

ADVANCES IN TAXATION

Edited by John Hasseldine

ADVANCES IN TAXATION

VOLUME 27

ADVANCES IN TAXATION

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ADVANCES IN TAXATION
VOLUME 27

ADVANCES IN TAXATION

EDITED BY

JOHN HASSELDINE

University of New Hampshire, USA



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ABOUT THE EDITOR

Since 2011, Dr. John Hasseldine has been a Professor of Accounting and Taxation in the Peter T. Paul College of Business and Economics at the University of New Hampshire. Previously he was a Chair and Head of the Accounting and Finance Department at the University of Nottingham Business School. John, a Kiwi, qualified as a chartered accountant in New Zealand and is a Fellow of the Association of Chartered Certified Accountants based in London.

John has served on three government committees in the United Kingdom and was a contributor to the Mirrlees Review of the U.K. tax system conducted by the Institute of Fiscal Studies. He has been an external expert at the International Monetary Fund, a visiting professor at the University of New South Wales, Sydney, and a keynote speaker at several international tax conferences. He travels widely, speaking at national and global conferences, including one on VAT organized by the OECD, World Bank, and IMF, and a conference on dealing with the national tax gap held at the US Library of Congress in Washington DC. He is a coauthor of *Comparative Taxation: Why Tax Systems Differ* (Fiscal Publications, 2017), and an International Fellow at the University of Exeter Tax Administration Research Centre.

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INTRODUCTION

Tax researchers have an important role to play in conducting and publishing rigorous quality research in the uncertain times facing the world's tax systems. There are many research questions to be addressed and *Advances in Taxation* invites submissions on a broad range of tax topics. I wish to thank the editorial board for their continued support. They have been called upon to promote *Advances in Taxation* and to engage in the reviewing process. And, importantly, I am also pleased to thank the 12 ad hoc expert reviewers listed below for their valuable and timely reviewing activity during 2019–2020.

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In Volume 27, there are 7 chapters. In the lead chapter, Kirsten Cook, Tao Ma, and Eddie Zhao examine how creditor interventions after debt covenant violations affect corporate tax avoidance. Using a regression discontinuity design, they find that creditor interventions increase borrowers' tax avoidance. This effect is concentrated among firms with weaker shareholder governance before creditor interventions and among those with less bargaining power during subsequent debt renegotiations.

Next, Tanyi, Klaus, and Burton examine the relationship between tax-related accounting misstatements and changes in the uncertain tax benefits accrual account in the year of the disclosure of a misstatement. They find that the disclosure of a tax-related misstatement is associated with an increase in unrecognized tax benefits during that year and show that this increase in the year of disclosure is from uncertain tax positions taken in prior periods. In the third chapter, Zhao, Filbeck, and Deshmukh examine the moderating effect of

financial statement readability on share repurchases in response to a temporary reduction in repatriation tax. They find that firms with less readable financial statements initiated higher levels of share repurchases after the American Jobs Creation Act and provide timely evidence of potential firm response to the 2017 Tax Cut and Jobs Act.

In Chapter 4, Kirkpatrick and Radicic investigate the impact of tax planning activities on the firm value of FTSE100 firms. Their results suggest that tax planning activity by U.K. firms has a negative impact on firm value. Then in a separate U.K. based study, Sutcliffe and Platanakis estimate the tax and national insurance contribution (NIC) effects of a pension scheme's change from final salary to career average revalued earnings on the gross and net wealth of the sponsor, government, and 16 age cohorts of members, deferred pensioners, and pensioners. They also measure the size of the 12 income tax and NIC payments and reliefs for new members and the sponsor, before and after the rule changes.

The final two chapters in this volume have a behavioral research focus. Walton and Killey employ an experimental design to investigate the effect of disclosure availability and content on nonprofessional investor judgments in the context of public country-by-country reporting. They find that participants receiving an expanded disclosure are able to more accurately assess the state of the social contract between the organization and society, imposing sanctions if necessary. Lastly, Zhang, Smith, and Gouldman examine three individual values on the willingness to pay and perceived fairness of use tax on Internet purchases. They find that while a strong sense of national identity is significantly correlated with fairness perceptions of use tax, it is not significantly related to perception of willingness to pay use tax, suggesting that taxpayers with a high level of religiosity are more willing to pay use tax, although they do not perceive the use tax to be fair.

