Debt Overhang During Policy Uncertainty:

The Case of Gold Clauses in the 1930s*

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July 22, 2026

Abstract

We study the impact of the 1933 abrogation of gold clauses on the slow recovery of corporate investment following the Great Depression. Constitutional challenges to the abrogation exposed many firms to a potential 69% increase in bond payments. Public firms with higher exposure to this risk reduced their investment in 1933 and 1934 followed by a recovery upon the Supreme Court's 1935 decision to uphold the abrogation. In the cross section, decreases in investment during 1933 and 1934 coincide with increases in equity payouts. Higher leverage uncertainty accounts for around one third of public firms' divestment in 1933 and 1934.

*We are grateful to the editor and three anonymous referees for their valuable comments and guidance. We also thank Harjoat Bhamra, Patrick Bolton, Briana Chang, Sudheer Chava, Carola Frydman, Harry DeAngelo, Gustavo Grullon, Larry Harris, Zhiguo He, Jerry Hoberg, Ayse Imrohoroglu, Selo Imrohoroglu, Marcin Kacperczyk, Raymond Kim, Arthur Korteweg, Peter Koudijs, Zack Liu, William Mann, Kevin Murphy, Dimitris Papanikolaou, Lubos Pastor, Vincenzo Quadrini, Mark Ready, Rodney Ramcharan, Tarun Ramadorai, Alejandro Rivera, Lukas Schmid, Ivan Shaliastovich, Selale Tuzel, Jessica Wachter, Jessie Wang, and Miao Ben Zhang; seminar participants at the UBC Winter Finance Conference, WFA, AEA, the University of Kentucky Finance Conference, the Tel Aviv University Finance Conference, the SFS Cavalcade, the 14th California Corporate Finance Conference, MFA, Imperial College London, McGill University, Syracuse University, USC Marshall, and the University of Wisconsin-Madison for helpful comments; and Simon Oh, Imran Majeed, and Ally Rilling for excellent research assistance. Financial support for this research was provided by the University of Wisconsin-Madison Office of the Vice Chancellor for Research and Graduate Education with funding from the Wisconsin Alumni Research Foundation as well as Jacobs Levy Equity Management Center for Quantitative Financial Research. This paper was previously titled "Leverage Risk and Investment: The Case of Gold Clauses in the 1930s."

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1 Introduction

The Great Depression led to a remarkable contraction in private investment that persisted throughout the first years of recovery: despite aggregate output growth of 11% in 1933 and 9% in 1934, net private investment remained negative in both years.[1] Given the lasting influence of the Great Depression on macroeconomics and finance, understanding the root causes behind the weak recovery of corporate investment is crucial, but the lack of disaggregated data over the period has limited researchers' ability to study this episode. Using newly hand-collected firm-level data, we show that U.S. public firms with greater exposure to the 1933 gold clause abrogation—which threatened widespread corporate bankruptcy—cut investment more severely during 1933 and 1934.

Prior to 1933, corporate bond issuers commonly indexed coupon and principal payments to the price of gold. In the era of the gold standard, these contractual agreements, known as the "gold clauses", aimed to protect bondholders against the devaluation of the dollar with respect to gold. When the United States effectively abandoned the gold standard in April 1933, the dollar quickly depreciated against gold, and the existence of these clauses posed a serious threat to most corporate bond issuers: around 97% of outstanding corporate bonds were subject to a gold clause. Therefore, enforcing these clauses would have substantially increased the debt burden of nearly all corporate bond issuers during the depths of the worst economic collapse in recorded history.

To protect issuers against this threat, Congress passed in June 1933 a joint resolution that voided gold clauses in all existing and future contracts. Opposing the resolution, several bondholders subsequently filed lawsuits demanding payment in gold. Throughout the rest of 1933 and 1934, the validity of Congress's action faced litigation, with multiple lawsuits

[1] Cole and Ohanian (2004) document that among common macroeconomic aggregates, investment was hit the hardest. Compared with gross national product (GNP), consumption, and hours worked, which were 36%, 28%, and 31%, respectively, below trend in 1934, investment was 72% below trend in the same year.

advancing through the judicial system. The litigation caused uncertainty for most corporate bond issuers about their future leverage. If the courts overturned the resolution, issuers would have to adjust bond payments according to the new gold price, increasing their leverage.

The Supreme Court delivered its ruling on four related court cases in February 1935. In a narrow 5-4 decision, the Court ruled that the abrogation of the gold clause in private contracts was constitutional; thus corporate bond payments were *not* indexed to gold. Based on the price of gold at the time, had the Supreme Court instead overturned the abrogation, the coupon and principal payments on most corporate bonds would have increased by 69%. Thus, while there were ultimately no changes in firm leverage as a result of the litigation, corporate bond issuers nonetheless experienced significant uncertainty over their future leverage during the episode.[2]

Guided by the dynamic debt overhang framework of Hennessy (2004), we test whether leverage uncertainty during 1933 and 1934 explains why firms with high exposure to gold clauses followed different investment paths than firms with low exposure. For this analysis, we hand-collect balance sheet and income statement data for all publicly traded U.S. industrial firms from 1925 to 1940. To measure each firm's exposure to the abrogation, we hand-collected data on the presence of gold clauses in individual securities—including corporate bonds and preferred equities—for all firms in our sample. Our hand-collected data reveal that although nearly all corporate bonds included such clauses, other types of long-term obligations, such as preferred shares, did not. Using this variation, we calculate the fraction of each firm's long-term liabilities that contained a gold clause.

Exploiting variation in gold clause exposure, we find that firms with fully exposed long-term liabilities had investment rates 6.0 and 4.1 percentage points lower in 1933 and 1934, respectively, than similar unexposed firms. Importantly, the negative effect of gold clause exposure is confined to the leverage uncertainty period of 1933–1934 and does not appear in

[2]In Section 3, we elaborate on the historical background relevant to our study.

any other year from 1926 to 1940. Moreover, examining equity payouts, we find that exposed firms increased their dividend payments during the leverage uncertainty period.

These patterns are consistent with debt overhang as the mechanism driving the investment decline (Myers, 1977; Hennessy, 2004). The legal uncertainty over gold clauses raised the prospect of substantially higher liabilities for exposed firms, reducing equityholders' incentives to invest since bondholders would capture a larger share of returns from new capital. On the payout side, our results align with Hennessy (2004)'s dynamic debt overhang framework, in which equityholders optimally extract large dividends from distressed firms.[3] Consistent with debt overhang theory, we also find some evidence that both investment and payout effects are more pronounced among firms with lower credit ratings.

Our results complement the empirical literature on debt overhang that exploits plausibly exogenous variation in leverage to study firm decisions (e.g., Giroud et al., 2011; Wittry, 2020; Bennett et al., 2025). With respect to this literature, our empirical setting has a unique feature: the abrogation created uncertainty about future leverage increases that ultimately did not materialize. This characteristic connects our work with the literature on political and policy uncertainty (Bloom, 2009; Baker et al., 2016; Hassan et al., 2019). Our study is closest to the literature on firm-level political uncertainty pioneered by Hassan, Hollander, van Lent, and Tahoun (2019) as the abrogation of the gold clause represents political intervention in private debt contracts (Bolton and Rosenthal (2002)). We contribute to this literature by showing how an uncertainty shock to future liabilities delayed the recovery of investment during the Great Depression.

Evaluating the effects of gold clause uncertainty during the Great Depression presents significant empirical challenges given the numerous concurrent policy interventions and economic shocks of this period. A central component of our analysis therefore addresses potential confounding factors that might otherwise explain our findings.

[3]See Section I.C in Hennessy (2004).

A key concern is that firms' gold clause exposure was largely determined by their long-term liability composition (corporate bonds versus preferred equity), which is endogenously chosen rather than randomly assigned. This raises the possibility that firms strategically adjusted their gold clause exposure in anticipation of the abrogation. For example, Britain's abandonment of the gold standard in September 1931 created fears that the United States might follow suit, providing both warning and motivation for such adjustment.

To mitigate this concern, we provide empirical evidence that firms did not systematically adjust their gold clause exposure in the aftermath of Britain's departure from the gold standard. With the benefit of hindsight, this inertia can seem puzzling. However, foreign exchange data show that markets did not expect the United States to abandon the gold standard: even a few days before the suspension of convertibility, the dollar remained stable against currencies of countries that remained on the gold standard, suggesting widespread confidence that the United States would maintain its commitment to gold. This market expectation, combined with the substantial costs and constraints of restructuring long-term debt obligations, likely explains firms' apparent inaction. Nonetheless, to further mitigate endogeneity concerns, we measure firms' exposure to the gold clause in 1930, before Britain's departure from the gold standard.

Another challenge to our empirical approach is that 1933 and 1934 witnessed major policy shifts under the New Deal, including industrial reforms that could confound our results. For instance, the industrial codes implemented under the National Industrial Recovery Act of 1933 (NIRA) varied by industry and may have affected investment decisions differently across industries (Cole and Ohanian (2004)). We show that the lower investment rates of high gold clause exposure firms are robust to industry-year fixed effects, which control for industry-specific policy effects. Beyond controlling for industry-year fixed effects, we also control for a battery of firm characteristics interacted with time. Overall, our results are

robust across the various specifications, lending additional support to the conclusion that gold clause exposure, rather than other firm characteristics or New Deal policies, drove investment differences during this period.

While our investment and equity payout results are consistent with debt overhang predictions, firms likely faced other frictions during this period that could challenge our interpretation. For example, Benmelech, Frydman, and Papanikolaou (2019) show that firms with maturing corporate bonds during the Great Depression experienced greater employment declines due to refinancing constraints. To ensure that refinancing constraints do not drive our investment results, we show that our findings hold using a subsample of firms without bonds maturing between 1931 and 1934. Our findings thus complement Benmelech, Frydman, and Papanikolaou (2019) by showing that the gold clause embedded in bond contracts, in addition to rollover concerns, played a significant role in shaping firm outcomes during the Depression.

Beyond refinancing constraints on maturing bonds, other sources of financial friction could explain the investment gap we document. For example, the banking sector experienced severe disruptions during the Great Depression (Bernanke, 1983). However, in our sample of large industrial firms, bank debt accounts for less than 2% of total liabilities, consistent with the view that larger firms are less affected by disruptions in the banking sector (Bernanke, 2018; Siemer, 2014). More broadly, we show that the investment gap in 1933 and 1934 is unique to corporate bond financing; exposure to other types of long-term liabilities that did not include the gold clause, such as preferred equity, show no similar effect on investment. These results further support the role of gold clause exposure in shaping firm outcomes during the Depression.

Finally, to quantify the importance of the gold saga at the aggregate level, we perform

a simple partial equilibrium aggregation exercise based on our reduced-form estimates.[4] Within our sample, we find that gold clause exposure accounts for one-third of public firms' divestment in 1933 and around one-half in 1934. This suggests that the abrogation of gold clauses played a substantial role in shaping corporate investment patterns of large industrial firms during a critical period of the Great Depression.

The outline of this article is as follows. Section 2 summarizes the related literature. Section 3 discusses historical events relevant to our study. Section 4 describes the firm-level data used in our analysis. Section 5 presents the empirical evidence on investment and the supporting evidence for the impact of gold clauses on firm outcomes. Section 6 concludes.

2 Literature

Our paper contributes to the literature on the Great Depression by providing novel firm-level evidence about the causes of the delayed recovery. A pioneering contribution by Benmelech, Frydman, and Papanikolaou (2019) shows that part of the employment decline from 1928 to 1933 was due to firms' inability to rollover maturing debt. We add to their contribution by identifying a complementary mechanism that contributed to the slow recovery of investment: the legal uncertainty introduced by the abrogation of gold clauses.

The legal uncertainty arising from the abrogation frames our study within the broader literature on economic uncertainty (Bloom, 2009; Baker et al., 2016; Hassan et al., 2019). We argue that leverage uncertainty created a debt overhang problem for firms with exposure to gold clauses. Hassan, Hollander, van Lent, and Tahoun (2019) measure firm-level exposure to policy shocks using textual analysis of earnings call transcripts. We adopt a similar firm-level approach, but identify exposure to legal uncertainty through the gold content of

[4] Chodorow-Reich (2013); Hausman, Rhode, and Wieland (2019); Benmelech, Frydman, and Papanikolaou (2019) present similar aggregation exercises.

firms' liabilities. While Hassan, Hollander, van Lent, and Tahoun (2019) document the real effects of uncertainty in modern episodes such as Brexit, U.S. elections, and Italian constitutional reforms, we examine how uncertainty shaped firm decisions during the Great Depression, a pivotal historical episode. In related work, Bennett, Ham, Milbourn, and Wang (2025) extends the textual analysis methodology of Hassan, Hollander, van Lent, and Tahoun (2019) to measure firm-level litigation risk and its effects on corporate policies in contemporary settings.

Our work contributes to the empirical literature on debt overhang (Myers, 1977) and firm outcomes. Lang, Ofek, and Stulz (1996) document a negative correlation between leverage and future hiring and investment. Subsequent studies aimed to establish causality by using exogenous shocks: Giroud, Mueller, Stomper, and Westerkamp (2011) exploit debt restructuring of Austrian ski hotels to show that relief improves performance and reduces strategic defaults; Wittry (2020) uses variation in mining reclamation liabilities across states; and Becker and Strömberg (2012) exploit a legal change reducing equity–debt conflicts, finding effects consistent with Myers (1977). We contribute to this literature by showing that the debt overhang channel helps explain the delayed recovery of investment in the 1930s. The conceptual framework guiding our analysis builds on the dynamic overhang model of Hennessy (2004), who shows that defaultable long-term debt creates a wedge between marginal and average Q, which should be accounted for in conventional investment-Q regressions.

The abrogation of gold clauses in sovereign debt contracts constituted a de facto US government default (Edwards (2018)) and represents a major political intervention in private debt contracts (Bolton and Rosenthal (2002)). Edwards, Longstaff, and Marin (2015) show that, from 1933 to 1935, Treasury bond prices with and without gold clauses reflected uncertainty over the Supreme Court's ruling, implying a significant perceived risk of unconstitutionality. Kroszner (1999) finds that the Court's 1935 decision upholding abrogation led

to broad increases in equity and corporate bond prices. The episode also informed theory: Bolton and Rosenthal (2002) model political intervention in private debt contracts, while Mian, Sufi, and Trebbi (2014) use this precedent to study the welfare effects of debt forgiveness policies. We contribute to this literature by analyzing firms' investment and payout decisions during this episode using hand-collected firm-level data.

3 Historical background

This section provides the historical context of our empirical analysis. In Section 3.1, we trace the emergence of gold clauses to the Civil War and discuss their subsequent widespread adoption in long-term obligations. In Section 3.2, we examine the events that led the Roosevelt administration to annul the clauses in 1933. For a comprehensive and masterful account of the abrogation of the gold clauses, see Edwards (2018).

3.1 Emergence and adoption of the gold clause

The gold clause emerged in the United States during the Civil War when gold-backed currency and fiat money (greenbacks) circulated simultaneously. During that period, long-term obligations were issued in both currencies (Payne et al., 2025). According to Edwards (2018), obligations denominated in gold-backed currency were considered safer since "the amount to be received in payment at some future date was anchored to the price of gold and, thus, not affected by possible changes in the purchasing power of paper money."

By the time the US returned to the gold standard in 1879, gold clauses had become a standard feature in most corporate and utility bonds, as well as many farm and house mortgages (Jackson, 1941; Edwards, 2018). However, their adoption was far from universal—Dam (1983) reports that only about fifty-five percent of long-term obligations contained gold clauses.

This selective use of the clause in long-term contracts can be seen among the large industrial firms studied in this paper. While the clause is present in the vast majority of corporate bonds (97% in our sample), it is entirely absent from preferred shares, another type of long-term obligations commonly used at the time. The exact reason why gold clauses were included in nearly all corporate bonds, present in some mortgages, and absent from preferred shares remains unclear. Despite extensive investigation of contemporary sources and legal studies, we found no definitive explanation for this differential adoption pattern.

Independently of why adoption differed, the record shows that the widespread use of the gold clause in corporate bonds originated from the monetary disruptions of the Civil War. This historical accident would prove consequential 70 years later when the United States abandoned the gold standard in the midst of the Great Depression.

3.2 Abrogation of the gold clause

By the onset of the Great Depression, most major economies were on the gold standard, but the crisis soon forced many to abandon it. The United Kingdom led the way. It ended convertibility on September 21, 1931, after speculative pressures and gold outflows severely undermined confidence in the pound's fixed exchange rate.

In the United States, Britain's exit from the standard prompted widespread concern that the dollar might be next, leading depositors to withdraw funds and hoard gold.[5] The Federal Reserve raised its discount rate, which swiftly stemmed gold outflows. While this policy protected gold reserves, the monetary tightening proved disastrous for an already fragile banking system, forcing hundreds of banks to close that month alone.[6]

Nonetheless, President Hoover defended these painful measures, describing the gold stan-

[5] Both the depositor panic and the Federal Reserve's subsequent discount rate increase are documented in Friedman and Schwartz (1963).

[6] According to the Federal Reserve Board, 522 banks suspended operations in October 1931 alone.

dard as “a little short of a sacred formula” (Eichengreen and Temin, 2000). Hoover would remain a staunch defender of the standard until the end of his presidency, even as the Depression deepened and deflation reached 10% in 1932. This commitment to the gold standard would also become an important issue in the 1932 presidential election.

In a campaign speech in October 1932, Hoover accused his opponent Franklin D. Roosevelt of proposing fiat money as relief, warning that it would bring “one of the most tragic disasters to... the independence of man” (Edwards, 2018). Roosevelt vigorously denied Hoover’s accusations. Pointing to the presence of gold clauses in US Treasury bonds, the future president stated that “no responsible government would have sold to the country securities payable in gold if it knew that the promise—yes, the covenant—embodied in these securities was as dubious as the President of the United States claims it was.” Yet, only a few weeks after taking office, Roosevelt would reverse course and ask Congress to void that precise covenant.

This dramatic reversal must be understood in the context of the severe banking crisis that greeted Roosevelt’s inauguration on March 4, 1933. The day before, depositors had withdrawn $250 million in gold and $150 million in currency from the New York Fed alone, leaving it $250 million short of required reserves. To stabilize the system and curb hoarding, Roosevelt signed the Emergency Banking Act on March 9, authorizing capital injections that partially reassured markets and restored confidence. However, gold redeposits fell short of the administration’s expectations (Edwards, 2018).

On April 5, 1933, Roosevelt issued Executive Order 6102, banning private gold ownership and requiring all individuals and businesses to surrender their holdings to the Federal Reserve by May 1 at the official price of $20.67 per ounce. Treasury Secretary William H. Woodin defended the measure, stating that “gold in private hoards serves no useful purpose... When added to the stock of the Federal Reserve Banks, it serves as a basis for currency and credit.”

While the order effectively ended domestic convertibility, it left the status of gold exports ambiguous. Roosevelt resolved this ambiguity on April 19 by declaring gold exports illegal, formally taking the United States off the gold standard.

The abandonment of the standard marked a dramatic reversal from positions voiced just weeks earlier. As late as March 6, 1933, Treasury Secretary Woodin had insisted it was "ridiculous and misleading to say that we are off the gold standard... We are definitely on the gold standard." Prior to the suspension of convertibility, exchange rates had remained stable, reflecting confidence in the dollar's gold backing. The suspension shocked markets and triggered immediate reactions in foreign exchange, causing the dollar to quickly depreciate against currencies still tied to gold, such as the French franc. Figure 1 plots the dollar exchange rate against sterling and the franc between December 31, 1930, and March 31, 1934, making this decline apparent. This rapid devaluation created a major domestic problem because of the widespread presence of gold clauses in debt contracts.

At that time, the administration estimated that about $120 billion of debt—roughly two times GDP, with $100 billion issued by the private sector—was linked to gold (Edwards, Longstaff, and Marin (2015)). Dollar depreciation therefore implied a nationwide rise in debt burdens just as many borrowers were already struggling. This issue was well understood at the time. For example, in a speech during the 1932 campaign, President Hoover stated that "A considerable part of farm mortgages, most of our industrial and all of our Government, most of our State and municipal bonds, and most other long-term obligations are written as payable in gold." He added that, if the US had gone off gold, farmers "would have sold their produce for depreciated currency... but you would have to pay a premium on such of your debts as are written in gold" (Hoover, 1932).

Although the administration initially maintained the official gold price at $20.67 per ounce, the dollar's implicit depreciation in international markets prompted the first legal

challenges to the enforceability of gold clauses.[7][8] To address the issue, the administration asked Congress on May 26 to void the gold clauses in all existing and future contracts. On June 5, Congress passed the Joint Resolution abrogating gold clauses, drawing protests from some members of Congress who argued the abrogation repudiated government promises and violated private contracts.[9]

In stark contrast to these legal objections, financial markets rallied in response to the Joint Resolution: the equity market gained 12.1% over the nine trading days between May 26 and June 6. Firms with gold clause exposure saw substantially larger gains: an equal-weighted portfolio of firms with gold-clause debt returned 30.9%, compared to 25.4% for an equal-weighted portfolio of firms without gold clauses, and a portfolio weighting firms by their gold-clause exposure returned 31.4% (Figure 3 and Table 1; Internet Appendix Figure IA.2 plots the full-period path of the market and the gold-exposure-weighted portfolio with all key litigation dates marked).[10] However, this positive reaction was clouded by the possibility that the abrogation would be ruled unconstitutional, creating uncertainty about whether the implicit debt forgiveness would ultimately be upheld.

As early as May 1933, bondholders filed lawsuits requesting the enforcement of gold clauses. These cases moved through the courts during 1933–34, and in January 1935 the Supreme Court heard four of them—two concerning private debt contracts and two involving government bonds. In each, the Court faced the question of whether Congress had violated

[7]With private holdings forbidden and exports prohibited, the official price of gold only specified the purchase price of newly minted gold.

[8]On May 1, 1933, proceedings began over payment of gold-denominated coupons on private bonds that had been paid in dollars (Edwards (2018)).

[9]Throughout the litigation surrounding the abrogation of the gold clause, payments on bonds containing the clause were not indexed to gold.

[10]The weight w_j of firm j in our gold-exposure-weighted portfolio is given by

$$w_j = \frac{d_j}{\sum_k d_k},$$

where d_j is defined in (1) and corresponds to the measure of firm-level exposure to gold clauses used throughout the paper.

the Constitution by altering existing contracts.[11]

From January 8–10, 1935, the gold cases were argued before the Supreme Court. Press reports indicated that the government's legal team performed poorly, struggling to answer many questions from the Justices (Edwards, 2018). On January 13, the *New York Times* reported that, amid "the speculative fever for gold," Liberty Bond prices reached their highest level since 1917 (New York Times, 1935). Since Liberty Bonds were themselves gold-denominated government obligations, their rising prices reflected investor expectations that the government could lose the case and be forced to honor full gold payments. During the three days of oral arguments (January 8–10), the government's weak showing fueled market anxiety, with the market falling 1.3% and our gold-exposure-weighted portfolio declining 1.4% (Figure 4). The Securities and Exchange Commission even stated it would seek presidential authority to close the exchanges if necessary.

On February 18, 1935, the Supreme Court rendered its decision, upholding the abrogation of gold clauses in private debt. The 5-4 vote reflected the uncertainty that markets had perceived during this period. The four conservative justices issued a scathing dissent: "The Constitution as many of us understood it... is gone... Because Congress may adopt a system, it does not follow that this may be enforced in violation of existing contracts... Shame and humiliation are upon us now. Moral and financial chaos may be confidently expected."

