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Covenants as barriers limiting enterprises' use of bank loans

Introduction

Various types of debt are a significant component of the financing structure of enterprises. The structure itself should match the type of operation and the development needs of an enterprise. Enterprises use bank loans to finance their development plans. However, credit institutions are generally reluctant to grant loans to enterprises in a difficult financial situation, and are therefore cautious with regard to providing capital in the current economy. The financing that is granted is often associated with strict financial conditions and credit parameters. Preferential treatment is accorded to enterprises operating in financially stable sectors. Less leeway is given in lenders' negotiations with companies in the raw material market, as exposure to price fluctuation risk is not accepted. Therefore, a number of enterprises must choose more modern instruments over bank loans, e.g. bonds (Bąk 2007). Notably, though, strict covenants may currently be found in all types of debt instruments, including both loan and bond agreements.

The paper discusses the issue of covenants used by banks in loan agreements. The research hypothesis is that excessively strict thresholds stipulated in the agreements restrict the use of bank loans by enterprises. When formulating covenants, bank do not sufficiently consider the specific nature of the client enterprise's industry.

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1. Covenants and their types

Covenants are clauses that oblige borrowers to perform or refrain from specific actions until their debt is repaid. These can include both obligations and prohibitions relating to the borrower's financial, capital, and investment situation. Covenants may also concern the collateral, informational obligations, or the borrower's ownership structure. All these considerations aim at limiting default risk (Pauka and Śmieja 2013). Covenants in traditional bank products ensure that the bank receives current information on the borrower, as well as ownership and financial documents related to the transfer of shares or any concluded insurance contracts. In many cases, banks oblige the borrower to immediately inform them in case of specific events, e.g. default on any other debt. In the case of bank loans, financial covenants are based on measures of the borrower's economic standing, with set limits of (minimum) capital level or (maximum) total debt. Changes to covenants may involve requesting a sale of assets, blocking the payment of dividends, doubling the credit margin, or charging a contract change fee (Sierpińska-Sawicz and Bąk 2016).

According to Smith and Warner (1979), the use of covenants entails an additional cost, but in turn reduces financing risk, and therefore, decreases the cost of capital. Smith and Warner state that for each company, there is an optimum set of covenants that ensures a balance between the cost associated with the introduction and enforcement of covenants on the one hand, and the benefits resulting from decreased investment risk for external entities on the other. Billet et al. (2007) have proposed a model comprising 15 variables for measuring covenants concerning the debt level, dividend level, asset-related restrictions, investment expenditure, bond issuance restrictions, maintenance of a set profit level, mergers and acquisitions, or maintenance of the rating grade. Śmieja and Pauka (2013) second other authors in emphasizing that enterprises with a larger number of effective covenants are at a lower risk of bankruptcy, as these covenants force the management to avoid risky decisions. Covenants may also concern general risk, the condition of a given industry, enterprise governance, or changes in ownership structure.

The main rationale behind the inclusion of covenants in financial contracts is the conflict of interest between shareholders and lenders. The conflict of interest results from decisions made by managers acting on behalf of shareholders that adversely affect both the value of the company, and the market value of its debt (Bazzana et al. 2014). Reisel (2014) has attempted an answer to the question whether restrictive covenants are effective in mitigating agency problems, and whether agency problems significantly increase the cost of debt. Based on her study, the author reports considerable benefits of lowering the cost of debt associated with agency problems. Covenants concerning investment activity or priority claims reduce the cost of debt by approx. 35–75 basis points. These results also indicate that investors consider covenants to be important in mitigating agency problems and reducing the cost of debt. Moreover, high growth companies and companies with low default risk were found to be less likely to include covenants, which may suggest that the costs of covenants outweigh benefits for these types of firms.

In general, covenants can be categorized as financial and non-financial (descriptive). Financial covenants, also termed accounting-based covenants, are included in loan agreements or issue terms and conditions in the form of maximum or minimum limits of specific financial indicators, expressed in absolute (e.g. minimum profit, maximum debt) or relative values (e.g. profitability, liquidity, structure, or debt service indicators). Achleitner et al. (2012) define two categories of financial covenants: maintenance covenants and incurrence covenants. The former are to be applied continuously, regardless of any actions taken. The latter prohibit the performance of specific actions that would result in violating the limits set for financial indicators (e.g. issuance of debt is permitted as long as it does not result in a decrease of the debt service coverage ratio below the required threshold – Brycz et al. 2015). The vast majority of studies focus on financial covenants.

Brycz et al. (2015) distinguish between two types of covenants: capital covenants and performance covenants. Capital covenants relate to capital structure, thus directly restricting the level of debt. Performance covenants, in turn, are used as indicators of any deterioration of an issuer's financial standing, and co-occur with descriptive covenants in the form of prohibitions. Niedziółka (2014) defines four covenant types:

- ◆ indicator-related covenants – concerning the allowed limits for financial indicators,
- ◆ covenants restricting various types of expenses and liabilities by the borrower,
- ◆ covenants obliging the borrower to perform specific actions, and
- ◆ covenants prohibiting the borrower from performing specific actions.

