Utilisation and restrictiveness of covenants in Australian private debt contracts

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Abstract

This paper investigates the accounting based covenants typically contained in the private debt contracts of listed Australian firms. In particular, cross sectional determinants of variation in covenant utilisation and restrictiveness are investigated. The primary source of data presented in the paper is a questionnaire completed by senior corporate managers of banks lending to listed Australian firms. In addition, standard and actual bank loan agreements are analysed. The survey results indicate that there is considerable cross-sectional variation in the utilisation and restrictiveness of covenants included in Australian private debt contracts, with this variation being partially explained by firm size and industry membership. The covenants most likely to be included are leverage, interest coverage, current, and prior charges ratios.

Key words: Debt covenants; Restrictiveness; Bank loan agreements

JEL classification: M41; G32

This paper is from my PhD thesis completed at the University of Queensland. The helpful guidance of my supervisor, Ian Zimmer and associate supervisor, Julie Walker, is gratefully acknowledged. I am also grateful for the comments of two anonymous referees, Pamela Kent, Paul Mather, Michaela Rankin and participants at the Ninth Annual Australasian Finance & Banking Conference and the University of Technology, Sydney. Funding for this research has been provided by the Department of Commerce at the University of Queensland and the Faculty of Commerce at the University of Southern Queensland.

1. Introduction

Little detail is known of the covenants contained in private debt contracts of Australian firms, with the only published research relating to public debt issues of the 1970s and early 1980s (see Whittred and Zimmer, 1986; and Stokes and Tay, 1988).[1] This lack of knowledge is problematic for researchers needing to make assumptions about the contents of current Australian debt contracts. Typically, it is assumed that either (a) private debt contracts contain similar covenants to those previously documented in relation to public debt issues; or (b) private debt contracts do not contain restrictive covenants. The current research aims to bridge this gap in our understanding, and contributes to the contracting literature in several ways. First, based upon evidence from 1993-1995 financial statements, it shows that banks are now the major source of corporate debt in Australia. Second, it presents evidence about the types of covenants typically used in bank loan agreements of listed Australian firms. Third, it examines differences in the typical utilisation and restrictiveness of accounting based covenants across a range of firm sizes and industry categories.

The results indicate that the most frequently used accounting based covenants in Australian bank loan agreements are leverage, interest coverage, prior charges and current ratios. The utilisation and restrictiveness of these covenants varies with firm size and industry. Larger firms tend to have less restrictive covenants than smaller firms, while industrial firms tend to have less restrictive covenants than mineral producers.

The remainder of this paper is organised as follows. The research methods used are outlined in the next section, with the primary source of evidence being a questionnaire survey of senior corporate bankers. Section 3 contains survey results, as well as the results of analysing a small sample of actual and standard bank loan agreements. Section 4 concludes the research.

[1] Mather (1997), in an unpublished working paper, reports the results of an interview survey of 48 bank lending officers from 19 divisions of Australian and foreign trading banks located in Sydney and Melbourne. While Mather's research describes the most frequently used covenants, it does not investigate cross sectional variation in the utilisation and restrictiveness of these covenants.

2. Research methods

2.1. Analysis of outstanding borrowings

The outstanding borrowings of listed Australian firms comprise both public and private debt. Public debt issues include debentures, unsecured and convertible notes. Private debt includes both intermediated debt (including bank loans and leases) and direct or non-intermediated debt. Bank loans may be secured or unsecured; short, medium or long term; and can be arranged on either a bilateral or syndicated basis; they include overdrafts, bank bills, term loans, and foreign currency loans. Direct private debt includes commercial paper (promissory notes and bills of exchange) and private placements, and may be issued either domestically or offshore.

