

SOURCES OF DEBT CAPITAL IN FINANCING THE ACTIVITIES OF THE METALLURGICAL INDUSTRY

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Abstract

Debt financing is one of the forms of financing a company's operations. It includes long- and short-term liabilities which may have various forms depending on many factors, e.g., the entity's needs and financial condition. The purpose of this article is to characterize different types and forms of liabilities, and present research findings with regard to financing with debt capital in the metal industry in 2009-2013.

Keywords: debt financing, liability, metallurgical industry

1. INTRODUCTION

Capital is a resource used for multiplying economic values. It may have three forms: cash, production means and intellectual property. Capital in the form of cash may come from internal or external sources. Internal financing means obtaining financial cash from the company's profit. External financing means equity financing (equity) and debt financing (debt capital) [1].

Debt capital is an important source of financing the company's operations. It consists in obtaining capital in the form of liabilities towards creditors. The capital obtained in this way may be divided into loans and credits taken out at the financial market, supplier finance facilities, as well as particular forms of financing, namely factoring, forfaiting, leasing, bonds and securitization. Sources of capital are selected by the enterprise depending on its financial condition and results. This choice is sometimes dictated by market conditions.

The purpose of the article is to characterize different types and forms of obtaining debt capital and to present the findings of research on the share of long- and short term liabilities in the total financing of assets, using the example of metallurgical industry companies listed on the stock exchange in 2009-2013.

2. IS DEBT CAPITAL NECESSARY?

Debt capital is used by enterprises to finance their operations. Debt capital is available for the enterprise for a limited time in the form of liability, and its usage may involve costs in the form of interest and commissions [2]. Debt capital may be used for financing current operations by covering the shortage of capital (improving financial liquidity) or financing investment activities. Liabilities may be divided based on various criteria [2, 3, 4]:

- Time:
 - long-term liabilities which include: long-term credits, bonds, bank loans and other liabilities with a maturity period of over 1 year;
 - short-term liabilities which include: credits, bonds, bank loans and trade, tax and payroll liabilities with a maturity period of up to 1 year.
- Type of liability:
 - liabilities towards financing institutions, e.g., due to bank loans;
 - liabilities from loans from various legal entities (excluding banks) or individuals;
 - liabilities towards suppliers of materials, goods or services;
 - statutory liabilities, e.g., settlements with the State's Treasury;
 - liabilities towards employees and other liabilities.

- Forms of financing:
 - loan,
 - credit,
 - leasing,
 - factoring,
 - forfaiting,
 - bonds and others.

When choosing the form of financing, one should pay attention to commissions and take them into account in cost management [6], because due to the diverse types and forms of obtaining funds, financing operations with debt capital may be attractive. Further parts of the article characterize some of them.

3. FINANCING OPERATIONS: LIABILITY TYPES

In the case of classifying debt capital according to types of financial liabilities, the basic form enabling the company to obtain cash is a liability towards financing institutions (banks, incorporate entities) due to credits and loans. An enterprise may take advantage of such liabilities not only in the event of lack of resources, but also when its equity is invested, e.g., in long-term deposits, and the cost of cancelling the investment is greater than the cost of taking out a loan. Using this form of financing involves the payment of interest, the amount of which may differ depending on the agreement with the financing institution, which is also related to the company's financial standing.

When applying for credit or a loan, one has to meet a range of requirements. First of all, one must prove that one has credit capacity (i.e. company's ability to pay off the loan and interest within the deadlines specified in the agreement) and present appropriate collateral [2]. In addition, banks may require borrowers to make financial forecasts for the lending period or present documents confirming timely payment of tax and social insurance liabilities, and if the borrower has loans taken out at other banks, he usually has to present statements confirming their timely repayment.

Enterprises may also finance their activities by prolonging payment terms for liabilities towards suppliers of materials, goods and services. However, this type of financing has been significantly reduced due to the necessity to correct tax-deductible expenses and VAT after exceeding the deadlines defined in the CIT Act, the VAT Act and the Freedom of Business Activity Act [7].