In stark contrast to the minority's opinion, the market received the news of the abrogation positively, with a return of 2.9% on the day of the decision. In comparison, our gold-exposure weighted portfolio returned 3.6% on that day (Figure 5). By the time of the ruling, gold had risen to $35 per ounce, 69% above the April 1933 level (Figure 2), which explains the market's positive reaction: enforcing gold clauses at that rate would have sharply raised the

[11] The intermediate legal steps—the first court hearing on the enforceability of gold clauses in May 1933, the lower-court rulings upholding the Joint Resolution in 1934, and the Supreme Court's grants of certiorari—produced no significant differential returns between gold-exposed and non-exposed firms, consistent with these procedural steps being largely anticipated. Internet Appendix Section IA.1 reports these estimates, along with the market response around the November 1934 midterm election.

real debt burden of many firms.[12] The 1935 decision was final and eliminated this risk.[13]

This short history shows how the legal battle over gold created prolonged uncertainty about firms' future liabilities. For nearly two years, legal challenges to the abrogation accumulated as cases worked their way through the courts. The Supreme Court's 1935 ruling ultimately removed the risk of higher debt burdens by upholding the abrogation. Moreover, the abrogation appears to have been largely unexpected, as evidenced by the dramatic market reactions. This surprise is consistent with the political rhetoric preceding the crisis: President Hoover's unwavering commitment to the gold standard throughout his presidency and Roosevelt's campaign insistence that he would not violate the gold covenant likely reinforced expectations that these obligations would be honored. Consistent with this interpretation, the next section provides further evidence that firm managers did not systematically adjust the gold content of their liabilities in the years preceding the abrogation.

4 Data and descriptive statistics

Our primary data source is the Moody's Industrial Manuals, from which we hand-collect annual balance sheet and income statement items for the period 1925–1940. Because some of our variables are growth rates, our sample period spans 1926–1940. The sample includes industrial public firms with coverage in the Center for Research in Securities Prices (CRSP) database, yielding a final sample of 7,074 firm-year observations with 558 unique firms.[14] Because our data are drawn from the Moody's Industrial Manuals, regulated industries

[12] Inflation had been modest in 1933 (0.8%) and 1934 (1.5%), so the 69% increase in nominal payments would have translated into a roughly 66% increase in real debt burden.

[13] The Court heard four cases: two on private contracts and two on public contracts. For private contracts, it ruled 5–4 that abrogation was constitutional. For public contracts, it ruled 8–1 that abrogation was *un*constitutional, but also ruled that plaintiffs had not suffered recoverable damages, such that no compensation was awarded.

[14] We restrict our sample to publicly listed firms since equity market value is necessary to study investment under the lens of Q-theory, as discussed in Section 5.1.

(transportation, communication, and utilities) and financial firms—which are covered in separate Moody's manuals—are not part of our sample.

Our main variable of interest is net investment, defined as the annual growth rate in fixed capital stock, measured using the book value of property, plant, and equipment reported on the balance sheet. Our main explanatory variable, $d_{j,t}$, measures firm j's exposure to the gold clause at time t as the fraction of its long-term liabilities containing the clause:

$$d_{j,t} = \frac{\text{Gold-denominated long-term liabilities of firm } j \text{ in year } t}{\text{Long-term liabilities of firm } j \text{ in year } t}. \tag{1}$$

We define the long-term liabilities of a firm as the sum of the par value of these three components: corporate bonds, preferred shares, and bank loans. To construct $d_{j,t}$, we collect individual security-level information on the presence of the gold clause.[15] As noted in the previous section, the gold clause was included in most corporate bonds (around 97% of them) and absent from all preferred shares. For bank debt, the manuals do not report exposure to the gold clause. However, at the time of the abrogation of the gold clause bank debt accounts for less than 2% of long-term liabilities in the pre-abrogation period (see Table 2). In the rest of the paper, we assume that bank debt did not include the clause. Our results are not sensitive to this assumption. Finally, firms without long-term liabilities are assigned $d_{j,t} = 0$.

Besides the main variables described above, we also collect balance sheet variables such as total assets, book equity, current assets, cash and marketable securities, along with net income from the income statement. These variables serve as control variables in some of our empirical specifications and allow us to construct standard financial ratios used in the

[15] We collected bond-by-bond gold clause information for the period 1930–1935; our frozen measure $\tilde{d}_{j,t}$, introduced below, directly reflects these security-level data. Since the overwhelming majority of corporate bonds contained the gold clause, and given the cost of security-level data collection, we approximate gold-denominated liabilities using the book value of corporate bonds for years before 1930.

investment literature. Appendix A contains detailed information on the construction of our variables.

Table 2 reports summary statistics separately for firms with no gold clause exposure ($d_{j,t} = 0$) and those with positive exposure ($d_{j,t} > 0$) across three key periods: 1926–1932 (Panel A), 1933–1934 (Panel B), and 1935–1940 (Panel C). In the pre-abrogation period, the average $d_{j,t}$ among exposed firms is 62%.[16] Exposed firms are significantly larger (log assets of 17.42 vs. 16.77), more levered (book leverage of 42% vs. 26%; market leverage of 48% vs. 28%), hold less cash (12% vs. 18% of assets), generate lower net income (4% vs. 6% of assets), rely less on bank debt (1% vs. 2% of LTL), and pay out less to equity holders (−2% vs. 13% of common stock).

The descriptive statistics provide preliminary support for the view that firms with gold exposure cut investment by more during the period of legal uncertainty. From the pre-abrogation period to the litigation period, the average investment rate of exposed firms falls by 11 percentage points (from 5% to −6%), compared with a 6 percentage point decline for unexposed firms (from 3% to −3%). However, these descriptive patterns should be interpreted with caution, as pre-existing differences between exposed and unexposed firms may also drive investment decisions.[17] Our formal empirical tests will control for these differences, with Section 5.5 further examining the sensitivity of our results to various control specifications.

Beyond observable differences, a separate challenge is that gold exposure is not randomly assigned across firms. In particular, Britain's departure from the gold standard in 1931 may have led firms to anticipate similar policy changes in the United States, prompting them to

[16]The measure $d_{j,t}$ can slightly exceed the ratio of corporate bonds to long-term liabilities because $d_{j,t}$ is calculated using the reported amount outstanding of each bond, whereas Corp. bonds/LTL is based on balance sheet information. For most firms the two values coincide, but minor discrepancies between the book value of corporate bonds and the reported amount outstanding can arise.

[17]Internet Appendix Tables IA.1 and IA.2 report detailed summary statistics separately for $d_{j,t} > 0$ and $d_{j,t} = 0$ firms.

strategically adjust their gold clause exposure. For example, if only financially unconstrained firms were able to reduce their gold-denominated liabilities prior to the abrogation, the remaining firms with high gold exposure would disproportionately consist of constrained firms, potentially biasing the estimated effect of gold exposure on investment by conflating it with the impact of pre-existing financial constraints.

We investigate this concern by constructing a balanced panel of 157 firms that had corporate bonds outstanding at the end of 1930—the year before Britain left the gold standard—and track their outstanding bonds until the end of 1934. Specifically, we examine whether firms adjusted the number of outstanding gold-denominated bonds or reduced the share of gold clause liabilities in their capital structure prior to the 1933 abrogation. Table 3 reports our findings. On the extensive margin, firms made minimal adjustments: of the 157 firms with corporate bonds outstanding, 150 had gold clause exposure at the end of 1930, and 144 of these still had gold-denominated bonds by the end of 1932. Similarly, the total number of gold-denominated bonds outstanding declined only modestly from 250 to 240 over the same period. On the intensive margin, we find no evidence of strategic reduction in exposure levels. Among firms with positive gold clause exposure, the average value of $d_{j,t}$ remained virtually unchanged at 0.57 in 1930 and 0.58 in 1932. These patterns suggest that firms either failed to anticipate the eventual abandonment of the gold standard or faced prohibitive costs to adjust their exposure.

As discussed in Section 3, both President Hoover and presidential candidate Roosevelt defended the standard throughout 1932, with Roosevelt explicitly denying he would alter the value of gold if elected. This apparent bipartisan commitment may have convinced firm managers that abandoning gold had little to no political support. Moreover, even if some managers perceived the risk, market conditions arguably made debt restructuring prohibitively expensive. As Figure IA.1 in the Internet Appendix shows, industrial bonds

traded at steep discounts to par value in 1931, which implies that most call options were deeply out-of-the-money. Open-market repurchases would have been similarly costly, as buying large quantities of bonds would likely have moved prices against the firms.

Nonetheless, to address potential endogeneity from post-1931 adjustments in gold exposure, we construct an alternative measure, $\tilde{d}_{j,t}$, that freezes each firm's exposure at its 1930 level for all subsequent years. It is formally defined as:

$$\tilde{d}_{j,t} = \begin{cases} d_{j,t}, & \text{if } t \leq 1930 \\ d_{j,1930}, & \text{if } t > 1930 \end{cases}. \tag{2}$$

By construction, $\tilde{d}_{j,t}$ captures a firm's gold exposure before Britain's policy shift could have prompted strategic adjustments. The evidence presented above suggests this approach is conservative: firms made minimal changes to their gold-denominated liabilities even after 1931, so $\tilde{d}_{j,t}$ and $d_{j,t}$ are highly correlated (as shown in the last column of Table 3). With these data and measures in hand, we now turn to our formal empirical analysis.[18]

5 Empirical analysis

In this section, we present our empirical strategy and results. We begin by outlining the debt overhang framework from Hennessy (2004), which guides our empirical design and generates predictions for both investment and payout policy. We then investigate how uncertainty about gold clause enforcement—and the resulting uncertainty about firms' effective leverage—affected corporate decisions in 1933 and 1934.

[18]The Internet Appendix provides additional summary statistics based on $\tilde{d}_{j,t}$. Table IA.3 is the analog of Table 2 using $\tilde{d}_{j,t}$ as the grouping variable instead of $d_{j,t}$. Tables IA.4 and IA.5 report a broader set of summary statistics separately for $\tilde{d}_{j,t} > 0$ and $\tilde{d}_{j,t} = 0$ firms. Tables IA.6 and IA.7 further split the $\tilde{d}_{j,t} > 0$ sample into high- and low-$\tilde{d}_{j,t}$ firms and show that high-$\tilde{d}_{j,t}$ firms are slightly smaller and less levered than low-$\tilde{d}_{j,t}$ firms. Table IA.8 reports correlations between $\tilde{d}_{j,t}$ and firm characteristics.

5.1 Conceptual framework

To motivate our empirical strategy, let's begin with the standard investment regression relating investment to average Q:

$$i_{j,t} = \beta Q_{j,t-1} + \epsilon_{j,t}, \tag{3}$$

where $i_{j,t} = I_{j,t}/K_{j,t-1}$ is the investment rate for firm j in year t, and $Q_{j,t} = V_{j,t}/K_{j,t}$ is average Q, with I denoting investment, V firm value, and K the replacement cost of capital. The theoretical foundation for this specification comes from Hayashi (1982) and Abel and Eberly (1994), who show that, under certain conditions, average Q is a sufficient statistic for investment policy.

For firms with long-term debt, however, Hennessy (2004) shows that capital structure creates a wedge $r_{j,t}$ between a firm's *average* Q and its *marginal* q, which governs the investment policy that maximizes the value of equityholders:

$$q_{j,t} = Q_{j,t} - r_{j,t}. \tag{4}$$

The wedge is given by $r_{j,t} = \frac{R_{j,t}}{K_{j,t}}$, with $R_{j,t}$ denoting the expected present value of debtholder's recovery upon default. This wedge arises because recovery value, although part of the firm's total value, does not accrue to equityholders, who therefore ignore its contribution to average Q when making investment decisions. To account for this effect, Hennessy (2004) shows that the standard investment regression must be modified as follows:

$$i_{j,t} = \beta Q_{j,t-1} - \beta r_{j,t-1} + \epsilon_{j,t}. \tag{5}$$

The gold clause litigation provides a natural setting to apply this framework. A ruling

against the abrogation would have raised the claim of debtholders on the firm's assets and increased the probability of default. Accordingly, the legal uncertainty about the abrogation must have increased the expected recovery value $R_{j,t}$ and thus the debt overhang wedge $r_{j,t}$. Crucially, this effect varied across firms in proportion to their exposure to gold-denominated debt, thereby generating differential increases in debt overhang across firms during the litigation period.

Empirically, measuring the wedge $r_{j,t}$ directly is challenging since it depends on default probabilities and expected recovery rates, which are not directly observable. We therefore parameterize the wedge as a time-dependent linear function of our gold exposure measure $\tilde{d}_{j,t}$, which captures the share of a firm's liabilities subject to gold clauses:

$$i_{j,t} = \beta Q_{j,t-1} + \sum_t \gamma_t \tilde{d}_{j,t-1} + f_j + \tau_t + \epsilon_{j,t}, \tag{6}$$

where f_j and τ_t are firm and time fixed-effects, respectively. This specification allows for flexible, time-varying effects of gold exposure on investment, which can be interpreted as a generalized difference-in-differences design around the litigation period with $\tilde{d}_{j,t}$ used as a continuous treatment. Under the hypothesis that gold clause uncertainty increased the debt overhang wedge in 1933 and 1934, we expect the corresponding coefficients, γ_{1933} and γ_{1934}, to be negative. Conversely, the coefficients γ_t for years outside the litigation period should be close to zero.

5.2 Investment

Table 4 reports our net investment regression results. All specifications include firm and year fixed effects, with 1932 (the year immediately preceding the abrogation) as the omitted category. Column 1 presents the estimates of the classical investment regression from equation (3). Consistent with Q-theory and with empirical evidence from more recent samples

(e.g., Peters and Taylor (2017)), average Q is positively associated with investment.

Column 2 presents our main debt overhang results from equation (5). The year $\times$ $\tilde{d}$ interaction coefficients are significantly negative only in 1933 and 1934—the years when the gold clause was litigated—while remaining statistically insignificant in all other years. The economic magnitudes are substantial: fully exposed firms ($\tilde{d} = 1$) reduced investment by an additional 6.0 percentage points in 1933 and 4.1 percentage points in 1934 relative to unexposed firms ($\tilde{d} = 0$). The interaction coefficient in 1935 is marginally significant and positive, suggesting that firms with gold exposure partially caught up with unexposed firms after the Supreme Court decision. Notably, the investment decline we document is concentrated in 1933, with a smaller—though still statistically significant—effect in 1934. This pattern is consistent with gradual resolution of uncertainty during the litigation period: as lower courts ruled in favor of abrogation throughout 1933 and early 1934, firms may have updated their expectations about the likelihood that the Supreme Court would ultimately uphold the gold clause.

To visually examine pre-trends, Figure 6 plots the yearly interaction coefficients reported in column 2 of Table 4. Before 1933, the interaction coefficients are not statistically significant and show no visible trend. Moreover, following the Supreme Court decision to uphold the abrogation in 1935, the effect of $\tilde{d}$ on investment quickly dissipates. This pattern—no pre-trends through 1932, sharp effects during the 1933-1934 litigation period, and subsequent reversal after the 1935 Supreme Court ruling—suggests that gold exposure depressed investment during the window of legal uncertainty and ceased to have an effect once the constitutional question was resolved. We emphasize that the identifying contrast in this design is between the litigation years and the omitted base year of 1932, the year immediately preceding the abrogation: the 1933 and 1934 interaction coefficients are individually significant relative to 1932, while none of the pre-treatment coefficients is. Given the wide confidence

intervals around individual year estimates in a sample of this size, it is this pre-treatment pattern—not pairwise comparisons between individual pre-treatment years such as 1930 and the litigation years—that supports the parallel-trends assumption.

The absence of effects in other years is particularly noteworthy for 1937 and 1938, which were also years of economic distress. If gold exposure $\tilde{d}$ captured inherent firm characteristics that make some companies more vulnerable during downturns, we would expect to observe differential investment patterns whenever economic conditions deteriorate. The fact that we find no effect of $\tilde{d}$ on investment during this subsequent recession, three years after the Supreme Court's ruling, suggests that our 1933–1934 findings reflect the specific impact of gold clause litigation rather than persistent differences in firms' sensitivity to adverse economic conditions.

While the evidence thus far supports a debt overhang interpretation, we next examine whether alternative mechanisms could explain the differential investment patterns between exposed and unexposed firms. First, we consider the possibility that gold exposure instead captures firms' financial constraints related to the contraction of credit supply. This concern is motivated by Figure 7, which shows that during the litigation of the gold clause, the issuance of corporate bonds was virtually inexistent. If this drastic reduction in primary market activity is attributable to a contraction in credit supply, firms with bonds maturing during these years may have faced severe difficulties rolling over their debt and thus reduced investment. Indeed, Benmelech, Frydman, and Papanikolaou (2019) show that disruptions in intermediation and bond market dislocations were key drivers of the investment contraction in the early years of the Great Depression, even for large firms.

To test if this rollover channel is driving our results, we re-estimate equation (5) excluding firms with bonds maturing at any point between 1931 and 1934, inclusively. Column 3 of Table 4 reports results consistent with the baseline specification: the interaction coefficients

for 1933 and 1934 are -0.058 and -0.037, respectively, compared to -0.060 and -0.041 in the baseline specification. The stability of the coefficient estimates shows that the effect of gold exposure is present among firms with no immediate refinancing needs, suggesting that $\tilde{d}$ is not simply capturing firms' vulnerability to credit constraints.

We next consider whether gold-exposed firms reduced investment because they redirected resources toward redeeming gold-denominated debt during the litigation period. This interpretation is plausible given the decline in the number of gold bonds from 250 in 1930 to 212 in 1933 and 189 in 1934, as documented in Table 3. To test whether this channel is driving our results, we re-estimate equation (5) excluding firms that retired their outstanding gold-clause debt during the litigation window (1931–1935). Column 4 reports interaction coefficients for 1933 and 1934 of -0.064 and -0.036, respectively, which remain economically and statistically significant. These results indicate that the decline in investment among gold-exposed firms extends beyond those actively managing their debt obligations through redemptions during the litigation period.

Relatedly, we consider whether our results might be driven by firms without long-term liabilities, which could differ systematically from firms with long-term obligations on time-varying unobservable characteristics. Column 5 of Table 4 reports results from re-estimating the baseline overhang specification restricting the sample to firms with a positive amount of long-term liabilities in 1930, the year in which gold exposure is measured. The interaction coefficients for 1933 and 1934 are -0.058 and -0.038, respectively, which are statistically significant and remain consistent with the negative coefficients observed in the baseline specification. These results indicate that the baseline findings are robust to excluding firms with zero long-term liabilities, alleviating concerns that our results are driven by systematic differences between firms with and without long-term obligations.

Having established that our findings are robust to various sample restrictions, we next

conduct placebo tests to verify that the documented investment effect is specifically attributable to gold clause exposure. To do so, we re-estimate equation (5) while replacing the numerator of $\tilde{d}$ with the book value of preferred shares. If the investment effect documented in our baseline specification results from gold exposure, we do not expect to find any effect when replacing the numerator of $\tilde{d}$ with preferred shares since the gold clause was not included in those securities. The results in column 6 support this conjecture: the interaction coefficients in 1933 and 1934 are positive and not statistically significant. As a second placebo test, we replace the numerator of $\tilde{d}$ with bank debt. Here again, the results in column 7 show that the 1933 and 1934 interaction terms are positive and not statistically significant.

5.3 Payouts and other outcomes

According to the dynamic debt overhang theory of Hennessy (2004), the shareholders of distressed firms may optimally increase the equity payouts to extract value from the firm in anticipation of losing their claim on the assets.[19] This prediction distinguishes debt overhang from theories of financial frictions, which also predict reduced investment during distress but imply *lower* payouts.

To test this prediction, we first calculate the total equity payout of a firm j at time t as[20]

$$\text{Payout}_{j,t} = \frac{\text{Dividend}_{j,t} + \text{Net repurchase}_{j,t}}{\text{Book value of common stocks}_{j,1930}}.$$

We then re-estimate equation (5) using payouts as the dependent variable. Column 1 of Table 5 shows that the interaction coefficients for 1933 and 1934 are 0.038 and 0.054, both

[19] See Section I.C in Hennessy (2004).

[20] We fix the denominator at its 1930 value (or the first available year after 1930) to prevent post-treatment changes in equity structure from distorting the payout measure. Since the gold clause shock may itself affect equity issuance and repurchase decisions, using a time-varying denominator could conflate changes in actual payouts with changes in the capital structure.

statistically significant at the 5% and 1% levels, respectively. Outside the litigation period, the coefficients are close to zero and statistically insignificant. Thus, consistent with debt overhang, the degree of gold exposure is associated with greater payouts during the gold clause litigation period, and during this period only.

Columns 2 and 3 investigate which component of payouts drives the results. The dividend regression (column 2) shows statistically significant interaction coefficients of 0.028 and 0.036 for 1933 and 1934, respectively. In contrast, the net repurchase regression (column 3) yields statistically insignificant coefficients for the corresponding years.[21] This pattern in the payout effect likely reflects that, before 1982, dividend payments were the primary driver of payout policy (e.g., Grullon and Michaely, 2002; Skinner, 2008).

So far, our payout results are consistent with the hypothesis that the lower investment rates of gold-exposed firms in 1933 and 1934 are driven by debt overhang. However, it could also be that gold-exposed firms increased payouts in 1933 and 1934 simply because these firms were more profitable in those years. To address this concern, we re-estimate equation (5) using profitability as the dependent variable. The estimation results reported in column 4 show no evidence that gold exposure is associated with increased profitability in 1933 or 1934. If the higher payouts instead reflected greater available resources rather than debt overhang incentives, we would also expect gold-exposed firms to have higher cash holdings or lower leverage during the litigation period. Columns 5 and 6 show that neither cash nor leverage is systematically associated with gold exposure in 1933 or 1934. Together, these results suggest that the payout effect is driven by debt overhang rather than by profitability or resource availability.

[21] Deliberate open-market repurchases were not a meaningful payout vehicle for industrial firms in this period. The changes in shares outstanding captured by our net repurchase measure over 1930–1934 therefore primarily reflect mechanical share retirements—arising from reorganizations, sinking-fund provisions, and call options—rather than discretionary distributions to shareholders. This reinforces our interpretation: the payout response we document operates entirely through cash dividends, the one component that firms could use to extract value preemptively.

In the Internet Appendix, we probe the dividend results along two additional dimensions. First, Table IA.15 examines the robustness of the annual dividend findings to sample restrictions and alternative normalizations. The dividend increase during the litigation period is concentrated among firms that were already paying dividends: columns 1 and 3 show strong and statistically significant effects for prior dividend payers, while columns 2 and 4 show no effect for non-payers. This pattern is consistent with the well-documented stickiness of dividend policy. The effect also remains significant across several alternative normalizations of the dependent variable, including dividends scaled by book equity (column 6) and by market capitalization (column 7).

Second, we examine whether the dividend effect holds at the quarterly frequency (Table IA.14). Because dividends exhibit strong seasonal patterns and are sticky, we estimate our baseline specification separately for each calendar quarter, using quarterly cash dividends as the dependent variable. Although the statistical evidence is somewhat weaker at this higher frequency, the quarterly results are concentrated in the first and second quarters. The Q2 interaction coefficients for 1933 and 1934 are both 0.010, statistically significant at the 1% and 5% levels, respectively.

In sum, gold-exposed firms in 1933 and 1934 reduced investment and increased payouts—primarily through cash dividends—without changes in profitability, cash, or leverage that would indicate differential financial constraints or greater resource availability.

5.4 Credit ratings

Standard theories of debt overhang such as Myers (1977) and Hennessy (2004) predict that investment distortions should be more severe for firms closer to default. To test this hypothesis, we collect bond ratings from the Moody's Manuals and construct the dummy variable,

"Low", which is equal to one if a firm's bond rating is Ba or below in 1930.[22] We then modify our investment regression Equation (6) to include an interaction term between gold exposure and low credit ratings:

$$i_{j,t} = \beta Q_{j,t-1} + \sum_t \gamma_t \tilde{d}_{j,t-1} + \sum_t \theta_t \mathbb{1}_{\text{Low}_j} + \sum_t \kappa_t \tilde{d}_{j,t-1} \times \mathbb{1}_{\text{Low}_j} + f_j + \tau_t + \epsilon_{j,t}, \qquad (7)$$

To ease the interpretation of the coefficients, we normalize $\tilde{d}$ by subtracting the median value of $\tilde{d}$ among firms with positive $\tilde{d}$, which is 0.60. This normalization centers the gold exposure variable at a meaningful reference point—the median exposure level among firms with gold-denominated debt. With this normalization, θ_t now represents the difference in investment between low-rated and high-rated firms with median exposure to gold. The interpretation of the coefficients γ_t and κ_t is unaffected by the normalization.