To determine the relative importance of these different types of corporate borrowings, financial statement footnotes were examined for a sample of 171 listed firms from the manufacturing, retail and transport industries over the 1993 to 1995 time period.[2] Table 1 shows the total amount of borrowings outstanding for the sample by type of borrowings. Unsecured bank loans account for between 37.5 and 42.1 percent of total borrowings; while secured bank loans account for between 13.3 and 20.1 percent of total borrowings outstanding for the sample.[3] Other types of private debt that represent a considerable proportion of outstanding debt include domestic commercial paper issues, overseas and other borrowings.[4] In contrast, public debt issues represent between only 1.8 and 4.5 percent of outstanding debt during the sample period. An analysis of the *number* of loans outstanding reveals that the majority take the form of either secured bank loans or lease/hire purchase agreements. However it is also evident that these loans are for relatively small amounts when compared to unsecured bank loans, commercial paper issues and overseas borrowings. Overall, bank loans are the major source of finance for listed Australian firms in the manufacturing, retail and transport industries. Public issues are not a significant source of debt for these firms over the sample period.

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[2] This represents all listed Australian firms in these industries for which the relevant financial statements can be obtained, and is the sample used for hypotheses testing in Cotter (1997).

[3] The large decline in secured debt between 1993 and 1994 is due mainly to massive debt reductions by David Jones Limited. These debt reductions were achieved through the sale of businesses and other assets including Woolworths Limited and Arthur Yates and Co. Limited.

[4] 'Other borrowings' are likely to be overstated due to a lack of disclosure about their details in financial statements. On the other hand, 'Overseas borrowings' may be understated due to a lack of clear disclosures in financial statements.

2.2. Development of survey instrument

Exploratory interviews were conducted with senior corporate bankers from Australia's four major banks (ANZ Banking Group Limited, Commonwealth Bank of Australia, National Australia Bank Limited, and Westpac Banking Corporation).[5] Where possible, bankers interviewed are chief managers with overall responsibility for loans to listed corporations by their bank. They indicated that the diversity in covenants included in loan contracts is large and determined on a firm-by-firm basis, depending upon individual firm circumstances. However some systematic relationships are expected to exist in relation to borrower industry, size and credit rating, and which party is in the strongest negotiating position, the bank or the borrower. The bankers agreed to provide information in regard to the covenants most frequently used in loan contracts for a range of industry groups and firm sizes. They indicated that the provision of a 'normal' or 'typical' range of percentages was considered preferable to an estimate of the simple average for each category due to the large variation in ratios which are considered to be normal. Each banker stressed that the 'normal' range is just a starting point from which variations often occur once the particular details of each company are considered.

On the basis of these discussions, a questionnaire was developed and pilot tested with a senior corporate manager from one of Australia's major banks. Information in regard to accounting based covenants for six industry groups and three firm sizes was requested. Pilot testing resulted in two industry groups being eliminated from the questionnaire. These were real estate developers and contractors, and media. Real estate developers and contractors were deleted because firms in this industry tend to use project finance rather than term loans of the type specified in the questionnaire. Media firms were deleted following banker suggestions that ratios used in this industry are extremely diverse. This left (1) manufacturers, (2) retail, (3) transport services, and (4) mineral producers as the four industry groups included. Size was determined according to the classification criteria normally used by the bankers, with (1) small firms being those listed firms with a turnover of less than $75m, (2) large

[5] The four major banks in Australia control a little over 60% of the non-housing lending by Australian banks, with the remainder being spread over a further forty-five banks. (Reserve Bank of Australia Bulletin, September 1995, S14).

firms being Australia's top 250 and subsidiaries of multinationals, and (3) medium firms being those in between.

To control for diversity in covenants due to alternative loan types and divergence in term to maturity, the type of loan under consideration for each industry group and size of firm was specified as a five year term loan for expansion of capacity. This loan type and usage was chosen on the grounds of being applicable across industries and size of firm; while the term of five years was considered to be sufficiently long to expect that a range of covenants would be included to overcome possible agency problems.