Liabilities towards employees are another type of financing operations. As a rule, companies pay remuneration to their employees after they perform their tasks and work for a specific period (usually one month). Thus, they take advantage of the possibility of generating revenue earlier than they have to cover the expenses. Prolonging the settlement of liabilities towards employees is also used in case of difficulties in obtaining timely payments by recipients of goods and services. However, this type of financing operations by liabilities is used as a last resort.

4. FINANCING OPERATIONS: FORMS OF FINANCING

The most common forms of financing operations are loans, leasing and factoring. Other, not so widely used forms, include forfaiting, bonds and securitization.

Loans are a quick form of obtaining debt capital. Depending on methods of granting them, they may be divided into:

- current account loans (overdrafts),
- loans granted on a loan account.

Overdrafts are usually short-term loans for financing the company's current operations. They provide the possibility of incurring debt on that account on terms and conditions and up to the amount specified in a loan agreement. An entity incurs debt when realizing payment orders (outflow) despite the lack of funds on that account. However, each inflow to the account decreases the loan usage level, which is also the basis for calculating interest. Banks usually apply slightly higher interest to overdrafts, as they have to always be ready to pay the potential full loan amount (limit) [3, 5].

A loan provided on a loan account requires separate operations between the current and loan account in order to use the loan and pay it off. Such loan may be used, and also repaid, in tranches, i.e. parts which are spread over time. Loan amounts on a loan account are usually higher than loan limit amounts on current accounts.

A loan - both short-term loan and investment loan - is a source of debt capital for an enterprise. However, its form and terms and conditions, as well as the manner of using it, have a great influence on the effectiveness of operations of a business entity. That is why any decisions and activities related to bank loans are of key importance for debt management in the enterprise [5].

Leasing is the second most common form of financing business operations. It consists in the possibility of using fixed asset components in a specified period without having to purchase them, in exchange for installments. There are many types of leasing: direct leasing, clean leasing, currency leasing, financial leasing, leveraged leasing, pawn leasing, real property leasing, Norwegian leasing, revolving leasing, supported leasing, specific leasing, operational leasing, full leasing, indirect leasing, employee leasing, tenant leasing, leasing with basic deadline, leasing in PLN, leasing of organized production divisions, and sale-and-lease-back. Based on the criterion of depreciation, one may distinguish: operational leasing and financial leasing. In the case of operational leasing, the object in question is included in the assets of the leasing provider, who is also responsible for making depreciation write-offs [7]. This kind of leasing provides the following benefits for the entrepreneur (leasing user): the possibility of classifying the total initial payment, all leasing installments (in the principal and interest part), as well as payments related to current operation of the object of leasing, as tax-deductible expenses. For most enterprises, this form of financing is more advantageous with regard to taxes. In the case of financial leasing, the object of leasing is a part of the enterprise's assets. Therefore, only the depreciation write-offs, the interest part of installments, and ongoing usage costs constitute tax-deductible expenses. An advantage of the financial leasing is lack of limits regarding the minimum residual value and the minimum agreement term (for a definite period). After the end of the leasing period, the object in question becomes the user's property and it may continue to be used in the company or it may be resold [8].

Leasing is usually used in the case of means of transport, computers, office equipment, machines and devices, but it may also be used for real property. Compared to bank loan, after taking account of tax benefits, the cost of capital in the case of leasing is lower, and the leasing payments are adjusted to the user's capabilities. In practice, leasing means using asset components (purchased and owned by the leasing provider) by the user in exchange for one-off and periodic fees [3].

Factoring consists in short-term financing of goods and service delivery by the entity which acts as an intermediary in financial settlements between the supplier and the recipient. It is a transaction in which a company assigns or may assign receivables (not overdue and not disputed) onto a financial institution (the factor), or incurs a cash loan secured by receivables, on specific terms and conditions determining the costs of the factoring service (margin, commissions, other costs related to the service). In both cases, a company receives cash without waiting for the receivables to be collected [3, 4].

Generally speaking, factoring is a form of financing designed for helping companies to solve cash flow problems (streamlining and accelerating cash flow), which appear in case of prolonging payment terms for recipients of goods and services. Factoring may be divided into:

- full factoring - under a receivables assignment agreement, the factoring bank (the factor) takes over the entire risk of debtor's insolvency;
- recourse factoring - the risk of debtor's insolvency is not transferred to the factor, which means that in the event of debtor's insolvency, the receivable returns to the entrepreneur;
- mixed factoring - it combines the features of full and recourse factoring; the risk of debtor's insolvency is divided between the factor and the assignor (factorer) and the parties agree in which cases and to what extent this risk is carried by particular parties.

