

SCIENTIFIC PAPERS  
OF THE UNIVERSITY OF PARDUBICE  
Series A  
Faculty of Chemical Technology  
**18 (2012)**

**LONG-TERM BANK LOANS AND CORPORATE  
BONDS AS SOURCES OF CORPORATE FINANCING  
IN THE CZECH REPUBLIC**

Jan SVĚDÍK<sup>1</sup> and Liběna TETŘEVOVÁ  
Department of Economics and Management of Chemical and Food Industry,  
The University of Pardubice, CZ–532 10 Pardubice

Received September 30, 2012

*The paper deals with the problems of long-term bank loans and corporate bonds as alternative sources of corporate financing in the Czech Republic. Firstly, the authors define and classify financial sources and evaluate development and structure of corporate financing in Czech companies. Secondly, the attention is paid to deciding between long-term bank loans and issuing corporate bonds, while the roles of both qualitative and quantitative evaluation are pointed out. Subsequently, the paper analyses and evaluates the situation on the Czech capital market from the point of view of long-term bank loans and corporate bonds.*

---

<sup>1</sup> To whom correspondence should be addressed.

## **Introduction**

In each phase of their life cycle, companies need sufficient volume of financial sources to finance their operating entrepreneurial activities and investment development. However, the success is conditioned by the optimal structure of the financial sources, where the cost of acquisition and maintenance of these sources is minimal.

Potentially, companies dispose of a wide range of financing sources. However, for a lot of them the actual possibilities of utilizing them in practice are limited. Long-term bank loans and corporate bonds as sources of financing strategic corporate needs represent alternatives that have been widely discussed for a long time.

The general opinion is that the European tradition of loan financing also prevails in the conditions of the Czech Republic. However, in the course of time the approaches of Czech financial managers to selection of financing sources are changing. The paper aims to analyse and evaluate the development and structure of corporate financing sources in the Czech Republic, emphasizing long-term bank loans and corporate bonds.

## **Corporate Financial Sources in the Czech Republic**

The term corporate financial sources refers to the financial means intended for implementation of corporate outputs and for an increase in their value [1]. They are the sources of creation of financial means and the corporate capital [2].

Financial sources can have the character of short-term sources (with maturity within one year) and long-term sources (with maturity over one year). In addition, some authors also distinguish medium-term sources (with maturity from one to five years). From the point of view of ownership, corporate financial sources can be divided into the equity sources (in the ownership of the owners) and the debt sources (debts). Financial sources can also be classified according to the subject of creation as internal (generated by the company's activity itself) and external (created outside the company).

If we focus on long-term financial sources, which have the basic importance in any company in view of the fact that they are intended for financing long-term investment needs, we can state that most companies in the Czech Republic have the possibility of choosing from several types of financial sources. And joint-stock companies have the biggest choice of financial sources. In practice, they actually use, as for the equity sources, mainly the retained earnings, depreciation and share issues, and as for the debt sources, bank loans, supplier loans, financial leasing, and corporate bonds. Although the scope of potential financial sources is much wider, given their disadvantages and limitations they are not used in the Czech corporate practice. As an example of such sources, we can state long-term bills of exchange

or long-term deposits from the customers.

As for the financial structure, the current selection of financing sources by the managers of Czech industrial companies most resembles the theory of hierarchical order [3]. Financial managers in the first place ensure sources for financing needs from the internal sources in the form of the retained earnings and depreciation, then they use external sources in the form of bank loans, in the second place they use corporate bonds, and the last source within the hierarchical order is in the form of share issues. [4,5] This results from the effort to avoid influence of external entities, particularly the impacts of the capital market.

