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ABSTRACT

This paper focuses on the development of reference interest rates in the Czech Republic after the currency crisis of May 1997 and covers the period to the years 2002/2003 (that is to the time just before the country’s entry into the European Union in May 2004) when the currency exchange of the Czech koruna (CZK) and interest rates were stabilised. The relatively high volatility of Czech reference interest rates in the late 1990’s influenced the development of company debt financing, forcing companies to become more sophisticated and dynamic in their use of debt instruments and hedging tools as they attempt to manage the subsequent interest rate risk. In this paper, the situation in three model corporations is also described – the first, a solvent company with a foreign owner (Moravian-Silesian Heating Company – MSHC, renamed to Dalkia Morava in 2002), the second, a solvent company with the Czech state as its majority owner (North Moravian Power Company – NMPC), and the third with domestic capital, which had economic problems during the given period (Vítkovice, a.s.), plus a big insurance company as a specific and very important institutional investor in a domestic financial markets.

INTRODUCTION

The scarcity of specific studies addressing the impact of interest rate changes in the Czech Republic – especially in the years following 1997 – on corporate financial decisions provided the impetus to undertake this research. Unlike the relatively stable rates of Eurozone markets, the Czech Republic has in recent years experienced a precipitous decline in the inter-bank rate PRIBOR. During the period of relatively high interest rates (1997 and 1998), Czech companies scrambled to find alternative sources of financing to be able to avoid expensive short- and long-term bank loans. The range of alternatives included CP programs for short-term and bonds for long-term financing. From 1999 onwards, with lower interest rates, companies with cash surpluses have needed to find much more sophisticated instruments (especially from the point of view of tax regime applied to the yield) to increase their profit from financial operations. The relatively high volatility of the reference interest rates has encouraged a significant rise in the use of interest rates hedging instruments in the Czech financial market since 1997.

INFLUENCE OF THE REFERENCE INTEREST RATES EVOLUTION ON CORPORATE SECTOR

Unlike the relatively stable rates of Eurozone markets, the Czech Republic has in the period under consideration experienced a precipitous decline in the inter-bank rate PRIBOR. During the period of relatively high interest rates (1997 and 1998), Czech companies scrambled to find alternative sources of financing to be able to avoid expensive short- and long-term bank loans. The range of
alternatives included Commercial Paper programs for short-term and bonds for long-term financing.

As Figure 1 illustrates, the reference interest rate in the Czech Republic declined sharply since 1997. As a result, Czech corporations were forced to operate in a relatively unstable interest rate environment until 2000, in comparison with their Eurozone counterparts. The average 3-month Dutch AIBOR (since 1999 the EURIBOR, as a result of the introduction of the Euro currency) is presented for comparison.

Figure 1: Comparison of the development of the 3M reference interest rates for Czech and Dutch (i.e. since 1999 Euro) markets, yearly averages in % p.a.

As Polák (2005) argued, the unstable interest rate environment at the end of the 90’s forced Czech businesses to choose differing strategies during periods of high and low interest rates, and even expand the tools used to eliminate risk caused by such interest rate variation. During periods of relatively high reference rates (particularly 1997 and 1998, and in terms of EURIBOR rates, even 1999 and 2000), businesses seeking financial resources looked for alternatives to short and long-term credits. In the Czech Republic, such alternatives include most notably, commercial papers issues for short and mid-term financing. For long term financing, there are alternatives to loans, namely the issue of corporate bonds. As Tables 1 and 2 show, corporate bond issues are not very wide spread, despite the inverted profile of IRS yield curve (in the years 1997-1998) for attracting fixed coupons under the appropriate PRIBOR rate. The reasons behind this include a lack of confidence from the side of investors, and at the same time, a lack of willingness from the issuers to go into long-term commitments in an environment of high and volatile interest rates.
Table 1: Advancement in volume of loans provided to the clients of Czech based banks, in billions of CZK, as at the end of respective year

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<tbody>
<tr>
<td>Loans</td>
<td>1 149.6</td>
<td>1 135.4</td>
<td>1 085.7</td>
<td>952.4</td>
<td>974.5</td>
<td>949.8</td>
</tr>
<tr>
<td>from that loans provided to corporations in bln. of CZK</td>
<td>986.4</td>
<td>917.4</td>
<td>851.2</td>
<td>720.0</td>
<td>631.5</td>
<td>555.6</td>
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<tr>
<td>in %</td>
<td>85.8%</td>
<td>80.8%</td>
<td>78.4%</td>
<td>75.6%</td>
<td>64.8%</td>
<td>58.5%</td>
</tr>
<tr>
<td>from that long term loans provided to corporations in bln. of CZK</td>
<td>327.5</td>
<td>335.8</td>
<td>336.2</td>
<td>316.8</td>
<td>289.2</td>
<td>236.1</td>
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Table 2: Advancement in volume of corporate bonds (in nominal value) registered at the Prague Stock Exchange, in billions of CZK, as at the end of respective year

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<tr>
<td>Corporate bonds in NV</td>
<td>8.65</td>
<td>17.95</td>
<td>40.00</td>
<td>53.01</td>
<td>53.04</td>
<td>57.04</td>
</tr>
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In terms of commercial papers issues, there are no central statistics. This is because such securities issues needn’t be approved by the SEC. Besides this, in the Czech Republic, this program is only for debtors who belong to companies with prime credit risk ratings.