Costs of factoring services are calculated and negotiated individually (taking many factors into account, e.g., factorer's turnover, the value of receivables, period of cooperation, credibility of the factorer's debtors, type of signed factoring agreement, the functions taken over by the factor) and mainly depend on the client's potential.

Forfaiting has the similar functions as factoring. It also has the purpose of quicker receipt of funds from the sale of products or performance of services, in exchange for interest and commissions resulting from the agreement. Forfaiting consists in the sale of receivables which is accompanied by a definitive assignment of risk of debtor's insolvency. Forfaiting may cover medium-term and long-term receivables and a forfaiting agreement covers individual cash receivables; it may not cover all receivables of an enterprise or a specific part of such receivables [8, 12]. Forfaiting has two basic functions: the financing function (the creditor, assignor of receivables, obtains a source of financing its operations) and the securing function (the creditor gets rid of the risk of debtor's insolvency). Additionally, forfaiting may also have a service function, as the forfaiting institution undertakes to perform a range of additional activities for the assignor of receivables. A forfaiting transaction includes at least three business entities: the assignor of receivable (the provider of goods or services), the payer of receivables (forfaiting debtor) and the forfaiting institution (forfaiter) which purchases the receivable.

Issuing bonds is a yet another form of obtaining debt capital. A bond is a security issued in series, in which the issuer states that it is the debtor of the bond's owner (bondholder) and undertakes to render specific performances under the terms and conditions of the issue in a specified period. The most important types of bonds are treasury bonds (issued by the State Treasury), enterprise bonds and municipal bonds (issued by communes or associations of communes) [9]. The following terms are characteristic for bonds:

- bonds' nominal value - is specified by the bond issuer and means the amount which the bondholder will receive after the end of the bond term, i.e. upon redeeming the bond by the issuer;
- the market value means the price for which the bond may be sold on the market;
- the nominal interest rate is the value of interest paid by the issuer, calculated in relation to the bond nominal value.

Bonds may be registered bonds or bearer bonds. The receivables resulting from bonds may be secured or unsecured. Secured loans give the investor the guarantee of return of the nominal value of issued bonds together with due interest. They are traded on the primary market, where they are sold to their first owner, and on the secondary market, where they are placed afterwards and when the actual trade takes place. Primary market of treasury bonds in Poland are tender procedures for bonds or sales offer through brokerage houses. The secondary market is the Warsaw Stock Exchange.

Securitization is an off-balance sheet method of obtaining capital for the purpose of investments and current operations. It transforms selected company assets into securities which may be subject to trade, and thus exchanged into cash. The purpose of securitization is obtaining financing by companies which are either seeking alternative sources of financing, at competitive cost, or are not able to obtain further debt capital because the share of debt capital in their liabilities is already too high. Securitization of assets is particularly beneficial in the case of companies which have significant receivables regulated by recipients over longer periods. Maintaining such receivables may be forced by the market and competition and may negatively affect the company's liquidity. In such case, securitization of receivables may solve the problem of lack of liquidity

[2, 10]. Securitization may cover: future receivables, i.e. receivables which do not exist at the moment of transfer, receivables under mutual agreements, e.g., receivables under agreement on the periodic supply of electricity.

Securitization enables a company to improve the efficiency of financial management by optimizing the use of capital, accelerating cash flows and increasing revenue, and also by diversifying the sources of financing, limiting credit risk and reducing the costs of obtaining capital [3].

5. SHARE OF DEBT CAPITAL IN METALLURGICAL INDUSTRY COMPANIES

The purpose of the research was to specify to what extent metallurgical industry companies use debt capital to finance their activities. The subject of research were metallurgical industry companies listed on the stock exchange in the years 2009-2013, such as Alchemia SA, Boryszew SA, Ferrum SA, Impexmetal SA and Stalprodukt SA.

The value of liabilities and equity for the analyzed sector in particular years is presented in **Table 1**.