Table I Financing sources used by Czech industrial companies with 100 and more employees in 2003-2011

Financial sources (in CZK bn)	2003	2004	2005	2006	2007	2008	2009	2010	2011
Equity capital	1 024.5	1 141.2	1 272.4	1 457.3	1 476.0	1 675.8	1 534.8	1 509.4	1 538.2
Registered capital	632.4	638.0	690.5	700.3	644.6	827.3	710.6	684.9	670.1
Net profit	79.7	122.9	129.3	169.5	157.0	178.2	160.7	173.5	186.3
Retained profit and funds	312.0	380.0	453.0	587.0	628.0	670.0	663.0	651.0	681.8
Debt financial sources	895.3	934.1	1 056.9	1 204.5	1 213.4	1 482.1	1 340.6	1 419.6	1 517.2
Reserves	94.2	92.6	109.8	125.6	119.4	117.6	109.2	127.3	124.6
Corporate bonds	47.3	40934	38.0	46.3	55.8	60.7	119.6	152.6	171.0
Other long-term liabilities	99.5	143.8	120.2	166.5	103.7	157.3	182.9	208.4	245.0
Short-term liabilities	419.5	470.9	498.2	534.7	625.1	793.5	634.0	692.5	716.1
Long-term bank loans	61.7	102.0	143.2	164.6	140.0	170.0	153.9	112.2	118.6
Short-term bank loans	173.0	97.9	147.5	166.7	169.5	183.1	141.0	126.6	141.8

Source: [6]

The development of the financial sources used by Czech industrial companies with 100 and more employees in the period of 2003- 011 is shown in Table I. It is apparent from the table that the share of equity sources prevails over the share of debt sources. However, the volumes of equity capital and debt capital have been approximating to each other since 2004. In the last observed period (2011), the share of the equity capital in Czech industrial companies with 100 and more employees amounted to 49.38 %, while the debt capital reached 48.71%, and the other capital comprised the remaining part of 1.91%. It is worth noticing the mutual relation between long-term bank loans and corporate bonds, where, in the last two observed years unlike the preceding years, the volume of corporate bonds prevails over the volume of bank loans.

## **Long-term Bank Loans and Corporate Bonds — Financing Alternative**

Bank loans and corporate bonds represent an important financing alternative in the conditions of the Czech Republic as debt financial sources.

Bank loans represent an unsecuritized debt financial instrument, through which a commercial bank or another financial institution loans a certain volume of financial means to a debtor for a period stipulated in advance against their commitment to pay an agreed interest for this loaned capital, redeem, in agreed periods gradually or in a lump sum, the principal sum of the loan, and meet properly any other terms and conditions related to this loan which the debtor undertakes to meet in the loan agreement [7].

Bank loans can be of a short-term or long-term character. Long-term bank loans are principally the same debt financial instruments as ordinary short-term loans. However, they differ in certain characteristics. Mostly, they are loans with the maturity between 3 and 7 years, where the repayment is performed in regular instalments. The volumes of such loans are usually higher than those of short-term loans as they are used for financing extensive investment projects. As for long-term bank loans, the loaned financial means can be drawn in a lump sum or continuously in accordance with the expenditure connected with the investment, where there is always the latest possible date of drawing. The interest on long-term loans can be fixed or variable depending on the contract terms and conditions [8]. It is possible to get long-term bank loans either in the form of a term loan (it is a form of a classical investment loan) or a mortgage (i.e., a loan with a pignorative contract) [2,3].

Long-term bank loans have certain pros and cons. The pros include:

- availability for a wide spectrum of entrepreneurial entities – various sizes and legal forms of business;
- individual conditions;
- lower administrative demands in comparison with the securities market instruments;
- absence of issue costs;
- possibility of using the interest tax shield;
- no distribution of ownership rights.

On the other hand, the disadvantages of long-term bank loans can particularly be seen in:

- the limited volume as compared to the securities market instruments;
- necessity of securing in the form of a pledge;
- necessity of timely payment of the interest and of the nominal value instalments;
- potential limitation of the decision-making rights of the loan recipient.

