 + \text{count})$ in the regression analyses.	FISD
Public bond proceeds	Total proceeds from public bond issuances (USD-denominated only) during the 36 months before the facility active date, scaled by total assets.	
Estimate change_Top5_Unrelated	Maximum frequency of accounting estimate changes in the unrelated-borrower portfolios of the syndicate's lenders during the 12/24/36 months before the facility active date, assigned to this variable when the maximum-frequency lender is a Top 5 bank (Mitsubishi UFJ, Bank of America, JPMorgan, Wells Fargo, and Mizuho). For each lender in the examined borrower's syndicate, count accounting estimate changes across the lender's other "unrelated" borrowers, where unrelated means outside the examined borrower's one-digit SIC industry and outside its headquarters state. Identify the syndicate lender with the highest count; if a Top 5 and a non-Top 5 lender tie for the highest count, the non-Top 5 lender is selected. If the selected lender is a Top 5 bank (Mitsubishi UFJ, Bank of America, JPMorgan, Wells Fargo, or Mizuho), its count loads here and Estimate change_NonTop5_Unrelated is set to zero.	Audit Analytics; DealScan
Estimate change_NonTop5_Unrelated	Constructed identically, but the maximum frequency loads here when the maximum-frequency lender is not a Top 5 bank; Estimate change_Top5_Unrelated is then set to zero.	
Estimate change_Top5_Related	Constructed as Estimate change_Top5_Unrelated, but counting accounting estimate changes in each lender's related-borrower portfolio—other borrowers within the examined borrower's one-digit SIC industry or its headquarters state. Loads here when the maximum-frequency lender is a Top 5 bank; otherwise zero.	
Estimate change_NonTop5_Related	As above, but loads when the maximum-frequency lender is not a Top 5 bank; Estimate change_Top5_Related is then set to zero.	
Control weakness_[Top5/NonTop5_Unrelated/Related]	Constructed identically, with events defined as disclosed internal control weaknesses, whether reported by management (SOX 404a) or by the auditor (SOX 404b).	
Restatement [·]	Constructed identically, with events defined as financial restatements.	
Going concern [·]	Constructed identically, with events defined as going-concern opinions in the auditor's report.	
Late filing [·]	Constructed identically, with events defined as late filing notifications (Form NT 10-K / NT 10-Q under Rule 12b-25).	
Impairment [·]	Constructed identically, with events defined as material asset impairments.	S&P credit rating
Default rating [·]	Constructed identically, with events defined as S&P default ratings.	
Post	Indicator equal to one if the facility active date falls on or after the borrower's reported ASC 842 adoption date, and zero otherwise.	SEC EDGAR
Amendment	Indicator equal to one if the facility active date is later than the DealScan deal active date, and zero otherwise.	LSEG DealScan

[·] denotes the four Top5/NonTop5 $\times$ Related/Unrelated variants, each constructed as in the accounting Estimate change set above, with the event type replaced as indicated.

Table 1. Descriptive Statistics**Panel A. Distribution of Regression Variables**

This table describes the sample of 11,184 private loan agreements in the intersection of SEC EDGAR Exhibit 10 filings, LSEG DealScan, and Compustat. For each regression variable, the table reports the mean, standard deviation, and the 25th, 50th, and 75th percentiles. Variable definitions appear in Appendix C.

