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Influence of the Czech Banks on their Foreign Owners' Interest Margin

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Abstract

The present paper investigates functional relationship between the parent companies and their subsidiaries, the Czech banks. The aim of this study is to examine if there are relationships between net interest margin of foreign parent companies and our selected variables of their Czech subsidiaries. We are using GMM regression with annual data in panels from the period 2005 – 2010. We confirm that there are some significant relationships between net interest income of foreign parent's and the both amount of gross loans and total deposits of their subsidiaries. In addition, we show the ways how it is possible for parent´s to get some cash flows from the Czech banking sector. We make also monetary policy implications for the Czech National Bank, then.

Keywords: Foreign parent companies; subsidiary banks; GMM regression;

1. Introduction

It is important to examine if there could be some influence of the Czech banks' parent companies. All of our selected Czech banks are owned by foreign capital and due to market concentration it can affect whole

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economy in the Czech Republic. Foreign economies that suffer by crisis can constrain parents to affect policies of their subsidiaries. International Monetary Fund published concluding statement news for the Czech Republic, International Monetary Fund, 2012. They argue that foreign owners of the Czech banking sector can take some cash flows from their subsidiaries. This can be a serious problem for the country in the future. Money price will increase for the Czech resident companies. It can affect development of GDP in the country, even the existing of some companies of the Czech industry. All the above issues motivate the present study.

The aim of present study is to examine if there are relationships between net interest margin of foreign parent companies and our selected variables of their Czech subsidiaries (Czech banks). These variables are gross loans, total deposits and net interest margin. The contribution of this study to current corporate governance issues are as follows. Estimating relationships between foreign parent companies and the Czech banks illustrate the possible negative impacts of that on the economy of the country.

Several studies have recently focused on the examining relationship between parent holding companies in USA, Houston and James, 1998, Peek et al., 1999. Our study firstly adopts a new focus by analyzing the financial companies, the banks in the country. Therefore, with its new focus, this study presents also some extension to existing literature. The contribution of this study can be very important to make some banks' policy implications in the Czech Republic. We will construct our ideas for the Czech banking monetary policy implications in this article.

The paper is organised as follows: Section 2 provides an overview of the Czech banking sector in our estimated period. We will focus on the concentration of the banking sector in the country. Section 3 then analysed some current studies on the problematic of the corporate governance. Section 4 firstly describes our data and then our used methodology. Section 5 discusses the output of our models and we make also some policy implications for the Czech banking sector here. Section 6 finally provides summary of the results.

2. The Czech banking sector

In this section we describe the banking sector in the country, its major banks and their foreign owners. Table 1 reports the concentration of the Czech banking sector in our estimated period. We can see that banking sector in the country is in all years concentrated by five major banks. They present almost 60% of the Czech market.

Table 1: The Czech banking sector concentration in period 2005 – 2010

	Bank assets in mil. EUR (100%)	ČSOB	Česká spořitelna	Komerční banka	Unicredit	GE Money Bank	∑ CZ assets in %
2005	100 236.47	21.09%	18.46%	16.98%	6.62%	2.21%	65.36
2006	113 971.96	19.57%	18.67%	16.35%	6.60%	2.32%	63.51
2007	139 302.60	21.25%	17.93%	15.88%	8.10%	2.29%	65.45
2008	154 228.40	17.01%	17.55%	14.69%	6.72%	2.37%	58.34
2009	159 417.87	17.84%	17.42%	14.34%	6.27%	3.20%	59.08
2010	172 775.96	18.01%	17.85%	14.02%	6.24%	3.22%	59.34

For the Czech financial policy area International Monetary Fund has argued and recommended this: The Czech financial system has proved resilient to the effects of the global crisis, but spill over risks remain elevated. Despite slow GDP growth at home and financial strains abroad, the performance of banks is very good, with strong capitalization, solid profits, and ample liquidity. This resilience has been confirmed by the FSAP stress tests. It reflects a large extent a relatively conservative structure of bank balance sheets (particularly low loan-to-deposit ratios) and relatively low indebtedness of the corporate and household sectors. Nevertheless, the financial system is facing a number of risks. It is particularly related to the macroeconomic and financial developments in the euro area, where the parents of the major Czech banks are based. Importantly, the situation of the Czech banks is different from those in most other European host countries. The Czech subsidiaries are typically net creditors *vis-a-vis* their parents.[1] Table 2 depicts names of financial companies that we used for the present study.