Corporate bonds represent long-term securities expressing the issuer's debtor

commitment towards the owner of this security. This debtor commitment is based on a credit relationship where the creditor buys a security with the condition the debtor will pay back the loaned sum together with the yields specified in advance within the stipulated period [9,10]. Corporate bonds are usually issued in bulk in bigger series; usually they are publicly tradeable securities that can be bought and sold on the public capital markets [3].

See Table II for an overview of corporate bonds currently traded at the Prague Stock Exchange.

Table II Corporate bonds traded at the Prague Stock Exchange

Name of corporate bond	Issuer	Area of business	Issue duration (years)	Issue volume (million)
ABS JETS 6,50/16	ABS Jets, a.s.	airline transport	5	CZK 450
CETELEM ČR VAR/14	CETELEM ČR, a.s.	trade	3	CZK 1 000
CPI ALFA 5,50/17	CPI Alfa, a.s.	development	5	CZK 279
CPI VAR/15	Czech PropertyInvestments, a.s.	development	3	EUR 15
CPI VAR/19	Czech PropertyInvestments, a.s.	development	7	EUR 57
CPI VAR/19	Czech PropertyInvestments, a.s.	development	7	CZK 2 000
ČEZ VAR/14	ČEZ, a.s.	power engineering	15	CZK 2 500
DALKIA ČR 4,24/15	Dalkia Czech Republic, a.s.	power engineering	7	CZK 10
GREENVALE VAR/14	GREENVALE, a.s.	development, services	5	CZK 400
HOME CR. BV 0,00/15	HomeCredit B.V.	trade	5	CZK 2 900
HOME CR.BV 6,25/16	HomeCredit B.V.	trade	4	CZK 3 750
ISTROKAP.CZ 10,0/16	ISTROKAPITAL CZ a.s.	trade, services	7	EUR 150

Table II — Continued

Name of corporate bond	Issuer	Area of business	Issue duration (years)	Issue volume (million)
JTFG I 6,40/14	J&T GlobalFinance I., B.V.	trade, insurance services	3	CZK 4 500
ORCO VAR/20	OrcoProperty Group S.A.	construction	14	CZK 300
SM VAK OVA 5,00/15	NorthMoravianWater Works and Sewerage Ostrava a.s.	services	10	CZK 2 000
UNIPETROL VAR/13	UNIPETROL, a.s.	chemical industry	15	CZK 2 000
ZONER SOF.10,00/14	ZONER software, a.s.	IT	5	CZK 76.69

Source: [11]

Just as bank loans, corporate bonds are distinguished by certain advantages and disadvantages [3,12]. The following characteristics can be considered as the main advantages of corporate bond issues:

- possibility of obtaining a big volume of financial means from a large number of creditors;
- lower life costs in comparison with shares;
- possibility of using the interest tax shield;
- securing in the form of pledging property is not required;
- successful issues improve the corporate image.

The disadvantages of corporate bond issues include, in particular:

- the creditors' high demands on the issuer's credit capacity;
- an increased financial risk due to higher indebtedness;
- high issue costs;
- necessity of timely payment of the interest and of the nominal value instalments.

Deciding between long-term bank loans and corporate bonds as the corporate financing sources is affected by a number of factors. In the first place, it is necessary to consider the legal form, size and image of the company. The decisive fact is then the volume of the required financial means. It is also necessary to consider the willingness to make information concerning the company activities public.

The thing is that corporate bonds can be issued and successfully placed on

the capital market by big and well-known companies with the “good name”. As for the volume of the required financial means, a bond issue does not become, in view of the significant volume of fixed costs related to their issue, budget-wise unless it reaches a certain issue volume. The optimum volume is about CZK100 million, the minimum CZK10 million. However, in the case there is a need for a considerable volume of financial means, corporate bonds become more favourable as compared to bank loans, as the means are provided by a large number of creditors, who share the risk, and so the required capital price is lower. However, the fact is that if a company is entering the capital market in relation to an issue of securities, it is subject to stricter administrative regulation, and it is obliged to publish a wide spectrum of information about the company.

While deciding about the form of financing, it is also necessary to consider the current situation on the capital market, e.g., from the point of view of interest rates or prepared issues of securities.