	Mean	P25	P50	P75	Std
Recognition_Overall	0.46	0.00	0.00	1.00	0.50
Recognition_Sale-leaseback	0.26	0.00	0.00	1.00	0.44
Recognition_Synthetic lease	0.28	0.00	0.00	1.00	0.45
Recognition_Operating lease	0.10	0.00	0.00	0.00	0.30
Recognition_Variable payments	0.05	0.00	0.00	0.00	0.22
Accounting policy	0.47	0.00	0.00	1.00	0.50
General GAAP override	0.47	0.00	0.00	1.00	0.50
Lease-standard freeze	0.26	0.00	0.00	1.00	0.44
Operating lease intensity	0.14	0.02	0.05	0.13	0.27
Investment grade	0.23	0.00	0.00	0.00	0.42
BB	0.18	0.00	0.00	0.00	0.38
B	0.13	0.00	0.00	0.00	0.34
CCC and below	0.03	0.00	0.00	0.00	0.17
Unrated	0.43	0.00	0.00	1.00	0.49
Relationship lender	0.62	0.20	0.78	1.00	0.40
Secured	0.56	0.00	1.00	1.00	0.50
Maturity	44.89	29.45	48.05	59.99	21.08
Number of lenders	7.88	3.00	6.00	11.00	7.06
Loan spread	210.14	125.00	175.00	275.00	143.09
Loan amount	789.96	100.00	322.43	850.00	1,722.14
Performance pricing	0.36	0.00	0.00	1.00	0.48
Financial covenant	0.97	0.00	1.00	2.00	1.12
Non-financial covenant	1.96	0.00	1.00	3.00	2.35
Firm size	7,292.23	424.70	1,412.16	4,660.39	26,762.57
Profitability	0.02	0.00	0.03	0.07	0.11
Tangibility	0.30	0.08	0.21	0.49	0.27
Leverage	0.30	0.14	0.29	0.43	0.22
Firm age	21.94	8.00	16.00	32.00	17.79
Book-to-market	0.57	0.26	0.47	0.76	1.00
Capex	0.07	0.02	0.04	0.07	0.10
Loss	0.24	0.00	0.00	0.00	0.43
R&D	0.02	0.00	0.00	0.01	0.05
Dividend yield	0.01	0.00	0.00	0.02	0.02
Public bond issuance	0.99	0.00	0.00	1.00	2.71
Public bond proceeds	0.53	0.00	0.00	0.53	1.14

Table 1. Descriptive Statistics (Continued)**Panel B. Lender Experience in the 12 Months Preceding the Loan Agreement**

This table presents the distribution of lender-experience variables capturing each syndicate's prior exposure to borrower accounting and credit events. For a given loan, we examine every lender in the borrower's syndicate, count the relevant events across that lender's other borrowers over the 12 months before the facility active date, and assign the highest such count to the loan. Each variable is split along two dimensions: whether the highest-count lender is a Top 5 bank (Mitsubishi UFJ, Bank of America, JPMorgan, Wells Fargo, and Mizuho), and whether the events occurred in the lender's related portfolio (other borrowers in the examined borrower's one-digit SIC industry or headquarters state) or its unrelated portfolio (all others). Only one of each Top 5 / non-Top 5 pair loads for a given loan; the other is set to zero. Seven event types are measured this way: accounting estimate changes, internal control weaknesses, financial restatements, going-concern opinions, late filings, material impairments, and S&P default ratings. Appendix C gives the full construction, the tie-breaking rule, and the definition of each event type.

	P10	P25	P50	P75	P90
Estimate change_NonTop5_Unrelated	0.00	0.00	0.00	0.00	2.48
Estimate change_Top5_Unrelated	0.00	3.64	4.08	4.37	4.84
Estimate change_NonTop5_Related	0.00	0.00	0.00	0.00	0.00
Estimate change_Top5_Related	0.00	0.00	0.00	0.00	1.10
Restatement_NonTop5_Unrelated	0.00	0.00	0.00	0.00	3.09
Restatement_Top5_Unrelated	0.00	3.95	4.62	5.32	6.04
Restatement_NonTop5_Related	0.00	0.00	0.00	0.00	1.10
Restatement_Top5_Related	0.00	0.00	0.00	0.69	1.79
Control weakness_NonTop5_Unrelated	0.00	0.00	0.00	0.00	1.61
Control weakness_Top5_Unrelated	0.00	0.00	3.22	3.76	5.11
Control weakness_NonTop5_Related	0.00	0.00	0.00	0.00	0.69
Control weakness_Top5_Related	0.00	0.00	0.00	0.00	0.69
Going concern_NonTop5_Unrelated	0.00	0.00	0.00	0.00	1.61
Going concern_Top5_Unrelated	0.00	1.95	2.94	4.28	5.02
Going concern_NonTop5_Related	0.00	0.00	0.00	0.00	0.00
Going concern_Top5_Related	0.00	0.00	0.00	0.00	1.10
Late filing_NonTop5_Unrelated	0.00	0.00	0.00	0.00	2.77
Late filing_Top5_Unrelated	0.00	3.40	3.81	5.80	6.36
Late filing_NonTop5_Related	0.00	0.00	0.00	0.00	0.69
Late filing_Top5_Related	0.00	0.00	0.00	1.10	2.08
Impairment_NonTop5_Unrelated	0.00	0.00	0.00	0.00	2.56
Impairment_Top5_Unrelated	0.00	0.00	5.20	6.39	6.62
Impairment_NonTop5_Related	0.00	0.00	0.00	0.00	1.39
Impairment_Top5_Related	0.00	0.00	0.00	1.39	2.40
Default rating_NonTop5_Unrelated	0.00	0.00	0.00	0.00	1.61
Default rating_Top5_Unrelated	0.00	0.79	2.08	2.48	3.09
Default rating_NonTop5_Related	0.00	0.00	0.00	0.00	0.00
Default rating_Top5_Related	0.00	0.00	0.00	0.00	0.00