The accounting-based covenants included in the questionnaire were chosen on the basis of discussions with bankers,[6] perusal of standard negative pledge documents supplied by two bankers, and a review of prior research into the frequency with which financial ratios are included in debt agreements (Gibson's (1983) survey of US banks and Whittred and Zimmer's (1986) evidence from Australian public debt issues). The ratios specifically included were total leverage, secured leverage, interest coverage, fixed charges coverage, and current ratio. Extra space was provided for the inclusion of additional or alternative ratios where ratios other than those specifically included in the questionnaire are generally used. Space was provided for the bankers to indicate the normal range of percentages used for each covenant specified for each industry group and size of firm.

2.3. Sample

The revised questionnaire was sent to a senior corporate manager from each of the three other major Australian banks as well as senior corporate managers from nine other banks that lend substantial amounts to listed Australian companies.[7] Three of the non-major banks did not respond to the questionnaire, while the response of

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[6] The bankers indicated that interest coverage, leverage, and liquidity ratios are often used in bank loan agreements of listed firms; while dividend payout and tangible net worth covenants are sometimes used. Interest coverage is considered to be the most important covenant and, if interest coverage is very strong, borrowers may be able to negotiate out of some other covenants.

[7] The data supplied in the pilot test questionnaire was retained in the sample, since the only difference between the pilot and revised questionnaires was a reduction in the number of industry groups included.

another was deleted due to its being deemed unreliable; thus leaving a final sample of four major and five non-major banks.[8]

In addition, a total of two standard contracts and twenty-three extracts from actual bank loan agreements were supplied by three of Australia's major banks. The fourth banker declined to provide this information due to client confidentiality requirements; however he confirmed that his survey response had been based on actual contract terms. The contracts obtained relate to listed firms in the four industry categories examined in the survey.

2.4. Data analysis

It became evident upon initial analysis of responses to the questionnaire that there was considerable disagreement between bankers in regard to the percentages normally specified for ratios in several of the categories examined. In order to gain further input from the bankers in this regard, the Delphi method of structuring a group communication process was used.[9] A second round questionnaire was designed and sent to each respondent. Possible sources of ambiguity in the original questionnaire were identified and a listing of these was included with the second questionnaire. Participants were asked to review their responses in light of those of the other banks and any resolved ambiguity, and revise them where this was deemed necessary. This procedure was successful in achieving considerable consensus among the bankers. A comparison of pre and post Delphi results shows that this procedure had the duel effects of narrowing normal ranges and increasing median restrictiveness for some categories of firms.[10]

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[8] Banks included in final sample are: Australia and New Zealand Banking Group Ltd, Commonwealth Bank of Australia, National Australia Bank Ltd, Westpac Banking Corporation, Banque Nationale de Paris, The Chase Manhattan Bank Australia Ltd, Indosuez Australia Limited, Lloyds Bank NZA Limited, and Macquarie Bank Ltd.

[9] Saren and Brownlie (1983, page 26) describe the Delphi method as being "based on achieving a reasonable consensus of expert opinion in a systematic and objective manner. Furthermore, in arriving at this consensus the experts remain unknown to one another, thereby avoiding any interaction of their personalities".

[10] In particular, prior charges ratios became more restrictive for larger firms, while median interest coverage ratios became more restrictive for firms in the transport industry and large mineral producers. However, the impact of this procedure on median leverage and current ratio restrictiveness was minimal; with only slight variations in leverage for medium and large mineral producers and large

Median restrictiveness of frequently used covenants is calculated as the median arithmetic mean (mid point) of the normal range indicated by each respondent.[11] The 'normal range' data supplied by bankers does not allow statistical testing of differences in medians between firm size and industry categories. Comparisons of covenant restrictiveness between firm size and industry categories are therefore limited to the extent that they are not formally tested.