The final decision is then made on the basis of judging the qualitative and quantitative criteria. The qualitative evaluation concerns advantages and disadvantages of alternative financial sources, while the quantitative evaluation considers the financing effectiveness through the criteria of the net present value of capital or the internal rate of return [3].

## **Financing through Long-term Bank Loans and Corporate Bonds in the Czech Republic**

As for long-term bank loans as a source of financing the needs of industrial companies in the Czech Republic, particularly the last years have seen a downward trend in their utilization. An exception is represented by 2008, when the impacts of the global financial crisis became evident. The downward trend resulted for one thing from the effort of company managers not to increase indebtedness and not to expose themselves to potential cost of financial difficulties, and for another a wider offer of innovated financial instruments and a higher willingness of financial managers to make use of them, but also the entrance of foreign investors, who try to utilize all the alternative financial sources.

For development of long-term bank loans as a financial source in the environment of Czech industrial companies in 2000-2011, see Fig. 1. Figure 1 also shows the share of long-term bank loans in the total liabilities of Czech industrial companies.

As for corporate bonds as a source of financing the needs of industrial companies in the Czech Republic, since 2005 there has been an apparent increasing volume of corporate bonds. The reason is particularly seen in the growing transparency of the capital market, together with the increasing confiden-

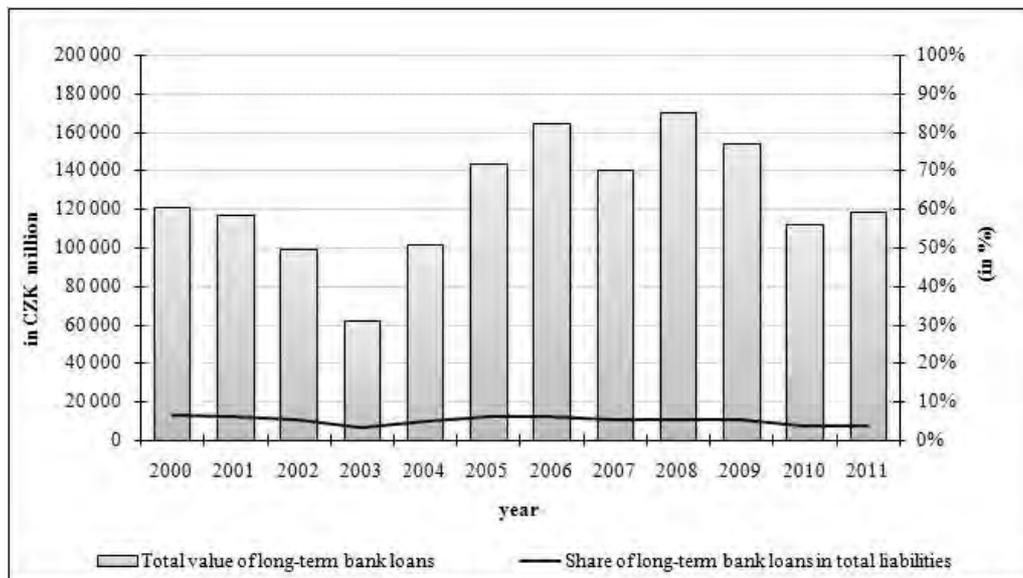


Fig. 1 Development of long-term bank loans and their share in the total liabilities of Czech industrial companies with 100 and more employees in 2000-2011. Ref. [6]