Table 2. Industry Conditions over Time and Contract Templates (H1–H2)

This table reports how much of the variation in private recognition is explained by industry-by-year, borrower, and lender fixed effects. The sample comprises 14,584 loan agreements dated between January 2000 and September 2025, and all specifications are linear probability models estimated by OLS. The dependent variable is OBSLI, an indicator equal to one if any of its four components receives a non-zero score under the extraction described in Section 3.1; the components are sale-leaseback (SLB), synthetic lease (SYN), operating lease (OPL), and variable lease payment, the last combining the variable-payment (VAR) and residual-obligation (RES) provisions. Each component also serves as a separate dependent variable. Panel A is the specification key: each column is one fixed-effect structure. Model (1) includes industry-by-year effects alone (two-digit SIC by signing year). Models (2)–(5) add borrower or lender effects individually, and models (6)–(8) add them jointly, so the borrower and lender increments can be read both unconditionally and conditional on the other. Group counts are reported once per fixed-effect set. Lender effects use the multi-membership coding of Section 3.2, under which every lender named in a contract activates its own indicator. We report three definitions of the lender pool. The full-syndicate coding spans lead arrangers and participants alike, so a facility with 14 members activates 14 indicators. The lead-arranger coding restricts the pool to lead lenders, and the lead-left coding to the single lead-left arranger. Panel B reports fit statistics for each dependent variable (rows) under each specification (columns), holding the sample fixed at 14,584 contracts. Because the specifications differ only in their fixed effects and include no other regressors, differences in adjusted R^2 across columns measure the share of variation attributable to each set of fixed effects: industry-by-year, borrower, and lender. The industry-by-year fit tests H1, Industry Conditions over Time. The incremental fit from borrower and lender effects provides evidence on H2, which predicts borrower-specific and lender-specific persistence in contract templates.

Panel A Specification key: each column is one FE structure

Fixed effects (# groups)	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)	Model (6)	Model (7)	Model (8)
Industry×Year SIC-2 (1,307)	✓	✓	✓	✓	✓	✓	✓	✓
Borrower (2,840)		✓				✓	✓	✓
Lender: all syndicate members (764)			✓			✓		
Lender: lead arrangers (173)				✓			✓	
Lender: lead-left arranger (123)					✓			✓

Panel B Adj. R^2 , N = 14,584 contracts throughout

Dependent variable: Recognition_	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)	Model (6)	Model (7)	Model (8)
Overall	0.04	0.29	0.08	0.08	0.09	0.30	0.30	0.31
Sale-leaseback	0.04	0.32	0.08	0.07	0.07	0.34	0.33	0.34
Synthetic lease	0.04	0.39	0.09	0.09	0.09	0.41	0.40	0.41
Operating lease	0.06	0.25	0.08	0.08	0.07	0.26	0.26	0.26
Variable payments	0.02	0.30	0.05	0.04	0.05	0.31	0.30	0.30