Table 2: Parents of the Czech major banks

The Czech Subsidiary	Parent company	Parent's country
Česká spořitelna	Erste Group Bank	Austria
ČSOB	KBC Groep	Belgium
Komerční banka	Société Générale	France
Uncredit	Unicredit	Italy
GE Money Bank	General Electric Company	USA

3. Literature review

Houston et al., 1997 have founded that loan growth at subsidiary banks is more sensitive to the holding company's cash flow and capital position than to the bank's own cash flow and capital. Their evidence suggests that bank parent companies establish internal capital markets to allocate scarce capital among their various subsidiaries. First, their results lend support to those who argue that bank profitability, liquidity, and capital requirements may have important effects on aggregate bank lending. Second, their results have implications regarding the management and regulation of commercial bank holding companies. The present study should have implications for these issues, the both too.

Loan's growth rate is correlated with cash flows. This suggests that all banks find external capital to be more expensive than internal capital, and that banks are typically capital constrained despite the fact that they have access to insured deposits, Houston and James, 1998. Their results suggest that affiliated banks are less constrained in that their loan growth is less sensitive to cash flow, liquidity and their capital ratio. However, loan growth is significantly more sensitive to parent company cash flows than the subsidiary bank's cash flows. Indeed the coefficient on holding company cash flows is over six times larger than the coefficient on the bank's own cash flows.

Next study, Peek et al., 1999 investigates the behaviour of commercial and savings banks in the United States that have been acquired by foreign entities and allowed to continue to operate as a separate entity. For the largest target banks, net income improves following the acquisition and is actually larger than that of their peers. Fee income is typically a less important source of income for these target banks relative to their peers. They suggest that foreign-owned banks tend to be less profitable and less input-efficient than their domestically owned peers.

We have analyzed one different study, Haas and Lelyveld, 2010. There was founded that internal capital

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[1] International Monetary Fund: "Czech Republic – 2012 Article IV Consultation Concluding Statement". Point 11, [online, 13-3-2012], URL: <http://www.imf.org/external/np/ms/2012/022712.htm>.

markets multinational banks manage the credit growth of their subsidiaries. They argue that multinational bank subsidiaries with financially strong parent banks are able to expand their lending faster. As a result of parental support, foreign bank subsidiaries also do not need to rein in their credit supply during a financial crisis, while domestic banks need to do so. It could be interesting compare situation in the small country and banking sector as in the Czech Republic with the situation in the whole Europe, North America and also Asia and Australia.

The most recent study analyzes how supervisory requirements on bank entry and restrictions on bank activities in a host country influence the international expansion of multinational banks, Tsai et al., 2011. They show that banks prefer subsidiary expansion in countries where bank activities are less restricted, but activities' restrictions seem to have no significant effect on bank branches. Changes in supervisory restrictions on bank activities may have stronger effects on bank subsidiaries than on bank branches. When an activity of banks is prohibited in a country, both bank branches and subsidiaries are not allowed. But when an activity is allowed to some extent, usually the regulator permits bank subsidiaries to conduct that business, but not branches.

The last our analysed study, Holod and Peek, 2010 shows that internal capital management involves not only the movement of capital among subsidiaries but also the movement of assets (loans) by means of loan sales and purchases. This study also provides new evidence consistent with internal secondary loan markets helping the subsidiaries avoid the asymmetric information problems faced by participants in the external secondary loan market, and, as a result, mitigating the financial constraints faced by the individual subsidiaries. The present study is not solving this problem, because due to our legislative we cannot operate with loans on the secondary capital market using loans securitization.