The first column of Table 6 reports our estimation results of equation (7).[23] The coefficients on $1933 \times \tilde{d}$ and $1934 \times \tilde{d}$ are -0.036 and -0.047, respectively, both statistically significant at the 1% level. For comparison, the corresponding coefficients in the baseline specification from Table 4 are -0.060 and -0.041. These coefficients represent the marginal effect of gold exposure on investment for high-rated firms. These results indicate that debt overhang depressed investment even among high-rated firms, not just those closest to default.

Turning to the coefficients on the interaction between year indicators and low credit rating, recall that θ_t represents the difference in investment between low-rated and high-rated firms at the median gold exposure level. The coefficient estimates are $\theta_{1933} = -0.038$ (significant at the 5% level) and $\theta_{1934} = 0.029$ (significant at the 10% level). The negative coefficient in 1933 indicates that low-rated firms with median gold exposure reduced investment by an

[22] We chose Ba as cutoff since it is the median credit rating of the bond issuers in our sample as of 1930. We use 1930 ratings—rather than contemporaneous ratings—to avoid endogeneity concerns.

[23] To conserve space, the table reports only the 1933 and 1934 interaction coefficients. The full set of year-by-year results is available in Internet Appendix Table IA.9.

additional 3.8 percentage points relative to high-rated firms, consistent with the prediction that debt overhang effects are more severe for firms closer to default. The positive coefficient in 1934, however, is inconsistent with this prediction, though we note that it is only marginally statistically significant.

Finally, the triple interaction coefficient κ_t captures the additional marginal effect of gold exposure for low-rated firms relative to high-rated firms—that is, the difference in how investment responds to a one-unit increase in gold exposure across credit rating groups. The coefficient estimates are $\kappa_{1933} = -0.073$ and $\kappa_{1934} = -0.077$, neither statistically significant. The negative signs are consistent with the debt overhang prediction that low-rated firms should exhibit a stronger marginal response to gold exposure, and the economic magnitudes are substantial. However, the coefficients are imprecisely estimated, so we interpret this evidence with caution.

The second column of Table 6 reports our estimation results of equation (7) with dividends as the dependent variable. The coefficients on $1933 \times \tilde{d}$ and $1934 \times \tilde{d}$ are 0.025 and 0.035, respectively, both statistically significant, compared to 0.028 and 0.036 in the baseline specification from Table 5. The positive and significant estimates indicate that, even among high rated firms, debt overhang induced dividend increases consistent with debt overhang.

As before, the coefficient θ_t captures the dividend differential between low-rated and high-rated firms at median gold exposure. The coefficient estimates are $\theta_{1933} = 0.013$ (significant at the 5% level) and $\theta_{1934} = 0.011$ (significant at the 10% level). The positive coefficients indicate that, relative to high-rated firms, low-rated firms with median gold exposure increased dividends by an additional 1.3 and 1.1 percentage points in 1933 and 1934, respectively. This pattern is consistent with the prediction that debt overhang effects are more severe for firms closer to default, as these firms face stronger incentives to extract value through payouts.

Finally, the triple interaction coefficient κ_t captures the additional marginal effect of

gold exposure for low-rated firms relative to high-rated firms. The coefficient estimates are $\kappa_{1933} = -0.025$ (not statistically significant) and $\kappa_{1934} = -0.037$ (significant at the 5% level). The negative signs suggest that the marginal effect of gold exposure on dividends diminishes with the degree of exposure, which is inconsistent with the prediction that low-rated firms should exhibit a stronger response for a given degree of exposure. However, this pattern may reflect non-linearity in the relationship between gold exposure and default risk. At moderate exposure levels, low-rated firms may be the only ones facing sufficient default risk to increase dividends aggressively, whereas at high exposure levels, both low- and high-rated firms face substantial default risk, narrowing the gap between them. Given the limited statistical significance of the triple interaction coefficients, however, we interpret this evidence with caution.

In sum, the credit rating results provide mixed but generally supportive evidence for the hypothesis that debt overhang effects are more pronounced for firms closer to default. Low-rated firms reduced investment more in 1933 and increased dividends more in both 1933 and 1934, consistent with stronger debt overhang effects for firms with weaker credit profiles. However, the triple interaction coefficients capturing the differential *marginal* effect of gold exposure for low-rated firms are either imprecisely estimated (for investment) or suggest a pattern that may reflect non-linearities rather than a simple differential response (for dividends). We therefore interpret these findings as suggestive rather than definitive evidence on the role of credit ratings in mediating debt overhang effects.

5.5 Controls and robustness

Although the evidence presented thus far is broadly consistent with the hypothesis that gold exposure depressed firm investment through a debt overhang channel, our study period coincides with major economic and policy changes, including the New Deal and the Agricultural

Adjustment Act. These policy shocks pose empirical challenges because they may confound the estimated effect of gold exposure. We therefore conduct several robustness checks to ensure that our documented effects are driven by debt overhang rather than these concurrent shocks.

We first control for the impact of New Deal policies by including industry-year fixed effects in our specification. Major interventions such as the National Industrial Recovery Act's industry codes and the Agricultural Adjustment Act operated primarily at the industry level (e.g., Cole and Ohanian (2004)). By absorbing time-varying, industry-specific shocks, industry-year fixed effects ensure that the gold exposure coefficient is identified solely from within-industry variation, netting out any industry-level policy effects. Given our limited sample size, we group years into four periods to maintain statistical power: the pre-treatment period (1926–1932, omitted), 1933, 1934, and the recovery years (1935–1940). We then interact these periods with 2-digit Standard Industrial Classification (SIC) codes.

The first column of Table 7 reports the estimation results of the specification with industry-year fixed effects. The 1933 and 1934 interaction coefficients are -0.059 and -0.036, respectively, compared to -0.060 and -0.041 in the baseline. Both coefficients remain statistically significant. The stability of these estimates after absorbing industry-specific time shocks suggests that our results are unlikely to be driven by New Deal policies or other industry-specific disturbances. These results strengthen our interpretation that gold exposure depressed investment through a firm-specific debt overhang channel rather than through industry-wide regulatory or policy changes.

While industry-year fixed effects address industry-level confounds, they do not account for firm-level heterogeneity that may correlate with both gold exposure and investment. To address this concern, we augment equation (6) with interaction terms between pre-treatment firm characteristics and time fixed effects. This approach allows firms with different observ-

able characteristics to follow different investment trajectories, isolating the effect of gold exposure from policies that may have differentially affected firms based on these characteristics. For example, if New Deal policies disproportionately affected large firms, highly leveraged firms, or firms with certain financial profiles, allowing these characteristics to have time-varying effects ensures that our gold exposure estimates are not confounded by such differential policy impacts.

Column 2 of Table 7 reports results from augmenting equation (6) with interactions between time indicators and linear controls for pre-treatment firm characteristics: log assets, Tobin's Q, net income over assets, cash holdings, payout ratios, book leverage, market leverage, and log long-term liabilities. This specification uses year fixed effects rather than industry-year fixed effects because the characteristic-period interactions and industry-year cells absorb overlapping variation; including both simultaneously causes several interactions to be dropped for multicollinearity, undermining the purpose of the exercise. The coefficient on the 1933-gold exposure interaction remains negative and statistically significant at -0.035, while the 1934 coefficient is -0.026, maintaining the expected negative sign though losing statistical significance. The loss in significance for 1934 is not surprising given the demanding nature of this specification, which allows eight different firm characteristics to have time-varying effects.

To ensure our results are not sensitive to the functional form of the controls, we next employ a more flexible approach by controlling for deciles of each firm characteristic interacted with time fixed effects. This non-parametric specification allows for non-linear relationships between firm characteristics and investment trajectories during the Depression. Rather than including all characteristics simultaneously—which would require estimating an impractical number of parameters given our sample size—we run eight separate regressions, each controlling for firm and year fixed effects and deciles of a single characteristic interacted with

time. Columns 3–10 of Table 7 report these results.

The findings are consistent with our earlier specifications: all eight estimated coefficients on the 1933-gold exposure interaction are negative and statistically significant. The 1934 coefficients are likewise all negative, with four of the eight specifications retaining statistical significance. This pattern reinforces our main findings while demonstrating that the debt overhang effect, particularly in 1933, is robust to flexible controls for observable firm heterogeneity. In Internet Appendix Table IA.17, we also verify robustness to stock market controls based on 1930 returns (average, volatility, and Fama-French betas). Internet Appendix Table IA.19 re-estimates columns 2–10 replacing year fixed effects with industry-year fixed effects. The average exposure effect $\tilde{d}$ remains negative and significant at the 5% level in all nine specifications, and $1933 \times \tilde{d}$ is significant at the 5% level in seven of nine and at the 10% level in all nine. $1934 \times \tilde{d}$ loses precision in seven of nine specifications: the point estimates remain negative and stable in magnitude (ranging from -0.012 to -0.031, with no sign reversals), but the portfolio decile controls and industry-year cells absorb overlapping variation, widening the standard errors. We interpret this as a limitation of statistical power in a sample of this size rather than a failure of robustness, and we return to it in the limitations discussion below.

We close this section by acknowledging two limitations that the data of this period do not allow us to fully resolve. First, because virtually all corporate bonds of the era carried gold clauses while preferred shares carried none, our gold-exposure measure $\tilde{d}$ is necessarily entangled with the composition of a firm's fixed claims. Preferred shares enter the denominator of $\tilde{d}$ but not its numerator, so firms financed more heavily with preferred stock have mechanically lower measured exposure. Because preferred dividends are discretionary and non-interest-bearing, such firms may also behave differently in distress for reasons unrelated to gold clauses, raising the concern that $\tilde{d}$ partly captures a general sensitivity to downturns

among bond-reliant firms. An ideal design would hold the debt-versus-preferred composition fixed while varying gold-clause exposure, but the institutional structure of the period precludes a clean separation. The preferred-share placebo (column 6 of Table 4), which finds no effect when the numerator of $\tilde{d}$ is replaced with preferred shares; the absence of any differential effect during the 1937–1938 recession (Section 5.2), which would have reproduced the gold-clause effect had $\tilde{d}$ merely proxied for sensitivity to downturns; and the characteristic-interacted controls above all mitigate—but cannot entirely eliminate—this concern. Second, our sample is small, and absorbing industry-year and characteristic-year variation simultaneously strains its identifying power. As Internet Appendix Table IA.19 shows, when both are included the point estimates remain stable but the 1934 interaction becomes imprecise in several specifications. We therefore view our preferred specifications—which introduce industry-year and characteristic controls separately—as the appropriate balance between guarding against confounders and preserving power, and we report the fully-saturated results so that readers can judge their sensitivity directly.

5.6 Aggregation

As a final exercise, we aggregate our firm-level estimates to assess the total effect of gold clause exposure on investment in 1933 and 1934. In this exercise, we abstract from general equilibrium effects and assume that, absent the uncertainty surrounding the abrogation, all firms would have invested as if they had no gold clause exposure (i.e., as if $\tilde{d}_j = 0$). We estimate the foregone aggregate investment rate in each year by computing the capital-weighted average gold clause effect:

$$\text{Gold clause effect}_t = \frac{\beta_t \sum_j \tilde{d}_{j,t} \times \text{Fixed capital}_{j,t-1}}{\sum_j \text{Fixed capital}_{j,t-1}}, \tag{8}$$

where j indexes firms and β_t is the coefficient on the interaction between $\tilde{d}_{j,t}$ and the indicator for year t.[24]

Table 8 reports the aggregation results. Panel A presents estimates for all firms in our sample. The first row shows that the aggregate net investment rate was -5.47% in 1933 and -2.47% in 1934, indicating substantial divestment during the litigation period. The second row reports our baseline estimate of the gold clause effect: -1.79 and -1.23 percentage points in 1933 and 1934, respectively. These estimates imply that gold clause uncertainty accounts for roughly one-third of the aggregate divestment in 1933 ($1.79/5.47 = 33\%$) and approximately one-half in 1934 ($1.23/2.47 = 50\%$).

To provide context for these estimates, Panels B and C decompose total investment by gold clause exposure. Panel C shows that firms without gold-denominated debt ($\tilde{d} = 0$) had aggregate net investment rates of -4.10% in 1933 and -1.77% in 1934. Panel B shows that firms with positive gold exposure ($\tilde{d} > 0$) disinvested more severely, with aggregate net investment rates of -6.59% in 1933 and -3.01% in 1934, a gap of approximately 2.5 and 1.2 percentage points, respectively.

The second row of Panel B refines this comparison by applying our regression-based estimates to gold-exposed firms only, yielding gold clause effects of -3.27 and -2.18 percentage points in 1933 and 1934, respectively—roughly half of these firms' total divestment in 1933 and approximately three-quarters in 1934. For both the full sample and the $\tilde{d} > 0$ subsample, net investment improves substantially in the 1935–1940 period following the Supreme Court decision. The effect of gold exposure vanishes in later years, consistent with the view that the Supreme Court's decision resolved the surrounding leverage uncertainty.

If the investment response to gold exposure varies systematically across firm types—for example, by credit quality or size—then the baseline aggregation, which assumes a uniform marginal effect, could over- or underestimate the true aggregate impact. To address this

[24] To be included in this calculation, we require a firm to be present in the sample both in year t and $t-1$.

concern, Internet Appendix Table IA.18 reports results that allow for heterogeneous marginal effects by credit rating and firm size. Accounting for credit rating heterogeneity leaves the estimates largely unchanged. Allowing for size heterogeneity yields similar results in 1933 but a somewhat smaller aggregate effect in 1934, reflecting the concentration of capital among large firms that experienced more moderate gold clause effects. In both cases, the qualitative conclusions remain the same.

Finally, we interpret our aggregation results as providing a lower bound for the total effect of gold clause abrogation on private investment. As previously discussed, gold clauses were prevalent in other private contracts, including farm mortgages, public utility bonds, and railroad securities. While data limitations prevent us from directly studying the impact on these sectors, our results suggest that the effects may have been economically significant for these issuers as well.[25] Taken together, the partial-equilibrium aggregation results highlight the significant role of gold clause uncertainty in explaining the weak investment recovery of public firms in 1933 and 1934.

6 Conclusion

In this paper, we study how the 1933 abrogation of gold clauses—and the ensuing leverage uncertainty that persisted until the Supreme Court's 1935 decision—affected real investment in 1933 and 1934. Firms with higher pre-episode gold clause exposure cut investment significantly in 1933 and 1934 relative to other firms, and the gap disappears in 1935 once the uncertainty is resolved. These patterns are consistent with the debt-overhang mechanism: legal uncertainty about the fate of the gold clause increased debtholders' claim in expectation, discouraging investment.

[25] To the best of our knowledge, disaggregated data on farm mortgage exposure to gold clauses are not readily available for this period. Additionally, most public utilities and railroads were not publicly traded during the 1930s, making it impossible to implement standard investment regressions for these firms.

Firms exposed to gold clauses also increased equity payouts, driven by cash dividends, in 1933–1934 and reverted afterward, while profitability did not deteriorate differentially. We find some evidence that the impact of the abrogation was strongest for lower-rated issuers, consistent with higher default risk amplifying the wedge. Results are robust to industry–year fixed effects and rich controls that interact pre-1933 characteristics with year, and they do not arise when gold clause exposure through bond financing is replaced with other long-term debt components: exposure to bank debt and preferred equity does not generate a similar pattern. Excluding firms with bonds maturing in 1931–1934 yields similar estimates, indicating that the effect is not driven by refinancing pressures or contemporaneous bond market dislocations.

Taken together, our evidence shows that policy-driven legal uncertainty on the liability side can depress investment at scale, even in the absence of realized changes in leverage. By isolating a plausibly exogenous episode that shifts expected liabilities, we provide evidence consistent with dynamic debt overhang and quantify its aggregate relevance.

While this paper focuses on the impact of gold clause abrogation on large industrial firms, examining its effects on other sectors of the economy represents a promising avenue for future research. Evidence suggests that gold clauses were prevalent in farm mortgages, making the agricultural sector a particularly important case for investigation. Given that agriculture employed nearly a quarter of the workforce at the onset of the Depression, understanding how the abrogation affected farmers' debt burdens, investment decisions, and recovery patterns could provide crucial insights into the policy's broader economic impact. Similarly, public utilities and railroads—major issuers of gold-denominated corporate bonds and critical components of economic infrastructure—warrant further attention. Investigating how the abrogation influenced these sectors' financing costs, capital investment, and operational decisions would enhance our understanding of the full macroeconomic consequences of this

landmark policy intervention and its role in shaping the trajectory of economic recovery during the 1930s.

Appendix

A Variables

This appendix presents the construction of variables in our analysis. The Moody's Manual in year t usually reports annual balance sheet and income statement data from year $t-7$ to $t-1$.[26] For variables that require data from multiple years, we use data from the same manual. We collect data for the period from 1925 to 1940. Because some of our variables are growth rates, our sample period spans 1926 to 1940.

We use firm-year observations of the following variables constructed from the hand-collected data in Moody's Manuals:

- Net investment is given by $\frac{\text{Fixed capital}_t}{\text{Fixed capital}_{t-1}} - 1$.
- Market capitalization is the product of share price with the amount of shares outstanding in January of the year from the Center for Research in Security Prices (CRSP).
- Tobin's Q is the sum of total equity market capitalization and total liabilities divided by total assets.
- Log(Assets) is the logarithm of total assets.
- Net income/assets is the ratio of net income from the income statement to total assets.
- Cash/assets is the ratio of cash (cash, bank deposit, and Treasuries) to total assets.
- Payout/common stock is the ratio of equity payouts to the book value of common stock, where the denominator is fixed at its 1930 value (or the first available year after 1930). Equity payout is computed using cash dividends and share repurchases following Boudoukh, Michaely, Richardson, and Roberts (2007).

[26] For some firms, the coverage includes as little as two years.

- Book leverage is the ratio of total assets minus book equity to total assets.
- Market leverage is the ratio of total liabilities to the sum of total liabilities and equity market capitalization.
- Long-term liabilities (LTL) are the sum of the book value of corporate bonds, preferred shares, and bank debt.
- Pref. shares/LTL is the ratio of preferred shares to long-term liabilities (LTL).
- Bank debt/LTL is the ratio of bank debt (the sum of bank loans and notes payable) to total long-term liabilities (LTL).
- d is the ratio of bond amount outstanding with gold clauses to long-term liabilities (LTL), as defined in equation (1).
- $\mathbb{I}_{d>0}$ is an indicator function that is one if $d > 0$.
- $\tilde{d}$ is the ratio of bond amount outstanding with gold clauses to long-term liabilities (LTL), as defined in equation (2).
- $\mathbb{I}_{\tilde{d}>0}$ is an indicator function that is one if $\tilde{d} > 0$.
- Profits and cash, which are used as the dependent variable in Table 5, are net income from the income statement and cash from balance sheet from each year normalized by fixed capital in 1930.

Firm-level control variables are constructed using data from 1930. These control variables are used to construct characteristic-year interaction terms and decile fixed effects. All variables are winsorized at the bottom and top 0.5% every year.

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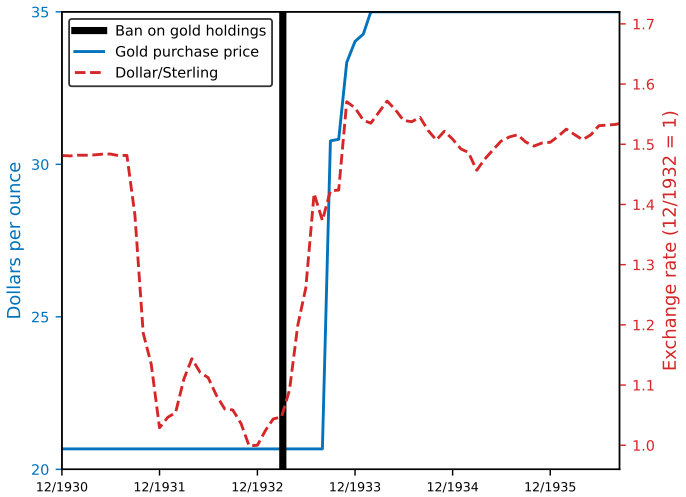
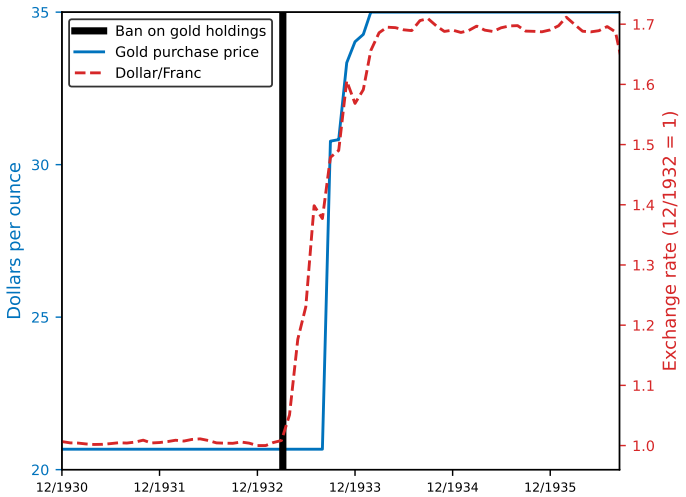
Figure 1. Gold price and exchange rates from 1931 to 1936

Panel A

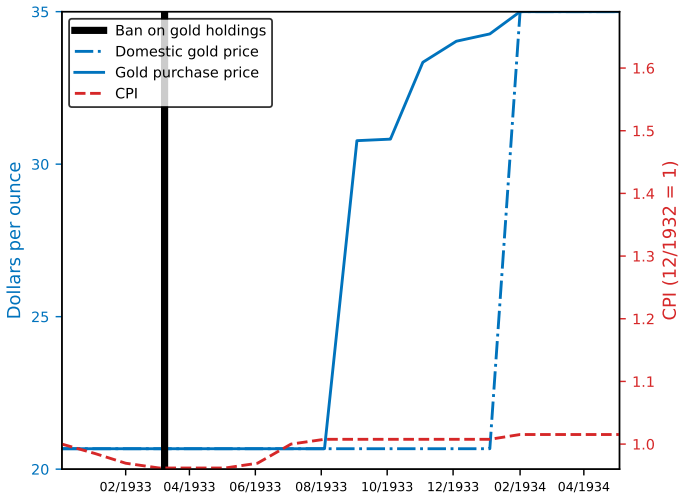


Panel B



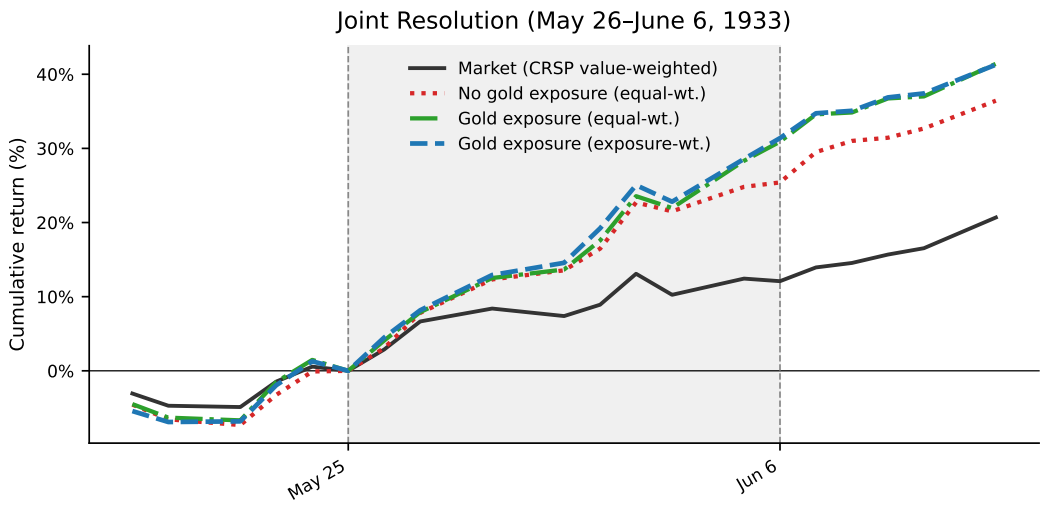
Notes: The red-dashed line represents the dollar/sterling (Panel A) and dollar/franc (Panel B) exchange rates normalized to 1 in December 1932. The black vertical line marks Executive Order 6102 of April 5, 1933, the start of the requirement to return all gold holdings to the U.S. government. The solid-blue line represents the gold price in the U.S. government's purchasing programs. All variables are at a monthly frequency.