Table 3. Borrower and Loan Correlates of Private Recognition (H3–H6)

This table reports how borrower and contract characteristics relate to private recognition, adding the covariates of Equation (1) to the fixed-effect structure of Table 2. Each column is a separate linear probability model estimated by OLS. The dependent variable is OBSLI or one of its four components: sale-leaseback (SLB), synthetic lease (SYN), operating lease (OPL), and variable lease payment and residual obligation combined. All specifications include industry-by-year (two-digit SIC by signing year), borrower, and full-syndicate lender fixed effects. The sample is 11,184 contracts, smaller than the 14,584 in Table 2 because the covariates require Compustat and DealScan coverage. Variable definitions appear in Appendix C. Standard errors are clustered by borrower; *, **, and *** denote significance at the 10%, 5%, and 1% levels (two-tailed).

Dependent variable: Recognition_	Overall	Sale-leaseback	Synthetic lease	Operating lease	Variable payments
Operating lease intensity	0.050	0.067	0.036	0.075	0.011
BB	0.053*	0.026	0.054**	0.000	0.027*
B	0.068**	0.069**	0.032	0.013	0.028
CCC and below	0.158***	0.117**	0.128***	0.006	0.000
Unrated	0.066**	0.049	0.051*	0.014	0.022
Relationship lender	-0.131***	-0.087***	-0.083***	-0.027**	-0.019**
Secured	-0.049**	-0.042**	-0.032*	-0.015	-0.019*
Performance pricing	0.074***	0.021	0.049***	0.020*	0.007
Financial covenant	0.034***	0.027***	0.025***	0.016***	0.008**
Accounting policy	0.394***	0.199***	0.285***	0.082***	0.046***
Maturity	0.015	0.015*	0.013	0.009	0.002
Number of lenders	0.013	0.002	0.021	-0.006	-0.011
Loan spread	0.005	0.009	-0.006	-0.006	0.002
Loan amount	0.014	0.009	0.004	0.005	0.000
Non-financial covenant	0.006	0.005	0.005	0.006**	0.005**
Firm size	0.005	-0.004	0.005	-0.003	-0.007
Profitability	-0.034	-0.055	-0.073	0.076	-0.001
Tangibility	0.124*	0.136*	-0.021	0.122**	0.033
Leverage	0.039	0.054	-0.014	0.011	-0.014
Firm age	0.007	0.000	0.003	-0.003	0.010
Book-to-market	0.008	0.006	0.004	0.002	-0.009**
Capex	-0.070	-0.144	0.021	-0.020	-0.022
Loss	-0.023	-0.013	-0.001	-0.008	0.012
R&D	-0.182	0.054	-0.143	-0.058	-0.083
Dividend yield	-0.038	-0.169	0.155	-0.032	0.080
Public bond issuance	-0.022	-0.014	-0.036**	0.010	0.008
Public bond proceeds	0.004	0.003	0.007	-0.003	-0.003
Adj. R ²	0.47	0.40	0.52	0.28	0.31

Table 4. Lender Portfolio Event Experience (H7): Fixed Effects Only

This table reports how a syndicate's prior exposure to accounting and credit events at other borrowers relates to private recognition. The dependent variable is OBSLI, estimated as a linear probability model by OLS on 11,184 contracts. All specifications include industry-by-year (two-digit SIC by signing year), borrower, and full-syndicate lender fixed effects, with no additional controls. The lender-experience variables follow Equation (2). For each contract, we count the relevant events across each syndicate lender's other borrowers in the 12 months before signing and assign the highest such count to the contract. Each variable is split on two dimensions: whether the maximum-frequency lender is a Top 5 bank (Mitsubishi UFJ, Bank of America, JPMorgan, Wells Fargo, or Mizuho), and whether the events occurred in that lender's related portfolio (other borrowers in the focal borrower's one-digit SIC industry or headquarters state) or its unrelated portfolio. Only one of each Top 5 / non-Top 5 pair loads for a given contract; the other is set to zero. Seven event types are measured this way: accounting-estimate changes, restatements, internal-control weaknesses, going-concern opinions, late filings, material impairments, and default ratings. Appendix C gives the full construction, the tie-breaking rule, and each event-type definition. The two panels differ only in which syndicate members contribute the count. Panel A draws the maximum-frequency lender from all syndicate members, lead arrangers and participants alike. Panel B draws it from lead arrangers only. The lender fixed effects are held constant across panels. Standard errors are clustered by borrower; *, **, and *** denote significance at the 10%, 5%, and 1% levels (two-tailed).