John Hasseldine
Editor, *Advances in Taxation*

DO CREDITORS INFLUENCE CORPORATE TAX PLANNING? EVIDENCE FROM LOAN COVENANTS

Kirsten Cook, Tao Ma and Yijia (Eddie) Zhao

ABSTRACT

This study examines how creditor interventions after debt covenant violations affect corporate tax avoidance. Using a regression discontinuity design, we find that creditor interventions increase borrowers' tax avoidance. This effect is concentrated among firms with weaker shareholder governance before creditor interventions and among those with less bargaining power during subsequent debt renegotiations. Our results indicate that creditors play an active role in shaping corporate tax policy outside of bankruptcy.

Keywords: Covenant violation; creditor intervention; tax avoidance; effective tax rates; regression discontinuity design; shareholder governance; bargaining power

INTRODUCTION

While much research has examined the effect of shareholder–manager conflicts on firms' tax avoidance (e.g., [Armstrong, Blouin, Jagolinzer, & Larcker, 2015](#); [Desai & Dharmapala, 2006](#)), the effect that conflicts between managers and creditors have on firms' tax avoidance is not clear. In particular, how creditors' control rights affect borrowers' tax avoidance is unknown. In this chapter, we exploit the discreet nature of debt covenant violations to examine how creditor interventions after covenant violations affect corporate tax avoidance. This study is among the first empirical investigations to shed light on how creditor control

rights outside of bankruptcy impact firms' real decision-making regarding tax avoidance.¹ We contribute to the tax avoidance literature, which has called for more empirical research on the role that creditors play in shaping corporate tax planning (Gallemore, Gipper, & Maydew, 2018; Hanlon & Heitzman, 2010).

Managers and creditors may differ in their preferences for tax avoidance. First, shirking managers may prefer a lower level of tax avoidance because tax strategies require considerable effort to design and implement (Armstrong et al., 2015; Blaylock, 2016), particularly if such effort (or lack thereof) is unobservable to outsiders. Second, prior studies view corporate tax avoidance as the trade-off between direct tax savings and agency costs arising from the opaque nature of many tax reduction activities (Chen & Chu, 2005; Crocker & Slemrod, 2005; Desai & Dharmapala, 2006). While tax avoidance yields direct cash tax savings (Goh, Lee, Lim, & Shevlin, 2016), it also induces managerial rent diversion and information hoarding (Kim, Li, & Zhang, 2011).² In particular, as tax-avoiding activities may be executed in a clandestine way, managers could take advantage of reduced tax liabilities for their private benefits at the expense of shareholders. As such, firms may prefer a lower level of tax avoidance to minimize the agency costs (Desai & Dharmapala, 2006).

In contrast, creditors may prefer a higher level of tax avoidance. Cash tax savings from tax avoidance can improve borrowers' solvency and secure expected payments to creditors. Moreover, creditors' enhanced monitoring can mitigate managerial rent extraction associated with tax avoidance, which is also harmful to creditors. In non-tax settings, both Nini, Smith, and Sufi (2012) and Ferreira, Ferreira, and Mariano (2018) report that management turnover increases significantly after covenant violations. Others also find that creditor interventions improve corporate governance and enhance firm value (Chava & Roberts, 2008; Ersahin, Irani, & Le, 2016; Nini et al., 2012; Tan, 2013). Hence, creditors have strong incentives to minimize value-decreasing agency problems arising from tax avoidance and thus prefer a higher level of tax avoidance to enhance after-tax cash flow.

Nevertheless, theory also suggests that creditors may discourage borrowers from undertaking overly aggressive forms of tax avoidance. Aggressive tax avoidance activities could enhance the manager's ability to withhold bad news for extended periods. As banks are particularly keen on timely disclosure of bad news, they are concerned with the "bad news hoarding" behavior accompanying aggressive tax avoidance activities. Further, aggressive tax avoidance could increase IRS audit risk, which potentially leads to higher litigation costs and reputation damage (see, e.g., Mills, 1998; Mills, Erickson, & Maydew, 1998;

¹Consistent with Hanlon and Heitzman (2010, p. 137), we use the term "tax avoidance" to mean a reduction in explicit taxes. Accordingly, tax avoidance activities are those that generate cash tax savings. We use terms such as "tax avoidance," "tax planning," and "tax reduction" interchangeably.