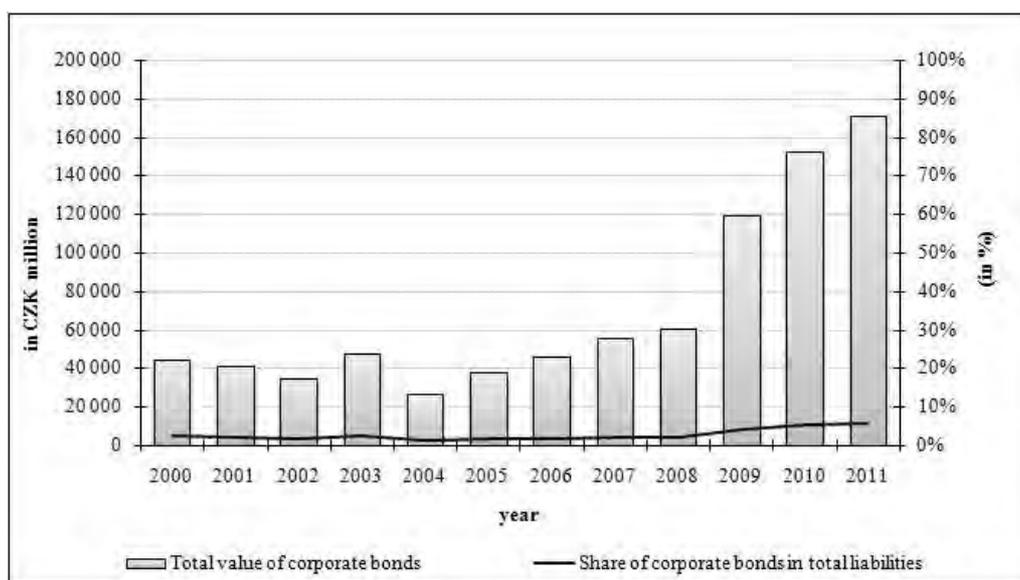


Fig. 2 Development of corporate bonds and their share in the total liabilities of Czech industrial companies with 100 and more employees in 2000-2011. Ref. [6]

ce of the investors in this instrument, but also the wider awareness of financial managers of the alternative instruments, which include corporate bonds. It is also worth noticing the hike in the volume of issued bonds in 2009, which is also related to the economic crisis, where the investors show their bigger interest in corporate bonds compared to the more hazardous shares and derivatives, and so there are more favourable conditions for issuing corporate bonds.

For development of corporate bonds as a financial source in the environment of Czech industrial companies in 2000-2011, see Fig. 2. Figure 2 also shows the share of corporate bonds in the total liabilities of Czech industrial companies.

As for the correlation between long-term bank loans and corporate bonds, until 2008 the volume of long-term bank loans was several times bigger than the volume of corporate bonds. However, 2009 saw a turn in the situation, and the volumes of long-term bank loans and corporate bonds approximated each other, but the volume of long-term bank loans still prevailed. The volume of corporate bonds has been bigger than the volume of long-term bank loans since 2010. This refutes the opinion on the so-called credit tradition of financing Czech industrial companies presented over a long period.

Figure 3 compares long term bank loans and corporate bonds as financial sources in the environment of Czech industrial companies with 100 and more employees in 2000-2011.