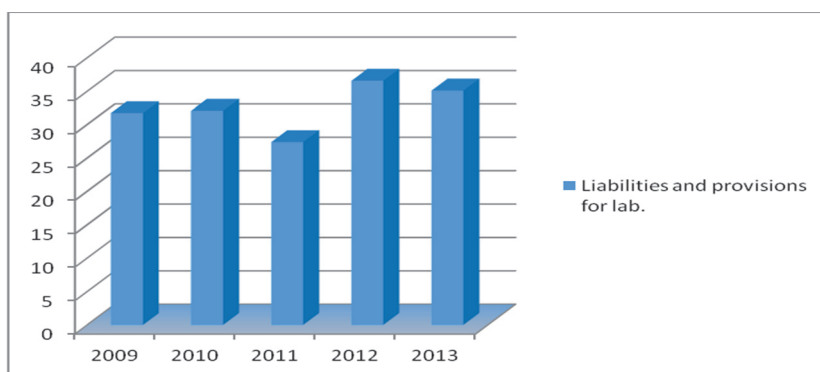
Table 1 The value of liabilities and equity of metallurgical industry companies listed on WSE (own material, based on WSE materials)

Name/years (in PLN thousands)	2013	2012	2011	2010	2009
Equity, including:	29,937,967	27,667,851	29,063,979	20,126,570	15,532,291
Shareholders	28,885,555	26,734,013	28,095,343	19,263,362	14,872,525
Minority interests	1,052,412	933,838	968,636	863,208	659,766
Liabilities and provisions, including:	16,206,487	15,968,598	10,967,883	9,510,244	7,217,623
Long-term	8,517,578	7,863,234	3,553,716	3,454,902	2,534,563
Short-term	7,688,909	8,105,364	7,414,167	6,055,342	4,683,060
LIABILITIES AND EQUITY	46,144,454	43,636,449	40,031,862	29,636,814	22,749,914

In the group of enterprises covered by the research, the total liabilities and equity increased on average by 19.75% a year. In 2009, total liabilities and equity amounted to PLN 22,749,914 thousand, while in 2013, they increased more than two-fold and amounted to PLN 46,144,454 thousand.

The share of liabilities and provisions in the analyzed period was not subject to such dynamic changes (see **Fig. 1**). The share of liabilities and provisions for liabilities in the total liabilities and equity was in the range of 27-37%. The lowest share was reported in 2011, and amounted to 27.4%, while the highest share was reported in 2012, and amounted to 36.59%.

Fig. 1 Share of liabilities and provisions in total liabilities and equity (%) in the metallurgical industry (own materials, based on WSE materials)



Compared to other sectors, the share of debt capital is relatively low (construction industry 76%, chemical industry 53.58%, electromechanical industry 40.95%, power industry 32.56%). It means safe involvement in financing activities with debt capital.

The share of short-term and long-term liabilities in the sources of debt financing for metallurgical industry changed over the years in question for the benefit of long-term liabilities (see **Fig. 2**).

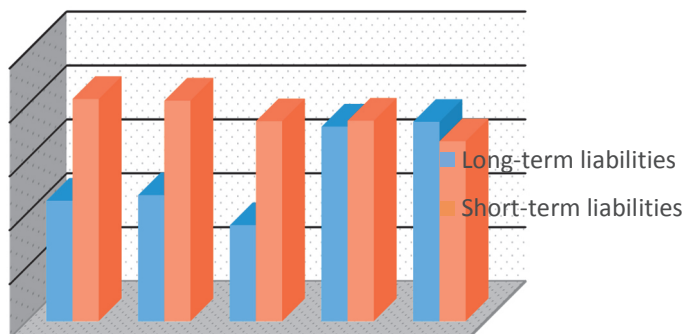


Fig. 2 Share of short-term and long-term liabilities in total liabilities and equity (%) in the metallurgical industry (own materials, based on WSE materials)

In 2009-2011, short-term liabilities played a significantly more important role in the structure of sources of debt financing. Their share amounted to 22.43% in 2009 and 18.52% in 2011, and was almost twice as large as the share of long-term liabilities, which amounted to 11.16% and 8.88%, respectively. In 2012-2013, the share of long-term liabilities significantly increased, and amounted to 18.02% in 2012 and 18.46% in 2013, and was comparable to the share of short-term liabilities, which amounted to 18.57% and 16.66%, respectively. The dominating role of short-term liabilities may result mostly from the common use of trade credit.