The breach of a financial covenant, unless previously authorized by the bank or remedied within a time stipulated by the loan agreement, constitutes an event of default, whereby the bank is formally entitled to terminate the loan agreement and request early repayment of the debt. According to Niedziółka (2014), this is particularly important to the borrower, as such clauses are increasingly commonly included in standard loan documentation, along with penalties due from the borrower in case of default, which may be quite severe. If the bank needs to recover the unpaid loan, it may seek to recover up to double the unpaid amount.

Specific sets of covenants included in loan agreements vary, depending on the current and expected financial standing of the borrower, its capital structure and level of debt, its financial strategy, and the specific nature of the industry in which it operates. Typically, banks have a set of standard financial covenants, but may agree to diverge from the standard in specific cases. Hence the major role of managers capable of justifying the need for non-standard covenants, adjusted to their company's situation. Any modifications to standard covenants require the specific indicators to be verified by an auditor, and a so-called compliance certificate to be needs provided to the bank. Additionally, the loan agreement must unambiguously specify which financial statements the calculations are to be based on (consolidated or separate), and what kind of data are to be used: for the last accounting period (e.g. quarter) or incremental from the beginning of the year.

2. Level of enterprise debt in European Union countries

The level of debt in enterprises depends on a variety of macro- and microeconomic factors. These include such determinants as the stability of macroeconomic conditions, stage in the economic cycle, interest rate level, inflation, debt market development, banks' willingness to grant loans, or the availability of alternative sources of financing (Bąk 2008). Other factors that need to be considered include the specific nature of the industry in which a company operates, as well the firm's financial standing, level of debt, or internal financing capabilities.

The data in Table 1 offers a comparison between the level of debt of enterprises in Poland and in other European Union states.

Based on their debt in 2016, the states listed in Table 1 can be categorized into several groups, with levels of debt ranging between:

- ◆ 40–60% of GDP – Czech Republic (39.3%), Germany (47.0%), Lithuania (40.2%), Poland (42.5%), Romania (40.3%), Slovakia (46.9%), Slovenia (58.5%);
- ◆ 61–80% of GDP – Estonia (78.2%), Greece (63.8%), Italy (66.4%), Latvia (72.4%), Hungary (71.0%), Austria (78.1%), United Kingdom (62.0%);
- ◆ 81–100% of GDP – Bulgaria (93.2%), Denmark (80.5%), Spain (99.0%), Croatia (91.4%), Portugal (94.5%), Finland (93.9%);
- ◆ 101–120% of GDP – France (102.7%), Netherlands (109.4%);
- ◆ 121–200% of GDP – Belgium (150.8%), Malta (134.7%), Sweden (125.2%); and
- ◆ above 200% of GDP – Ireland (240.9%), Cyprus (224.4%), Luxembourg (306.4%).

The above comparison demonstrates that enterprises in Poland are not excessively indebted. Slightly lower ratios of enterprise debt to GDP are found in the Czech Republic, Lithuania, and Romania. In the 24 remaining EU member states, the ratio of enterprise debt to GDP is considerably higher. In half of the EU states, enterprise debt does not exceed 80% of GDP. The most corporate debt is to be found in Luxembourg (306.4%), Ireland (240.9%), and Cyprus (224.4%). These states are tax havens, where large international corporations register in order to avoid taxation. Therefore, the ratio of these enterprises' debt to GDP does not accurately reflect the actual debt of local companies.

Considering the change of debt level in 2016 compared to that from 2007, three groups of countries can be distinguished:

- ◆ those where the debt-to-GDP ratio increased (Belgium, Czech Republic, Ireland, Greece, France, Croatia, Cyprus, Luxembourg, Malta, Netherlands, Poland, Slovakia, Finland, Sweden);
- ◆ those where enterprise debt-to-GDP ratio decreased (Bulgaria, Denmark, Germany, Estonia, Spain, Italy, Lithuania, Romania, Hungary, Austria, Slovenia, United Kingdom);
- ◆ those where enterprise debt-to-GDP ratio remained stable (Latvia, Portugal).

In Poland, enterprise debt-to-GDP ratio increased by nearly 12 percentage points (pp).

Similar increases of debt-to-GDP ratio occurred in France, Sweden, Finland, and the Netherlands. The largest increase of corporate debt occurred in Ireland, Cyprus, Belgium,

Table 1. Debt of non-financial enterprises in European Union states as percentage of GDP in the years 2007–2016

Tabela 1. Zadłużenie przedsiębiorstw strefy niefinansowej w państwach Unii Europejskiej w relacji do PKB w latach 2007–2016