²When detected, aggressive tax avoidance (e.g., sheltering) could also lead to severe penalties from tax authorities (e.g., Hanlon & Slemrod, 2009; Hoi, Wu, & Zhang, 2013; Wilson, 2009).

Mills & Sansing, 2000). Therefore, aggressive tax planning hampers lenders' direct monitoring as it increases information opaqueness and increases regulatory reputational costs that may outweigh the benefit of tax savings.

Covenant violations offer a unique empirical setting to examine creditors' influence on tax avoidance. First, covenants are ubiquitous in debt contracts, and violations of covenants are common (Chava & Roberts, 2008; Nini et al., 2012). With the threat of immediate repayment and termination of lending commitments after covenant violations, creditors can effectively discipline managers and influence firms' real decisions. Second, the treatment assignment (i.e., creditor intervention) is solely determined by whether or not an observed accounting variable exceeds a prespecified cutoff point, which is clearly stated in the loan contract. Following recent studies (e.g., Nini et al., 2012; Roberts & Sufi, 2009a; Tan, 2013; Vashishtha, 2014), we exploit the discrete shift in creditor control rights around a covenant violation and employ a quasi-discontinuity research design to assess the impact of creditor interventions on tax avoidance.

Following Goh et al. (2016) and Shevlin (2016), we use both cash and GAAP effective tax rates (ETRs) to gauge tax avoidance. Using a large sample of covenant violations of US public firms between 1996 and 2007, we find strong evidence that firms increase tax avoidance after a violation of debt covenants. Economically, our estimates suggest that, ceteris paribus, a violating firm's cash ETR is lower by about 3%. The baseline findings are also fully retained when we use alternative ETR and book-tax difference measures of tax avoidance.

In addition, we extract detailed covenant threshold information from LPC Dealscan and compare tax avoidance between firms with accounting ratios just below the cutoff (control firms with no intervention triggered) and those just above the cutoff (treatment firms with intervention triggered). Using a sharp regression discontinuity design (RDD), we continue to find evidence corroborating our baseline results. Our results are also robust to a subsample test with covenant violating firms only as well as to a propensity score matching (PSM) test.³

We explore the heterogeneity in firms' existing governance environment to shed light on the underlying channels conducive to the increased tax avoidance. As creditor interventions mitigate managerial rent extraction arising from tax avoidance, we expect the impact of creditor interventions on tax avoidance to be more pronounced among firms that have weak corporate governance prior to violations, where agency costs likely outweigh the benefits of tax avoidance to shareholders. Specifically, we posit that a firm with weak shareholder governance

³Proximity to covenant violation may give firms a stronger incentive to engage in earnings management (Franz, HassabElnaby, & Lobo, 2014; Kim, Lisic, & Pevzner, 2011). Jha (2013) shows that, while managers manage earnings upward in the quarters preceding a debt covenant violation, they manage earnings *downward* in the quarter a violation occurs and continue to do so while the firm remains in violation. Therefore, the lowered ETRs are unlikely to be a result of upward earnings management that may not lead to tax savings. Please refer to Section 5 for further discussion on the effect of earnings management.

before a violation would experience a larger increase in tax avoidance after a creditor intervention.

Empirically, we find strong support for this prediction. Using the G-Index and institutional ownership as proxies for ex ante corporate governance, we find that violators with weak governance increase tax avoidance more following creditor interventions. This finding further supports the argument that high agency costs of tax avoidance deter firms from undertaking tax avoidance, and, after creditor interventions, tax avoidance increases significantly for those firms that were poorly governed.

In addition, we find that the effectiveness of creditor intervention in increasing tax avoidance depends on the relative bargaining power between the firm and its lender. In particular, we explore the cross-sectional variation in violators' bargaining power during debt renegotiations following a covenant violation.⁴ The relationship banking literature suggests that some firms establish lending relationships with multiple banks to avoid the "lock-in" problem associated with the exclusive bank relationship and to gain bargaining power in loan negotiations (e.g., [Detragiache, Garella, & Guiso, 2000](#); [Ioannidou & Ongena, 2010](#)).⁵ Upon a covenant violation, a firm with multiple established bank relationships could turn to other lenders for capital. The ability to switch lenders makes the incumbent bank's intervention less effective. Consistent with this notion, we use the number of banks from which a firm obtains loans in the past five years as a proxy for the firm's bank dependence and thus its bargaining power. We find that the increase in tax avoidance is more pronounced when the borrower has an inferior bargaining position (i.e., having fewer relationship banks in the past). This result suggests that the effectiveness of creditor governance also relies on lenders' relative bargaining power.

