

# Corporate Debt Covenants in Australia

Kim Nguyen<sup>[\*]</sup>



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## Abstract

The economic downturn associated with the COVID-19 pandemic has raised questions about the extent to which a deterioration in the financial health of some businesses could lead to breaches of debt covenants – with potential knock-on effects on firm behaviour and loan quality. This article includes a new data set on corporate debt covenants in Australia, developed by applying text analytic techniques on the annual reports of non-financial listed companies. It reveals that the share of companies reporting debt covenants has steadily increased over time from around 10 per cent in 2002 to almost 40 per cent in 2020, although the proportion of firms with covenants that reported a breach has remained stable at roughly 13 per cent. Also, following a breach, firms try to get their financial indicators back on track quickly. This study is a first step in understanding the role of debt covenants as a point of financial friction in the economy.

## Introduction

Corporate debt covenants are provisions in debt contracts that set the conditions a borrowing company is obligated to satisfy and the consequences of any violations. Typically, debt covenants specify that the firm must maintain certain financial indicators (e.g. the ratio of profits to interest payments) within certain bounds. A significant deterioration in financial positions – such as one caused by the COVID-19 pandemic – may trigger breaches of debt covenants. As a result, the Australian Securities and Investments Commission

(ASIC) highlighted the ability to meet borrowing covenants as a focus area for financial reporting in the COVID-19 environment (ASIC 2020). In addition, debt covenants can affect business activity by making debt financing more expensive following a violation of covenants or by influencing managerial actions even before a covenant is violated.

In theory, debt covenants are designed to protect lenders by restricting risky corporate behaviour and preventing businesses from getting into financial trouble that could adversely affect their ability to repay their loans (Stein 2003). In practice, covenants

are reviewed frequently and violations are common. In any given year, between 10 and 20 per cent of US non-financial companies report a violation in one or more financial covenants (Nini, Smith and Sufi 2012). Further, companies that have problems satisfying covenants are more likely to violate them again in the future (Taylor 2013). The consequences of a breach of covenant vary but generally include some type of penalty, such as an increase in the interest rate or collateral requirements of the loan and, in some cases, liquidation of the company (Greenwald 2019). Therefore, while covenants do not typically impose a hard cap on borrowing and breaches are common, violations are costly enough that businesses seek to avoid them. That, in turn, could influence firm behaviour, including the rate of debt and asset accumulation (Chava and Roberts 2008; Roberts and Sufi 2009; Nini, Smith and Sufi 2009), as well as firms' growth strategies that could affect investment decisions (Billett, King and Mauer 2008).

Debt covenants are an understudied research topic in corporate finance, both internationally and in Australia. In fact, very little is known about corporate debt covenants outside of the United States (see Nini, Smith and Sufi 2012; Lian and Ma 2021) and the United Kingdom (see Chatterjee 2006; Moir and Sudarsanam 2007). An important reason for this lack of research is the challenge associated with obtaining information about corporate debt covenants. This study aimed to fill this gap for Australia by analysing publicly available annual reports of non-financial listed firms via text analytic techniques and constructing a measure of the prevalence and types of debt covenants these firms are exposed to over time. The article is structured as follows. It first outlines the types of debt covenants commonly used in practice. It then describes the data construction process and presents key summary statistics of the data. Finally, it examines differences in firms' characteristics across different debt covenant structures.

### Types of debt covenants

The most common types of debt covenants are financial covenants, which are based on financial indicators readily available in corporate balance

sheets and profit and loss statements. Financial covenants are usually maintenance based: the borrower must keep the financial indicators under or over certain thresholds, which are typically reviewed every quarter. When the covenants are reviewed, the creditor may tighten or relax the thresholds depending on the borrower's situation (Sansone and Taylor 2007).

Generally, financial covenants can be categorised into two broad categories: asset-based covenants; and earnings-based covenants.

#### Asset-based covenants (ABCs)

Calculated using balance sheet measures, ABCs typically restrict the firm's maximum amount of debt (or minimum amount of equity) by requiring that it remains below a certain level of leverage or above a net worth threshold. Examples include restrictions on:

- debt-to-equity ratio – the degree to which the company finances its operations through outside funds (debt) versus inside funds (shareholders' equity)
- current assets-to-current liabilities ratio – the company's ability to pay short-term obligations or those due within one year.

To avoid breaching these conditions, the firm can issue more equity or cut back on dividend payments, essentially affecting the firm's capital structure (Christensen and Nikolaev 2012).

#### Earnings-based covenants (EBCs)

EBCs are formulated using information from both income and balance sheet statements to impose restrictions on the firm's debt servicing or earnings ratio. Examples include:

- interest coverage ratio – a measure of the company's ability to repay the interest component of outstanding debt with its earnings
- debt-to-earnings ratio – a measure of the company's ability to repay its total debt, including both principal and interest components, with its earnings.