Countries	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2016–2007
1. Belgium	118.3	136.6	141.2	129.4	136.2	138.8	139.0	137.1	141.5	150.8	32.5
2. Bulgaria	100.8	107.7	114.1	112.8	107.8	109.6	115.6	110.1	96.6	93.2	-7.6
3. Czech Republic	34.7	37.6	36.7	36.4	37.8	39.7	44.7	41.9	40.5	39.3	4.6
4. Denmark	87.6	95.8	91.6	87.7	86.9	88.6	85.1	81.6	81.6	80.5	-7.1
5. Germany	51.5	51.8	53.0	50.0	48.5	48.4	50.1	47.4	47.3	47.0	-4.5
6. Estonia	102.9	106.6	105.5	94.3	81.5	80.0	80.3	83.3	79.6	78.2	-24.7
7. Ireland	98.8	144.4	161.0	166.0	188.3	202.5	192.0	217.1	267.0	240.9	142.1
8. Greece	47.0	51.5	53.3	64.3	65.1	65.9	63.4	64.8	63.9	63.8	16.8
9. Spain	123.2	126.2	129.0	131.0	131.0	124.3	118.0	111.5	104.5	99.0	-24.2
10. France	90.5	94.5	94.3	92.4	96.8	97.2	95.5	97.6	99.9	102.7	12.2
11. Croatia	71.2	78.5	90.0	98.8	98.1	96.2	98.0	97.4	96.0	91.4	20.2
12. Italy	70.2	73.3	77.1	76.0	75.9	75.6	72.4	70.1	67.4	66.4	-3.8
13. Cyprus	173.5	186.9	198.3	202.2	205.3	203.4	213.1	223.1	226.9	224.4	50.9
14. Latvia	72.0	77.8	94.4	100.9	90.7	84.3	78.9	74.4	72.5	72.4	0.4
15. Lithuania	53.8	52.5	53.4	48.2	42.5	41.6	39.5	36.3	36.7	40.2	-13.6
16. Luxemburg	274.1	266.3	283.0	243.0	251.1	261.4	269.0	282.8	308.8	306.4	32.3
17. Hungary	78.2	82.2	93.0	88.3	91.0	85.2	81.3	81.0	77.6	71.0	-7.2
18. Malta	120.7	134.6	149.7	152.7	161.0	155.5	150.6	148.8	138.4	134.7	14.0
19. Netherlands	100.4	100.9	111.4	111.7	114.2	111.0	110.0	110.9	114.0	109.5	9.1
20. Austria	80.8	82.8	81.8	82.8	81.1	79.5	82.7	79.0	79.0	78.1	-2.7
21. Poland	30.8	37.0	35.6	35.5	37.8	38.0	38.4	39.7	40.7	42.5	11.7
22. Portugal	94.7	101.8	106.4	106.3	110.4	119.6	112.0	106.6	100.3	94.5	-0.2
23. Romania	43.9	50.3	57.2	52.3	52.0	51.9	48.4	44.9	43.6	40.3	-3.6
24. Slovenia	77.9	87.8	93.3	92.7	93.2	91.1	86.4	76.1	64.9	58.5	-19.4
25. Slovakia	41.7	43.7	46.1	43.7	46.1	46.2	46.1	44.9	43.8	46.9	5.2
26. Finland	81.2	95.6	94.2	94.0	93.4	92.5	95.0	100.1	108.3	93.9	12.7
27. Sweden	113.2	135.2	141.6	131.0	134.2	131.8	130.9	130.3	130.5	125.2	12.0
28. Great Britain	78.7	86.7	79.8	77.0	71.7	73.1	68.2	62.5	60.8	62.0	-16.7

and Luxembourg, while the largest decrease occurred in Estonia, Greece, and Slovenia. Enterprise debt level in Bulgaria, Denmark, and Hungary dropped by more than 7 pp.

Table 2 shows enterprises' capability to service their debt, based on their net income. Net debt was calculated as the difference between an enterprise's debt (in the form of loans,

Table 2. Net Debt/Net profit for non-financial companies in EU Member States in 2007–2016

Tabela 2. Wskaźnik dług netto/zysk netto dla przedsiębiorstw strefy niefinansowej w państwach Unii Europejskiej w latach 2007–2016

Countries	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
EU (28)	341	372	409	357	353	375	361	326	298	287
Euro Zone	295	351	405	363	342	393	366	344	332	339
Belgium	161	4	–17	–108	–59	–62	9	78	236	285
Denmark	457	562	598	398	325	373	308	203	144	197
Estonia	187	289	450	182	130	157	128	111	133	:
Ireland	252	440	316	247	308	290	223	232	442	:
Greece	372	429	526	704	562	588	402	656	817	:
Spain	1 564	1 127	799	814	807	729	552	444	431	373
France	270	332	381	365	393	475	471	495	433	430
Italy	558	689	756	727	764	977	911	820	717	584
Latvia	345	598	483	438	321	264	251	314	:	:
Luxemburg	:	:	:	:	:	:	108	63	96	21
Netherlands	219	235	274	228	214	228	215	250	173	176
Austria	250	304	349	315	297	313	323	314	315	295
Poland	179	237	162	135	151	176	178	181	167	:
Portugal	960	1 597	1 155	854	1 284	1 077	912	761	654	617
Slovenia	1 092	1 437	3 834	4 987	2 933	5 775	2 326	1 057	702	512
Slovakia	144	176	240	134	148	147	199	231	212	196
Finland	222	315	483	390	488	520	596	471	419	389
Sweden	198	322	435	319	348	357	335	313	236	205
Great Britain	268	302	385	251	263	311	262	203	199	188
Island	–1 489	–2 000	–7 705	–46 808	36 009	–1 944	2 686	3 145	:	:
Switzerland	37	72	69	44	79	75	:	:	:	:

: – not available.