Panel A Experience drawn from all syndicate members (lead arrangers and participants)

Lender experience	Estimate change	Restatement	Control weakness	Going concern	Late filing	Impairment	Default rating
NonTop5_Unrelated	0.063***	0.062***	0.040***	0.050***	0.065***	0.054***	0.056***
Top5_Unrelated	0.060***	0.058***	0.028***	0.050***	0.061***	0.045***	0.059***
NonTop5_Related	0.019	-0.009	-0.019	-0.027	-0.032**	-0.038***	-0.016
Top5_Related	-0.006	-0.020*	-0.034**	-0.015	-0.026**	-0.033***	-0.018
Adj. R ²	0.29	0.29	0.28	0.29	0.29	0.29	0.29

Panel B Experience drawn from lead lenders only

Lender experience	Estimate change	Restatement	Control weakness	Going concern	Late filing	Impairment	Default rating
NonTop5_Unrelated	0.048***	0.057***	0.045***	0.034**	0.054***	0.052***	0.034*
Top5_Unrelated	0.048***	0.051***	0.032***	0.035***	0.050***	0.042***	0.039***
NonTop5_Related	0.008	-0.029*	-0.043*	-0.061*	-0.030	-0.032**	-0.028
Top5_Related	-0.009	-0.017	-0.025	-0.010	-0.016	-0.028**	-0.030
Adj. R ²	0.29	0.29	0.29	0.29	0.29	0.29	0.28

Table 5. Lender Portfolio Event Experience (H7): Adding Borrower and Contract Controls

This table re-estimates Table 4 with the borrower and contract controls of Equation (1), including collateral, performance pricing, and financial covenants. Those three terms are omitted from Table 4 by design, as they are set alongside the debt definition and respond to the same portfolio experience, so comparing the experience coefficients across the two tables shows how much of the association operates through the wider contract package. The dependent variable is OBSLI, estimated as a linear probability model by OLS on 11,184 contracts, with industry-by-year (two-digit SIC by signing year), borrower, and full-syndicate lender fixed effects. The lender-experience variables are constructed as in Table 4 (see that table and Appendix C), and the controls are those defined in Table 3 and Appendix C. The panels differ in which lenders' portfolio experience enters the regressor. Panel A draws the maximum-frequency lender from all syndicate members, Panel B from lead arrangers only. Standard errors are clustered by borrower. *, **, and *** denote significance at the 10%, 5%, and 1% levels (two-tailed).

Panel A Experience drawn from all syndicate members (lead arrangers and participants)

Lender experience	Estimate change	Restatement	Control weakness	Going concern	Late filing	Impairment	Default rating
NonTop5_Unrelated	0.007	0.008	0.010	0.000	0.004	0.008	-0.004
Top5_Unrelated	0.012	0.011	0.012	0.009	0.009	0.008	0.008
NonTop5_Related	0.011	0.007	-0.002	-0.019	-0.010	-0.028**	-0.006
Top5_Related	-0.002	-0.003	-0.026**	-0.006	-0.010	-0.016*	-0.013
Adj. R ²	0.47	0.47	0.47	0.47	0.47	0.47	0.47

Panel B Experience drawn from lead lenders only

Lender experience	Estimate change	Restatement	Control weakness	Going concern	Late filing	Impairment	Default rating
NonTop5_Unrelated	-0.003	0.007	0.017	0.001	0.003	0.006	-0.010
Top5_Unrelated	0.007	0.010	0.016**	0.007	0.008	0.007	0.002
NonTop5_Related	0.003	-0.002	-0.027	-0.048	0.001	-0.024*	-0.030
Top5_Related	0.000	-0.004	-0.017	-0.006	-0.004	-0.014	-0.001
Adj. R ²	0.47	0.47	0.47	0.47	0.47	0.47	0.47