3. Results

3.1. Utilisation of covenants

Survey results on the frequency with which accounting based covenants are typically utilised in Australian term loan agreements are shown in table 2 by firm size and industry. Differences in the number of bankers responding for each category are a result of some banks, especially non-major banks, not lending significant amounts to smaller firms, or to firms in certain industries. Overall, these results indicate that the most widely used accounting based covenants in Australian term loan agreements are likely to be leverage, interest coverage, current and prior charges ratios.[12]

Specifically, survey results indicate that leverage covenants are frequently used in bank loan contracts, with leverage most frequently measured as the ratio of total liabilities to total tangible assets. In addition, prior charges covenants that restrict the amount of secured debt owed to other lenders are typically included in the term loan agreements of larger firms, and are defined as a percentage of total tangible assets. Australia's four major banks tend to use prior charges ratios more frequently than non-major banks, and they use this ratio for firms of all sizes. Interest coverage constraints are also frequently used in Australian bank loan agreements; with this ratio generally being measured as earnings before interest and taxes (EBIT) to interest expense.[13] In contrast to the finding by Whittred and Zimmer (1986, p. 25) that "the interest coverage constraint, when it existed (in 33% of debenture deeds), applied

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transport service providers, and a small increase in current ratio restrictiveness for small and medium firms.

[11] Robustness checks using an alternative calculation of median restrictiveness involve taking low, mid, and high points for the normal range indicated by each respondent, ranking these, and determining the median from this ranking.

[12] This result is consistent with the interview survey results of Mather (1997).

[13] Some banks indicated a preference for alternative measures of coverage. These included EBIT to net interest or financial charges, which includes leasing and other off-balance sheet finance.

only at the time a debt issue was proposed", the interest coverage covenants contained in bank loan agreements are of a continuing nature. This coincides with Day and Taylor's (1995) finding that these ratios are included in UK bank loan agreements for monitoring purposes. Banker responses indicate that current ratios are used frequently for industrial firms, while they are not often used for mineral producers. The bankers surveyed indicated that tangible net worth restrictions are not generally used, and when they are used it is only in relation to industrial firms. Dividend payout restrictions, if employed, are typically only used for smaller firms. This finding is in contrast to evidence in relation to US private debt contracts (Castle, 1980; Gibson, 1983; El-Gazzar and Pastena, 1991). This international difference may be a result of restrictions on the payment of dividends to payments out of profits, or in limited circumstances the share premium account, under Australian Corporations Law (s201 and s191).[14]

In addition to survey evidence, standard negative pledge contracts supplied by two of Australia's major banks are examined. This analysis indicates some diversity between banks, and between survey responses and standard contract clauses. One bank's contract includes restrictions on (a) total external liabilities to consolidated shareholders' funds, (b) total secured liabilities to total tangible assets, (c) the dollar value of net tangible assets, and (d) total current liabilities to total current assets; while the second bank's contract includes restrictions on (a) the dollar value of shareholders' funds, (b) total financial indebtedness to shareholders' funds, (c) total indebtedness to total tangible assets, (d) operating cash flow to finance charges, (e) operating profit to finance charges, and (f) current assets to current liabilities. Survey results of the particular banks concerned appear to indicate that these standard contracts are not always used, and if they are, that the number and type of accounting based covenants included in these standard lists is adjusted to reflect the borrower's circumstances.

Further, a sample of twenty-three actual bank loan agreements was examined. Table 3 shows that leverage covenants are included in all but one of the contracts, while

[14] Several other ratios were indicated in the responses as being frequently used covenants. However each bank seemed to have its own types of additional covenants and the degree of correspondence between banks was minimal.

interest coverage constraints are included for the majority of industrial firms. Net worth covenants are included for many large firms, and prior charges covenants are most often included for large industrials. Current ratios are included less frequently, and mainly in relation to manufacturers. Variation in other types of accounting based covenants is large in terms of both the number and types of covenants included.[15] Results for leverage, interest coverage, prior charges, and dividend constraints confirm those for the questionnaire survey, however results for net worth and current ratios are inconsistent. In particular, net worth covenants appear more frequently in actual contracts than indicated in the survey, while current ratios appear less frequently in the sample of actual contracts than expected.