Source: <http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&plugin=1&pcode=tec00102&language=en> (15.12.2017).

Short Description: Net debt-to-income ratio, after taxes, of non-financial corporations is defined as main financial liabilities divided by net entrepreneurial income (ESA 2010 code: B4N) less current taxes on income and wealth (D5PAY). Main financial liabilities include currency and deposits (AF2), debt securities (AF3) and loans (AF4). Detailed data and methodology is available at: <http://ec.europa.eu/eurostat/sectoraccounts>.

credit, and bond issues) and its cash and cash equivalents. Net income is the generated income with taxes deducted. It can be used to repay loans and redeem bonds.

In 2007, enterprises in six countries, including Poland, were able to repay their debt in less than two years. The analyzed indicator was extremely low for Switzerland, with a net debt to net income ratio of only 37%. In Poland, the net debt was 79% higher than the net income that year. Enterprises in Spain could repay their debt within 16 years and in Slovenia – within 11 years.

In 2012, the ratio of net debt to net income in most analyzed countries was similar to that from 2007, and in 2015, it decreased slightly. Throughout the analyzed period, enterprises in Poland were capable of repaying their debt in less than two years. There was a number of contributing factors, including enterprises' unwillingness to use loans, as well as banks' unwillingness to lend to enterprises due to the benefits of lending to the government. The Polish government issues bonds that are bought by banks so as to invest their customers' deposits without risk. Another factor affecting this ratio is the cash accumulated in enterprises. A company's net debt is its debt minus cash, deposits, and other cash equivalents. The uncertain situation on global markets, as well as the instability of the Polish law, cause enterprises to limit their investment activity (Jonek-Kowalska 2013).

In 2012, enterprises in highly developed countries such as Denmark, France, the Netherlands, Austria, Sweden, and the United Kingdom, were able to repay their debt in two-and-a-half to five years' time. 10 years would have been required for the repayment of debt in Greece, Spain, Italy, Portugal, and Finland. Debt service capacity was the lowest among enterprises in Slovenia and in Iceland, where enterprises incurred losses due to excessive debt.

As 2016, data is not available for seven states, comparisons must be made based on 2015 data. Notably, in Greece, enterprises were able to repay their debt in less than four years in 2007, less than six years in 2012, and more than eight years in 2015. The increase in net debt up to 64% of the GDP, combined with poorer financial performance due to recession, reduced enterprises' ability to repay debt. In Spain, in 2007, enterprises' net income would allow them to repay their debt in almost 16 years, while in 2016 – in less than four. A similar trend can be observed in Italy, Portugal, and Slovenia. In the latter, the net debt to net income ratio was 5775% in 2012, and 512% in 2016. In Luxembourg, where the largest global corporations register for tax avoidance purposes, the corporate debt-to-GDP ratio is the highest, and their debt-to-income ratio is the lowest. In 2016, it was 21%, which means that net income generated by the corporations was 5 times greater than their net debt that year. Data from consolidated financial statements were used in the above calculations.

3. Methodology

To verify the hypothesis formulated in the Introduction, 25 loan agreements concluded with banks or banking consortia by three large corporate groups and their subsidiaries were

analyzed. To determine whether industry-related factors affect the covenants used in these agreements, corporate groups from three sectors were included: fuels, mining, and metal-working. All the studied corporate groups are listed on the main market of the Warsaw Stock Exchange. The study included loan agreements concluded by the parent companies and their subsidiaries, and their debt level and debt servicing capacity were analyzed based on consolidated financial statements in the case of two parent companies, and on separate financial statements in the case of the remaining entities.

The agreements were made available on the condition that the names of the corporate groups and companies be redacted, due to the confidentiality of provisions, often imposed by lenders. One can suspect that banks would not like their borrowers to compare loan conditions, as companies differ not only in terms of their financial standing, but also in terms of collateral or debt servicing capabilities. Price fluctuations in commodity exchanges cause a large variability of financial results, and interfere with the accurate assessment of a company's debt servicing capacity. Furthermore, for companies listed on the stock exchange, the disclosure of loan agreement provisions would violate the principle of equal treatment of shareholders.

All the analyzed loans agreements were concluded in the years 2013–2015. Loans were granted by banks or bank consortia. The consortia acted as lenders in cases where the loan amounts were large. All the borrowers were in a good financial standing, and their investments aimed not only at increasing the potential for generating profit in subsequent periods, but also enhancing the company's competitiveness.

4. Types of covenants included in loan agreements

Financial covenants in agreements for investment loans (Table 3) concerned the following.

1. The company's debt servicing capacity, expressed by:
 - ◆ the ratio of net debt to EBITDA (9 agreements);
 - ◆ the ratio of the sum of net profit, depreciation, and amortization to debt service (interest + principal) payments (1 agreement);
 - ◆ the ratio of financial debt to EBITDA (2 agreements);
 - ◆ the ratio of EBITDA to interest and annual principal payment amount (1 agreement);
 - ◆ DSCR – Debt Service Coverage Ratio (2 agreements).
2. The company's level of debt, measured by:
 - ◆ the value of equity (1 agreement);
 - ◆ the share of equity and loans from parent company in total assets (1 agreement);
 - ◆ the share of equity in assets (1 agreement);
 - ◆ the ratio of financial debt to equity (3 agreements);
 - ◆ the ratio of total debt to equity (1 agreement).