In the United States, around 60 per cent of large non-financial firms have EBCs explicitly written into their debt contracts (Lian and Ma 2021). To comply with these restrictions, borrowing firms must regularly monitor and manage their net earnings – for instance, by cutting back on expenses or terminating risky investment projects (Christensen and Nikolaev 2012).

### Constructing debt covenants data for Australia

As part of this research, I constructed a database on the prevalence and types of debt covenants used by non-financial listed Australian companies by applying text analytic techniques to their publicly available annual reports, collected from the Connect4 website. I wrote a Python program to first convert the files into readable text and then extracted relevant information from the text as follows:

1. I searched for the term 'covenant' and its inflections in the text. If the search query returned non-empty results, I classified the firm as having debt covenants in that year.
2. I isolated the blocks of text surrounding the mentions of covenants. Figure 1 shows an example of an extracted block of text.
3. In each block of text, I searched for keywords (and their inflections) that indicated the possible types of debt covenants (e.g. interest cover, gearing ratio, leverage ratio).
4. For each type of debt covenant, I counted the appearances of its indicative keywords. If the counter returned a positive value, I classified the firm as having that particular type of covenant. In the example in Figure 1, the firm mentions three types of debt covenants: equity ratio; leverage ratio; and interest cover ratio.
5. Finally, I teased out information about whether the firms complied with or violated their covenants from the reports by counting the appearances of keywords such as 'breach' and 'violate' (and their inflections while incorporating negation). The example in Figure 2 suggests that the firm breached its

financial covenants in the period to the date of the report.

This method was not without limitations. Australian companies are not required to report the existence of covenants and, indeed, they may have incentives *not* to report them. For instance, financially vulnerable firms may want to avoid any signal of their poor financial health. Alternatively, financially strong firms may have an incentive to mention covenants and draw attention to their compliance. However, ASIC's financial reporting guideline emphasises that firms need to 'put themselves in the shoes of investors and consider what information investors would want to know' when considering what to disclose in the financial reports (ASIC 2020). To the extent that debt covenants can serve as early warning signs of the firm's financial health and violations can lead to serious consequences such as default, transparent reporting of debt covenants is strongly encouraged by ASIC. In addition, the Australian Accounting Standard on 'Financial Instruments: Disclosures' requires disclosures of non-remedied covenant breaches, as they have material impacts on the

#### Figure 1: Mentions of Covenants in Firm's Annual Report – An Example

In addition to the eligible collateral, the Group has several general and financial undertakings which it must comply with including an Equity Ratio covenant, a Leverage Ratio covenant and an Interest Cover Ratio covenant.

#### Figure 2: Mentions of Breaches in Covenants in Firm's Annual Report – An Example

During the year ended 31 December 2006, a controlled entity of AHG, Cottman, breached certain financial covenants under its finance facilities with GE Capital Finance Pty Ltd ("GE Capital") and has continued to breach those covenants in the period to the date of this report.

classification of debt in the financial statements (AASB 2020).

## Descriptive statistics

The constructed data contained roughly 20,000 observations from 3,742 unique non-financial listed firms between 2002 and 2020. On average, around 22 per cent of firms reported debt covenants, of which 24 per cent also specified the types of covenants. Graph 1 shows that the share of firms reporting debt covenants has steadily increased over time, from around 10 per cent in the early 2000s to nearly 40 per cent in the late 2010s. This could be due to the trend towards greater transparency in corporate reporting rather than reflecting an increase in their use.

The structure of debt covenants within firms reporting covenants also appears to have gone through a significant change around the same time as the global financial crisis. In the early 2000s, most covenants in Australia were earnings based; however, increased use of ABCs and slightly less prevalence of EBCs since that time means that, now, both ABCs and EBCs are reported by roughly 70 per cent of firms. In comparison, corporate debt covenants in the United States, the United Kingdom, Japan and Finland are predominantly earnings based (Lian and Ma 2021; Moir and Sudarsanam 2007; Kochiyama and Nakamura 2014; Niskanen and Niskanen 2004).

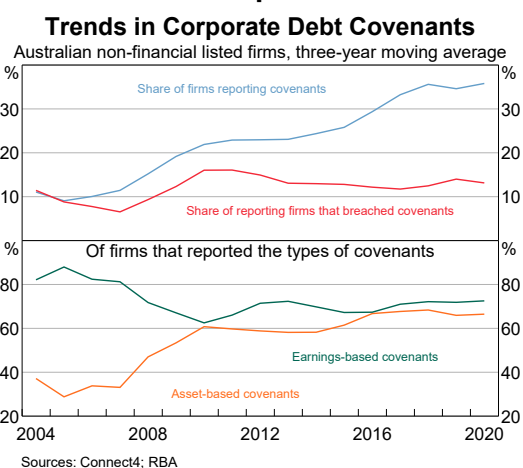
The Australian data show that around 13 per cent of firms reporting debt covenants also reported having breached them. This proportion appears to be stable over the years and is consistent with findings in the United States, where 10 to 20 per cent of firms report breaches (Nini, Smith and Sufi 2012).