Table 6. Implementing Private Recognition Around ASC 842 (H8–H9)

This table reports how private recognition changes around the borrower's adoption of ASC 842. Panels A and C use 1,704 contracts dated within three years of the adoption date disclosed in the borrower's SEC EDGAR filings, and Panel B uses 2,602 contracts dated within five years. The dependent variable is OBSLI, an indicator equal to one if any component receives a non-zero score. Components appear separately in the remaining columns, with variable payments combining the variable-payment (VAR) and residual-obligation (RES) scores. Post equals one for contracts dated on or after the borrower's adoption date. Adoption dates differ across borrowers, so Post varies within industry-year cells rather than switching on at a single calendar date. Estimates are from a linear probability model with the fixed effects and controls of Table 3, and investment grade is the omitted rating category. Panel A reports the full interaction set. Panel B reports the accounting-policy interaction only, with the remaining interactions estimated but suppressed for space. Panel C replaces Accounting policy with its two components, a general GAAP override and a freeze written on the lease standard. Coefficients on borrower and contract controls are omitted from the table, though all Table 3 controls enter every regression. Variable definitions appear in Appendix C. Standard errors are clustered by borrower. *, **, and *** denote significance at the 10%, 5%, and 1% levels (two-tailed).

Panel A: Three-year window

Dependent variable: Recognition_	Overall	Sale- leaseback	Synthetic lease	Operating lease	Variable payments
Post	0.045	0.152	-0.013	-0.063	0.088
Post×Accounting policy	-0.157**	-0.158**	-0.065	0.020	-0.057
Accounting policy	0.345***	0.145**	0.148***	0.104**	0.020
Amendment	-0.138**	-0.130**	-0.090	0.025	0.015
Post×Amendment	0.026	0.044	0.027	-0.000	-0.033
Post×Relationship lender	0.062	0.012	0.044	0.015	-0.023
Post×Financial covenant	0.003	0.010	-0.017	0.067*	0.009
Post×Operating lease intensity	0.362	0.140	0.091	0.240	-0.132
Post×BB	-0.044	-0.152	0.064	0.050	0.005
Post×B	0.064	-0.126	0.141	0.027	-0.033
Post×CCC and below	0.144	0.010	0.317*	-0.023	-0.059
Post×Unrated	-0.002	-0.100	0.084	-0.074	-0.025
Other Controls	YES	YES	YES	YES	YES
Adj. R ²	0.41	0.36	0.44	0.27	0.29

Panel B: Five-year window

Dependent variable: Recognition_	Overall	Sale- leaseback	Synthetic lease	Operating lease	Variable payments
Post	0.046	0.049	0.066	-0.080	0.123*
Post×Accounting policy	-0.119**	-0.117**	-0.088*	0.063	-0.051*
Accounting policy	0.398***	0.173***	0.250***	0.108***	0.046*
Other Controls	YES	YES	YES	YES	YES
Adj. R ²	0.44	0.39	0.48	0.32	0.35

Panel C: Three-year window

Dependent variable: Recognition_	Overall	Sale- leaseback	Synthetic lease	Operating lease	Variable payments
Post	0.038	0.157	-0.017	-0.072	0.088
Post×General GAAP override	-0.023	-0.245**	0.016	0.173*	-0.059
Post×Lease-standard freeze	-0.162	0.100	-0.097	-0.179*	0.004
General GAAP override	0.169*	0.143	0.068	0.048	0.052
Lease-standard freeze	0.207**	0.004	0.094	0.063	-0.038
Adj. R ²	0.42	0.36	0.44	0.28	0.29