Figure 2. Gold price and inflation in 1933 and 1934



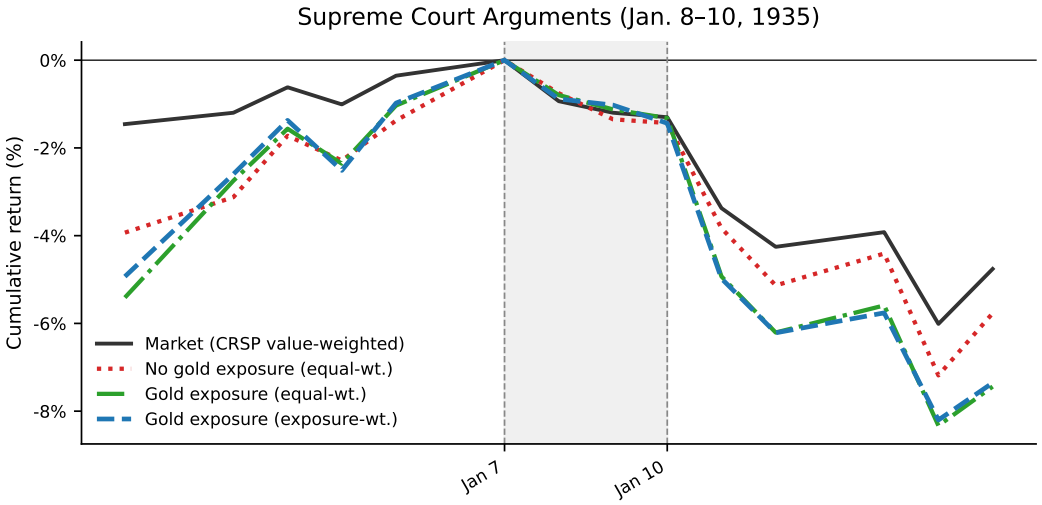
Notes: The blue-dotted line represents the official domestic gold price in the United States. The vertical black line marks Executive Order 6102 of April 5, 1933, the start of the requirement to return all gold holdings to the government in the United States. The solid-blue line is the gold price in the U.S. government's purchasing programs. The red-dashed line is the Consumer Price Index (CPI) normalized to 1 in December 1932.

Figure 3. Stock market response to the Joint Resolution (May 26–June 6, 1933)



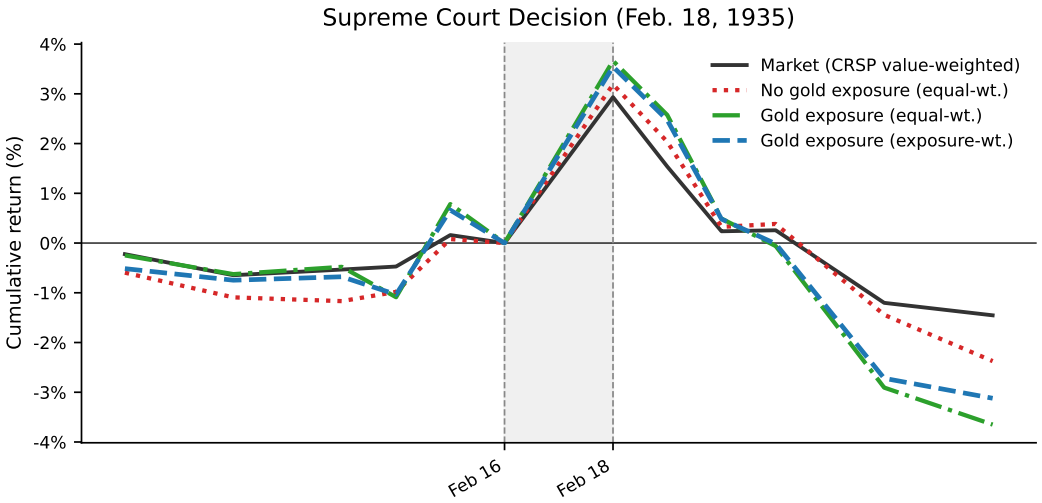
Notes. Cumulative returns for the CRSP value-weighted market index (black solid), the equal-weighted portfolio of firms without gold-clause exposure (red dotted), the equal-weighted portfolio of firms with gold-clause exposure (green dash-dotted), and the gold-exposure-weighted portfolio (blue dashed), normalized to zero at the close of May 25, 1933. The shaded region marks the event window (May 26–June 6, 1933). Firms are classified by the gold-clause exposure measure d_j defined in equation (1); the exposure-weighted portfolio weights each firm by $w_j = d_j / \sum_k d_k$.

Figure 4. Stock market response to the Supreme Court oral arguments (January 8–10, 1935)



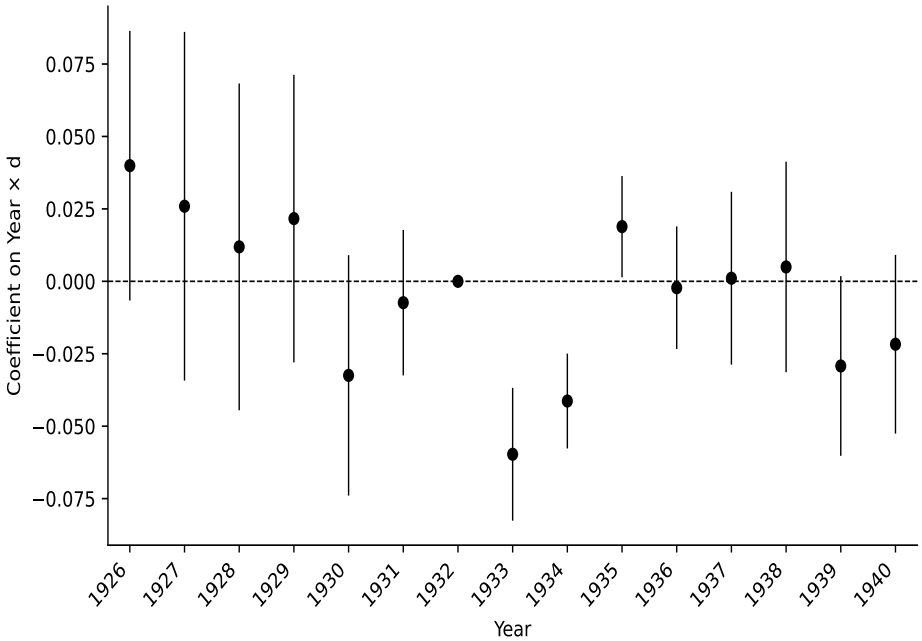
Notes. Cumulative returns for the CRSP value-weighted market index (black solid), the equal-weighted portfolio of firms without gold-clause exposure (red dotted), the equal-weighted portfolio of firms with gold-clause exposure (green dash-dotted), and the gold-exposure-weighted portfolio (blue dashed), normalized to zero at the close of January 7, 1935. The shaded region marks the three days of oral arguments (January 8–10, 1935). Firms are classified by the gold-clause exposure measure d_j defined in equation (1); the exposure-weighted portfolio weights each firm by $w_j = d_j / \sum_k d_k$.

Figure 5. Stock market response to the Supreme Court decision (February 18, 1935)



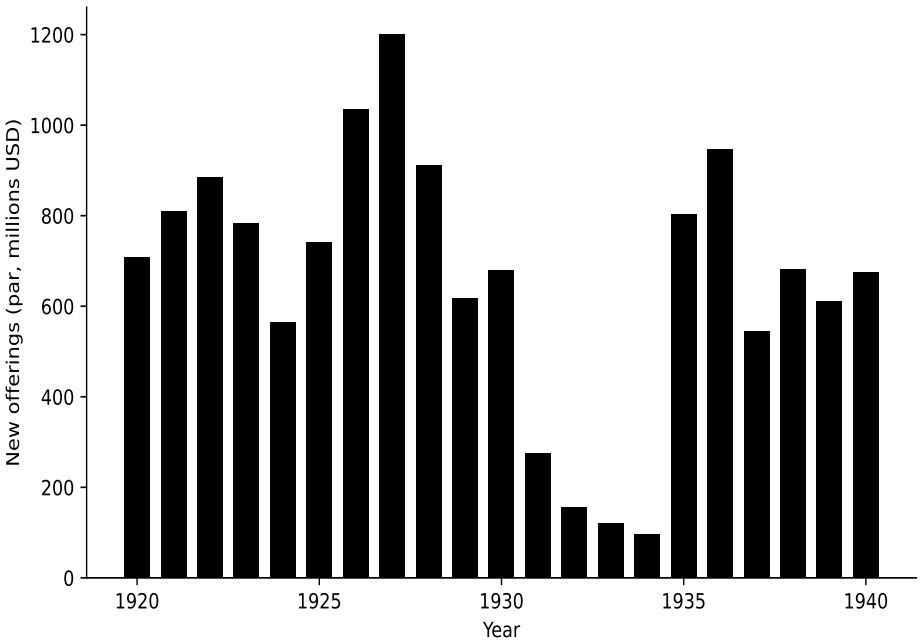
Notes. Cumulative returns for the CRSP value-weighted market index (black solid), the equal-weighted portfolio of firms without gold-clause exposure (red dotted), the equal-weighted portfolio of firms with gold-clause exposure (green dash-dotted), and the gold-exposure-weighted portfolio (blue dashed), normalized to zero at the close of February 16, 1935 (the last trading day before the ruling; the exchange was open on Saturdays). Dashed vertical lines mark February 16 (the benchmark) and February 18, 1935 (the decision day). Firms are classified by the gold-clause exposure measure d_j defined in equation (1); the exposure-weighted portfolio weights each firm by $w_j = d_j / \sum_k d_k$.

Figure 6. Gold clause effect on investment by year



Notes. This figure plots the year dummy × $\tilde{d}$ interaction coefficients and 95% confidence bands from the investment regression reported in column 2 of Table 4. The specification regresses net investment on Q and year dummy × $\tilde{d}$ interactions with firm and year fixed effects.

Figure 7. New bond offerings, industrial firms (Hickman, 1953)



Notes. This figure plots the issuance of industrial corporate bonds by year.

Table 1

Stock market responses to key legal events

Panel A: Cumulative raw returns over event windows

Event	Dates	Days	Market	No gold (equal-wt.)	Gold (equal-wt.)	Gold (exposure-wt.)
Joint Resolution	May 26–June 6, 1933	9	+12.1%	+25.4%	+30.9%	+31.4%
Supreme Court oral arguments	Jan. 8–10, 1935	3	-1.3%	-1.4%	-1.3%	-1.4%
Supreme Court decision	Feb. 18, 1935	1	+2.9%	+3.2%	+3.7%	+3.5%

Panel B: CAPM cumulative abnormal returns

Event	Dates	Days	No gold (equal-wt.)	Gold (equal-wt.)	Gold (exposure-wt.)
Joint Resolution	May 26–June 6, 1933	9	+12.7%	+15.8%	+16.1%
Supreme Court oral arguments	Jan. 8–10, 1935	3	-0.7%	-0.5%	-0.5%
Supreme Court decision	Feb. 18, 1935	1	+0.7%	+0.9%	+0.7%

Panel C: Daily return summary statistics

	Market	No gold (equal-wt.)	Gold (equal-wt.)	Gold (exposure-wt.)
Mean daily return (%)	0.032	0.113	0.126	0.122
Std. deviation (%)	1.417	1.506	1.765	1.775
Pre-abrogation $\hat{\beta}$	—	0.81	0.92	0.93
Trading days		5,814		
Sample period		July 1926–December 1945		
Firms (gold-clause / no gold clause)		177 / 376		

Notes. All series are constructed from CRSP daily returns. The market return is value-weighted using previous-day market capitalization and reproduces the CRSP value-weighted index. Firms are classified by the gold-clause exposure measure d_j defined in equation (1): the two equal-weighted portfolios contain firms with $d_j > 0$ and $d_j = 0$, respectively, and the exposure-weighted portfolio weights firms with $d_j > 0$ by $w_j = d_j / \sum_k d_k$. Portfolios are rebalanced daily over firms with a return on each day. Raw returns are the compound product of daily returns over each event window. The cumulative abnormal return (CAR) in Panel B is the sum of daily abnormal returns $\hat{\varepsilon}_t = r_t - \hat{\alpha} - \hat{\beta}\, r_{m,t}$, where $\hat{\alpha}$ and $\hat{\beta}$ are estimated by OLS on the full pre-abrogation period (July 1, 1926–April 25, 1933; 2,021 trading days); the estimated betas are reported in Panel C. The same estimation window is used for all three events. For the Supreme Court decision (February 18), the benchmark is the close of February 16—the last trading day before the ruling, as the exchange was open on Saturdays. The modest decline during the oral arguments (January 8–10) understates the market anxiety triggered by the government's weak showing: press coverage in the following days drove sustained selling, with Liberty Bond prices reaching their highest level since 1917 by January 13 (New York Times, 1935). Internet Appendix Section IA.1 examines the remaining legal and political events of the litigation period. Panel C statistics cover the full sample.

Table 2

Summary statistics by gold clause exposure

Panel A: 1926–1932

	$d = 0$ (415 firms)			$d > 0$ (338 firms)			Δ Mean	
	N	Mean	SD	N	Mean	SD	Δ	p-val
Net investment	1,750	0.03	0.33	1,439	0.05	0.27	0.02	0.25
Tobin's Q	1,750	1.33	1.19	1,439	1.14	0.86	−0.19	0.00
log(Assets)	1,750	16.77	1.18	1,439	17.42	1.18	0.65	0.00
Net income/assets	1,740	0.06	0.11	1,427	0.04	0.08	−0.02	0.00
Cash/assets	1,750	0.18	0.15	1,439	0.12	0.11	−0.06	0.00
Payout/common stock	1,750	0.13	0.67	1,439	−0.02	0.55	−0.15	0.00
Book leverage	1,750	0.26	0.22	1,439	0.42	0.22	0.16	0.00
Market leverage	1,750	0.28	0.26	1,439	0.48	0.27	0.20	0.00
log(LTL)	1,750	8.96	7.50	1,439	15.61	2.95	6.65	0.00
Corp. bonds/LTL	1,750	0.09	0.26	1,439	0.60	0.35	0.51	0.00
Pref. share/LTL	1,750	0.49	0.49	1,439	0.36	0.33	−0.13	0.00
Bank debt/LTL	1,750	0.02	0.12	1,439	0.01	0.07	−0.01	0.01
d	1,750	0.00	0.00	1,439	0.62	0.49	0.62	0.00

Panel B: 1933–1934

	$d = 0$ (369 firms)			$d > 0$ (169 firms)			Δ Mean	
	N	Mean	SD	N	Mean	SD	Δ	p-val
Net investment	706	−0.03	0.23	312	−0.06	0.13	−0.03	0.01
Tobin's Q	706	0.94	0.69	312	0.78	0.34	−0.16	0.00
log(Assets)	706	16.55	1.26	312	17.31	1.30	0.76	0.00
Net income/assets	702	0.03	0.08	310	0.01	0.05	−0.02	0.00
Cash/assets	706	0.19	0.15	312	0.12	0.11	−0.07	0.00
Payout/common stock	706	0.10	0.37	312	0.02	0.09	−0.08	0.00
Book leverage	706	0.28	0.25	312	0.51	0.26	0.23	0.00
Market leverage	706	0.37	0.29	312	0.67	0.26	0.30	0.00
log(LTL)	706	9.11	7.36	312	15.96	2.29	6.85	0.00
Corp. bonds/LTL	706	0.12	0.30	312	0.65	0.30	0.53	0.00
Pref. share/LTL	706	0.46	0.48	312	0.34	0.29	−0.12	0.00
Bank debt/LTL	706	0.03	0.17	312	0.00	0.02	−0.03	0.00
d	706	0.00	0.00	312	0.67	1.07	0.67	0.00

Panel C: 1935–1940

	$d = 0$ (503 firms)		
Net investment	2,867	0.01	0.14
Tobin's Q	2,867	1.25	0.86
log(Assets)	2,867	16.87	1.35
Net income/assets	2,861	0.06	0.08
Cash/assets	2,867	0.16	0.13
Payout/common stock	2,867	0.13	0.50
Book leverage	2,867	0.35	0.25
Market leverage	2,867	0.37	0.27
log(LTL)	2,867	10.90	7.17
Corp. bonds/LTL	2,867	0.26	0.38
Pref. share/LTL	2,867	0.41	0.44
Bank debt/LTL	2,867	0.04	0.18

Notes. This table reports summary statistics separately for firms with no gold clause exposure ($d = 0$) and firms with positive gold clause exposure ($d > 0$). The number of unique firms in each group is reported in parentheses. Δ Mean is the difference in means ($d > 0$ minus $d = 0$), and p-val is the p-value of the difference. Panel A covers 1926–1932, Panel B covers 1933–1934, and Panel C covers 1935–1940. In Panel C, all firms have $d = 0$ because the Supreme Court upheld the constitutionality of the abrogation in February 1935; the reported statistics pool all observations. In Panels A and B, d can be slightly greater than Corp. bonds/LTL because d is calculated using the reported amount outstanding of each bond, whereas Corp. bonds/LTL is based on balance sheet information. For most firms the two values coincide, but minor discrepancies between the book value of corporate bonds and the reported amount outstanding can arise. See Appendix A for variable definitions.

Table 3

Bond statistics

Year	N firms (with bonds)	N firms (with gold bonds)	N bonds (all)	N bonds (gold)	Mean d ($d > 0$)	Median d ($d > 0$)	$\rho(d_{1930}, d_t)$
1930	157	150	275	250	0.57	0.55	1.00
1931	150	148	260	247	0.59	0.55	0.81
1932	146	144	251	240	0.58	0.56	0.80
1933	134	130	225	212	0.59	0.59	0.71
1934	123	114	209	189	0.56	0.52	0.55

Notes. This table examines whether firms strategically adjusted their gold clause exposure prior to the abrogation. The sample is a balanced panel of 157 firms with corporate bonds outstanding at the end of 1930—the year before Britain's departure from the gold standard. For each year, the table reports the number of the initial 157 firms that still have at least one bond outstanding, the number of firms with gold clause bonds, total bond count among the 157 firms, gold clause bond count, mean and median gold clause exposure (d, as defined in equation (1)) among firms with positive exposure, and the correlation between contemporaneous d and its 1930 value.

Table 4
Leverage and investment

	Classic (1)	Overhang (2)	No maturity (3)	No redemption (4)	With LT Lia. (5)	Pref. shares (6)	Bank Debt (7)
Q	0.095***	0.096***	0.095***	0.086***	0.104***	0.095***	0.095***
	(0.016)	(0.017)	(0.016)	(0.014)	(0.019)	(0.016)	(0.019)
$\tilde{d}$		−0.055*	−0.062*	−0.094**	−0.052	0.055	−0.007
		(0.029)	(0.032)	(0.034)	(0.030)	(0.040)	(0.095)
$1926 \times \tilde{d}$		0.040	0.049	0.061**	0.032	0.015	−0.335**
		(0.024)	(0.028)	(0.022)	(0.024)	(0.012)	(0.125)
$1927 \times \tilde{d}$		0.026	0.036	0.010	0.042	−0.042**	−0.210
		(0.031)	(0.034)	(0.030)	(0.031)	(0.018)	(0.125)
$1928 \times \tilde{d}$		0.012	0.021	0.039	0.009	−0.037	−0.144***
		(0.029)	(0.031)	(0.031)	(0.030)	(0.021)	(0.039)
$1929 \times \tilde{d}$		0.022	0.037	0.040	0.033	0.018	0.252
		(0.025)	(0.027)	(0.028)	(0.025)	(0.021)	(0.146)
$1930 \times \tilde{d}$		−0.032	−0.023	−0.024	−0.035	0.038**	−0.097
		(0.021)	(0.025)	(0.022)	(0.022)	(0.016)	(0.080)
$1931 \times \tilde{d}$		−0.007	−0.003	0.004	−0.014	0.008	−0.045
		(0.013)	(0.015)	(0.014)	(0.013)	(0.008)	(0.103)
$1933 \times \tilde{d}$		−0.060***	−0.058***	−0.064***	−0.058***	0.024	0.057
		(0.012)	(0.013)	(0.012)	(0.012)	(0.014)	(0.063)
$1934 \times \tilde{d}$		−0.041***	−0.037***	−0.036***	−0.038***	0.016	0.060
		(0.008)	(0.009)	(0.010)	(0.008)	(0.012)	(0.035)
$1935 \times \tilde{d}$		0.019*	0.023**	0.027**	0.024**	0.007	−0.026
		(0.009)	(0.011)	(0.010)	(0.008)	(0.006)	(0.023)
$1936 \times \tilde{d}$		−0.002	0.008	0.006	−0.005	0.011	−0.013
		(0.011)	(0.013)	(0.011)	(0.011)	(0.013)	(0.031)
$1937 \times \tilde{d}$		0.001	0.011	0.005	0.008	0.014	−0.038
		(0.015)	(0.016)	(0.016)	(0.015)	(0.011)	(0.039)
$1938 \times \tilde{d}$		0.005	0.015	0.009	−0.005	0.038***	0.025
		(0.019)	(0.021)	(0.019)	(0.019)	(0.007)	(0.042)
$1939 \times \tilde{d}$		−0.029*	−0.019	−0.025	−0.035*	0.028***	−0.056
		(0.016)	(0.018)	(0.016)	(0.017)	(0.008)	(0.047)
$1940 \times \tilde{d}$		−0.022	−0.012	−0.013	−0.020	0.028**	0.032
		(0.016)	(0.017)	(0.016)	(0.017)	(0.013)	(0.055)
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R^2	0.237	0.239	0.238	0.224	0.244	0.239	0.239
Observations	7,074	7,074	6,891	5,918	6,187	7,074	7,074

Notes. This table reports results from panel regressions of net investment on Q, gold clause exposure $\tilde{d}$ (as defined in equation (2)), and year $\times$ $\tilde{d}$ interactions, where 1932 is the omitted category. Column 1 presents the classical investment regression (equation (3)) without gold clause exposure. Column 2 reports our baseline debt overhang specification (equation (6)). Columns 3 through 5 report estimation results using the baseline specification on restricted samples: Column 3 excludes firms with bonds maturing between 1931 and 1934, Column 4 excludes firms that retired their gold-clause debt between 1931 and 1935, and Column 5 restricts the sample to firms with positive long-term liabilities in 1930. Columns 6 and 7 report results from placebo tests that replace the numerator of $\tilde{d}$ with preferred shares and bank debt, respectively—securities that did not contain gold clauses. All regressions include firm and year fixed effects. All variables are winsorized at the 0.5% and 99.5% levels within each year. Standard errors in parentheses are two-way clustered by firm and year. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