4. Data and Methodology

We obtained the dataset from the Bureau van Dijk's BANKSCOPE financial database (last data update 3/11/2011, update no 256.1). The sample includes five Czech major banks that dominate the Czech banking sector with accumulated share on total assets almost 60% and their foreign parent companies. All Czech banks in our data sample are subsidiaries of foreign parent financial companies. Our data includes large financial companies from the EU countries as Austria, Belgium, France, Italy, but also from the USA.

All of our annual data comes from period 2005 – 2010 (in pooled sample). We examine relationships between the Czech subsidiaries and their foreign owners. It is usual that all our selected variables are denominated in different currencies (CZK, EUR, USD), and even in different amounts in financial statements. We convert all of our data in the million EUR. We apply the last official exchange rates in all years for our period.

The inputs include net interest margin, gross loans, total deposits and number of impaired loans. As net interest margin we mean net interest income minus net interest outcome. Therefore we apply gross loans, because net interest margin operates also with impaired loans margin. Due the same reason we apply total deposits, because net interest margin operates with interests from clients as well as interests from banks. Impaired loans are bad loans in financial statements and that means that we do not apply corrections (gross loans minus net loans).

Recent empirical studies use panel regression to estimate equation that describe relationship between foreign parent companies and their subsidiaries, Houston and James, 1998, Peek et al., 1999. Due to our short data sample period we cannot make variables' growth rates and we cannot use OLS regression method. Therefore we apply a panel Generalized Method of Moments (GMM) with orthogonal deviations. In using GMM estimation we follow methodologically earlier study, Haas and Lelyveld, 2010 by (1):

$$Y_{jt} = \propto_{it} + \beta_1 . Y_{jt-1} + \beta_2 . X_{it} + \varepsilon \tag{1}$$

, where Y_{jt} is endogenous dependent variable in form of net interest margin, total deposits, or gross loans, all of foreign parent companies. X_{it} is exogenous independent variable as net interest income, total deposits, or gross loans of the Czech subsidiaries. All variables included i banks in panel in time t. Regression constant is $\propto_{it}$ and symbol ε means residuals of regression.

5. Empirical results

In Appendix we can see correlation matrix of all our selected pool data variables. There are four statistically significant positively correlated pairs between parent and subsidiary companies. These are parents' net interest margin with gross loans and impaired loans of subsidiaries, and gross loans of subsidiaries with parents' impaired loans and total deposits. From our variables we made two regression models. Then we see functional relationship between net interest margin of parents companies (dependent endogenous variable) and gross loans of the Czech subsidiaries, or volume of deposits in the Czech banks.

In the Table 3 we see positive functional relationship between net interest margin of foreign parent's (dependent variable) and gross loans of the Czech banks (independent variable). We can see that gross loans of subsidiaries significantly influence net interest margin of their parent companies. It is difficult to prove why there is a significant relationship in this study. It could indicate some cash flows in form of profits and interest revenues on the Czech loans for example. We argue that it is possible for foreign parent companies to get some financial funds from their subsidiaries. It should be very interesting to estimate, if there are some cash flows in the future research from their non-consolidated financial statements. It is also very important to understand that net interest margin simply means interest revenues from loans minus interest costs from deposits. Therefore we estimate relationship between these two variables, too.

Table 3: GMM regression model with gross loans of CZ banks

Net interest margin of parents companies (dependent variable IRM)			
IRM(-1)	0.2548	0.1930	0.1961
Gross Loans CZ banks	0.7038		
Deposits of CZ banks		0.3363	
Net interest margin CZ			5.41

Note: All variables are statistically significant at 1% level.

In the Table 3 we suggest statistically significant influence of the Czech deposits to net interest income of their parent's. We see that influence of the Czech gross loans have a stronger positive relationship than the Czech deposit influence. This could be caused also by higher interests from the Czech loans than from the deposits in the country. But there is some space also to borrow the Czech deposits abroad. We argue that it is possible and we describe how they can do that. We describe three ways how foreign parent companies can affected profits and get cash flows from their subsidiaries. Some of that ways could be usual, but definitely not in current situation, especially not in crisis times.