The increased share of long-term financing may be related to the increase of the share of fixed assets in the total assets in the years 2012-2013 (see **Fig. 3**).

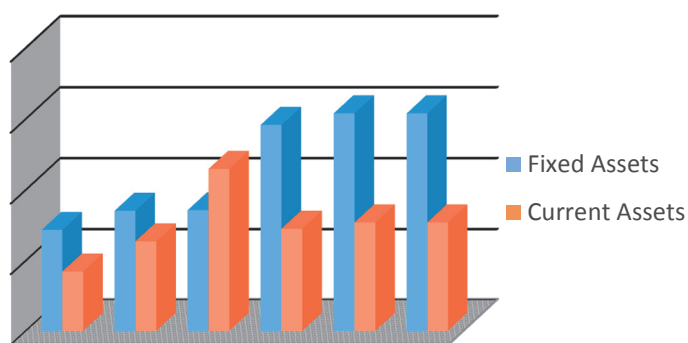


Fig. 3 Fixed and current Assets (in thousand PLN) (own materials, based on WSE materials)

In 2009-2013 the share of fixed assets in the total assets dynamically increased. In 2009, fixed assets amounted to approx. PLN 14,322,124 thousand, to increase almost two-fold to the amount of PLN 30,758,401 thousand in 2013.

CONCLUSION

There are many types and forms of debt financing of enterprise's activities. A decision on choosing a specific source of financing depends on many factors - the size of the enterprise, its market position, legal form and strategy, but most of all, on the current and forecasted financial standing. When using debt capital, one should

take account of its cost and the risk of conducted operations, as well as the effectiveness of using the invested capital. Large share of debt capital in the enterprise's total capital may contribute to lack of financial liquidity. In the metallurgical industry, debt capital does not exceed 35% of total capital, while short-term liabilities are decreasing to the benefit of long-term liabilities. This is a sign of a healthy financial situation of the industry, and of limited interest in such forms of financing.

REFERENCES

- [1] BEGG D., FISHER S., DORNBUSH R. *Mikroekonomia*, Polskie Wydawnictwo Ekonomiczne, Warszawa, 2003.
- [2] SIERPIŃSKA M., WĘDZKI D. *Zarządzanie płynnością finansową w przedsiębiorstwie*, PWN, Warszawa, 2001.
- [3] BIEŃ W. *Zarządzanie finansami przedsiębiorstwa*. Difin, Warszawa, 2008.
- [4] SZCZEPAŃSKI J., SZYSZKO L. (red.) *Finanse przedsiębiorstwa*, Warszawa: PWE, wydanie III zmienione i rozszerzone, 2007, s. 141-142.
- [5] CZEKAJ J., DRESLER Z., *Zarządzania finansami przedsiębiorstw: podstawy teorii*. PWN, Warszawa, 2005.
- [6] SANIUK A., VIDOVA H., *Controlling logistyczny - pomiar i zarządzanie kosztami*, Wydawnictwo IIPZ, UZ, 2012, s.114.
- [7] USTAWA O PODATKU DOCHODOWYM OSÓB PRAWNYCH z dnia 15 lutego 1992 r., Dz.U. z 1992 r. nr 21, poz. 86, z późn. zm.
- [8] KUŹDOWICZ D., NOWAK E. *Aspekty podatkowe i księgowe leasingu w zarządzaniu przedsiębiorstwem*, Management 2002, Vol.6, No. 2, s. 99-109.
- [9] TARNOWSKA D. *Faktoring w Polsce*, Oficyna Wydawnicza SGH, 2007.
- [10] BRIGHAM E.F., HUSTON J.F. *Podstawy zarządzania finansami*, PWE, Warszawa, 2005.
- [11] KOSIŃSKI A. *Sekurytyzacja aktywów na świecie i w Polsce*. Zarządzanie i Finanse - Biblioteka Menedżera i Bankowca; Warszawa 1997.
- [12] SŁOWNIK EKONOMICZNO-PRAWNY, www.slownikekonomiczny.pl, 2014.