Table 3. Types of financial covenants included in investment loan agreements concluded by the surveyed business entities

Tabela 3. Rodzaje kowenantów finansowych zapisane w umowach kredytów inwestycyjnych badanych podmiotów gospodarczych

Companies	Types of covenants	Threshold values	Actual values
A	Equity – intangible assets + deferred tax	>PLN 5 M	6.103 M, 6.525 M, 6.627 M, 6.520 M, 5.905 M, 6.125 M
A1	Net debt / EBITDA	≤ 3.5	3.2, 3.2, 3.4, 3.3, 3.6, 3.4
A2	(Equity + loans from the parent company) / balance sheet total	≥ 10%	17.2%, 21.0%, 19.7%, 18.3%, 17.6%, 15.7%
A3	Net debt / EBITDA	≤ 2.5	1.89, 1.96, 2.21, 2.27 2.13, 2.09
A4	Net debt / EBITDA	≤ 1.9	1.23, 1.34, 1.39, 1.43, 1.25, 1.54
A5	Financial debt service ratio (net income + amortization and depreciation / interest + principal payments)	≥ 1.5	2.15, 1.98, 1.76, 2.28, 2.07, 1.95
A6	Financial debt / equity	≤ 4	2.52, 2.15, 2.02, 3.07, 2.98, 3.17
A7	EBITDA – tax paid / interest + annual principal repayment amount	≥ 1.4	1.73, 1.92, 1.97, 1.85 1.23, 1.37
A8	Financial debt / equity	≥ 3.5	3.46, 3.36, 3.79, 3.21, 2.98, 2.76
A9	Total debt / equity	≤ 3.0	3.04, 2.98, 2.79, 2.81, 3.05, 2.93
A10	Net debt / EBITDA	≤ 3.5	3.1, 3.9, 3.5, 5.2, 5.4, 2.8
A11	DSCR – Debt Service Coverage Ratio	≥ 1.05	1.31, 1.27, 1.15, 0.75, 0.89, 1.10
A12	Net debt / EBITDA	≤ 3.5	3.14, 3.27, 2.98, 3.10, 2.97, 2.94
A13	Equity ratio (equity / balance sheet total)	≥ 40%	58%, 56%, 53%, 54, 51%, 49%
A14	Financial debt / EBITDA	≤ 3.0	2.60, 2.56, 2.63, 2.74, 2.89, 2.80
B	Net debt / EBITDA	≤ 3.5	1.98, 2.16, 1.86, 2.54, 3.01, 3.34
B1	EBITDA / debt service payments (interest + annual principal repayment amount)	≥ 2.0	2.57, 2.98, 3.07, 3.15, 2.49, 1.87
B2	Financial debt / EBITDA	≤ 4.0	4.17, 4.31, 3.98, 3.84, 4.05, 3.83
B3	Net debt / EBITDA	≤ 4.5	4.13, 4.06, 4.37, 4.44, 4.67, 3.96
C	Net debt / EBITDA	≤ 2	2.15, 2.10, 1.98, 1.75, 1.82, 1.92
C1	Net debt / EBITDA	≤ 3	2.45, 3.27, 3.67, 2.15, 2.05, 2.89
C2	DSCR (cash available for debt servicing / interest + principal payment)	≤ 1.1:1.3	1.63, 1.27, 1.45, 1.27, 1.25, 1.17

A – parent company; A1, A2... – subsidiaries (fuel sector); B – parent company; B1, B2... – subsidiaries (metalworking sector); C – parent company; C1, C2... – subsidiaries (mining sector).

Most of the analyzed agreements (15), regardless of the sector in which the company operates, comprised measures of the company's debt servicing capacity. Net debt was calculated as the difference between cost-bearing debt (short- and long-term loans, bond issues, and finance lease) and short-term investments. The category comprises cash and other instruments from which the enterprise expects to recover cash by the end of the financial year. Short-term investments also comprise loans granted to subsidiaries that are not part of the free cash flow, which may be used to service debt. The subsidiaries are not always capable of repaying these loans. Moreover, this method of net debt calculation may result in a less favorable result that exceeds the threshold set in the agreement. In cases where there were several loan agreements with the parent company and its subsidiaries, only cash was deducted from cost-bearing debt to calculate net debt.

EBITDA was also calculated using various methods. In most companies, the operating profit shown in the profit and loss account was adjusted for non-recurring, non-continuing items recorded under other operating income and expenses. The scope of operating profit adjustments varied. In all the analyzed companies, operating profit excluded profits and losses on sale of fixed assets and intangible assets, as well as results of asset valuation. In some agreements, write-downs on receivables and operational risk reserves were additionally deducted from operating profit. In all companies, the adjusted operating profit was increased by depreciation and amortization amounts. By including depreciation and amortization, the measure becomes similar to operating cash flow. Apart from net income, EBITDA is the most popular measure of enterprise profitability, and is used in many companies as a criterion of economic value. A high EBITDA value is an indicator of a company's solid operating performance. In capital-intensive sectors with large asset depreciation potential, EBITDA is largely determined by the depreciation amount, which can be so high as to produce a positive EBITDA even when the company is operating at a loss.