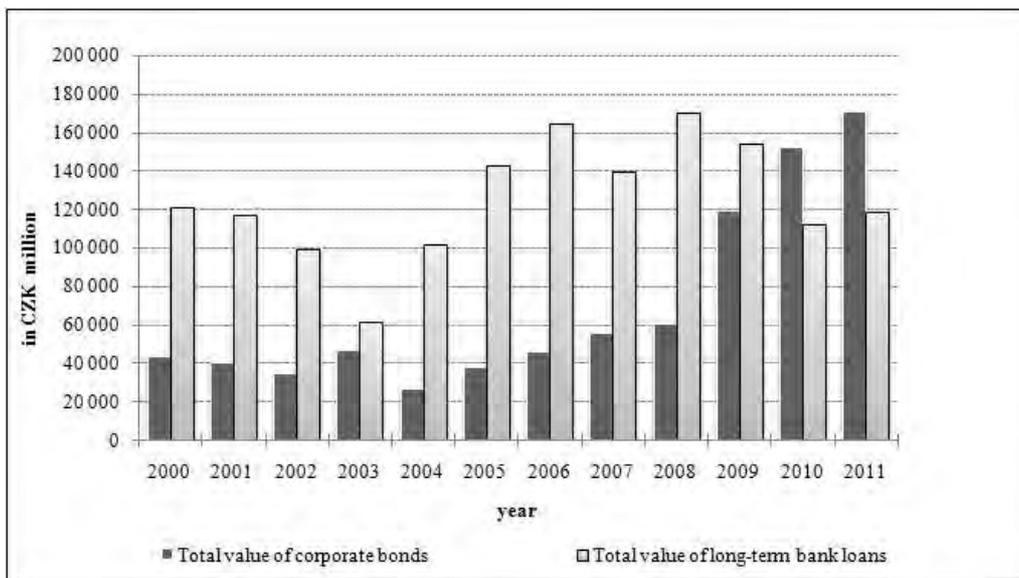


Fig. 3 Comparison of development of long-term bank loans and corporate bonds of Czech industrial companies with 100 and more employees in 2000-2011

## Conclusion

The key problem of the corporate financial management is to ensure sufficient volume of financial sources to finance the needs, and also to ensure the given volume of financial sources in the optimum structure. The approaches of company managers differ both in the international environment and in time. There is a generally prevailing opinion of the European tradition of financing through loans, and on the other hand of the American tradition of financing through securities. This opinion has been proved by the situation in financing Czech industrial companies after 1989. This situation was also supported by the fact that before 1989 long-term bank loans were the essential, and basically the only possible, source of financing the corporate needs. This situation also resulted from the initial lack of confidence of the investors in the Czech capital market. In the course of

time, as stated in the paper, the approach both of company financial managers and of investors in the Czech Republic has changed.

In conclusion, we can state that with time corporate bonds have become, in the conditions of the Czech Republic, a standard source of financing industrial companies with 100 and more employees, and their volume now prevails over the volume of long-term bank loans.

## References

- [1] Wöhe G.: *Introduction to Business Management* (in Czech), C.H. Beck, Prague, 1995.
- [2] Valach J. et al.: *Financial Management* (in Czech), 2<sup>nd</sup> edition, Ekopress, Prague, 1999.
- [3] Tetřevová L.: *Projects Financing* (in Czech), Professional Publishing, Prague, 2006.
- [4] Baker H.K., Martin G.S.: *Capital Structure and Corporate Financing Decisions: Theory, Evidence, and Practice*, John Wiley & Sons, Hoboken, 2011.
- [5] Damodaran A.: *Applied Corporate Finance*, 3<sup>rd</sup> edition, John Wiley & Sons, Hoboken, 2010.
- [6] Ministry of Industry and Trade of the Czech Republic: *Financial Analysis 2000-2011* [on-line], [cit. 2012-07-24], available at URL: <<http://www.mpo.cz/cz/ministr-a-ministerstvo/analyticke-materialy/#category238>>.
- [7] Mareš S.: *Sources of Business Financing*, Eupress, Prague, 2004.
- [8] Kislingerová E., Boukal P., Čepelka V., Hnilica J., Novotný J., Scholleová H., Sieber P., Vávrová H.: *Managerial Finance* (in Czech), 2<sup>nd</sup> edition, C. H. Beck, Prague, 2007.
- [9] Bodie Z., Kane A., Marcus A. J.: *Essentials of Investments*, 5<sup>th</sup> edition, McGraw-Hill Companies, New York, 2003.
- [10] Sabolová V., Tetřevová L.: *Alternative Forms of Financing PPP Projects*, In Proceedings of the 6<sup>th</sup> International Scientific Conference “Business and Management 2010”, Vilnius, 2010.
- [11] Prague Stock Exchange: *List of Securities* [online], [cit. 2012-11-09], available at URL: <<http://www.pse.cz/Cenne-Papiry/>>.
- [12] Meluzín T., Zinecker M.: *IPO – Primary Public Offer of Stock as a Source of Financing of Company’s Development* (in Czech), Computer Press, Brno, 2009.