Finally, turning to the more aggressive and riskier end of the spectrum of tax avoidance, we find that creditor interventions have a mitigating effect on aggressive tax avoidance ([Hanlon & Heitzman, 2010](#); [Shevlin, 2016](#)). Using the sheltering probability estimated according to [Wilson \(2009\)](#) and [Lisowsky \(2010\)](#)

⁴The literature suggests that a majority of, if not all, violations are related to private bank debt. While the original covenant violation data from [Nini et al. \(2012\)](#) do not distinguish between covenant violations related to private debt (bank loans) and those related to public debt (bonds), the literature suggests that covenant violations are much more frequent on bank debt. First, banks loans are used by many more companies across different sizes while only relatively large firms issue bonds. Second, private bank debt typically has more covenants than public debt, and bank loan covenants are usually tighter. Third, most bank loan agreements maintain that the violation of a covenant in a public debt contract automatically puts the borrower in default on its private debt (i.e., cross-default provision).

⁵On the one hand, strong lending relationships facilitate information acquisition and monitoring (e.g., [Berger & Udell, 1995](#); [Petersen & Rajan, 1994](#); [Rajan, 1992](#)). Nonetheless, firms with an exclusive bank relationship might incur holdup costs ([Sharpe, 1990](#); [Rajan, 1992](#)). In particular, they could become "locked in" by their relationship lenders as private information about the borrowers cannot be easily obtained by noninformed outside lenders (e.g., [Prilmeier, 2017](#); [Saunders & Steffen, 2011](#)).

and discretionary permanent book-tax differences from [Frank, Lynch, and Rego \(2009\)](#), we show that creditor interventions curb more aggressive tax avoidance. This result suggests that, given the reputation and other costs involved, creditors discourage more aggressive forms of tax avoidance (e.g., [Armstrong et al., 2015](#); [Cheng, Huang, Li, & Stanfield, 2012](#); [Hasan, Keung, Wu, & Zhang, 2014](#)).

This study is among the first to provide comprehensive evidence on how active interventions of creditors affect corporate tax avoidance. Our study makes several contributions to the literature. First, we identify creditor interventions as a new determinant of corporate tax avoidance. Recent studies have identified distinct monitoring/governance roles played by family owners ([Chen, Chen, Cheng, & Shevlin, 2010](#)), labor unions ([Chyz, Leung, Li, & Rui, 2013](#)), dual-class shareholders ([McGuire, Wang, & Wilson, 2014](#)), and hedge fund activists ([Cheng et al., 2012](#)). However, the role that creditors play in tax avoidance remains largely unexamined. We provide evidence that creditor interventions prompt borrowers to reduce tax liabilities, facilitated by increasing tax avoidance.

Second, we provide new evidence of the real effect of creditor interventions. The literature finds that, following a covenant violation, actions taken by creditors are effective in curbing agency problems and in increasing the value of violating firms (e.g., [Chava & Roberts, 2008](#); [Ersahin et al., 2016](#); [Nini et al., 2012](#)). Our study sheds new light on how creditors actively exercise their control rights granted by debt contracts to increase tax avoidance, a likely efficiency gain to shareholders. As properly managed tax strategies increase after-tax cash flows, our findings add to the literature by identifying a new value-enhancing channel of the reallocation of control rights in technical defaults.

Third, the differential impact of covenant violations on moderate and aggressive tax avoidance activities, respectively, portrays a nuanced picture. We find that creditors prefer cash savings from tax avoidance, and enhanced creditor monitoring mitigates the agency cost of tax avoidance activities. At the same time, enhanced creditor monitoring discourages more aggressive tax avoidance activities, which carry significant risk. These findings provide support to recent studies that emphasize the importance of distinguishing the nature of different tax avoidance activities (e.g., [Gallemore, Maydew, & Thornock, 2014](#); [Shevlin, 2016](#)).⁶

The rest of this chapter proceeds as follows: Section on Related Literature and Hypothesis Development reviews related literature and develops our hypothesis; Section on Data, Empirical Specification, and Summary Statistics describes the data and empirical method; Section on Empirical Results and Additional Tests present the results of our empirical analyses; and Section on Conclusion offers the study conclusions.