Table 5

Gold clause exposure and other outcomes

	Payout (1)	Dividend (2)	Net rep. (3)	Profits (4)	Cash (5)	Leverage (6)
Q	0.059*	0.111***	−0.061*	0.212***	0.011	0.024***
	(0.031)	(0.018)	(0.033)	(0.035)	(0.020)	(0.007)
$\tilde{d}$	−0.005	0.022	−0.012	0.083*	0.014	0.037*
	(0.036)	(0.023)	(0.024)	(0.043)	(0.056)	(0.018)
$1926 \times \tilde{d}$	0.053	−0.010	0.040	−0.201***	0.070	−0.017
	(0.034)	(0.017)	(0.027)	(0.044)	(0.056)	(0.020)
$1927 \times \tilde{d}$	−0.026	−0.023	−0.030	−0.294***	0.092	0.014
	(0.046)	(0.025)	(0.023)	(0.069)	(0.073)	(0.021)
$1928 \times \tilde{d}$	−0.041	−0.012	−0.056	−0.193***	−0.025	0.001
	(0.060)	(0.029)	(0.037)	(0.053)	(0.049)	(0.018)
$1929 \times \tilde{d}$	−0.017	0.005	−0.003	−0.064	−0.157***	−0.025
	(0.040)	(0.027)	(0.026)	(0.049)	(0.032)	(0.015)
$1930 \times \tilde{d}$	−0.019	−0.008	−0.007	−0.002	−0.071	−0.027**
	(0.030)	(0.017)	(0.022)	(0.035)	(0.059)	(0.010)
$1931 \times \tilde{d}$	0.004	−0.016	−0.003	−0.050*	0.004	−0.007
	(0.010)	(0.011)	(0.009)	(0.023)	(0.072)	(0.008)
$1933 \times \tilde{d}$	0.038**	0.028**	0.017	0.012	0.047	0.016*
	(0.015)	(0.012)	(0.010)	(0.018)	(0.088)	(0.008)
$1934 \times \tilde{d}$	0.054***	0.036***	0.006	0.011	0.035	0.012
	(0.018)	(0.011)	(0.011)	(0.016)	(0.114)	(0.009)
$1935 \times \tilde{d}$	−0.011	0.008	−0.030**	0.009	0.059	−0.016
	(0.010)	(0.010)	(0.012)	(0.021)	(0.088)	(0.011)
$1936 \times \tilde{d}$	0.033	0.015	0.016	−0.014	0.066	−0.017
	(0.021)	(0.020)	(0.016)	(0.027)	(0.065)	(0.014)
$1937 \times \tilde{d}$	−0.026	−0.024	−0.005	−0.019	0.090	−0.036**
	(0.024)	(0.025)	(0.019)	(0.031)	(0.073)	(0.014)
$1938 \times \tilde{d}$	0.016	−0.012	0.027**	−0.039	0.039	0.001
	(0.017)	(0.014)	(0.010)	(0.027)	(0.151)	(0.018)
$1939 \times \tilde{d}$	0.027	−0.022	0.050***	−0.056	0.089	−0.034*
	(0.016)	(0.017)	(0.007)	(0.034)	(0.101)	(0.019)
$1940 \times \tilde{d}$	−0.014	−0.033	0.015*	−0.087*	0.027	−0.052**
	(0.015)	(0.021)	(0.008)	(0.042)	(0.096)	(0.018)
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
R^2	0.415	0.788	0.155	0.648	0.801	0.805
Observations	7,074	7,074	7,074	7,038	7,074	7,074

Notes. This table reports results from panel regressions of various firm outcomes on Q, gold clause exposure $\tilde{d}$ (as defined in equation (2)), and year $\times$ $\tilde{d}$ interactions, where 1932 is the omitted category. Columns 1–3 test the debt overhang prediction that firms with gold exposure should increase payouts during the litigation period: Payout is total annual equity payout, Dividend is cash dividends, and Net rep. is net share repurchases, all normalized by the book value of common stock. Columns 4–6 examine whether gold exposure is associated with changes in profitability, cash holdings, or leverage that might confound the payout results: Profits is net income; Cash includes cash and marketable securities (both normalized by fixed capital); and Leverage is book leverage. All regressions include firm and year fixed effects. All variables are winsorized at the 0.5% and 99.5% levels within each year. Standard errors in parentheses are two-way clustered by firm and year. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

Table 6

Gold clause exposure, investment, and payout by credit rating

	Net investment (1)	Dividend (2)
$1933 \times \tilde{d}$	-0.036^{***}	0.025^{*}
	(0.012)	(0.014)
$1934 \times \tilde{d}$	-0.047^{***}	0.035^{**}
	(0.007)	(0.013)
$1933 \times$ Low rating	-0.038^{**}	0.013^{**}
	(0.015)	(0.005)
$1934 \times$ Low rating	0.029^{*}	0.011^{*}
	(0.016)	(0.006)
$1933 \times \tilde{d} \times$ Low rating	-0.073	-0.025
	(0.047)	(0.019)
$1934 \times \tilde{d} \times$ Low rating	-0.077	-0.037^{**}
	(0.052)	(0.016)
Firm FE	Yes	Yes
Year FE	Yes	Yes
R^2	0.244	0.789
Observations	7,074	7,074

Notes. This table reports results from panel regressions testing whether debt overhang effects are more severe for firms closer to default. It regresses net investment (column 1) and cash dividends (column 2) on Q, gold clause exposure $\tilde{d}$ (as defined in equation (2)), year $\times$ $\tilde{d}$ interactions, and triple interactions with a low credit rating indicator. Low rating equals one if a firm's bond rating is Ba or below in 1930 (the median rating among bond issuers). To ease interpretation, $\tilde{d}$ is normalized by subtracting its median value among firms with positive exposure. All regressions include firm and year fixed effects. Only 1933 and 1934 interaction terms are reported; see Internet Appendix Table IA.9 for the full list of coefficients. All variables are winsorized at the 0.5% and 99.5% levels within each year. Standard errors in parentheses are two-way clustered by firm and year. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

Table 7

Gold clause exposure and net investment with controls

	Industry-year FE	All controls linear	Q deciles	Assets deciles	NI/assets deciles	Cash/assets deciles	Payout deciles	Book leverage deciles	Market leverage deciles	LT lia. deciles
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Q	0.090***	0.098***	0.097***	0.096***	0.096***	0.097***	0.098***	0.095***	0.096***	0.095***
	(0.017)	(0.019)	(0.018)	(0.017)	(0.018)	(0.017)	(0.017)	(0.017)	(0.017)	(0.017)
$\tilde{d}$	−0.059***	−0.047*	−0.048**	−0.050**	−0.044**	−0.050**	−0.051**	−0.048**	−0.047**	−0.050**
	(0.019)	(0.022)	(0.020)	(0.022)	(0.020)	(0.021)	(0.022)	(0.020)	(0.021)	(0.021)
1933 × $\tilde{d}$	−0.059***	−0.035**	−0.053***	−0.055***	−0.067***	−0.035**	−0.051***	−0.067***	−0.054***	−0.048***
	(0.017)	(0.016)	(0.014)	(0.015)	(0.018)	(0.016)	(0.013)	(0.018)	(0.017)	(0.015)
1934 × $\tilde{d}$	−0.036**	−0.026	−0.033**	−0.036**	−0.043	−0.034**	−0.038**	−0.030*	−0.022	−0.030*
	(0.013)	(0.016)	(0.012)	(0.012)	(0.028)	(0.015)	(0.013)	(0.017)	(0.016)	(0.015)
After × $\tilde{d}$	−0.013	0.009	0.002	0.004	−0.003	0.003	−0.004	−0.002	0.003	0.004
	(0.016)	(0.016)	(0.012)	(0.012)	(0.035)	(0.013)	(0.012)	(0.016)	(0.015)	(0.016)
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry-year FE	Yes	No	No	No	No	No	No	No	No	No
R^2	0.311	0.244	0.241	0.242	0.242	0.241	0.242	0.241	0.242	0.241
Observations	7,015	7,049	7,074	7,074	7,074	7,074	7,074	7,074	7,074	7,074

Notes. This table examines whether the effect of gold clause exposure on investment is robust to controlling for industry-level shocks (e.g., New Deal policies, agricultural shocks) and firm-level heterogeneity. It reports results from panel regressions of net investment on Q, gold clause exposure $\tilde{d}$ (as defined in equation (2)), and period × $\tilde{d}$ interactions, where the pre-abrogation period (1926–1932) is the omitted category. Column 1 includes SIC2 industry-year fixed effects to absorb industry-specific shocks. Column 2 includes all firm characteristics (measured in 1930) interacted with year indicators as linear controls. Columns 3–10 use a non-parametric approach: each column includes decile dummies for a single 1930 characteristic interacted with year indicators. The characteristics are: (3) Q, (4) log assets, (5) net income/assets, (6) cash/assets, (7) payout/common stock, (8) book leverage, (9) market leverage, and (10) log long-term liabilities. All regressions include firm fixed effects. All variables are winsorized at the 0.5% and 99.5% levels within each year. Standard errors in parentheses are two-way clustered by firm and year. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

Table 8
Aggregated investment effects

	1933	1934	After
Panel A: All firms			
Total net investment in %	-5.47	-2.47	-0.21
Gold clause effect in %	-1.79	-1.23	-0.15
Panel B: $\tilde{d} > 0$ firms			
Total net investment in %	-6.59	-3.01	-0.75
Gold clause effect in %	-3.27	-2.18	-0.28
Panel C: $\tilde{d} = 0$ firms			
Total net investment in %	-4.10	-1.77	0.56

Notes. This table aggregates firm-level estimates to assess the total investment foregone due to gold clause uncertainty. Total net investment is the aggregate change in fixed capital divided by lagged aggregate fixed capital, for firms present in both years. The gold clause effect is the capital-weighted average of each firm's foregone investment, calculated using the regression coefficients from Table 4 applied to each firm's gold clause exposure $\tilde{d}$ (as defined in equation (2)). Panel A reports results for all firms; Panels B and C decompose by gold clause exposure. "After" denotes the post-resolution period (1935–1940). See Section 5.6 for details.

Internet Appendix for
Debt Overhang During Policy Uncertainty:
The Case of Gold Clauses in the 1930s

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July 22, 2026

Additional Details, Tables, and Figures
Not for Publication

Figure IA.1. Industrial bond quotes. Commercial and Financial Chronicle, Oct 1931

Industrial and Miscellaneous Securities

Under the heading "Industrial and Miscellaneous Securities" we include all issues which *do not* appear under the previous two headings, namely "Railroads (Steam)" and "Public Utilities." In the case of stocks, however, we put "Textile Manufacturing," "Insurance," "Mining," "Real Estate and Land," "Title Guarantee and Safe Deposit Companies" under separate heads, then follow with the rest of the "Industrial and Miscellaneous."

NOTICE.—All bond prices are "and interest" except where marked "f" and income and defaulted bonds.

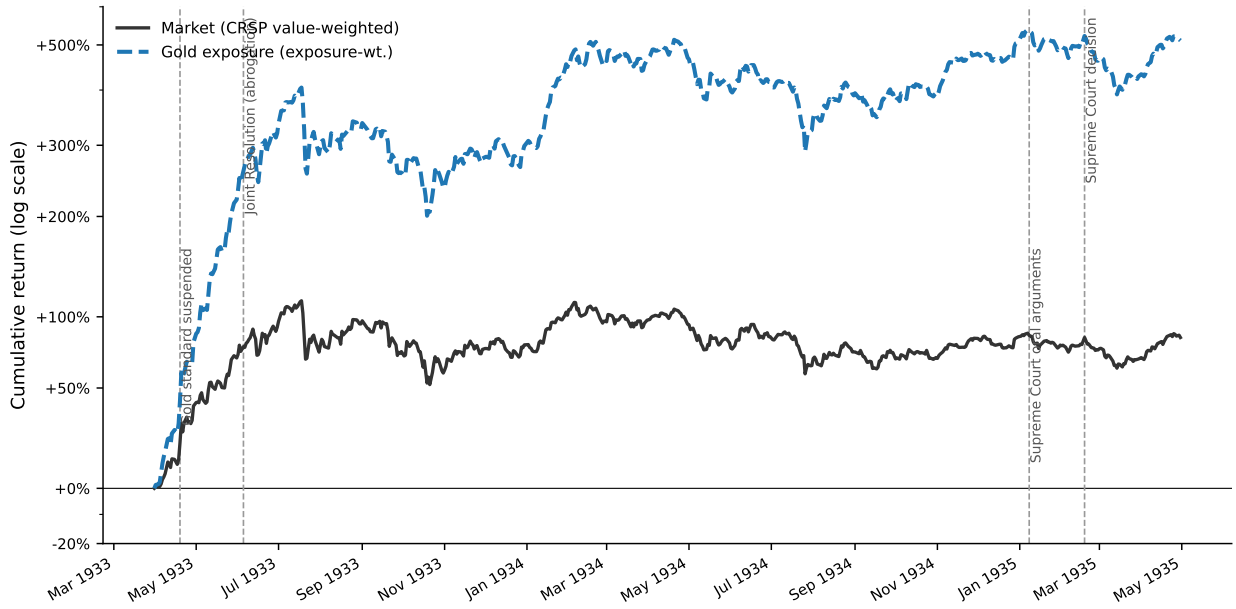
Bonds.	Bid.	Ask.
INDUSTRIAL AND MISCELLANEOUS BONDS.		
Abbotts Dairies deb 6s 1942_M&S	----	99⅝
Abitibi Pow & Paper—		
1st M 5s 1953 ser A_____J&D	39	39½
Abraham & Straus Inc—		
Deb 5½s 1943 with warr__A&O	92	94
Adams Exp coll tr g 4s '48_M&S	70	84
Coll tr g 4s 1947_____J&D	f 75	79
Ajax Rubber s f 8s 1936____J&D	----	14
Alabama Cons Coal & Iron—		
1st cons M 5s 1933_____M&N	75	90
Alabama Mills 1st 6½s '43 A A&O	5	10
Ala Steel & Shipbldg—See Tenn	C. I. &	RR.
Alaska Gold Mines deb 6s'25M&S	f 5¾	10
Deb 6s 1926 ser B_____M&S	f 5¾	10
Albany Perf Wrapping Corp—		
1st M coll tr 6s 1948_____A&O	50½	58½
Alberta Pacific Grain 6s, 1946____	r ----	---
Algoma Steel 1st 5s 1962____A&O	30	32
Allied Packers deb 6s 1939__J&J	f 30½	----
1st M & coll tr 8s 1939____J&J	f 30½	----
Allis-Chalmers Mfg Co—		
Deb gold 5s 1937_____M&N	----	96½
Alpine Montan Steel Corp—		
1st s f 7s 1955_____M&S	----	70
Aluminum Co debs 5s 1952_M&S	98¾	99¼
Aluminum Ltd s f debt 5s '48_J&J	85	88
Amalgamated Sugar Co—		
1st s f 7s 1937_____A&O	60	75
Amer Aggregates Corp—		
Deb 6s '43 ser A with war_F&A	60½	65
Without warrants_____	58	----

Bonds.	Bid.	Ask.
Beech Creek C & C 5s '44__J&D	----	----
Beld'g-Hem'way6% notes '36 J&J	94¼	100
Belgo-Can Pap 1st 6s 1943_J&J	----	----
Beneficial Indus Loan Corp—		
Conv deb 6s 1946_____M&S	80	81
Beth'm St 1st l & ref 5s '42_M&N	98	100
Purch money 5s 1936___J&J	100½	101¼
Penn-Mary Steel 5s 1937_J&J	97	----
Bluff Point Land Impt Co—		
1st mtge guar 4s 1940_____J&J	80	90
Bohemian (First) Glass Works—		
1st 7s 1957 without warr__J&J	----	----
Borden Mills 1st s f 6s 1934__F&A	85	95
Boston Store (Chic) 5s 1938_____	100½	101½
Boston Term Co 3½s 1947_F&A	92½	94
Botany Consol Mills 6½s '34 A&O	20⅛	22
Brown Co 1st 5½s 1946____A&O	63	65
1st 5½s 1950 ser B_____M&S	63	65
Buffalo & Susq Iron 5s 1932 J&D	96	98
Burmeister & Wain (Copenhagen)		
15-yr s f extl 6s 1940_____J&J	----	----
Bush Term 1st 4s 1952_____A&O	91⅛	----
Cons g 5s Jan 1955_____J&J	82	85
Bush Term Bldgs 1st 5s '60_A&O	----	95⅞
By-Products Coke Corp—		
1st M 5½s 1945 ser A____M&N	50	83
Cady Lumber 6½s 1939___M&N	f 3	6
California Packing Corp—		
Cons deb 5s 1940_____J&J	82	83
Calif Pet deb 5½s 1938____M&N	89	90
Conv s f deb 5s 1939____F&A	79	----
Camaguey Sugar 7s 1942 A&O 15	17	20
Can Cement 1st 5½s 1947_M&N	r ----	----

Bonds.	Bid.	Ask
Crown Willamet Pap 6s '51_J&J	80	83
Crown Zellerbach Corp—		
Deb 6s 1940 with warr___M&S	56	58
Crucible Steel Co deb 5s '40_M&N	----	s 88
Cuba Cane Products—		
Deb 6s 1950_____J&J	4⅛	4½
Cuba Cane Sug deb 7s 1930__J&J	----	----
Conv deb 8s 1930_____J&J	----	----
Cuban Dominican Sugar Co—		
1st lien s f 7½s 1944____M&N	5	11½
Certificates of deposit_____	----	----
Stmpd with stk purch warr____	6	7
Certificates of deposit_____	6	7
Cudahy Pack s f 5s 1946___J&D	101½	102
Sink fund deb g 5½s 1937 A&O	90¼	92
Cuyamel Fruit 1st 6s 1940 _A&O	----	103⅞
Dairymen's League Co-oper Assn		
6s 1935 ser CC_____	f ----	----
6s 1937 ser DD_____	f ----	----
De Bardeleben Coal Corp—		
1st mtge 6s 1953_____J&D	39	40
Dery (D G) 7s 1942 stpd___M&S	1	20
Second stamped_____	2¼	64
Denver Un Stk Yds 5s 1946__J&J	99	101
Deutsche Bank (Berlin)—		
6% note'32(Am part ctfs) M&S	82¼	83½
Deutsche Rentenbank—		
Farm Ln s f 6s Oct 15'60 A&O15	43	46
Dodge Bros deb 6s 1940____M&N	83¾	84
Dodge Mfg 1st 7s 1942_____J&J	----	----
Dold (Jac) Pack 1st 6s '42_M&N	50	53¼
Dominion Canners 1st 6s '40 A&O	----	z 103
Domin Coal 5s '40 ser '10__M&N	84	89

Notes. This figure reproduces a page of industrial bond quotations from the *Commercial and Financial Chronicle*, October 1931. Each row reports the coupon rate, maturity date, and recent bid–ask prices for an individual bond issue. Most bonds trade at substantial discounts to par, indicating that call options embedded in these contracts were deeply out-of-the-money, making voluntary debt restructuring prohibitively expensive for issuers during this period.

Figure IA.2. Cumulative returns around the gold clause litigation



Notes. This figure plots cumulative returns for the CRSP value-weighted market and the gold-exposure-weighted portfolio (with weights $w_j = d_j / \sum_k d_k$, where d_j is defined in equation (1)) from March 31, 1933 through April 30, 1935, indexed to zero at the close of March 31, 1933 and plotted on a logarithmic scale. Vertical dashed lines mark the key dates in the episode: the suspension of the gold standard (April 19, 1933), the Joint Resolution abrogating gold clauses (June 5, 1933), the Supreme Court oral arguments (January 8, 1935), and the Supreme Court decision (February 18, 1935). Daily returns are from the same data underlying Table 1.

Table IA.1

Summary statistics for $d > 0$ firms

Variable	Firms	N	Mean	SD	5%	25%	50%	75%	95%
Panel A: 1926–1932									
Net investment	338	1,439	0.05	0.27	−0.21	−0.04	-0.00	0.07	0.38
Tobin's Q	338	1,439	1.14	0.86	0.44	0.69	0.92	1.25	2.65
log(Assets)	338	1,439	17.42	1.18	15.74	16.58	17.26	18.22	19.50
Net income/assets	338	1,427	0.04	0.08	−0.09	0.00	0.04	0.08	0.15
Cash/assets	338	1,439	0.12	0.11	0.02	0.05	0.09	0.15	0.31
Payout/common stock	338	1,439	−0.02	0.55	−0.44	0.00	0.00	0.08	0.24
Book leverage	338	1,439	0.42	0.22	0.10	0.26	0.40	0.56	0.81
Market leverage	338	1,439	0.48	0.27	0.07	0.24	0.47	0.71	0.92
log(LTL)	338	1,439	15.61	2.95	12.52	14.94	16.07	17.06	18.43
Corp. bonds/LTL	338	1,439	0.60	0.35	0.00	0.34	0.57	1.00	1.00
Pref. share/LTL	338	1,439	0.36	0.33	0.00	0.00	0.37	0.60	0.96
Bank debt/LTL	338	1,439	0.01	0.07	0.00	0.00	0.00	0.00	0.01
d	338	1,439	0.62	0.49	0.05	0.36	0.58	1.00	1.00
$I_{d>0}$	338	1,439	1.00	0.00	1.00	1.00	1.00	1.00	1.00
Panel B: 1933–1934									
Net investment	169	312	−0.06	0.13	−0.34	−0.07	−0.04	−0.02	0.05
Tobin's Q	169	312	0.78	0.34	0.38	0.57	0.73	0.92	1.40
log(Assets)	169	312	17.31	1.30	15.48	16.28	17.15	18.33	19.55
Net income/assets	169	310	0.01	0.05	−0.07	−0.02	0.00	0.03	0.10
Cash/assets	169	312	0.12	0.11	0.02	0.05	0.08	0.15	0.34
Payout/common stock	169	312	0.02	0.09	−0.04	0.00	0.00	0.02	0.14
Book leverage	169	312	0.51	0.26	0.18	0.31	0.47	0.66	0.96
Market leverage	169	312	0.67	0.26	0.21	0.48	0.75	0.90	0.98
log(LTL)	169	312	15.96	2.29	13.82	15.12	16.02	17.15	18.50
Corp. bonds/LTL	169	312	0.65	0.30	0.11	0.43	0.62	1.00	1.00
Pref. share/LTL	169	312	0.34	0.29	0.00	0.00	0.35	0.56	0.80
Bank debt/LTL	169	312	0.00	0.02	0.00	0.00	0.00	0.00	0.01
d	169	312	0.67	1.07	0.10	0.37	0.56	0.91	1.00
$I_{d>0}$	169	312	1.00	0.00	1.00	1.00	1.00	1.00	1.00

Notes. This table reports summary statistics for publicly traded industrial firms with positive contemporaneous gold clause exposure ($d > 0$). Panel A covers the pre-abrogation period (1926–1932) and Panel B the legal uncertainty period surrounding the abrogation of the gold clause (1933–1934). Long-term liabilities (LTL) are the sum of corporate bonds, preferred shares, and bank debt. All variables are winsorized at the 0.5% and 99.5% levels within each year. See Appendix A for detailed variable definitions.