Given the available evidence, it appears that leverage covenants are consistently included in the bank loan agreements of all types of firms examined. Interest coverage constraints are generally included for industrial firms; while prior charges covenants are often included for larger industrials, especially where the lender is a major Australian bank. Current and tangible net worth covenants also tend to be used in Australian bank loan agreements.[16]

3.2. Restrictiveness of covenants

Survey evidence on the restrictiveness of frequently used covenants is presented in table 4. Panel A shows the normal range and median restrictiveness of leverage covenants across the various industry categories and firm sizes examined. Results for the full sample of banks as well as the sub-sample comprising only Australia's four major banks are included. When the full sample of banks are considered, the normal range of leverage covenants is between 0 and 80 percent of total tangible assets; with median leverage ranging from 48.75 to 70 percent, depending upon firm size and industry. Leverage covenants contained in term loan agreements are more restrictive for mineral producers than for industrial firms, and less restrictive for larger firms

[15] Examples of infrequently used covenants include restrictions on the amount of operating leases, offshore assets, and investments in joint ventures and project companies.

[16] In addition, details of the accounting based covenants contained in sixteen convertible note deeds issued between 1988 and 1995 were analysed. Consistent with prior research in relation to Australian public debt contracts issued in the 1970s and early 1980s (Whittred and Zimmer, 1986; Stokes and Tay, 1988), the results show that restrictions on total liabilities and secured liabilities are usually contained in these contracts. There appears to have been little, if any change in the average

than for smaller firms. While differences in the restrictiveness of leverage covenants between the industrial categories examined are not large, covenants for transport service providers appear to be the most restrictive. Median leverage covenants tend to be slightly more restrictive when the analysis is restricted to Australia's four major banks. This is particularly evident for smaller firms. However these comparisons in relation to small and medium firms should be interpreted cautiously due to the very low number of non-major banks responding to these categories.

Panel B shows that prior charges ratios generally limit debt of a higher priority to between 0 and 20 percent of total tangible assets; with a median restrictiveness of 7.5% for larger firms. The limited usage of this covenant indicated for small firms and mineral producers appears to be indicative that prior charges for these firms are effectively restricted to zero through non-accounting based restrictions on increases in debt of a higher priority. The median restrictiveness of this covenant does not vary with firm size or industry.

The current ratios shown in panel C require current assets of 1 to 2 times current liabilities for industrial firms, with median ratios ranging between 1.025 and 1.75 times.[17] This covenant is less restrictive for larger firms. Transport sector covenants are generally less restrictive than those for other industrials, especially at the smaller end of the market. Median current ratio covenants tend to be less restrictive when only responses from Australia's four major banks are considered than when the full sample of banks are considered for small and medium firms, and more restrictive for large firms.[18] Panel D shows that the normal range of restrictiveness for interest coverage constraints is between 1.25 and 4 times. Cross sectional variation in the median restrictiveness of interest coverage ratios is limited, with median restrictions in regard to this ratio of between 2.188 and 2.5 times for all types of listed firms.

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restrictiveness of accounting based covenants contained in convertible note deeds over the past two decades.

[17] This ratio is not generally used in relation to mineral producers. These firms create liquidity by forward selling and therefore do not have significant levels of current assets.

[18] This increase in restrictiveness of current ratios for large transport service providers is driven by the input of one banker from a major Australian bank who indicated that a number of the larger firms in this industry category are diversified across industry segments. When his response is excluded, the median measures for large transport firms is 1.15, which is the same as for large retail firms.

When only major banks are considered, median interest coverage ratios tend to be less restrictive than when all banks are considered.