⁶For example, [Gallemore et al. \(2014\)](#) suggest that tax avoidance activities range from mundane strategies to aggressive strategies that are likely to attract negative attention. [Shevlin \(2016\)](#) also points out that not all proxies capture the same underlying aspect of tax avoidance and one might not expect all the proxies to exhibit the same sign and significance in a particular study.

RELATED LITERATURE AND HYPOTHESIS DEVELOPMENT

In this section, we first briefly describe prior work on debt covenant violations and the associated creditor interventions. We then develop our hypothesis on the effect of creditor interventions on tax avoidance.

Covenant Violation and Bank Intervention

The incomplete contract theory rationalizes the state-contingent allocation of control rights to creditors as a mechanism to increase pledgeable income and facilitate financing (e.g., Grossman & Hart, 1986; Hart & Moore, 1990). An emerging body of empirical literature finds strong support to the theory's prediction. Earlier studies show that covenants are essential to the allocation of creditor control rights outside of bankruptcy (e.g., Beneish & Press, 1993; Chen & Wei, 1993; Sweeney, 1994).

Violations often involve covenants written on bank loans. Compared with other arm's length creditors and diffused bondholders, banks provide specialized monitoring and develop long-run relationships with borrowers (Diamond, 1984; Fama, 1985). After a covenant violation, banks significantly intensify their monitoring of the borrower. For example, Chava and Roberts (2008) report that banks demand more informal communications with borrowers and impose more frequent reporting requirements. Tan (2013) reports that corporate disclosure becomes more conservative after covenant violations. Vashishtha (2014) provides evidence that shareholders delegate more monitoring tasks to banks after covenant violations.

In addition, bank monitoring also significantly alters borrowers' operating and financial policies. For example, Chava and Roberts (2008) find that intensified bank monitoring after covenant violations mitigates corporate overinvestment. They also demonstrate that this effect is concentrated among violators with relatively more severe agency problems. Nini et al. (2012) document that covenant violations cause a sharp decline in financial leverage and significantly increase CEO turnover. Using establishment-level data, Ersahin et al. (2016) find that firms experience reduced employment and more frequent establishment closures after covenant violations, suggesting that creditor discipline improves within-firm resource allocation. Taken together, these studies provide supporting evidence that covenant violations lead to enhanced creditor monitoring. Yet little is known about the effect of covenant violations on firms' tax avoidance. This study aims to fill this gap.

Hypothesis Development

Although tax avoidance may lead to substantial after-tax cash savings, managerial agency problems induced by tax avoidance may outweigh the benefits. First, Desai and Dharmapala (2006) argue that managerial rent extraction can be a significant agency cost of tax planning. Tax avoidance activities often encompass complex transactions (such as establishing offshore operations in tax haven countries and engaging in related party transactions) that are contrived to

obscure the underlying intent and to elude tax authorities' auditing and detection. The murky nature of such activities weakens internal control and makes it easier for managers to conceal their rent extraction behaviors. Investors anticipating such managerial self-dealings may prefer a lower level of tax avoidance and are likely to attach a price discount for firms engaging in a high level of tax avoidance. As such, shareholders may perceive that the costs of tax avoidance outweigh its benefits, and particularly so for firms with weak corporate governance. In turn, managers may choose to conduct less tax avoidance to bypass the price discount or other constraints imposed by investors. Consistent with this argument, [Chen, Chen, Cheng, and Terry \(2010\)](#) find that family firms forgo tax benefits (by underinvesting in tax avoidance) to circumvent the non-tax cost of a valuation discount assigned by minority shareholders.

Second, managers may perceive tax avoidance as a risky investment and subsequently engage in less tax avoidance. Specifically, tax avoidance demands great effort from managers to devise proper strategies that minimize cash taxes paid (tax expense) and maximize after-tax cash flow (net income) without violating the law (e.g., [Armstrong et al., 2015](#); [Blaylock, 2016](#)). However, such effort cannot be directly observed by outsiders and therefore is often not compensated accordingly. Thus, effort-avoiding managers may choose to engage in a lower level of tax avoidance at the expense of shareholders.