Table IA.2

Summary statistics for $d = 0$ firms

Variable	Firms	N	Mean	SD	5%	25%	50%	75%	95%
Panel A: 1926–1932									
Net investment	415	1,750	0.03	0.33	−0.26	−0.06	−0.02	0.04	0.44
Tobin's Q	415	1,750	1.33	1.19	0.31	0.66	0.99	1.60	3.44
log(Assets)	415	1,750	16.77	1.18	15.01	15.93	16.70	17.48	18.98
Net income/assets	415	1,740	0.06	0.11	−0.11	-0.00	0.06	0.11	0.24
Cash/assets	415	1,750	0.18	0.15	0.02	0.07	0.15	0.26	0.49
Payout/common stock	415	1,750	0.13	0.67	−0.15	0.00	0.06	0.16	0.82
Book leverage	415	1,750	0.26	0.22	0.03	0.09	0.20	0.39	0.70
Market leverage	415	1,750	0.28	0.26	0.02	0.07	0.20	0.43	0.86
log(LTL)	415	1,750	8.96	7.50	0.00	0.00	13.78	15.37	17.22
Corp. bonds/LTL	415	1,750	0.09	0.26	0.00	0.00	0.00	0.00	1.00
Pref. share/LTL	415	1,750	0.49	0.49	0.00	0.00	0.39	1.00	1.00
Bank debt/LTL	415	1,750	0.02	0.12	0.00	0.00	0.00	0.00	0.00
d	415	1,750	0.00	0.00	0.00	0.00	0.00	0.00	0.00
$I_{d>0}$	415	1,750	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Panel B: 1933–1934									
Net investment	369	706	−0.03	0.23	−0.26	−0.07	−0.03	−0.01	0.15
Tobin's Q	369	706	0.94	0.69	0.24	0.50	0.76	1.15	2.30
log(Assets)	369	706	16.55	1.26	14.69	15.72	16.48	17.35	18.96
Net income/assets	369	702	0.03	0.08	−0.10	−0.01	0.03	0.08	0.16
Cash/assets	369	706	0.19	0.15	0.03	0.08	0.15	0.26	0.51
Payout/common stock	369	706	0.10	0.37	−0.01	0.00	0.00	0.09	0.45
Book leverage	369	706	0.28	0.25	0.03	0.09	0.20	0.41	0.75
Market leverage	369	706	0.37	0.29	0.03	0.11	0.29	0.61	0.92
log(LTL)	369	706	9.11	7.36	0.00	0.00	13.48	15.20	17.22
Corp. bonds/LTL	369	706	0.12	0.30	0.00	0.00	0.00	0.00	1.00
Pref. share/LTL	369	706	0.46	0.48	0.00	0.00	0.08	1.00	1.00
Bank debt/LTL	369	706	0.03	0.17	0.00	0.00	0.00	0.00	0.03
d	369	706	0.00	0.00	0.00	0.00	0.00	0.00	0.00
$I_{d>0}$	369	706	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Panel C: 1935–1940									
Net investment	424	2,084	0.01	0.15	−0.15	−0.04	−0.01	0.04	0.21
Tobin's Q	424	2,084	1.32	0.92	0.47	0.75	1.04	1.55	3.14
log(Assets)	424	2,084	16.69	1.30	14.77	15.77	16.63	17.53	19.08
Net income/assets	424	2,080	0.06	0.08	−0.06	0.03	0.06	0.10	0.20
Cash/assets	424	2,084	0.18	0.14	0.03	0.08	0.15	0.24	0.46
Payout/common stock	424	2,084	0.16	0.55	−0.07	0.00	0.05	0.16	0.83
Book leverage	424	2,084	0.31	0.22	0.05	0.14	0.26	0.43	0.72
Market leverage	424	2,084	0.31	0.25	0.03	0.11	0.24	0.47	0.82
log(LTL)	424	2,084	9.45	7.38	0.00	0.00	13.69	15.46	17.51
Corp. bonds/LTL	424	2,084	0.16	0.34	0.00	0.00	0.00	0.00	1.00
Pref. share/LTL	424	2,084	0.42	0.47	0.00	0.00	0.00	1.00	1.00
Bank debt/LTL	424	2,084	0.05	0.20	0.00	0.00	0.00	0.00	0.32

Notes. This table reports summary statistics for publicly traded industrial firms with no contemporaneous gold clause exposure ($d = 0$). Panel A covers the pre-abrogation period (1926–1932), Panel B the legal uncertainty period surrounding the abrogation of the gold clause (1933–1934), and Panel C the post-resolution period (1935–1940). Long-term liabilities (LTL) are the sum of corporate bonds, preferred shares, and bank debt. All variables are winsorized at the 0.5% and 99.5% levels within each year. See Appendix A for detailed variable definitions.

Table IA.3

Summary statistics by gold clause exposure

Panel A: 1926–1932

	$\tilde{d}=0$ (410 firms)			$\tilde{d}>0$ (330 firms)			Δ Mean	
	N	Mean	SD	N	Mean	SD	Δ	p-val
Net investment	1,759	0.03	0.33	1,430	0.05	0.27	0.02	0.19
Tobin's Q	1,759	1.33	1.19	1,430	1.14	0.86	−0.19	0.00
log(Assets)	1,759	16.77	1.17	1,430	17.43	1.19	0.66	0.00
Net income/assets	1,748	0.06	0.11	1,419	0.04	0.08	−0.02	0.00
Cash/assets	1,759	0.18	0.15	1,430	0.12	0.10	−0.06	0.00
Payout/common stock	1,759	0.13	0.67	1,430	−0.02	0.55	−0.15	0.00
Book leverage	1,759	0.26	0.22	1,430	0.42	0.22	0.16	0.00
Market leverage	1,759	0.29	0.27	1,430	0.48	0.27	0.19	0.00
log(LTL)	1,759	9.00	7.49	1,430	15.60	2.99	6.60	0.00
Corp. bonds/LTL	1,759	0.09	0.27	1,430	0.60	0.35	0.51	0.00
Pref. share/LTL	1,759	0.49	0.49	1,430	0.36	0.33	−0.13	0.00
Bank debt/LTL	1,759	0.02	0.11	1,430	0.01	0.07	−0.01	0.02
$\tilde{d}$	1,759	0.00	0.00	1,430	0.61	0.33	0.61	0.00

Panel B: 1933–1934

	$\tilde{d}=0$ (357 firms)			$\tilde{d}>0$ (161 firms)			Δ Mean	
	N	Mean	SD	N	Mean	SD	Δ	p-val
Net investment	704	−0.03	0.23	314	−0.05	0.13	−0.02	0.03
Tobin's Q	704	0.92	0.68	314	0.82	0.40	−0.10	0.00
log(Assets)	704	16.55	1.27	314	17.30	1.29	0.75	0.00
Net income/assets	701	0.03	0.08	311	0.01	0.06	−0.02	0.00
Cash/assets	704	0.19	0.15	314	0.12	0.12	−0.07	0.00
Payout/common stock	704	0.10	0.36	314	0.03	0.15	−0.07	0.00
Book leverage	704	0.29	0.25	314	0.49	0.28	0.20	0.00
Market leverage	704	0.38	0.30	314	0.64	0.29	0.26	0.00
log(LTL)	704	9.37	7.32	314	15.33	3.83	5.96	0.00
Corp. bonds/LTL	704	0.14	0.32	314	0.59	0.34	0.45	0.00
Pref. share/LTL	704	0.46	0.48	314	0.36	0.32	−0.10	0.00
Bank debt/LTL	704	0.03	0.17	314	0.00	0.02	−0.03	0.00
$\tilde{d}$	704	0.00	0.00	314	0.60	0.31	0.60	0.00

Panel C: 1935–1940

	$\tilde{d}=0$ (349 firms)			$\tilde{d}>0$ (154 firms)			Δ Mean	
	N	Mean	SD	N	Mean	SD	Δ	p-val
Net investment	2,001	0.01	0.15	866	-0.00	0.12	−0.01	0.05
Tobin's Q	2,001	1.31	0.93	866	1.11	0.64	−0.20	0.00
log(Assets)	2,001	16.65	1.29	866	17.38	1.36	0.73	0.00
Net income/assets	1,998	0.06	0.08	863	0.04	0.06	−0.02	0.00
Cash/assets	2,001	0.18	0.14	866	0.13	0.11	−0.05	0.00
Payout/common stock	2,001	0.17	0.54	866	0.05	0.34	−0.12	0.00
Book leverage	2,001	0.31	0.22	866	0.46	0.27	0.15	0.00
Market leverage	2,001	0.32	0.25	866	0.50	0.28	0.18	0.00
log(LTL)	2,001	9.37	7.37	866	14.44	5.14	5.07	0.00
Corp. bonds/LTL	2,001	0.16	0.34	866	0.49	0.39	0.33	0.00
Pref. share/LTL	2,001	0.42	0.47	866	0.38	0.37	−0.04	0.01
Bank debt/LTL	2,001	0.05	0.20	866	0.03	0.14	−0.02	0.00
$\tilde{d}$	2,001	0.00	0.00	866	0.59	0.31	0.59	0.00

Notes. This table reports summary statistics separately for firms with no gold clause exposure ($\tilde{d}=0$) and firms with positive gold clause exposure ($\tilde{d}>0$). The number of unique firms in each group is reported in parentheses. Δ Mean is the difference in means ($\tilde{d}>0$ minus $\tilde{d}=0$), and p-val is the p-value of the difference. Panel A covers 1926–1932, Panel B covers 1933–1934, and Panel C covers 1935–1940. In Panels A and B, $\tilde{d}$ can be slightly greater than Corp. bonds/LTL because $\tilde{d}$ is calculated using the reported amount outstanding of each bond, whereas Corp. bonds/LTL is based on balance sheet information. In Panel C, $\tilde{d}$ can differ significantly from Corp. bonds/LTL because $\tilde{d}$ is frozen at each firm's 1930 value while Corp. bonds/LTL is contemporaneous. See Appendix A for variable definitions.

Table IA.4

Summary statistics for $\tilde{d} > 0$ firms

Variable	Firms	N	Mean	SD	5%	25%	50%	75%	95%
Panel A: 1926–1932									
Net investment	330	1,430	0.05	0.27	−0.19	−0.04	0.00	0.07	0.38
Tobin's Q	330	1,430	1.14	0.86	0.44	0.70	0.92	1.25	2.65
log(Assets)	330	1,430	17.43	1.19	15.76	16.58	17.26	18.22	19.53
Net income/assets	330	1,419	0.04	0.08	−0.09	0.00	0.04	0.08	0.15
Cash/assets	330	1,430	0.12	0.10	0.02	0.05	0.09	0.15	0.31
Payout/common stock	330	1,430	−0.02	0.55	−0.44	0.00	0.00	0.08	0.24
Book leverage	330	1,430	0.42	0.22	0.10	0.26	0.40	0.56	0.81
Market leverage	330	1,430	0.48	0.27	0.07	0.24	0.47	0.70	0.92
log(LTL)	330	1,430	15.60	2.99	12.47	14.94	16.07	17.06	18.43
Corp. bonds/LTL	330	1,430	0.60	0.35	0.00	0.34	0.57	1.00	1.00
Pref. share/LTL	330	1,430	0.36	0.33	0.00	0.00	0.36	0.60	0.96
Bank debt/LTL	330	1,430	0.01	0.07	0.00	0.00	0.00	0.00	0.01
$\tilde{d}$	330	1,430	0.61	0.33	0.05	0.36	0.58	1.00	1.00
$I_{\tilde{d}>0}$	330	1,430	1.00	0.00	1.00	1.00	1.00	1.00	1.00
Panel B: 1933–1934									
Net investment	161	314	−0.05	0.13	−0.31	−0.07	−0.03	−0.01	0.05
Tobin's Q	161	314	0.82	0.40	0.37	0.58	0.74	0.96	1.56
log(Assets)	161	314	17.30	1.29	15.46	16.34	17.13	18.35	19.55
Net income/assets	161	311	0.01	0.06	−0.07	−0.02	0.01	0.04	0.12
Cash/assets	161	314	0.12	0.12	0.02	0.05	0.09	0.16	0.33
Payout/common stock	161	314	0.03	0.15	−0.04	0.00	0.00	0.03	0.19
Book leverage	161	314	0.49	0.28	0.11	0.28	0.45	0.67	0.97
Market leverage	161	314	0.64	0.29	0.11	0.40	0.71	0.90	0.98
log(LTL)	161	314	15.33	3.83	0.00	15.07	15.88	17.10	18.50
Corp. bonds/LTL	161	314	0.59	0.34	0.00	0.36	0.57	1.00	1.00
Pref. share/LTL	161	314	0.36	0.32	0.00	0.00	0.38	0.59	1.00
Bank debt/LTL	161	314	0.00	0.02	0.00	0.00	0.00	0.00	0.01
Panel C: 1935–1940									
Net investment	154	866	-0.00	0.12	−0.11	−0.04	−0.01	0.03	0.17
Tobin's Q	154	866	1.11	0.64	0.48	0.73	0.94	1.28	2.29
log(Assets)	154	866	17.38	1.36	15.36	16.35	17.21	18.52	19.63
Net income/assets	154	863	0.04	0.06	−0.05	0.01	0.04	0.07	0.14
Cash/assets	154	866	0.13	0.11	0.03	0.06	0.10	0.16	0.30
Payout/common stock	154	866	0.05	0.34	−0.16	0.00	0.00	0.09	0.40
Book leverage	154	866	0.46	0.27	0.12	0.27	0.41	0.64	0.90
Market leverage	154	866	0.50	0.28	0.09	0.25	0.50	0.75	0.95
log(LTL)	154	866	14.44	5.14	0.00	14.61	15.82	17.05	18.57
Corp. bonds/LTL	154	866	0.49	0.39	0.00	0.00	0.49	0.91	1.00
Pref. share/LTL	154	866	0.38	0.37	0.00	0.00	0.34	0.66	1.00
Bank debt/LTL	154	866	0.03	0.14	0.00	0.00	0.00	0.00	0.12
$\tilde{d}$	154	866	0.59	0.31	0.09	0.34	0.57	0.94	1.00
$I_{\tilde{d}>0}$	154	866	1.00	0.00	1.00	1.00	1.00	1.00	1.00

Notes. This table reports summary statistics for publicly traded industrial firms with positive gold clause exposure ($\tilde{d} > 0$). Panel A covers the pre-abrogation period (1926–1932), Panel B the legal uncertainty period surrounding the abrogation of the gold clause (1933–1934), and Panel C the post-resolution period (1935–1940). Long-term liabilities (LTL) are the sum of corporate bonds, preferred shares, and bank debt. In Panels A and B, $\tilde{d}$ can be slightly greater than Corp. bonds/LTL because $\tilde{d}$ is calculated using the reported amount outstanding of each bond, whereas Corp. bonds/LTL is based on balance sheet information. In Panel C, $\tilde{d}$ can differ significantly from Corp. bonds/LTL because $\tilde{d}$ is frozen at each firm's 1930 value while Corp. bonds/LTL is contemporaneous. All variables are winsorized at the 0.5% and 99.5% levels within each year. See Appendix A for detailed variable definitions.

Table IA.5

Summary statistics for $\tilde{d} = 0$ firms

Variable	Firms	N	Mean	SD	5%	25%	50%	75%	95%
Panel A: 1926–1932									
Net investment	410	1,759	0.03	0.33	−0.26	−0.06	−0.02	0.04	0.44
Tobin's Q	410	1,759	1.33	1.19	0.31	0.66	0.99	1.59	3.44
log(Assets)	410	1,759	16.77	1.17	15.01	15.92	16.70	17.48	18.97
Net income/assets	410	1,748	0.06	0.11	−0.11	-0.00	0.06	0.11	0.24
Cash/assets	410	1,759	0.18	0.15	0.02	0.07	0.14	0.26	0.49
Payout/common stock	410	1,759	0.13	0.67	−0.15	0.00	0.06	0.15	0.82
Book leverage	410	1,759	0.26	0.22	0.03	0.09	0.20	0.40	0.70
Market leverage	410	1,759	0.29	0.27	0.02	0.07	0.20	0.44	0.87
log(LTL)	410	1,759	9.00	7.49	0.00	0.00	13.84	15.40	17.22
Corp. bonds/LTL	410	1,759	0.09	0.27	0.00	0.00	0.00	0.00	1.00
Pref. share/LTL	410	1,759	0.49	0.49	0.00	0.00	0.39	1.00	1.00
Bank debt/LTL	410	1,759	0.02	0.11	0.00	0.00	0.00	0.00	0.00
$\tilde{d}$	410	1,759	0.00	0.00	0.00	0.00	0.00	0.00	0.00
$I_{\tilde{d}>0}$	410	1,759	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Panel B: 1933–1934									
Net investment	357	704	−0.03	0.23	−0.27	−0.07	−0.04	−0.01	0.14
Tobin's Q	357	704	0.92	0.68	0.24	0.49	0.75	1.11	2.22
log(Assets)	357	704	16.55	1.27	14.69	15.70	16.47	17.37	18.96
Net income/assets	357	701	0.03	0.08	−0.10	−0.01	0.03	0.07	0.16
Cash/assets	357	704	0.19	0.15	0.03	0.08	0.14	0.26	0.51
Payout/common stock	357	704	0.10	0.36	−0.01	0.00	0.00	0.08	0.41
Book leverage	357	704	0.29	0.25	0.03	0.09	0.21	0.42	0.74
Market leverage	357	704	0.38	0.30	0.03	0.12	0.31	0.63	0.92
log(LTL)	357	704	9.37	7.32	0.00	0.00	13.69	15.21	17.36
Corp. bonds/LTL	357	704	0.14	0.32	0.00	0.00	0.00	0.00	1.00
Pref. share/LTL	357	704	0.46	0.48	0.00	0.00	0.12	1.00	1.00
Bank debt/LTL	357	704	0.03	0.17	0.00	0.00	0.00	0.00	0.01
$\tilde{d}$	357	704	0.00	0.00	0.00	0.00	0.00	0.00	0.00
$I_{\tilde{d}>0}$	357	704	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Panel C: 1935–1940									
Net investment	349	2,001	0.01	0.15	−0.15	−0.04	−0.01	0.04	0.21
Tobin's Q	349	2,001	1.31	0.93	0.47	0.74	1.03	1.52	3.15
log(Assets)	349	2,001	16.65	1.29	14.73	15.74	16.61	17.49	19.07
Net income/assets	349	1,998	0.06	0.08	−0.06	0.02	0.06	0.10	0.20
Cash/assets	349	2,001	0.18	0.14	0.03	0.08	0.15	0.24	0.47
Payout/common stock	349	2,001	0.17	0.54	−0.03	0.00	0.05	0.15	0.83
Book leverage	349	2,001	0.31	0.22	0.05	0.14	0.26	0.44	0.72
Market leverage	349	2,001	0.32	0.25	0.03	0.11	0.24	0.48	0.82
log(LTL)	349	2,001	9.37	7.37	0.00	0.00	13.60	15.40	17.47
Corp. bonds/LTL	349	2,001	0.16	0.34	0.00	0.00	0.00	0.00	1.00
Pref. share/LTL	349	2,001	0.42	0.47	0.00	0.00	0.00	1.00	1.00
Bank debt/LTL	349	2,001	0.05	0.20	0.00	0.00	0.00	0.00	0.34
$\tilde{d}$	349	2,001	0.00	0.00	0.00	0.00	0.00	0.00	0.00
$I_{\tilde{d}>0}$	349	2,001	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Notes. This table reports summary statistics for publicly traded industrial firms with no gold clause exposure ($\tilde{d} = 0$). Panel A covers the pre-abrogation period (1926–1932), Panel B the legal uncertainty period surrounding the abrogation of the gold clause (1933–1934), and Panel C the post-resolution period (1935–1940). Long-term liabilities (LTL) are the sum of corporate bonds, preferred shares, and bank debt. All variables are winsorized at the 0.5% and 99.5% levels within each year. See Appendix A for detailed variable definitions.

Table IA.6

Summary statistics for below median $\tilde{d} > 0$ firms

Variable	Firms	N	Mean	SD	5%	25%	50%	75%	95%
Panel A: 1926–1932									
Net investment	201	715	0.04	0.25	−0.14	−0.04	−0.01	0.05	0.35
Tobin's Q	201	715	1.11	0.83	0.48	0.71	0.92	1.22	2.32
log(Assets)	201	715	17.47	1.08	15.88	16.73	17.38	18.19	19.25
Net income/assets	201	712	0.03	0.08	−0.09	-0.00	0.04	0.08	0.14
Cash/assets	201	715	0.11	0.09	0.02	0.05	0.09	0.14	0.29
Payout/common stock	201	715	−0.04	0.51	−0.38	0.00	0.00	0.07	0.25
Book leverage	201	715	0.51	0.21	0.18	0.35	0.49	0.64	0.89
Market leverage	201	715	0.57	0.27	0.11	0.35	0.58	0.79	0.95
log(LTL)	201	715	16.32	1.76	14.42	15.60	16.30	17.26	18.45
Corp. bonds/LTL	201	715	0.37	0.24	0.00	0.20	0.40	0.50	0.86
Pref. share/LTL	201	715	0.62	0.25	0.00	0.49	0.58	0.79	1.00
Bank debt/LTL	201	715	0.01	0.08	0.00	0.00	0.00	0.00	0.05
$\tilde{d}$	201	715	0.33	0.17	0.02	0.19	0.36	0.47	0.56
$I_{\tilde{d}>0}$	201	715	1.00	0.00	1.00	1.00	1.00	1.00	1.00
Panel B: 1933–1934									
Net investment	83	160	−0.05	0.12	−0.25	−0.07	−0.03	−0.01	0.04
Tobin's Q	83	160	0.87	0.41	0.40	0.60	0.81	1.03	1.69
log(Assets)	83	160	17.36	1.16	15.78	16.48	17.24	18.28	19.26
Net income/assets	83	158	0.01	0.05	−0.07	−0.02	0.01	0.05	0.12
Cash/assets	83	160	0.12	0.09	0.02	0.05	0.09	0.16	0.30
Payout/common stock	83	160	0.05	0.20	−0.04	0.00	0.00	0.02	0.35
Book leverage	83	160	0.57	0.29	0.21	0.36	0.54	0.71	1.04
Market leverage	83	160	0.71	0.28	0.17	0.55	0.82	0.93	0.98
log(LTL)	83	160	15.96	3.09	14.52	15.53	16.31	17.21	18.51
Corp. bonds/LTL	83	160	0.41	0.27	0.00	0.25	0.43	0.51	0.97
Pref. share/LTL	83	160	0.55	0.28	0.00	0.46	0.56	0.73	1.00
Bank debt/LTL	83	160	0.00	0.02	0.00	0.00	0.00	0.00	0.00
Panel C: 1935–1940									
Net investment	79	444	−0.01	0.12	−0.13	−0.04	−0.02	0.02	0.14
Tobin's Q	79	444	1.06	0.54	0.46	0.75	0.94	1.23	1.95
log(Assets)	79	444	17.43	1.23	15.44	16.48	17.35	18.50	19.39
Net income/assets	79	441	0.04	0.06	−0.04	0.01	0.04	0.07	0.12
Cash/assets	79	444	0.11	0.07	0.02	0.06	0.10	0.15	0.25
Payout/common stock	79	444	0.04	0.43	−0.26	0.00	0.00	0.08	0.44
Book leverage	79	444	0.52	0.27	0.16	0.32	0.49	0.70	0.89
Market leverage	79	444	0.57	0.27	0.11	0.33	0.60	0.81	0.95
log(LTL)	79	444	15.47	3.86	0.00	15.25	16.18	17.18	18.60
Corp. bonds/LTL	79	444	0.39	0.34	0.00	0.00	0.37	0.63	1.00
Pref. share/LTL	79	444	0.54	0.35	0.00	0.29	0.58	0.86	1.00
Bank debt/LTL	79	444	0.01	0.06	0.00	0.00	0.00	0.00	0.08
$\tilde{d}$	79	444	0.34	0.16	0.04	0.22	0.35	0.47	0.55
$I_{\tilde{d}>0}$	79	444	1.00	0.00	1.00	1.00	1.00	1.00	1.00

Notes. This table reports summary statistics for publicly traded industrial firms with below-median gold clause exposure ($0 < \tilde{d} \leq 0.53$). Panel A covers the pre-abrogation period (1926–1932), Panel B the legal uncertainty period surrounding the abrogation of the gold clause (1933–1934), and Panel C the post-resolution period (1935–1940). Long-term liabilities (LTL) are the sum of corporate bonds, preferred shares, and bank debt. In Panels A and B, $\tilde{d}$ can be slightly greater than Corp. bonds/LTL because $\tilde{d}$ is calculated using the reported amount outstanding of each bond, whereas Corp. bonds/LTL is based on balance sheet information. In Panel C, $\tilde{d}$ can differ significantly from Corp. bonds/LTL because $\tilde{d}$ is frozen at each firm's 1930 value while Corp. bonds/LTL is contemporaneous. All variables are winsorized at the 0.5% and 99.5% levels within each year. See Appendix A for detailed variable definitions.