Due to a lack of formal standards for EBITDA calculation, the calculation methods were detailed in each agreement. Therefore, non-financial covenants in most of the agreements require EBITDA to be validated by an auditor, which increases the cost of financial statement audit. Moreover, different EBITDA calculation methods in companies belonging to one group interfered with comparisons within the group. Group members run diversified operations, and therefore, the operating profit was adjusted in different ways. For instance, in mining, there is a provision for decommissioning costs of mines amounting to 8% of the depreciation and amortization value, recorded under other operating costs, which is not included in profit adjustments. In many companies, all the provisions were deducted from the operating profit as non-recurring items.

Thus, it seems that rather than using the adjusted operating profit, it would be better to consider profit from core operations, i.e. sales profit. This would eliminate the need for adjustments, and for EBITDA validation by an auditor. All the analyzed loan agreements provided for financial covenant monitoring on a quarterly basis.

Notably, thresholds for the ratio of net debt to EBITDA were stricter for companies operating in the mining sector than for the metalworking sector and for most companies

operating in the fuels sector. In most agreements, the threshold was 3.5, which means that the companies should be able to repay their debt in 3.5 years, based on EBITDA. For the mining sector, the threshold was 2.0 or 3.0, meaning that the period was shorter, while profit variation in the sector is larger due to raw material price fluctuations, and the rate of return on invested capital is lower. Such approach on the part of the banks is an obstacle to enterprises' use of bank loans.

Seven loan agreements comprised financial covenants concerning debt levels, measured by various indicators. In their calculation, financial liabilities were understood as all liabilities that generate a financial cost, i.e. loans, bond issues, finance leasing, and other interest-bearing liabilities. A threshold of 4.0 for the ratio of financial debt to equity meant that for PLN 1 worth of equity, a company could have PLN 4 worth of debt.

Table 4 shows covenants included in working capital loan agreements. Two such loans were used as a form of inventory financing, and thus the covenants specified a ratio of the loan amount to the value of inventory used as collateral. In the case of the fuel sector, this was mandatory inventory comprising the national energy security reserve, while in the case of the mining sector, this concerned coal stocks associated with the mining cycle and use seasonality of this material. In the case of the metalworking sector, the working capital loan was required due to the policy of granting payment deferrals to end customers, which enables the companies to thrive in an aggressively competitive market with increasing imports of steel products. Here, a threshold of 50% meant that for PLN 1 worth of debt, the company should have no less than PLN 0.5 worth of equity.

Table 4. Types of financial covenants included in working capital loan agreements concluded by the surveyed business entities

Tabela 4. Rodzaje kowenantów finansowych zapisane w umowach kredytów obrotowych badanych podmiotów gospodarczych

Companies	Types of covenants	Threshold values	Actual values
A14	(Amount of loan used for inventory financing/value of inventory)	$\leq 0.7: 1$	0.73, 0.82, 0.97, 1.07, 1.10, 0.56
B4	Equity/total debt	$\leq 50\%$	46.7%, 45.9%, 50.9%, 49.1%, 50.2%, 51.3%
C4	Amount of loan/value of inventory	≤ 0.6	0.415, 0.401, 0.428, 0.532, 0.598, 0.613

Source: own analysis of loan agreements concluded by the studied business entities.

With this form of the covenant, lower net profit would restrict the allowed debt, resulting in a shortage of funds for the financing of operations. In the case of working capital loans, covenants should be based on annual financial results reflecting the company's ability to

repay debt, rather than on multi-annual balance sheet values reflecting the level of debt. The latter can be included in long-term loan agreements. The working capital loan was collateralized by the assignment of receivables from main customers.

5. Other covenants included in loan agreements

Other covenants included in the analyzed loan agreements specified a set of obligations and prohibitions, providing for additional financial cost or immediate repayment of the loan in case of non-compliance. Such restrictions included in the agreements concerned: dividend payments, management of company assets, investment expense levels, and adherence to additional requirements by managers.

Among these restrictions, the loan agreements comprised provisions regarding the distribution of profits. A limit was placed on payments from net profit for the companies listed on the main market of the Warsaw Stock Exchange. Until the repayment of the loan, the company was prohibited from paying out dividends higher than 30% of its profit. For some subsidiaries, the agreement required the company to refrain from dividend payouts altogether, or to condition dividend payouts on the achievement of a set profit. These provisions were based on expected cash flows and were associated with the requirement to maintain the set values of the financial indicators discussed above.

Covenants related to assets concerned the equal treatment of claims by the bank and other creditors; or a prohibition on sale of assets, their disposal, transfer to subsidiaries, or placing any other charge on assets used as collateral for the loan. In the case of some companies, covenants regarding fixed assets specified the value of assets that could be sold or leased out to other entities. This may restrict companies from servicing the debt with funds from sale of assets. Companies experiencing decreased profit could use leaseback transactions to maintain their debt service capacity, but their freedom to manage their assets is limited by such covenants.