On the other hand, creditors may prefer a higher level of tax avoidance. Tax avoidance increases a firm's tax savings and improves after-tax cash flow, which enhances a firm's financial slack and reduces bankruptcy risk. Further, as creditors have the priority claim in bankruptcy, an increase in firm value arising from tax avoidance can be desirable for creditors as it provides a larger buffer to their claims. Managerial rent extraction decreases firm value and increases borrowers' default risk; therefore, creditors have strong incentive to minimize such rent extraction. In particular, creditor interventions after covenant violations heighten external monitoring and can effectively deter managerial rent extraction. Therefore, creditors may prefer a higher level of tax avoidance as the benefits of tax avoidance likely outweigh the costs to them. As argued in Section on Hypothesis Development, prior studies show that creditor intervention indeed improves direct monitoring of managers and enhances firm value ([Chava & Roberts, 2008](#); [Ersahin et al., 2016](#); [Nini et al., 2012](#); [Tan, 2013](#)).

Not only do lenders have the incentive to affect borrowers' tax avoidance, prior research and anecdotal evidence indicate that banks also have the ability and "know-how" to do so. [Gallemore et al. \(2018\)](#) show that banks act as tax planning intermediaries because of their expertise in designing complex financial instruments and their inside knowledge about clients through direct lending. In addition, several recent articles from the *Wall Street Journal* also discuss strategies that banks use to help firms avoid tax.⁷ For examples, banks developed and

⁷These articles include "Fed Questions Bank Maneuver to Reduce Hedge Funds' Dividend Taxes," *Wall Street Journal*, September 28, 2014; "European Probe Widens Into Tax Maneuver," *Wall Street Journal*, October 29, 2015; "Bank of America's U.S. Deposit-Taking Unit Financed Tax Trades," *Wall Street Journal*, February 11, 2015.

helped clients implement a strategy called “dividend arbitrage,” in which banks temporarily (e.g., through swaps) transfer the ownership of shares that soon will receive dividend payments to third parties in low tax jurisdictions, enabling clients to pay lower dividend taxes on those investments. Based on the above discussions, we state our hypothesis as follows:

H1. Firms engage in more tax avoidance after debt covenant violations.

DATA, EMPIRICAL SPECIFICATION, AND SUMMARY STATISTICS

Covenant Violations

We obtain the original sample of covenant violations from Amir Sufi’s website.⁸ These quarterly data were collected using a text-search algorithm on SEC 10-K and 10-Q electronic filings. The SEC Regulation S-X Rule 4-08 requires the disclosure of a covenant violation that occurred as of the report date but has not been subsequently remediated. Because most tax avoidance measures are constructed using annual data, we aggregate the quarterly covenant violation data to yield an annual measure.⁹ Then, we match the covenant violation data with firm-level financial statement data extracted from the Compustat Annual database. We exclude financial (SIC 6000–6999) and utility (SIC 4800–4999) firms. After removing observations with missing regression variables, we obtain a sample of 31,410 firm-year observations between 1997 and 2007. This dataset covers 6,190 unique firms. In line with the incidence rate reported in previous studies, covenant violations occur among 8.2% of the firm-year observations. The actual sample size varies in subsequent tests due to the availability of a specific tax avoidance measure.

Tax Avoidance Measures

Our primary choices of tax avoidance proxies aim to capture the broad spectrum of tax avoidance rather than focusing on the more aggressive end of this spectrum (Goh et al. 2016). Accordingly, our two primary measures of tax avoidance are the GAAP ETR and the cash effective tax rate (CETR). We supplement these two measures with the Desai and Dharmapala (2006, 2009) book-tax difference (DD_BT D) and the federal ETR (FETR) to provide a broad assessment of tax strategies that a firm could use to reduce tax payments. As argued by Shevlin (2016), ETRs and DD_BT D largely reflect tax planning from the less aggressive

⁸We thank Greg Nini, David Smith, and Amir Sufi for making these data publicly available. For details about the covenant violation data collection process, please refer to the Data Appendix in Nini et al. (2012). The original covenant violation data cover until early 2008. After excluding missing variables, our sample ends at 2007.

⁹Specifically, a firm-year observation is considered to be a violation if there is at least one reported violation in any of the four quarters in the year and without any reported violation in all four quarters of the previous year.