Table IA.7

Summary statistics for above median $\tilde{d} > 0$ firms

Variable	Firms	N	Mean	SD	5%	25%	50%	75%	95%
Panel A: 1926–1932									
Net investment	192	715	0.06	0.29	−0.23	−0.03	0.01	0.09	0.45
Tobin's Q	192	715	1.17	0.88	0.42	0.69	0.93	1.29	2.76
log(Assets)	192	715	17.39	1.28	15.69	16.45	17.08	18.26	19.84
Net income/assets	192	707	0.04	0.08	−0.09	0.00	0.04	0.08	0.16
Cash/assets	192	715	0.12	0.12	0.02	0.04	0.09	0.16	0.34
Payout/common stock	192	715	-0.00	0.59	−0.47	0.00	0.01	0.09	0.23
Book leverage	192	715	0.33	0.18	0.08	0.19	0.30	0.45	0.67
Market leverage	192	715	0.39	0.25	0.06	0.18	0.35	0.57	0.85
log(LTL)	192	715	14.88	3.72	9.26	14.37	15.52	16.71	18.43
Corp. bonds/LTL	192	715	0.84	0.27	0.00	0.72	1.00	1.00	1.00
Pref. share/LTL	192	715	0.11	0.18	0.00	0.00	0.00	0.17	0.42
Bank debt/LTL	192	715	0.01	0.06	0.00	0.00	0.00	0.00	0.00
$\tilde{d}$	192	715	0.90	0.14	0.61	0.82	1.00	1.00	1.00
$I_{\tilde{d}>0}$	192	715	1.00	0.00	1.00	1.00	1.00	1.00	1.00
Panel B: 1933–1934									
Net investment	78	154	−0.06	0.14	−0.35	−0.07	−0.04	−0.01	0.09
Tobin's Q	78	154	0.77	0.37	0.34	0.52	0.69	0.89	1.38
log(Assets)	78	154	17.23	1.42	15.33	16.08	16.89	18.35	19.75
Net income/assets	78	153	0.01	0.06	−0.07	−0.02	0.01	0.03	0.12
Cash/assets	78	154	0.13	0.14	0.01	0.05	0.09	0.16	0.44
Payout/common stock	78	154	0.02	0.07	−0.04	0.00	0.00	0.04	0.12
Book leverage	78	154	0.41	0.24	0.08	0.25	0.36	0.55	0.91
Market leverage	78	154	0.57	0.28	0.08	0.34	0.56	0.84	0.97
log(LTL)	78	154	14.67	4.38	0.00	14.53	15.63	16.88	18.47
Corp. bonds/LTL	78	154	0.77	0.31	0.00	0.62	0.90	1.00	1.00
Pref. share/LTL	78	154	0.15	0.22	0.00	0.00	0.00	0.32	0.52
Bank debt/LTL	78	154	0.00	0.02	0.00	0.00	0.00	0.00	0.02
$\tilde{d}$	78	154	0.87	0.15	0.60	0.71	0.94	1.00	1.00
$I_{\tilde{d}>0}$	78	154	1.00	0.00	1.00	1.00	1.00	1.00	1.00
Panel C: 1935–1940									
Net investment	75	422	0.01	0.11	−0.10	−0.04	−0.01	0.04	0.19
Tobin's Q	75	422	1.16	0.73	0.52	0.72	0.94	1.32	2.74
log(Assets)	75	422	17.33	1.49	15.33	16.17	16.88	18.66	19.81
Net income/assets	75	422	0.05	0.07	−0.06	0.02	0.04	0.08	0.16
Cash/assets	75	422	0.14	0.13	0.03	0.06	0.10	0.17	0.42
Payout/common stock	75	422	0.06	0.20	−0.05	0.00	0.03	0.10	0.36
Book leverage	75	422	0.40	0.24	0.08	0.24	0.34	0.50	0.91
Market leverage	75	422	0.43	0.27	0.07	0.18	0.39	0.64	0.92
log(LTL)	75	422	13.35	6.02	0.00	13.78	15.54	16.88	18.49
Corp. bonds/LTL	75	422	0.59	0.41	0.00	0.00	0.72	1.00	1.00
Pref. share/LTL	75	422	0.20	0.31	0.00	0.00	0.00	0.39	1.00
Bank debt/LTL	75	422	0.05	0.19	0.00	0.00	0.00	0.00	0.21
$\tilde{d}$	75	422	0.87	0.15	0.60	0.70	0.94	1.00	1.00
$I_{\tilde{d}>0}$	75	422	1.00	0.00	1.00	1.00	1.00	1.00	1.00

Notes. This table reports summary statistics for publicly traded industrial firms with above-median gold clause exposure ($\tilde{d} > 0.53$ among firms with $\tilde{d} > 0$ in 1926–1932). Panel A covers the pre-abrogation period (1926–1932), Panel B the legal uncertainty period surrounding the abrogation of the gold clause (1933–1934), and Panel C the post-resolution period (1935–1940). Long-term liabilities (LTL) are the sum of corporate bonds, preferred shares, and bank debt. In Panels A and B, $\tilde{d}$ can be slightly greater than Corp. bonds/LTL because $\tilde{d}$ is calculated using the reported amount outstanding of each bond, whereas Corp. bonds/LTL is based on balance sheet information. In Panel C, $\tilde{d}$ can differ significantly from Corp. bonds/LTL because $\tilde{d}$ is frozen at each firm's 1930 value while Corp. bonds/LTL is contemporaneous. All variables are winsorized at the 0.5% and 99.5% levels within each year. See Appendix A for detailed variable definitions.

Table IA.8
Correlations of firm characteristics with $\tilde{d}$

	1926–1932	1932
Tobin's Q	-0.070	-0.095
	(0.0001)	(0.0306)
log(Assets)	0.196	0.202
	(0.0000)	(0.0000)
Net income/assets	-0.073	-0.102
	(0.0000)	(0.0202)
Cash/assets	-0.190	-0.198
	(0.0000)	(0.0000)
Payout/common stock	-0.081	-0.110
	(0.0000)	(0.0115)
Book leverage	0.124	0.201
	(0.0000)	(0.0000)
Market leverage	0.151	0.305
	(0.0000)	(0.0000)
log(LTL)	0.348	0.358
	(0.0000)	(0.0000)
Corp. bonds/LTL	0.783	0.649
	(0.0000)	(0.0000)
Pref. share/LTL	-0.381	-0.258
	(0.0000)	(0.0000)
Bank debt/LTL	-0.049	-0.046
	(0.0052)	(0.2956)

Notes. This table examines correlations between gold clause exposure $\tilde{d}$ (as defined in equation (2)) and firm characteristics. The first column reports correlations using firm-year observations from the pre-abrogation period (1926–1932). The second column reports correlations using only 1932 observations, the last year before abrogation. All variables are winsorized at the 0.5% and 99.5% levels within each year. p-values are in parentheses.

Table IA.9

Gold clause exposure, investment, and payout by credit rating

	Net investment	Payout	Dividend
	(1)	(2)	(3)
Q	0.096***	0.059*	0.111***
	(0.017)	(0.031)	(0.018)
$\tilde{d}$	−0.043*	0.048	0.024
	(0.021)	(0.047)	(0.025)
Low rating	0.086	−0.333	0.042
	(0.129)	(0.264)	(0.077)
$1926 \times \tilde{d}$	0.051**	0.010	−0.025
	(0.022)	(0.042)	(0.019)
$1927 \times \tilde{d}$	0.016	−0.077	−0.030
	(0.030)	(0.053)	(0.026)
$1928 \times \tilde{d}$	0.013	−0.107	−0.019
	(0.026)	(0.065)	(0.031)
$1929 \times \tilde{d}$	0.008	−0.041	−0.002
	(0.027)	(0.049)	(0.030)
$1930 \times \tilde{d}$	−0.033	−0.054	−0.011
	(0.022)	(0.039)	(0.023)
$1931 \times \tilde{d}$	0.001	0.021**	0.000
	(0.010)	(0.010)	(0.011)
$1933 \times \tilde{d}$	−0.036***	0.033*	0.025*
	(0.012)	(0.016)	(0.014)
$1934 \times \tilde{d}$	−0.047***	0.055**	0.035**
	(0.007)	(0.019)	(0.013)
$1935 \times \tilde{d}$	0.021***	−0.006	0.007
	(0.006)	(0.013)	(0.010)
$1936 \times \tilde{d}$	−0.016**	0.008	0.035
	(0.006)	(0.027)	(0.024)
$1937 \times \tilde{d}$	−0.005	−0.038	−0.005
	(0.014)	(0.030)	(0.028)
$1938 \times \tilde{d}$	0.001	0.015	−0.012
	(0.025)	(0.017)	(0.014)
$1939 \times \tilde{d}$	−0.051***	0.031	−0.015
	(0.014)	(0.018)	(0.018)

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Table IA.9 continued from previous page

	Net investment	Payout	Dividend
	(1)	(2)	(3)
$1940 \times \tilde{d}$	-0.043^{**}	-0.002	-0.017
	(0.014)	(0.017)	(0.023)
1926× Low rating	0.005	0.098^{***}	0.062^{**}
	(0.021)	(0.030)	(0.022)
1927× Low rating	0.016	0.064^{*}	0.016
	(0.024)	(0.030)	(0.019)
1928× Low rating	0.053	0.043	-0.014
	(0.037)	(0.043)	(0.024)
1929× Low rating	0.091^{**}	-0.053	0.022
	(0.036)	(0.067)	(0.020)
1930× Low rating	0.090^{*}	0.031	0.017
	(0.046)	(0.051)	(0.023)
1931× Low rating	-0.007	-0.037^{***}	-0.031^{***}
	(0.016)	(0.010)	(0.007)
1933× Low rating	-0.038^{**}	0.022^{**}	0.013^{**}
	(0.015)	(0.008)	(0.005)
1934× Low rating	0.029^{*}	0.016	0.011^{*}
	(0.016)	(0.010)	(0.006)
1935× Low rating	0.000	-0.036^{*}	0.001
	(0.015)	(0.018)	(0.008)
1936× Low rating	0.042^{**}	0.058^{***}	-0.043^{***}
	(0.017)	(0.018)	(0.014)
1937× Low rating	0.000	0.004	-0.039^{**}
	(0.020)	(0.023)	(0.017)
1938× Low rating	0.025	0.000	0.002
	(0.021)	(0.010)	(0.007)
1939× Low rating	0.053^{***}	-0.028^{*}	-0.019^{*}
	(0.017)	(0.015)	(0.010)
1940× Low rating	0.044^{***}	-0.039^{***}	-0.045^{***}
	(0.014)	(0.012)	(0.012)
$1926 \times \tilde{d}$× Low rating	-0.273^{***}	0.141	-0.016
	(0.091)	(0.204)	(0.084)
$1927 \times \tilde{d}$× Low rating	-0.056	0.285	0.001
	(0.097)	(0.206)	(0.081)

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Table IA.9 continued from previous page

	Net investment	Payout	Dividend	
	(1)	(2)	(3)	
1928 × $\tilde{d}$× Low rating	−0.268	0.483**	0.062	
	(0.192)	(0.214)	(0.082)	
1929 × $\tilde{d}$× Low rating	−0.230**	0.367	−0.032	
	(0.101)	(0.229)	(0.070)	
1930 × $\tilde{d}$× Low rating	−0.388	0.232	−0.060	
	(0.229)	(0.184)	(0.066)	
1931 × $\tilde{d}$× Low rating	−0.071	−0.010	−0.021	
	(0.106)	(0.018)	(0.013)	
1933 × $\tilde{d}$× Low rating	−0.073	−0.025	−0.025	
	(0.047)	(0.027)	(0.019)	
1934 × $\tilde{d}$× Low rating	−0.077	−0.084**	−0.037**	
	(0.052)	(0.032)	(0.016)	
1935 × $\tilde{d}$× Low rating	−0.040	0.082	0.005	
	(0.060)	(0.074)	(0.018)	
1936 × $\tilde{d}$× Low rating	−0.043	0.005	−0.022	
	(0.057)	(0.047)	(0.031)	
1937 × $\tilde{d}$× Low rating	0.064	0.103	−0.043	
	(0.065)	(0.063)	(0.040)	
1938 × $\tilde{d}$× Low rating	−0.080	−0.024	−0.001	
	(0.055)	(0.043)	(0.018)	
1939 × $\tilde{d}$× Low rating	0.024	0.035	0.004	
	(0.054)	(0.056)	(0.026)	
1940 × $\tilde{d}$× Low rating	0.059	−0.010	0.018	
	(0.054)	(0.049)	(0.027)	
Firm FE	Yes	Yes	Yes	
Year FE	Yes	Yes	Yes	
R^2	0.244	0.416	0.789	
Observations	7,074	7,074		7,074

Notes. This table reports results from panel regressions of net investment, equity payout rate, and cash dividends on interactions of individual year indicators with $\tilde{d}$, where 1932 is the omitted year. The net investment regression controls for Q. Low rating is a firm-level dummy variable that is 1 if a firm's bond ratings are Ba or below in 1930. All regressions include firm and year fixed effects. All variables are winsorized at the 0.5% and 99.5% levels within each year. Standard errors in parentheses are two-way clustered by firm and year. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

Table IA.10

Summary statistics for preferred equity and/or bond issuers

Variable	Firms	N	Mean	SD	5%	25%	50%	75%	95%
Panel A: 1926–1932									
Net investment	452	2,408	0.04	0.28	−0.21	−0.04	−0.01	0.06	0.38
Tobin's Q	452	2,408	1.16	0.90	0.42	0.69	0.93	1.31	2.68
log(Assets)	452	2,408	17.21	1.20	15.49	16.39	17.05	17.96	19.31
Net income/assets	452	2,394	0.04	0.08	−0.09	0.00	0.04	0.09	0.16
Cash/assets	452	2,408	0.13	0.12	0.02	0.05	0.10	0.18	0.37
Payout/common stock	452	2,408	0.03	0.59	−0.35	0.00	0.01	0.10	0.33
Book leverage	452	2,408	0.40	0.22	0.09	0.24	0.38	0.53	0.81
Market leverage	452	2,408	0.45	0.27	0.07	0.22	0.42	0.67	0.92
log(LTL)	452	2,408	15.19	3.13	11.56	14.64	15.64	16.71	18.23
Corp. bonds/LTL	452	2,408	0.40	0.40	0.00	0.00	0.32	0.83	1.00
Pref. share/LTL	452	2,408	0.56	0.41	0.00	0.01	0.58	1.00	1.00
Bank debt/LTL	452	2,408	0.01	0.08	0.00	0.00	0.00	0.00	0.01
$\tilde{d}$	452	2,408	0.37	0.40	0.00	0.00	0.25	0.69	1.00
$I_{\tilde{d}>0}$	452	2,408	0.59	0.49	0.00	0.00	1.00	1.00	1.00
Panel B: 1933–1934									
Net investment	366	717	−0.04	0.20	−0.31	−0.07	−0.03	−0.01	0.09
Tobin's Q	366	717	0.84	0.46	0.33	0.57	0.75	1.01	1.74
log(Assets)	366	717	16.98	1.32	15.13	16.00	16.81	17.83	19.17
Net income/assets	366	714	0.02	0.06	−0.08	−0.01	0.02	0.05	0.12
Cash/assets	366	717	0.15	0.13	0.02	0.06	0.11	0.21	0.43
Payout/common stock	366	717	0.07	0.33	−0.02	0.00	0.00	0.05	0.26
Book leverage	366	717	0.43	0.28	0.08	0.23	0.39	0.60	0.91
Market leverage	366	717	0.56	0.29	0.09	0.31	0.58	0.85	0.97
log(LTL)	366	717	14.42	4.29	0.00	14.35	15.39	16.60	18.16
Corp. bonds/LTL	366	717	0.36	0.40	0.00	0.00	0.19	0.69	1.00
Pref. share/LTL	366	717	0.56	0.42	0.00	0.00	0.61	1.00	1.00
Bank debt/LTL	366	717	0.02	0.11	0.00	0.00	0.00	0.00	0.03
$\tilde{d}$	366	717	0.26	0.36	0.00	0.00	0.00	0.51	1.00
$I_{\tilde{d}>0}$	366	717	0.44	0.50	0.00	0.00	0.00	1.00	1.00
Panel C: 1935–1940									
Net investment	355	2,016	0.00	0.13	−0.13	−0.04	−0.01	0.03	0.18
Tobin's Q	355	2,016	1.14	0.64	0.48	0.74	0.97	1.33	2.40
log(Assets)	355	2,016	17.05	1.37	15.14	16.04	16.88	17.98	19.35
Net income/assets	355	2,013	0.05	0.06	−0.05	0.02	0.05	0.08	0.15
Cash/assets	355	2,016	0.15	0.12	0.03	0.07	0.12	0.20	0.39
Payout/common stock	355	2,016	0.11	0.49	−0.09	0.00	0.03	0.12	0.51
Book leverage	355	2,016	0.41	0.25	0.08	0.23	0.37	0.55	0.85
Market leverage	355	2,016	0.44	0.27	0.08	0.20	0.41	0.66	0.91
log(LTL)	355	2,016	13.35	5.65	0.00	13.59	15.25	16.56	18.17
Corp. bonds/LTL	355	2,016	0.30	0.39	0.00	0.00	0.00	0.61	1.00
Pref. share/LTL	355	2,016	0.53	0.44	0.00	0.00	0.58	1.00	1.00
Bank debt/LTL	355	2,016	0.03	0.15	0.00	0.00	0.00	0.00	0.13
$\tilde{d}$	355	2,016	0.26	0.36	0.00	0.00	0.00	0.49	1.00
$I_{\tilde{d}>0}$	355	2,016	0.43	0.50	0.00	0.00	0.00	1.00	1.00

Notes. This table reports summary statistics for publicly traded industrial firms that issued preferred equity and/or corporate bonds, among firms with positive gold clause exposure ($\tilde{d} > 0$). Panel A covers the pre-abrogation period (1926–1932), Panel B the legal uncertainty period (1933–1934), and Panel C the post-resolution period (1935–1940). Long-term liabilities (LTL) are the sum of corporate bonds, preferred shares, and bank debt. All variables are winsorized at the 0.5% and 99.5% levels within each year. See Appendix A for detailed variable definitions.

Table IA.11

Average characteristics for $\tilde{d} = 0$ and $\tilde{d} > 0$ among preferred equity and bond issuers

Variable	$\tilde{d} = 0$	$\tilde{d} > 0$	p-val.
Panel A: 1926–1932			
Net investment	0.02	0.05	0.05
Tobin's Q	1.19	1.14	0.23
log(Assets)	16.89	17.43	0.00
Net income/assets	0.05	0.04	0.01
Cash/assets	0.16	0.12	0.00
Payout/common stock	0.11	−0.02	0.00
Book leverage	0.38	0.42	0.00
Market leverage	0.41	0.48	0.00
log(LTL)	14.59	15.60	0.00
Corp. bonds/LTL	0.11	0.60	0.00
Pref. share/LTL	0.84	0.36	0.00
Bank debt/LTL	0.01	0.01	0.16
$\tilde{d}$	0.00	0.62	0.00
Panel B: 1933–1934			
Net investment	−0.03	−0.05	0.14
Tobin's Q	0.86	0.82	0.31
log(Assets)	16.73	17.30	0.00
Net income/assets	0.02	0.01	0.01
Cash/assets	0.17	0.12	0.00
Payout/common stock	0.10	0.03	0.00
Book leverage	0.39	0.49	0.00
Market leverage	0.50	0.64	0.00
log(LTL)	13.71	15.33	0.00
Corp. bonds/LTL	0.18	0.59	0.00
Pref. share/LTL	0.71	0.36	0.00
Bank debt/LTL	0.03	0.00	0.00
$\tilde{d}$	0.00	0.60	0.00
Panel C: 1935–1940			
Net investment	0.00	-0.00	0.41
Tobin's Q	1.16	1.11	0.07
log(Assets)	16.80	17.38	0.00
Net income/assets	0.06	0.04	0.00
Cash/assets	0.17	0.13	0.00
Payout/common stock	0.15	0.05	0.00
Book leverage	0.38	0.46	0.00
Market leverage	0.39	0.50	0.00
log(LTL)	12.54	14.44	0.00
Corp. bonds/LTL	0.16	0.49	0.00
Pref. share/LTL	0.64	0.38	0.00
Bank debt/LTL	0.03	0.03	0.86
$\tilde{d}$	0.00	0.60	0.00

Notes. This table reports average characteristics for preferred equity and/or bond issuers, split by gold clause exposure ($\tilde{d} = 0$ vs. $\tilde{d} > 0$). Panel A covers 1926–1932, Panel B covers 1933–1934, and Panel C covers 1935–1940. p-values are from two-sample t-tests. All variables are winsorized at the 0.5% and 99.5% levels within each year. See Appendix A for variable definitions.