The limit placed on investment expenses by the companies for the period between the grant and repayment of the loan was included in order to prevent the companies from seeking other sources of financing, e.g. bond issues, which might decrease their ability to repay the debt.

The additional requirements placed on managers concerned:

- ◆ providing the bank with quarterly statements and annual financial statements validated by an auditor, as well as certified calculations of debt indicators, within the required times;
- ◆ providing the bank with information on the procedure of auditor selection in case the auditor is replaced;
- ◆ providing the bank with a description of significant risk factors affecting the company's operation;
- ◆ providing the bank with information on any changes to the accounting principles.

Summary and recommendations

Covenants are used as an instrument for monitoring the financial standing of enterprises that use various forms of debt, in particular bank loans or bond issues. Their impact on the operation of enterprises is significant, and some covenants restrict the affected enterprise in operation and effective decision-making, potentially increasing the risk of bankruptcy. Restrictions included in loan agreements may be a particular burden on developing enterprises or ones in need of asset restructuring, as the scope of restructuring may be difficult to foresee at the time of concluding the loan agreement. Notably, both banks and enterprise managers can have an impact on the number and quality of the covenants. Banks include a set of standard covenants used on the market in their loan agreements, but managers can use their knowledge and negotiating skills to considerably loosen these provisions and adjust them to the particular risk level of their company and sector.

All the analyzed loan agreements included covenants concerning the debt level and debt service capacity of the companies, using indicators monitored on a quarterly basis. The threshold values of these indicators included in the agreements were in some cases too strict to be complied with by the company. A threshold of 2.0 for the ratio of net debt to EBITDA, imposed on a mining company, meant that its debt should be no higher than the value of EBITDA generated in a two-year period. These were investment loans, and a typical investment period in the sector is between three and five years. Additionally, raw material price fluctuations in the sector are another obstacle to compliance with covenants. As a result, companies struggle to fulfill the imposed requirements and may be forced to suffer the financial consequences of non-compliance (Królikowska and Sierpińska-Sawicz 2016). The studied companies did not incur penalties for covenant violation, as only non-compliance in three consecutive quarterly periods would have triggered financial consequences. Some companies failed to comply with the covenants for two consecutive periods. Another difficulty resulted from the asset-related restrictions. By entering into leaseback transactions, the companies could have increased their debt service capacity or accelerated their development. In turn, other covenants prevented the companies from incurring additional debt, causing problems with liquidity.

REFERENCES

- Achleitner et al. 2012 – Achleitner, A., Braun, R., Hinterramskogler, B. and Tappeiner, F. 2012. Structure and determinants of financial covenants in leveraged buyouts. *Review of Finance* 16(3), pp. 647–684.
- Bąk, P. 2007. Characteristics of the capital gaining sources and financing the activity of coal mine enterprises. Part 2: Sources of the foreign capital. *Gospodarka Surowcami Mineralnymi – Mineral Resources Management* Vol. 23, Issue 2, pp. 101–117.
- Bąk, P. 2008. Financing of the investment activity based on the example of coal mining industry. *Gospodarka Surowcami Mineralnymi – Mineral Resources Management* Vol. 24, Issue 3, pp. 11–17.
- Billett et al. 2007 – Billett, M.T., King, T.H.D. and Mauer, D.C. 2007. Growth opportunities and the choice of leverage, debt maturity, and covenants. *Journal of Finance* 62(2), pp. 697–730.

- Brycz et al. 2015 – Brycz, B., Pauka, M. and Śmieja, N. 2015. The importance of covenants on corporate bond market in theory and empirical research – a literature review (*Znaczenie kowenantów na rynku obligacji korporacyjnych w teorii i w badaniach empirycznych – przegląd literatury*). *Zeszyty Naukowe Uniwersytetu Szczecińskiego nr 855, Finanse, Rynki Finansowe, Ubezpieczenia* t. 1, 74, pp. 23–34 (in Polish).
- Jonek-Kowalska, I. 2013. Bankruptcy risk a Polish mining enterprise – reasons, symptoms and consequences [In:] *Aktualne problemy podnikowej sfery 2013. Zbornik vedeckych prac*, ed. by S. Majtan a kolektiv. Ekonomicka Univerzitať Bratislava. Bratislava, Vydavateľ'stvo Ekonom, pp. 211–217.
- Królikowska, E. and Sierpińska-Sawicz, A. 2016. The types of covenants in bond issuance programs of mining industry companies (*Rodzaje kowenantów zawartych w programach emisji obligacji w spółkach węglowych*). *Gospodarka Surowcami Mineralnymi – Mineral Resources Management* 32(2), pp. 5–30 (in Polish).
- Niedziółka, P. 2014. Possible applications of financial covenants in corporate banking (*Zastosowanie kowenantów finansowych w bankowości korporacyjnej*). *Zeszyty Naukowe Uniwersytetu Ekonomicznego w Krakowie* 10(934), pp. 135–145 (in Polish).
- Pauka, M. and Śmieja, N. 2013. Using debt covenants of put options embedded in bonds – an empirical research among bond issuers from real estate development industry in Poland (*Zastosowanie kowenantów w warunkach emisji obligacji – badania empiryczne wśród emitentów z branży developerskiej w Polsce*). *Zeszyty Naukowe Uniwersytetu Szczecińskiego* 766, pp. 399–409 (in Polish).
- Śmieja, N. and Pauka, M. 2013. Covenants analysis in corporate bonds issued by the debt collection firms (*Analiza kowenantów w obligacjach korporacyjnych emitowanych przez niebankowe spółki z branży finansowej*). *Annales Universitatis Mariae Curie-Skłodowska, Lublin-Polonia, Vol. XLVII, 3, Sectio H*, pp. 551–561 (in Polish).
- Reisel, N., 2014. On the value of restrictive covenants: Empirical investigation of public bond issues. *Journal of Corporate Finance* 27, pp. 251–268.
- Sierpińska-Sawicz, A. and Bąk, P. 2016. Costs of corporate bond issue in coal mining companies. *Contemporary Economics* 10(2), pp. 99–112.
- Smith, W. and Warner, Jr., J.B., 1979. On financial contracting, An Analysis of bond covenants. *Journal of Financial Economics* 7, pp. 117–161.