As part of the Delphi procedure, bankers from Australia's four major banks were asked to list additional factors that determine variation in covenants for each industry group. Several bankers indicated that certain aspects of how firms are financed are important determinants of covenant restrictiveness. For example, whether the loan was on demand or a term facility, whether it was secured, the extent of off-balance sheet financing for transport firms, and whether mineral producers finance their assets on a non-recourse basis. Other factors listed by some of the bankers include operating history, susceptibility to recession, variation in inventory and debtor turnover, quality of management, strength of cash flows, and market conditions in relation to the level of competition between banks.

Table 5 shows the restrictiveness of frequently used accounting based covenants included in a sample of twenty-three actual bank loan contracts. The restrictiveness of each ratio for each firm in the sample was checked against the normal range of percentages indicated in relation to its industry category from the survey of bankers shown in table 4. This analysis shows that actual covenant percentages fall within normal ranges in more than 85% of cases for each ratio,[19] thereby supporting the survey results as being representative of actual bank loan contract terms.

4. Conclusions

This research investigates the utilisation and restrictiveness of accounting based debt covenants contained in bank loan agreements of listed Australian firms. Results from a survey of senior bankers indicate that the most widely used covenants are leverage, interest coverage, current, and prior charges ratios. The restrictiveness of these covenants varies with firm size and industry. In particular, larger firms tend to have less restrictive accounting covenants than smaller firms; while industrial firms tend to have less restrictive accounting covenants than mineral producers. However, the large "normal range" of covenant restrictiveness found in relation to most categories of firms is evidence that only part of this cross sectional variation is captured by these

[19] 90.9% for leverage, 85.7% for prior charges and current ratios, 87.5% for interest coverage.

factors. Other determinants suggested by bankers include credit rating, the term of loan, whether the borrowings are secured or unsecured, and other firm specific characteristics. An analysis of a small sample of actual bank loan agreements provides support for the survey results, with more than 85% of observed restrictions falling within the normal ranges found in the survey.

The evidence presented in this paper is expected to be useful for researchers who need to make assumptions about the content of Australian private debt contracts. While the research results do not allow a precise determination of the contents of debt contracts for individual firms, measurement of expected debt covenants using the results presented in this paper represents a considerable improvement over the simplistic assumptions previously employed.

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Table 1
Total outstanding borrowings for sample of 171 listed Australian firms in the manufacturing, retail and transport industries - amount outstanding at balance date in $'000 and as a percentage of total outstanding debt

	1993		1994		1995	
	$'000	%	$'000	%	$'000	%
Public issues	403,044	1.8	803,267	3.8	1,080,723	4.5
Commercial paper issues	2,710,401	12.3	2,517,192	12.0	3,310,850	13.8
Lease & hire purchase	787,086	3.6	738,424	3.5	656,213	2.7
Secured bank loans	4,431,743	20.1	2,925,399	13.9	3,193,335	13.3
Unsecured bank loans	8,246,443	37.5	8,832,977	42.1	9,816,041	40.9
Overseas borrowings	1,786,386	8.1	1,763,834	8.4	2,028,129	8.5
Other borrowings	3,657,865	16.6	3,421,946	16.3	3,896,483	16.3
Total borrowings	22,022,968	100	21,003,039	100	23,981,774	100

Public issues include bonds, convertible notes, and secured notes.

Commercial paper issues include bills of exchange and promissory notes.

Lease and hire purchase includes finance lease liabilities and hire purchase creditors. Operating leases are not included.

Secured bank loans include secured overdrafts, bank bills payable and other secured bank loans.

Unsecured bank loans include unsecured overdrafts and other unsecured bank loans.

Overseas borrowings include all types of debt issued overseas but do not include debt issued in Australia denominated in a foreign currency.

Other borrowings include non-bank bond facilities, subordinated loans, interest bearing deposits, and other non-bank loans.

Table 2
Utilisation of accounting based covenants in bank loan agreements by firm size and industry; as depicted by the ratio of (a) the number of bankers indicating that covenants are normally used, to (b) the number of bankers responding.