INVESTMENT STRATEGY

It is supposed that a company will chose such an investment instrument, which will ensure it the greatest yield up to the time of maturity or sale. Discussions were carried out on the grounds of the Czech Association of Corporate Treasurers in the last two years on this given theme. An indicator of financial management was also set in the fields of corporate investment and in the yields from financial operations.

\[
YFFO = \frac{IY + S(SS) - S(SD)}{FP} \times 100\%
\]

Where

- \(YFFO\) = yield from financial operations
- \(IY\) = interest yield (profit and loss statement)
- \(S(SS)\) = sales on the sale of securities (profit and loss statement)
- \(S(SD)\) = sale of securities and deposits (profit and loss statement)
- \(FP\) = financial property (balance sheet), average state at the beginning and end of period

The yield development from financial operations has illustrated in % p.a. in three selected companies – Northern Moravian Power Company (NMPC). Moravian-Silesian Heating Company (MSHC), since the year 2002 the company has used a new name – Dalkia Morava), and Vítkovice. In the cases of Vítkovice and NMPC, we are dealing with companies with mostly state ownership in the years under observation. Their position in relation to financial intermediaries on the Czech financial market was however and is by no means different. The North Moravian Power Company is the most important distributor of electrical energy in the Czech Republic from
the point of view of sales and profit, and has a high rating from Standard & Poor’s. From the point of view of its position, the North Moravian Power Company has an excellent position in the area of obtaining external financial means for its activities, as in investing in financial market means, whose intermediary has established a certain credit risk for the bank. Vitkovice is in a different position, financing its production was ensured by credit from the state Consolidation Bank through the means of the company Osinek. A special case in this group is the MSHC, which has been in the hands of foreign investors since 1997.

Debt Financing

It is supposed that a company chooses such debt financing that would have the lowest costs for financing (including subscription and administrative costs). Parallely, it is possible to analyse the proportional amount of cost interest paid in regard to external sources of financing – the issuing of bonds and bank credit. For this purpose, it is also possible to state the quality indicator of financial management in areas of company debt activities, and the interest costs for external financing.

\[ CEF = \frac{IC}{BL + B} \times 100\% \]

CEF – costs of external financing  
IC – interest cost (profit and loss statement)  
BL – bank loans (balance sheet), average state at the beginning and end of period  
B – bonds issued (balance sheet), distinguished by time

The development of price indicators for external financing for selected joint-stock companies has been illustrated.

CONCLUSION

Evolution in Czech corporate debt financing been driven by changes in the requirements of suppliers of capital, with institutional and other non-bank investors replacing traditional banks. Investors have become increasingly sophisticated, favoring less regulated instruments. Increased volatility in the reference interest rate has also influenced capital raising decisions, and increased the use of hedging instruments to manage the resulting interest rate risk.

A company, as an investor, can certainly select such an instrument, which will bring it the highest net revenue from the tax regime and interest-bearing points of view. It is interesting in this connection to compare the investment activities of industrial companies, which have aimed mostly on the instruments of money market, with an insurance company that has invested a greater part of its technical reserves into fixed interest-bearing instruments of the capital market (mostly into bonds). For this reason, the insurance company reached revenues under the PRIBID and vice versa in the period of a reversal in the revenue curve of long-term rates (using the IRS rates).

At the same time, the company, as a debtor, tried to minimise interest and other costs in parts of debt financing. In the environment of volatile interest rates, debtors could select two basic strategies – to fix its paid interest by means of an interest swap after the whole time the long-term credit/issued bonds lasts or to leave the variable interest rate connected to the PRIBOR. At least, the primary sense in choosing one of these strategies was evidently to minimise interest rates, for reasons of the dramatic drop in interest rates. The variable interest rate has shown to be better in
the period following the year 1999. Other costs for short-term and long-term debt financing are comparable.

REFERENCES


BIOGRAPHY

Dr. Petr Polák teaches Finance at the VŠB - Technical University of Ostrava (Czech Republic) and Swinburne University of Technology (Melbourne, Australia). Before that he was involved in finance, and accounting, in various senior positions with major corporations in the Czech Republic (such as e.g. Moravskoslezske Teplarny, a.s.), and Canada (BC Hydro). He has been a member of the editorial panel of Treasury Management International since 1999. Dr. Polák has been appointed to the Editorial Board of teh Journal of Corporate Treasury Management, based in London, since March 2007. He is a Certified Finance and Treasury Professional of the FTA (Australia), and in 2001 was appointed Vice-President of the CAT (Czech Association of Corporate Treasurers). He has a Ph.D. in Finance. email: petr.polak@vsb.cz

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