Table IA.12
Omitting repayers and balanced panels

	Omit repayer (1)	1930–1936 (2)	1929–1940 (3)	1926–1940 (4)
Q	0.085***	0.080***	0.080***	0.075***
	(0.015)	(0.016)	(0.017)	(0.017)
$\tilde{d}$	−0.097**	−0.037	−0.034	−0.069***
	(0.033)	(0.023)	(0.024)	(0.021)
1926 $\times\tilde{d}$	0.057**	0.021	0.002	0.029
	(0.021)	(0.018)	(0.019)	(0.019)
1927 $\times\tilde{d}$	0.026	−0.032	−0.045**	−0.010
	(0.028)	(0.022)	(0.020)	(0.022)
1928 $\times\tilde{d}$	0.061*	0.008	0.002	0.038
	(0.030)	(0.025)	(0.028)	(0.032)
1929 $\times\tilde{d}$	0.046	0.032	0.051*	0.093**
	(0.029)	(0.026)	(0.028)	(0.037)
1930 $\times\tilde{d}$	−0.018	−0.016	−0.033**	−0.023
	(0.022)	(0.018)	(0.015)	(0.016)
1931 $\times\tilde{d}$	0.004	−0.004	0.006	0.015
	(0.014)	(0.009)	(0.010)	(0.013)
1933 $\times\tilde{d}$	−0.068***	−0.035***	−0.025***	−0.032*
	(0.013)	(0.010)	(0.006)	(0.016)
1934 $\times\tilde{d}$	−0.032***	−0.033***	−0.029***	0.005
	(0.011)	(0.006)	(0.007)	(0.010)
1935 $\times\tilde{d}$	0.025**	0.015***	0.018**	0.013
	(0.010)	(0.005)	(0.006)	(0.010)
1936 $\times\tilde{d}$	0.001	−0.009	0.011	0.028
	(0.012)	(0.009)	(0.011)	(0.019)
1937 $\times\tilde{d}$	0.015	0.017	0.021	0.017
	(0.016)	(0.013)	(0.014)	(0.014)
1938 $\times\tilde{d}$	0.000	0.002	0.003	−0.004
	(0.019)	(0.018)	(0.015)	(0.014)
1939 $\times\tilde{d}$	−0.021	−0.019	−0.016	−0.000
	(0.015)	(0.011)	(0.012)	(0.012)
1940 $\times\tilde{d}$	−0.005	−0.008	0.004	0.003
	(0.016)	(0.012)	(0.011)	(0.015)
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
R^2	0.221	0.211	0.220	0.189
Observations	5,572	6,064	5,435	3,630

Notes. This table reports results from panel regressions of net investment on Q, gold clause exposure $\tilde{d}$, and year $\times\,\tilde{d}$ interactions, where 1932 is the omitted category. Column 1 excludes firms that repaid all of their gold clause debt anytime from 1931 to 1935. Columns 2–4 restrict the sample to balanced panels of firms with observations in each year for 1930–1936, 1929–1940, and 1926–1940, respectively. All regressions include firm and year fixed effects. All variables are winsorized at the 0.5% and 99.5% levels within each year. Standard errors in parentheses are two-way clustered by firm and year. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

Table IA.13

Gold clause exposure and investment by firm size, cash, and book leverage

	Small (1)	Low cash (2)	High leverage (3)
Q	0.095***	0.096***	0.097***
	(0.017)	(0.017)	(0.017)
$\tilde{d}$	0.017	−0.033	−0.046**
	(0.029)	(0.029)	(0.021)
$\tilde{d} \times$ I	−0.104***	−0.033	0.004
	(0.032)	(0.080)	(0.075)
1933 × I	−0.005	−0.088***	−0.057
	(0.020)	(0.023)	(0.043)
1934 × I	−0.004	0.014	−0.037
	(0.018)	(0.016)	(0.036)
After × I	−0.004	−0.016	−0.024
	(0.018)	(0.018)	(0.032)
1933 $\times\tilde{d}$	−0.053**	−0.096***	−0.043**
	(0.024)	(0.027)	(0.020)
1934 $\times\tilde{d}$	−0.013	−0.052**	−0.037***
	(0.022)	(0.020)	(0.012)
After $\times\tilde{d}$	−0.023	−0.024	0.007
	(0.023)	(0.020)	(0.016)
1933 $\times\tilde{d} \times$ I	−0.017	0.103**	−0.027
	(0.041)	(0.045)	(0.065)
1934 $\times\tilde{d} \times$ I	−0.055*	0.011	−0.001
	(0.031)	(0.035)	(0.053)
After $\times\tilde{d} \times$ I	0.026	0.042	−0.026
	(0.028)	(0.038)	(0.042)
Firm FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
R^2	0.240	0.239	0.239
Observations	7,074	7,074	7,074

Notes. This table tests whether debt overhang effects vary by firm characteristics. It reports results from panel regressions of net investment on Q, gold clause exposure $\tilde{d}$, period $\times$ $\tilde{d}$ interactions, and triple interactions with a firm characteristic indicator I, where the pre-abrogation period (1926–1932) is the omitted category. In column 1, I equals one if a firm has below-median asset size among $\tilde{d} > 0$ firms in 1930. In column 2, I equals one if a firm has below-median cash/assets among $\tilde{d} > 0$ firms in 1930. In column 3, I equals one if a firm has above-median book leverage among $\tilde{d} > 0$ firms in 1930. All regressions include firm and year fixed effects. All variables are winsorized at the 0.5% and 99.5% levels within each year. Standard errors in parentheses are two-way clustered by firm and year. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

Table IA.14

Quarter-specific dividend regressions (annual specification)

	Annual (1)	Q1 (2)	Q2 (3)	Q3 (4)	Q4 (5)
Q	0.111***	0.023***	0.025***	0.028***	0.035***
	(0.018)	(0.004)	(0.003)	(0.004)	(0.005)
$\tilde{d}$	0.022	−0.000	0.003	0.003	0.016**
	(0.027)	(0.008)	(0.007)	(0.007)	(0.007)
$1926 \times \tilde{d}$	−0.010	0.001	−0.003	−0.002	−0.008
	(0.030)	(0.008)	(0.008)	(0.008)	(0.009)
$1927 \times \tilde{d}$	−0.023	0.003	−0.002	−0.004	−0.021**
	(0.037)	(0.011)	(0.010)	(0.009)	(0.009)
$1928 \times \tilde{d}$	−0.012	0.000	0.000	−0.002	−0.019*
	(0.038)	(0.009)	(0.009)	(0.008)	(0.010)
$1929 \times \tilde{d}$	0.005	0.001	−0.005	0.003	−0.010
	(0.039)	(0.009)	(0.009)	(0.009)	(0.010)
$1930 \times \tilde{d}$	−0.008	0.005	−0.005	−0.002	−0.009
	(0.030)	(0.010)	(0.008)	(0.007)	(0.008)
$1931 \times \tilde{d}$	−0.016	0.003	−0.002	−0.007	−0.015***
	(0.015)	(0.006)	(0.005)	(0.005)	(0.005)
$1933 \times \tilde{d}$	0.028**	0.010*	0.010***	0.003	0.001
	(0.011)	(0.005)	(0.004)	(0.002)	(0.003)
$1934 \times \tilde{d}$	0.036**	0.011**	0.010**	0.005**	0.001
	(0.015)	(0.005)	(0.004)	(0.002)	(0.006)
$1935 \times \tilde{d}$	0.008	0.009*	0.002	0.002	−0.013**
	(0.017)	(0.005)	(0.004)	(0.004)	(0.005)
$1936 \times \tilde{d}$	0.015	0.005	0.006	0.003	−0.008
	(0.029)	(0.005)	(0.006)	(0.006)	(0.019)
$1937 \times \tilde{d}$	−0.024	−0.000	0.003	−0.007	−0.026*
	(0.032)	(0.007)	(0.007)	(0.009)	(0.015)
$1938 \times \tilde{d}$	−0.012	−0.002	0.001	−0.002	−0.022***
	(0.020)	(0.006)	(0.005)	(0.004)	(0.007)
$1939 \times \tilde{d}$	−0.022	0.001	−0.001	−0.003	−0.030***
	(0.024)	(0.006)	(0.005)	(0.005)	(0.010)
$1940 \times \tilde{d}$	−0.033	0.003	−0.005	0.000	−0.039***
	(0.029)	(0.007)	(0.006)	(0.006)	(0.014)
Firm FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
R^2	0.788	0.747	0.767	0.779	0.690
Observations	7,074	6,935	6,993	7,029	7,048

Notes. This table reports results from panel regressions of cash dividends on Q, gold clause exposure $\tilde{d}$, and year $\times$ $\tilde{d}$ interactions, where 1932 is the omitted category. Column 1 replicates the annual dividend specification (Table 5, column 2). Columns 2–5 use the same specification but restrict the sample to firm-years with data from Q1, Q2, Q3, or Q4 only; the dependent variable is quarterly cash dividend (sum of monthly dividends in that quarter) normalized by book common stock. All regressions include firm and year fixed effects. Standard errors in parentheses are clustered by firm. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

Table IA.15

Additional analysis on dividends

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
$1933 \times \tilde{d}$	0.064***	0.002	0.081***	0.004	−0.001	0.037*	0.031*	0.517*
	(0.018)	(0.007)	(0.020)	(0.014)	(0.011)	(0.018)	(0.016)	(0.243)
$1934 \times \tilde{d}$	0.083***	0.018*	0.080***	0.022	0.186***	0.050**	0.027	0.341
	(0.024)	(0.009)	(0.023)	(0.015)	(0.056)	(0.017)	(0.015)	(0.208)
After $\times \tilde{d}$	−0.011	0.010	0.017	−0.009	0.020	0.025	0.025	0.382
	(0.029)	(0.007)	(0.034)	(0.014)	(0.035)	(0.020)	(0.017)	(0.271)
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R^2	0.800	0.437	0.802	0.456	0.202	0.140	0.152	0.183
Observations	4,367	2,594	2,967	3,878	6,063	7,073	7,066	4,807

Notes. This table tests the robustness of the dividend results to sample restrictions and alternative dependent variable definitions. It reports results from panel regressions of dividends on gold clause exposure $\tilde{d}$, and period $\times$ $\tilde{d}$ interactions, where the pre-abrogation period (1926–1932) is the omitted category. Columns 1–4 use cash dividends normalized by fixed capital in 1930 as the dependent variable: column 1 (2) includes firm-year observations where a firm paid a positive (zero) amount of cash dividends in the previous year; column 3 (4) includes firms that paid a positive (zero) amount of cash dividends in 1932. Columns 5–8 use the full sample with alternative dependent variable definitions: column 5 uses annual dividend growth (set to zero if dividends are zero in both years); column 6 uses dividends divided by lagged book equity; column 7 uses dividends divided by market capitalization in 1930; column 8 uses dividends as a share of net income for firms with positive net income exceeding the dividend. All regressions include firm and year fixed effects. All variables are winsorized at the 0.5% and 99.5% levels within each year. Standard errors in parentheses are two-way clustered by firm and year. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

Table IA.16

Gold clause exposure at the extensive margin and investment

	(1)	(2)	(3)
Q	0.096***	0.096***	0.096***
	(0.017)	(0.017)	(0.017)
$(\tilde{d} > 0)$	−0.039*	−0.034	−0.035*
	(0.019)	(0.019)	(0.019)
$(\tilde{d} > \tilde{d}_0.5)$		−0.009	−0.022
		(0.014)	(0.016)
$(\tilde{d} > \tilde{d}_0.75)$			0.021
			(0.022)
1933 $\times(\tilde{d} > 0)$	−0.045***	−0.034*	−0.035*
	(0.012)	(0.017)	(0.017)
1934 $\times(\tilde{d} > 0)$	−0.029***	−0.025*	−0.026*
	(0.009)	(0.013)	(0.013)
After $\times(\tilde{d} > 0)$	−0.007	−0.006	−0.006
	(0.008)	(0.012)	(0.012)
1933 $\times(\tilde{d} > \tilde{d}_0.5)$		−0.022	−0.007
		(0.018)	(0.032)
1934 $\times(\tilde{d} > \tilde{d}_0.5)$		−0.007	0.018
		(0.014)	(0.025)
After $\times(\tilde{d} > \tilde{d}_0.5)$		−0.002	0.003
		(0.009)	(0.018)
1933 $\times(\tilde{d} > \tilde{d}_0.75)$			−0.030
			(0.037)
1934 $\times(\tilde{d} > \tilde{d}_0.75)$			−0.055
			(0.036)
After $\times(\tilde{d} > \tilde{d}_0.75)$			−0.004
			(0.033)
Firm FE	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
R^2	0.239	0.239	0.239
Observations	7,074	7,074	7,074

Notes. This table tests whether debt overhang effects operate at the extensive margin (any gold clause exposure versus none) and whether effects vary with exposure intensity. It reports results from panel regressions of net investment on Q, indicator variables for gold clause exposure, and period $\times$ indicator interactions, where the pre-abrogation period (1926–1932) is the omitted category. Column 1 uses a single indicator ($\tilde{d} > 0$). Column 2 adds an indicator for above-median exposure ($\tilde{d} > \tilde{d}_{0.50}$). Column 3 further adds an indicator for the top quartile ($\tilde{d} > \tilde{d}_{0.75}$), where $\tilde{d}_{0.50}$ and $\tilde{d}_{0.75}$ are the 50th and 75th percentiles of $\tilde{d}$ among firms with positive exposure. All regressions include firm and year fixed effects. All variables are winsorized at the 0.5% and 99.5% levels within each year. Standard errors in parentheses are two-way clustered by firm and year. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

Table IA.17

Gold clause exposure and investment with return-based controls

	(1)	(2)	(3)	(4)	(5)	(6)
Q	0.096***	0.095***	0.096***	0.096***	0.096***	0.095***
	(0.019)	(0.017)	(0.017)	(0.016)	(0.017)	(0.017)
$\tilde{d}$	−0.046*	−0.046*	−0.047**	−0.046*	−0.048*	−0.046*
	(0.022)	(0.022)	(0.020)	(0.022)	(0.023)	(0.022)
1933 $\times\tilde{d}$	−0.033*	−0.058***	−0.077***	−0.066***	−0.060***	−0.050***
	(0.017)	(0.015)	(0.016)	(0.015)	(0.016)	(0.012)
1934 $\times\tilde{d}$	−0.022	−0.042***	−0.046***	−0.043***	−0.044***	−0.037***
	(0.017)	(0.011)	(0.012)	(0.011)	(0.010)	(0.011)
After $\times\tilde{d}$	0.007	−0.008	−0.011	−0.006	−0.007	−0.003
	(0.017)	(0.012)	(0.011)	(0.012)	(0.011)	(0.012)
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry-year FE	No	Yes	Yes	Yes	Yes	Yes
R^2	0.250	0.240	0.242	0.241	0.241	0.241
Observations	7,033	7,074	7,074	7,074	7,074	7,074

Notes. This table tests whether the effect of gold clause exposure on investment is robust to controlling for equity return characteristics. It reports results from panel regressions of net investment on Q, gold clause exposure $\tilde{d}$, and period $\times$ $\tilde{d}$ interactions, where the pre-abrogation period (1926–1932) is the omitted category. Column 1 includes all controls from Column 2 of Table 7 as well as equity return average and volatility, and Fama-French betas from the three-factor model computed using daily data. Columns 2–6 use a non-parametric approach: each column includes decile dummies for a return-based characteristic measured in 1930 interacted with year indicators, along with SIC2 industry-year fixed effects. All regressions include firm fixed effects. All variables are winsorized at the 0.5% and 99.5% levels within each year. Standard errors in parentheses are two-way clustered by firm and year. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

Table IA.18

Aggregated investment effects with heterogeneous marginal effects

	1933	1934	After
Panel A: All firms			
Gold clause effect in % (baseline)	-1.79	-1.23	-0.15
Gold clause effect in % (with rating)	-1.40	-1.74	-0.49
Gold clause effect in % (with size)	-1.54	-0.45	-0.54
Panel B: $\tilde{d} > 0$ firms			
Gold clause effect in % (baseline)	-3.27	-2.18	-0.28
Gold clause effect in % (with rating)	-2.56	-3.08	-0.90
Gold clause effect in % (with size)	-2.82	-0.80	-0.99

Notes. This table extends the aggregation in Table 8 by allowing for heterogeneous marginal effects of gold clause exposure across firm subgroups. Rows labeled "with rating" allow the marginal effect to differ between high-rated and low-rated firms (Ba or below in 1930), using coefficients from Table 6. Rows labeled "with size" allow the marginal effect to differ between large and small firms (above and below median assets). The baseline row reproduces the uniform-effect estimates from Table 8 for comparison. "After" denotes the post-resolution period (1935–1940). See Section 5.6 for details.

Table IA.19

Gold clause exposure and net investment with controls: industry-year fixed effects

	All controls linear (1)	Q deciles (2)	Assets deciles (3)	NI/assets deciles (4)	Cash/assets deciles (5)	Payout deciles (6)	Book leverage deciles (7)	Market leverage deciles (8)	LT lia. deciles (9)
Q	0.093***	0.092***	0.090***	0.092***	0.091***	0.092***	0.090***	0.091***	0.090***
	(0.019)	(0.019)	(0.017)	(0.018)	(0.017)	(0.018)	(0.017)	(0.018)	(0.017)
$\tilde{d}$	−0.059**	−0.062***	−0.061***	−0.058***	−0.063***	−0.065***	−0.060***	−0.060***	−0.061**
	(0.022)	(0.019)	(0.019)	(0.019)	(0.020)	(0.020)	(0.018)	(0.019)	(0.020)
$1933 \times \tilde{d}$	−0.028*	−0.049**	−0.056**	−0.055**	−0.028*	−0.050***	−0.058***	−0.049**	−0.043**
	(0.014)	(0.019)	(0.019)	(0.019)	(0.016)	(0.014)	(0.019)	(0.018)	(0.016)
$1934 \times \tilde{d}$	−0.012	−0.024	−0.031*	−0.030	−0.024	−0.031**	−0.017	−0.017	−0.018
	(0.016)	(0.015)	(0.015)	(0.025)	(0.016)	(0.015)	(0.017)	(0.016)	(0.016)
After $\times \tilde{d}$	0.003	−0.004	−0.006	−0.002	−0.004	−0.010	−0.008	−0.004	−0.003
	(0.018)	(0.017)	(0.017)	(0.026)	(0.016)	(0.015)	(0.020)	(0.019)	(0.018)
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	No	No	No	No	No	No	No	No	No
Industry-year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	6,990	7,015	7,015	7,015	7,015	7,015	7,015	7,015	7,015

Notes. This table replicates columns 2–10 of Table 7 replacing firm and year fixed effects (`absorb(permno year)`) with firm and industry-year fixed effects (`absorb(permno sic2_year)`), so that all specifications share the same fixed-effect structure as column 1 of Table 7. The characteristic-interacted controls are identical to those in Table 7: column (1) includes all 1930 firm characteristics interacted with year indicators as linear controls; columns (2)–(9) each include decile dummies for a single 1930 characteristic interacted with year indicators. All regressions include firm and SIC2 industry-year fixed effects. All variables are winsorized at the 0.5% and 99.5% levels within each year. Standard errors in parentheses are two-way clustered by firm and year. $^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$.

IA.1 Stock market responses to other legal and political events

The event-study evidence in the main text (Table 1 and Figures 3–5) focuses on the three events that resolved the largest amount of uncertainty about the abrogation: the Joint Resolution, the Supreme Court oral arguments, and the Supreme Court decision. The litigation, however, involved a number of intermediate legal steps. This section examines the stock market response to each of them: the first court hearing on the enforceability of gold clauses (May 22–24, 1933); the first federal ruling upholding the constitutionality of the Joint Resolution (*In re Missouri Pacific R. Co.*, E.D. Mo., June 20, 1934); the New York Court of Appeals' affirmance of *Norman v. Baltimore & Ohio R. Co.* (July 3, 1934); and the Supreme Court's grants of certiorari (October 8 and November 5, 1934). We also examine the November 6, 1934 midterm election.

Table IA.20 reports, for each event window, the raw market return and the cumulative abnormal returns of the gold-exposed and non-exposed equal-weighted portfolios, using the same portfolio construction, pre-abrogation estimation window, and CAR methodology as Table 1 in the main text. Two results stand out.

First, *none of the intermediate judicial events produced a significant differential response* between gold-exposed and non-exposed firms. The differential is +0.7 percentage points around the first hearing, −0.9 around *In re Missouri Pacific*, +0.4 around the *Norman* affirmance, and +0.6 around the first certiorari grant—each small relative to the variability of the daily differential in calm periods. This pattern is consistent with these procedural steps being largely anticipated: both lower-court rulings confirmed the legal status quo (every court to consider the question in 1933–34 upheld the Joint Resolution), so they conveyed little news about the abrogation's ultimate fate. By contrast, the events that carried genuine constitutional and political news—the Joint Resolution itself and the Supreme Court endgame—are precisely where the differential responses appear. We view this as reinforcing the event selection in the main text.

Second, the one exception is the November 1934 window, in which the gold-exposed portfolio earned a cumulative abnormal return 3.1 percentage points above the non-exposed portfolio. This window, however, mixes three tightly interleaved events: the certiorari grant in *United States v. Bankers Trust Co.* on Monday, November 5 (which the government itself had sought, accelerating final resolution); the midterm election on Tuesday, November 6, for which the New York Stock Exchange was closed; and the first trading on the election result on Wednesday, November 7. The Democratic landslide—the president's party gained seats in both chambers, an exceptional midterm outcome—was widely read as a popular ratification of the New Deal, and plausibly raised the perceived durability of the abrogation. Figure IA.3 plots the four portfolio series around this window: the differential opens over November 5–7 and does not subsequently revert, consistent with a genuine repricing rather than a transitory movement. Because the certiorari grant and the election cannot be separated within the window, and because this event was identified in the course of our analysis rather than specified ex ante, we report it here as corroborating evidence rather than as a main result.

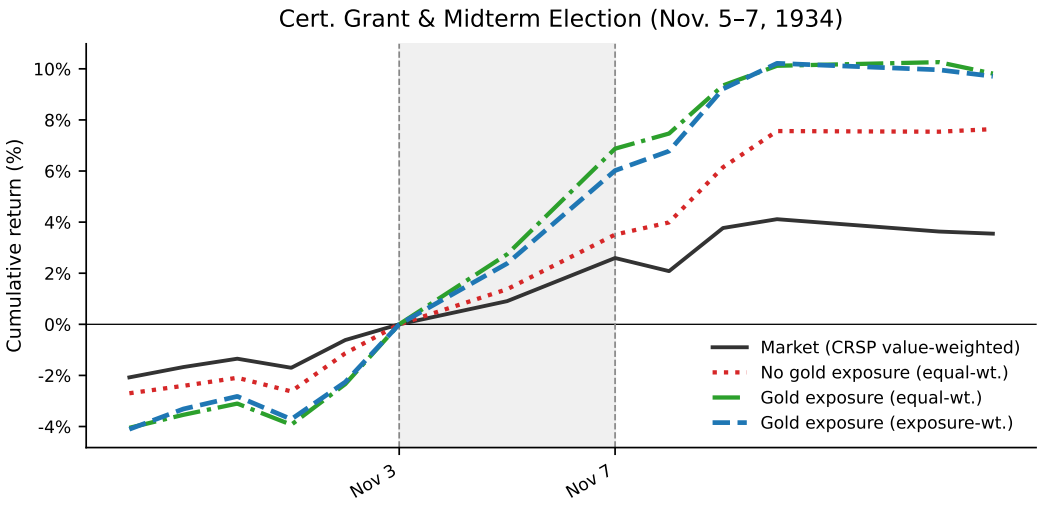
Table IA.20

Stock market responses to other legal and political events

Event	Dates	Days	Market	CAR (equal-wt.) Gold	CAR (equal-wt.) No gold	Diff.	t
First gold-clause hearing (Irving Trust)	May 22–24, 1933	3	+5.5%	+2.8%	+2.1%	+0.7%	0.9
In re Missouri Pacific ruling	June 20–22, 1934	3	-3.8%	-2.1%	-1.2%	-0.9%	-1.0
Norman affirmed (N.Y. Ct. App.)	July 3–6, 1934	3	+2.2%	-0.1%	-0.5%	+0.4%	0.5
Cert. granted, *Norman*	Oct. 8–10, 1934	3	+0.7%	+1.1%	+0.5%	+0.6%	0.7
Cert. granted & midterm election	Nov. 5–8, 1934	3	+2.1%	+5.1%	+2.0%	+3.1%	3.6
Joint Resolution (reference)	May 26–June 6, 1933	9	+12.1%	+15.8%	+12.7%	+3.1%	2.1

Notes. This table reports stock market responses to the intermediate legal and political events of the gold clause litigation, using the same portfolios, estimation window, and CAR methodology as Table 1 in the main text. "Diff." is the difference between the cumulative abnormal returns of the gold-exposed and non-exposed equal-weighted portfolios. The t-statistic scales this difference by $\hat{\sigma}\sqrt{h}$, where h is the number of trading days in the window and $\hat{\sigma} = 0.50$ percentage points is the standard deviation of the daily abnormal-return differential over calm trading days in 1934 (excluding the event windows in this table). The Irving Trust hearing (May 22–24, 1933) was the first court hearing on the enforceability of gold clauses. *In re Missouri Pacific* (E.D. Mo., June 20, 1934) was the first federal ruling upholding the constitutionality of the Joint Resolution; the New York Court of Appeals affirmed *Norman v. Baltimore & Ohio R. Co.* on July 3, 1934. Certiorari was granted in *Norman* on October 8, 1934 and in *United States v. Bankers Trust Co.* on November 5, 1934; the New York Stock Exchange was closed on November 6, 1934 for the midterm election, so the November window mixes the certiorari grant with the election result. The Joint Resolution window from Table 1 is repeated for reference.

Figure IA.3. Stock market response around the certiorari grant and the 1934 midterm election



Notes. Cumulative returns for the CRSP value-weighted market index (black solid), the equal-weighted portfolio of firms without gold-clause exposure (red dotted), the equal-weighted portfolio of firms with gold-clause exposure (green dash-dotted), and the gold-exposure-weighted portfolio (blue dashed), normalized to zero at the close of Saturday, November 3, 1934. The shaded region spans the certiorari grant in *United States v. Bankers Trust Co.* (Monday, November 5) through the first trading day after the midterm election (Wednesday, November 7); the exchange was closed on election day, November 6. Firms are classified by the gold-clause exposure measure d_j defined in equation (1); the exposure-weighted portfolio weights each firm by $w_j = d_j / \sum_k d_k$.