	Leverage	Prior Charges	Tangible Net Worth	Div. Payout	Current	Interest Cover.
	TL/TTA[a]	PC/TTA[a]	$ value[a]	%NPAT[a]	CA/CL[a]	EBIT/ Int. exp.[a]
Small listed companies (< $75m turnover)						
Manufacturing	5/5	2/5	2/5	2/5	5/5	4/4
Retail	5/5	2/5	2/5	2/5	5/5	4/4
Transport	4/4	1/4	2/4	1/4	4/4	4/4
Mineral prod.	3/3	1/3	0/3	1/3	1/3	2/2
Medium listed companies						
Manufacturing	6/6	5/6	1/6	1/6	6/6	5/5
Retail	5/5	3/5	1/5	1/5	5/5	4/4
Transport	5/5	4/5	1/5	0/5	5/5	5/5
Mineral prod.	4/4	2/4	0/4	1/4	2/4	3/3
Large listed companies (top 250 or multinational subsidiary)						
Manufacturing	9/9	6/9	2/9	0/9	9/9	8/8
Retail	8/8	5/8	2/8	0/8	8/8	7/7
Transport	8/8	5/8	2/8	0/8	8/8	8/8
Mineral prod.	5/6	4/6	0/6	0/6	2/6	4/5

[a] The ratios shown are those indicated by bankers to be most frequently used.
TL/TTA = Total liabilities to total tangible assets
PC/TTA = Prior charges to total tangible assets
%NPAT = Percentage of net profit after tax
CA/CL = Current assets to current liabilities
EBIT/Int. exp. = Earnings before interest and taxes to gross interest expense

Table 3
Utilisation of accounting based covenants in actual bank loan agreements by firm size and industry; as depicted by the ratio of the number of contract extracts containing the covenants to the number of contracts obtained in relation to each firm size and industry category.

Size & Industry	Leverage	Prior charges	Current	Interest cover	Net worth
Small/Medium Manufacturing	4/5	0/5	2/5	4/5	2/5
Large Manufacturing	9/9	4/9	3/9	7/9	6/9
Large Retail	4/4	2/4	1/4	4/4	4/4
Large Transport	1/1	1/1	0/1	1/1	0/1
Large Mining	4/4	0/4	1/4	0/4	3/4
Total	22/23	7/23	7/23	16/23	17/23

Table 4
Restrictiveness of frequently used covenants by firm size and industry (for the number of bankers responding in relation to each category).

	No. of responses	Range (%)	Median (full sample) (%)	Median (4 majors) (%)
PANEL A: LEVERAGE				
Small listed companies (< $75m turnover)				
Manufacturing	5	50-75	60	62.5
Retail	5	50-70	60	61.25
Transport	4	50-65	57.5	60
Mineral producers	3	0-65	NA*	NA*
Medium listed companies				
Manufacturing	6	50-75	65	65
Retail	5	50-70	62.5	63.75
Transport	5	50-70	62.5	62.5
Mineral producers	4	35-65	48.75	52.5
Large listed companies (top 250 or multinational subsidiary)				
Manufacturing	9	50-80	67.5	67.5
Retail	8	50-80	70	67.5
Transport	8	50-80	61.25	62.5
Mineral producers	5	40-70	55	55
PANEL B: PRIOR CHARGES				
Small listed companies (< $75m turnover)				
Manufacturing	2	5-10	NA*	NA*
Retail	2	5-10	NA*	NA*
Transport	1	5-10	NA*	NA*
Mineral producers	1	5-10	NA*	NA*
Medium listed companies				
Manufacturing	5	0-10	7.5	7.5
Retail	3	0-10	7.5	7.5
Transport	4	0-10	7.5	7.5
Mineral producers	2	5-10	NA*	NA*
Large listed companies (top 250 or multinational subsidiary)				
Manufacturing	6	5-20	7.5	7.5
Retail	5	5-15	7.5	7.5
Transport	5	5-10	7.5	7.5
Mineral producers	4	5-10	7.5	NA*