Figure 1. Off-Balance-Sheet Lease Contractual Intensity Around ASC 842

Each 100 percent stacked bar shows, for loan agreements dated from 2000 to 2024, the share at each intensity level for the five lease provisions and two GAAP-adoption dimensions defined in Section 3.1: sale-leaseback (SLB), synthetic lease (SYN), operating lease (OPL), variable lease payment (VAR), residual obligation (RES), the general GAAP override, and the lease-standard freeze. Lease provisions are scored 0 when the contract is silent or defers to GAAP, 1 when the exposure is capped, 2 when it is included in the definition of debt, and 3 when it is prohibited. The general GAAP override fixes accounting standards at the signing date and the lease-standard freeze fixes lease accounting standard at ASC 840. Both are scored 0 when GAAP floats, 1 for a hard freeze applying automatically, and 2 for soft protection through a materiality threshold or renegotiation trigger.

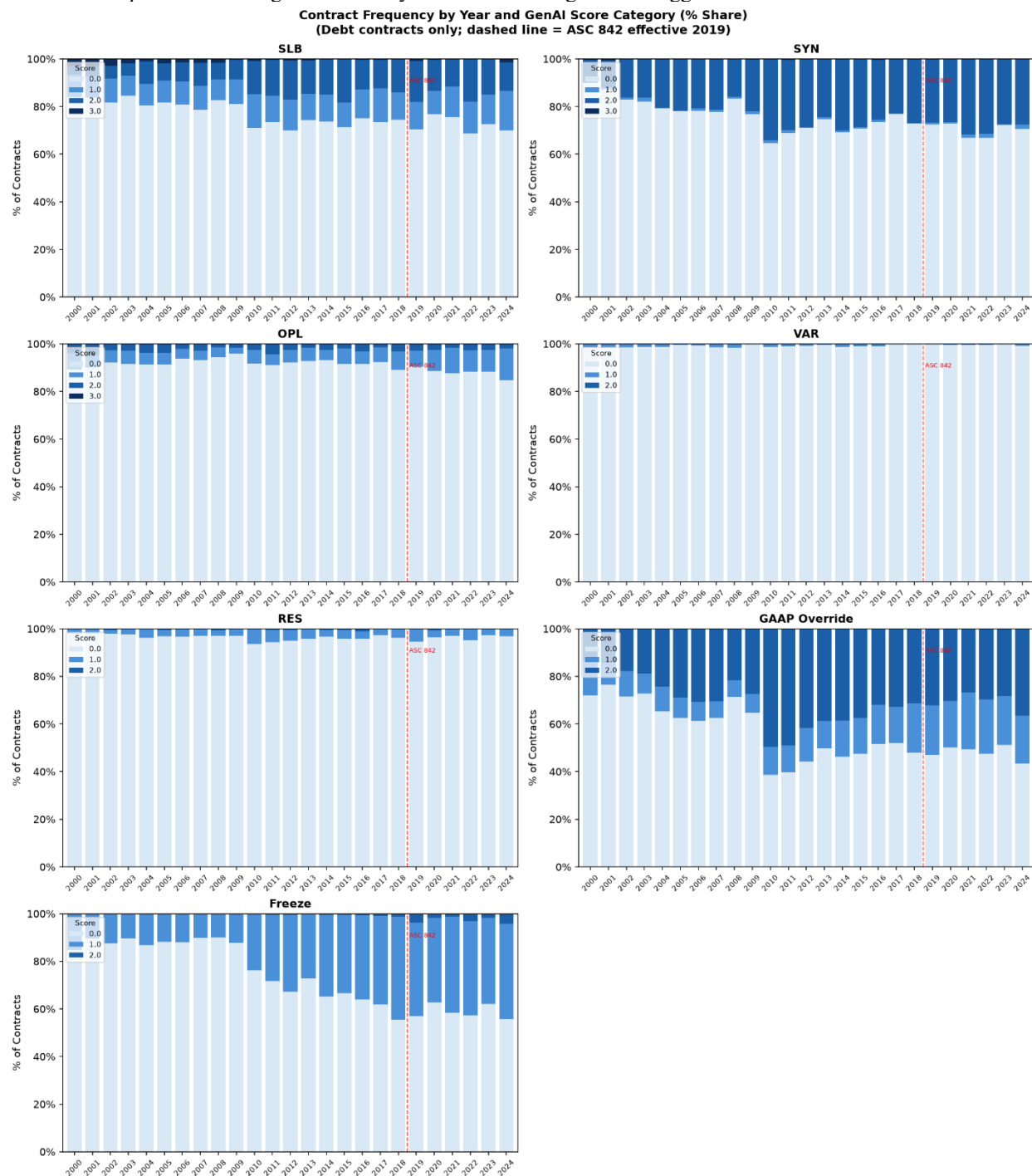
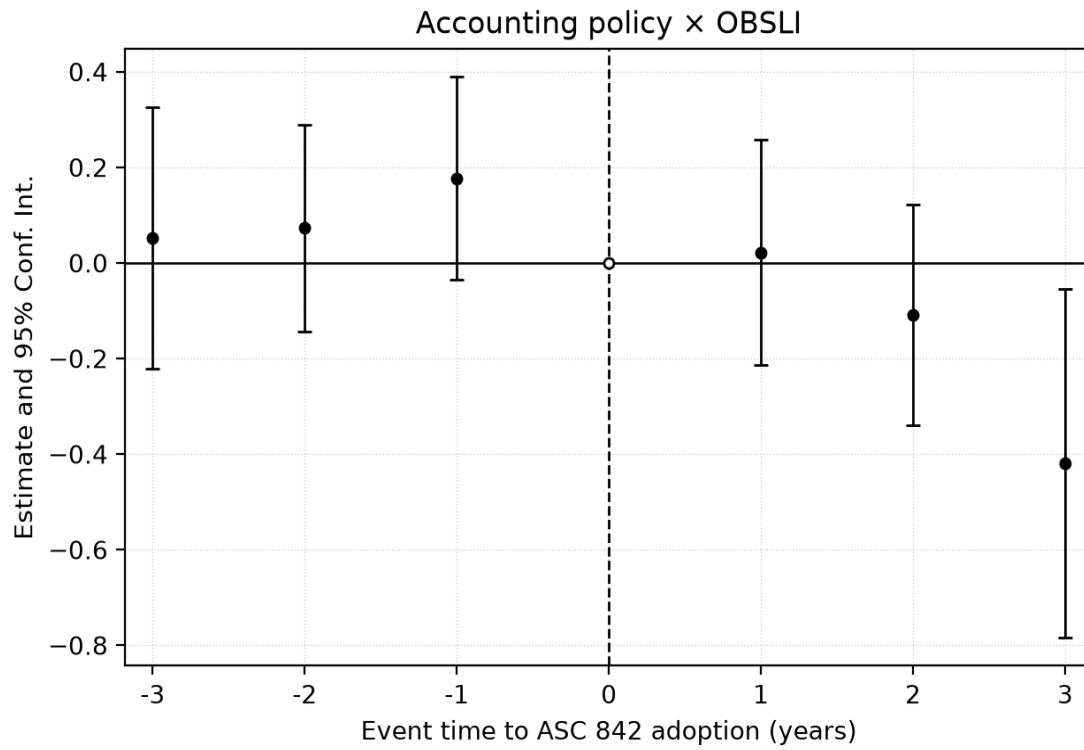


Figure 2. Implementing Private Recognition Around ASC 842: Three-year Window

This figure plots the dynamics behind the $\text{Post} \times \text{Accounting policy}$ coefficient in Table 6, Panel A. We replace the single Post indicator with indicators for each year relative to the borrower's ASC 842 adoption date and interact each with Accounting policy, retaining the specification, sample, and controls of Table 6, Panel A, except that the other interaction terms are omitted. The sample is the 1,704 contracts dated within three years of the adoption date. The adoption year ($\tau = 0$) is the reference period. Points are point estimates and vertical bars are 95 percent confidence intervals from standard errors clustered by borrower.



Adopting firms, ± 3 -year window, $N = 1,704$. Ref period $\tau = 0$. Model 7 FE (Industry $\times$ Year + Borrower + Lender), SE clustered by gvkey.