Of interest is the composition within the category of EBCs. It consists of interest coverage (IC) covenants, which set a minimum on the ratio of earnings (usually earnings before interest, taxes, depreciation and amortisation) to interest payments, and other types of EBCs that limit the stock of debt to some multiple of earnings. While IC covenants imply debt limits that are directly sensitive to interest rates, other types of EBCs

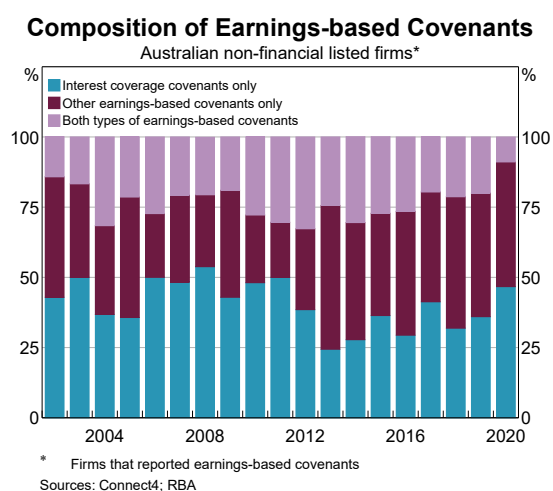
depend indirectly on interest rates. The distinction suggests that the structure of debt covenants could affect how much a change in monetary policy transmits to real economic activity through tightening or relaxing the financial restrictions imposed by such covenants. For example, an increase in interest rates generally raises a firm's interest costs and increases the likelihood that the firm could breach IC covenants included in its debt contracts. Moreover, as a firm's IC ratio is pushed closer to the critical threshold, the firm may be forced to take business decisions that help steer the covenant away from being violated. Graph 2 shows that, over the years, roughly 40 per cent of firms reporting EBCs are subject to IC covenants only.

The use and structure of debt covenants vary across industries. According to Graph 3, debt covenants are most used in the real estate sector, while the

**Graph 1**



**Graph 2**



materials (including mining) and energy sectors have the least use of covenants. ABCs appear more popular in capital-intensive sectors (e.g. real estate and utilities), while EBCs are more prevalent in services sectors (e.g. commercial and professional services, communication services and IT). In addition, utilities and health care sectors stand out as having the largest shares of companies reporting a covenant breach.

### Firm's financial characteristics and debt covenants

This study also sought to explore the differences between firms exposed to different structures of covenants. This was done by matching the constructed covenants data with the Morningstar database for balance sheet information. Graph 4 presents the typical median value for several financial measures for firms with and without covenants, as well as across different covenant configurations. Generally, there is a significant difference between firms with and without covenants, and between firms reporting only ABCs, firms reporting only EBCs and firms reporting both.

First, similar to the United States (Lian and Ma 2021; Greenwald 2019), firms with covenants in Australia are much larger – in both revenue and assets – than firms without covenants. They are also more highly leveraged (higher debt-to-equity and debt-to-asset

ratios) but have stronger earnings-to-interest payment ratios. This is unsurprising since larger firms tend to borrow more and have more consistent earnings to cover the cost of debt financing. For more details on firms' balance sheets and debt-to-asset ratios, see Appendix A.

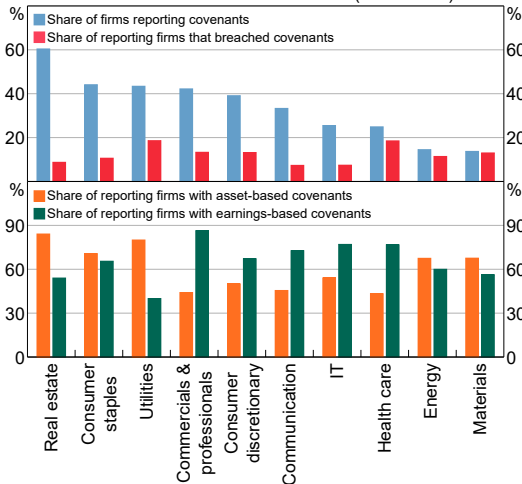
Second, and in contrast to Lian and Ma (2021) who argue that EBCs are not practical for small and young firms with a less-consistent revenue stream, Australian firms reporting only EBCs tend to be of smaller scale than those reporting only ABCs. Interestingly, firms reporting only ABCs appear less leveraged with lower debt-to-equity and debt-to-asset ratios, indicating that they have generally stronger balance sheets or that the ABCs have restricted their opportunity to leverage their assets. Conversely, firms reporting only EBCs have a higher median IC ratio, suggesting that the restrictions on their debt levels relative to their cash flows and net earnings are effective.