COVENANTS AS BARRIERS LIMITING COMPANIES' USE OF BANK LOANS

Keywords

loans, financial covenants, non-financial covenants

Abstract

The article addresses the issue of conditions that the borrower is obliged to fulfill during the crediting process. These terms, the so-called covenants are built into credit agreements and are aimed at limiting banks' risk when financing business entities. However, at the same time, covenants constitute conditions limiting the scope of use of bank loans. Covenants are very diverse. The principle hypothesis of the study assumes that the covenants differ according to the type of credit and the characteristic of the industry and the financial situation of the enterprise. In order to examine the hypothesis, an analysis of 25 credit agreements in three corporations and their subsidiaries was undertaken. These entities belong to fuel, mining and metallurgical sectors. At the same time, we observe the extent to which these covenants were kept during four quarters of 2016 and two quarters of 2017. Due to the confidentiality of the data contained in the loan agreements, the names of groups and their companies

were kept confidential at the request of their management. Studies have also shown that abiding by non-financial covenants has been more difficult than abiding by financial covenants. In covenants, several contracts stipulated that a company cannot freely dispose fixed assets, restructure them or use leased assets which hinders the use of those asset to repay debt. One major obstacle was the fact that the company could not undertake any additional business beyond the existing one. This hindered the diversification of companies' activities, which would improve their competitive position on the market. The author intends to conduct further research on covenants to highlight their flexible use and to increase the availability of bank loans to business entities.

KOWENANTY JAKO BARIERY OGRANICZAJĄCE ZAKRES KORZYSTANIA Z KREDYTÓW BANKOWYCH PRZEZ PRZEDSIĘBIORSTWA

Słowa kluczowe

kredyty, kowenanty finansowe, kowenanty pozafinansowe

Streszczenie

W artykule podjęty został problem warunków, do których spełnienia w trakcie kredytowania zobligowany jest kredytobiorca. Warunki te, czyli tzw. kowenanty, wbudowane są w umowy kredytowe i mają na celu ograniczenie ryzyka banku przy finansowaniu podmiotów gospodarczych. Dla podmiotów tych jednak mogą stanowić równocześnie warunki ograniczające zakres korzystania z kredytów bankowych. Myślą przewodnią badań była hipoteza, w której założono, że kowenanty są zróżnicowane stosownie do rodzajów kredytów oraz specyfiki branż i sytuacji finansowej przedsiębiorstw. W celu potwierdzenia hipotezy przeprowadzono analizę 25 umów kredytowych w trzech korporacjach i ich spółkach zależnych. Podmioty te należą do sektora paliwowego, wydobywczego i metalurgicznego. Sprawdzono równocześnie w jakim stopniu kowenanty te były dotrzymane w czterech kwartałach 2016 roku i dwóch kwartałach 2017 roku. Ze względu na poufność danych zawartych w umowach kredytowych nazwy grup kapitałowych i ich spółek zostały utajnione na życzenie zarządów tych podmiotów. Badania wykazały ponadto, że dotrzymanie kowenantów pozafinansowych sprawiło firmom więcej problemów niż dotrzymanie kowenantów finansowych. W kilku umowach zapisano, że firma nie może swobodnie dysponować majątkiem trwałym, restrukturyzować go, wykorzystać leasingu zwrotnego co utrudniało wykorzystanie tego majątku do zwrotu długu. Sporym utrudnieniem były warunki, zastrzegające, że firma nie może podejmować dodatkowej działalności poza dotychczasową. Utrudniało to dywersyfikację działalności spółek, która poprawiłaby ich pozycję konkurencyjną na rynku. Autorka zamierza prowadzić dalsze badania nad kowenantami, aby wskazać bankom pole do ich elastycznego stosowania, a tym samym zwiększenia dostępności kredytów bankowych dla podmiotów gospodarczych.