Table 4 (continued)

	No. of responses	Range (X)	Median (full sample) (X)	Median (4 majors) (X)
PANEL C: CURRENT RATIO				
Small listed companies (< $75m turnover)				
Manufacturing	5	1-2	1.75	1.5
Retail	5	1-2	1.75	1.5
Transport	4	1-2	1.175	1.1
Mineral producers	1	1-1.2	NA*	NA*
Medium listed companies				
Manufacturing	6	1-2	1.425	1.375
Retail	5	1-2	1.5	1.375
Transport	5	1-2	1.125	1.1
Mineral producers	2	1.3	NA*	NA*
Large listed companies (top 250 or multinational subsidiary)				
Manufacturing	9	1-2	1.125	1.088
Retail	8	1-2	1.025	1.15
Transport	8	1-2	1.075	1.25
Mineral producers	2	1-2.5	NA*	NA*
PANEL D: INTEREST COVERAGE				
Small listed companies (< $75m turnover)				
Manufacturing	4	1.5-4	2.188	1.875
Retail	4	1.5-4	2.375	2.25
Transport	4	1.5-4	2.5	2.5
Mineral producers	2	2-3	NA*	NA*
Medium listed companies				
Manufacturing	5	1.5-4	2.25	1.875
Retail	4	1.5-4	2.25	2.25
Transport	5	1.5-4	2.5	2.25
Mineral producers	3	2-4	2.5	NA*
Large listed companies (top 250 or multinational subsidiary)				
Manufacturing	8	1.75-4	2.188	2.125
Retail	7	1.5-4	2.25	2.25
Transport	8	1.25-4	2.188	2.125
Mineral producers	4	1.75-4	2.375	NA*

*NA=not applicable due to too few (less than 3) observations or split data

Table 5
Restrictiveness of frequently used accounting based covenants contained in a sample of twenty-three actual bank loan agreements relating to listed firms, and issued by major Australian banks.

Size/Industry	Leverage (TL/TTA) %	Prior charges (PC/TTA) %	Current (CA/CL) X	Interest cover (EBIT/Int.exp) X
Small/medium manufacturing				
1	65[a]		1.5	-
2	65[a]	-	-	3.5[g]
3	65[a]	-	1	2[h]
4	-	-	-	3[h]
5	43[b]	-	-	3
Large manufacturing				
6	70	-	-	2.5
7	70[c]	15	-	2.5
8	80	10	1	1.5
9	70	-	-	-
10	60	5	-	-
11	80	10	-	1.5
12	65	-	1.5	2.0
13	80[a]	-	-	2.0
14	60	-	0.9	2.5
Large retail				
15	75[a]	10[f]	-	3
16	60	-	-	1.5[i]
17	40	10	-	3
18	35[a]	-	1.5	2
Large transport				
19	65[c]	15[c]	-	2
Large mining				
20	70[c]	-	-	-
21	60	-	-	-
22	65[d]	-	1	-
23	60[e]	-	-	-

TL/TTA = Total liabilities to total tangible assets
PC/TTA = Secured liabilities to total tangible assets
CA/CL = Current assets to current liabilities
EBIT/Int. exp.= Earnings before interest and taxes to gross interest expense
a = Defined as the ratio of net tangible assets to total tangible assets in the contract.
b = Defined as the ratio of gross financial indebtedness to shareholders' funds in the contract
c = Defined as a percentage of total assets in the contract.
d = Defined as total revised liabilities to total revised tangible assets in the contract.
e = Defined as the ratio of net debt to net worth in the contract
f = Defined as a percentage of net tangible assets in the contract.
g = Defined as a multiple of gross interest expense plus finance lease repayments in the contract
h = Defined as a multiple of financial charges in the contract.
i = Defined as a multiple of interest expense plus operating lease expense in the contract.