Finally, firms with both types of covenants appear to have the healthiest balance sheets; they are roughly as large as firms reporting only ABCs, while having less leverage and higher earnings-to-interest payment ratios than firms reporting only EBCs.

In addition, this study explored how financial statistics evolve over time for firms reporting covenant breaches. Graph 5 (top panel) shows that an average firm experienced a drop in its earnings-to-interest payment ratio prior to reporting a breach of covenants, after which its IC ratio picked up if it

**Graph 3**

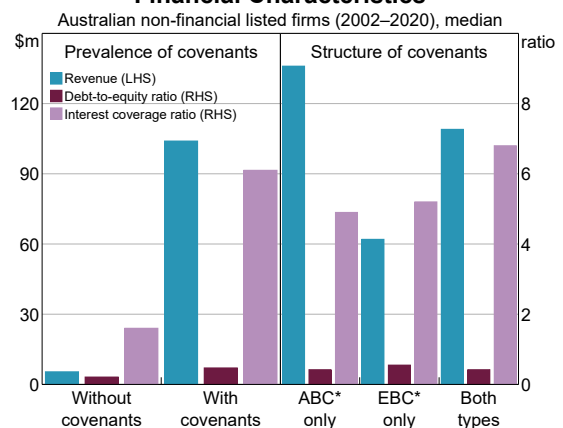
#### Reported Debt Covenants by Industry



Sources: Connect4; RBA

**Graph 4**

#### Financial Characteristics

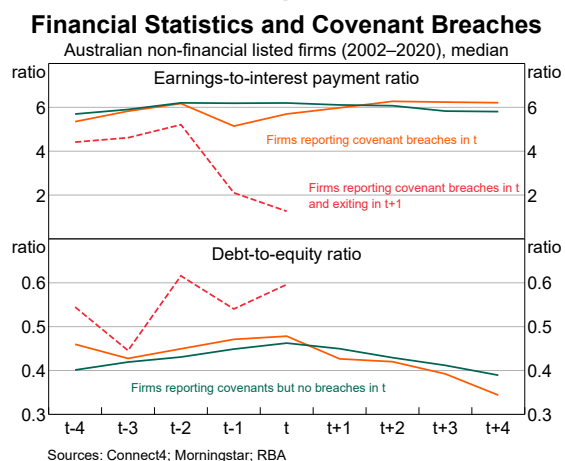


\* ABC: Asset-based covenants. EBC: Earnings-based covenants.

Sources: Connect4; Morningstar; RBA

survived to the next period. Similarly, there appeared to be a substantial reduction in debt-to-equity ratios among surviving firms in the years following a reported breach (Graph 5, bottom panel). This suggests that actions were taken quickly to remedy the worsening financial conditions that had resulted in a breach of covenants. On the other hand, roughly 7 per cent of breaching firms could not stop their financial statistics from deteriorating and ended up exiting the market. In contrast, both financial statistics stayed relatively constant for firms reporting covenants but no breaches.

**Graph 5**



## Conclusion

While debt covenants are an important aspect of debt financing, data on covenants have not been readily available and widely studied in Australia. As such, this research employed text analytic techniques to extract information from firms' annual reports about the usage and the types of covenants that Australian non-financial listed firms are exposed to over time. It found that, on average, reporting of debt covenants has increased over time, while the share of firms reporting covenant breaches remains stable. However, both the usage and the composition of debt covenants vary significantly across industries and firms' financial characteristics. Debt covenants benefit financial stability by aligning firm incentives with sound financial behaviour and, in turn, protecting lenders. However, the financial constraints imposed by the covenants may affect firm hiring and investment decisions, while also potentially amplifying shocks to the economy. Exploring the prevalence and structure of corporate debt covenants is the first step towards understanding their role as a financial influence in the economy. ✎

## Appendix A

**Table A1: Firm's Characteristics by the Prevalence and Structure of Debt Covenants**

Non-financial listed firms (2002–2020), median

	No covenants	With covenants	Asset-based covenants only	Earnings-based covenants only	Both types of covenants
Revenue (A\$ million)	5.4	104	136	62	109
Debt (A\$ million)	1	62	78	34	80
Cash (A\$ million)	4.5	15	18	6.1	17
Asset (A\$ million)	36	290	380	124	452
Debt-to-equity ratio	0.21	0.47	0.42	0.55	0.42
Debt-to-asset ratio	0.04	0.24	0.23	0.25	0.22
Interest coverage ratio	1.6	6.1	4.9	5.2	6.8
Observations (No.)	15,500	4,613	367	411	319

Sources: Connect 4; Morningstar; RBA

## Footnote

[\*] The author is from Economic Research Department.

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