The present study works with the pool data of the Czech major banks. But on our result we argue that it is really possible for the Czech Republic face to risks from the parent's economies. We suggest that there is some functional relationship between loans and deposit policy of the Czech subsidiaries and their foreign parent companies. Therefore there may be some secret cash flows from the Czech banks to their parent's that cannot be seen in their financial statements. We do not discuss about illegal deals. But in financial statements we cannot differ between cash flows' interest margins of parent's and subsidiaries for example. It is a real hidden risk for our economy then. Even if our country could help countries affected by financial crisis, costs for the Czech households and companies increase through this help.

Our idea is also supported by regression results from Table 3. Even if there is no statistically significant correlation between net interest incomes of subsidiaries and parent's, we can see that there is functional statistically significant relationship between that. This relationship is also much stronger than in our earlier cases with gross loans and deposits. We found positive relationship, which is normal in this case. The Czech banks have very good performance, solid profits, and ample liquidity, International Monetary Fund, 2012. Negative coefficient could be possible only in the case when parents affect interest margin of their subsidiaries too much. It is very important to say that opposite relationships are not being founded in our study.

Dividends are usual way to get profit for foreign owners of the Czech banks from the parent-subsidy relationship. If they invest and buy shares of the Czech companies, they have a right to participate on the profit of their subsidiaries through this way. But it is unusual to increase profit of the Czech banks through increase of banking fees (of the loans, but also deposits). First, our opinion is that due to that we suggest statistically significant relationship between parent's net interest margin and gross loans and deposits, the both. Increasing of the interest rates on the loans may be also an important factor, Heryán and Stavárek, 2011. We recommend the Czech National Bank to pay more attention to the problematic of the Czech banks profit and its roots, if it is possible.

Second, we suggest the significant relationships between our variables also due to margin cash flows from subsidiaries to their parent's. Subsidiary banks from the Czech Republic often have subordinated debts and pay interest rate on that. Of course there are cash flows to their parents and back or also in opposite way. It differs just in price of these cash flows. Whereas the subsidiaries borrow credits to parents on lower interest rates, their parent's borrow the credits to their subsidiaries for a higher interest rates on loans. We argue that it is possible due to our earlier study estimating interactions between interest rates on loans in selected euro area countries and in the Czech Republic, Heryán and Stavárek, 2011. But also results of the present study confirm that. Our opinion is that the Czech National Bank should pay more attention to this problem.

The last way to get some cash flows from the Czech banks is doing unprofitable businesses between subsidiaries and their parent companies. Specifically, parents can sell some bad assets (e.g. some holding companies, acquisitions, or debtor securities and bonds from some countries) for a higher price. It is possible due to information asymmetry as well as due to synergy effects of some acquisitions and fusions insolvent and bankrupt companies with the others. All these assets can parents sell to their subsidiaries. Through that parents can transfer increased risk of bankrupt companies or decrease price of some securities to their subsidiaries, the Czech banks. We argue the Czech National Bank should pay more attention on that, definitely.

6. Conclusion

The aim of present study was to examine if there are some relationships between net interest margin of foreign parent companies and our selected variables of their Czech subsidiaries (Czech banks). Our results clearly confirm that there is positive relationship between parent's net interest margin and gross loans and deposits of the Czech banks. Even if there is no significant positive correlation, we have also proved positive relationship between interest incomes of the both parent's and subsidiaries, too.

Further, we have tried to highlight ways, how can foreign parents get some cash flows from the Czech banks. Our opinion is that it is very important pay attention to the problematic of corporate governance nowadays. On our results we should try recommend to the Czech National Bank to do its monitoring function more strictly. We know that it should be independent controlling organ on the Czech financial market. But due to that fact it is not recommended to the Czech government. As the IMF also argue this situation could be very risky for the Czech economy due to financial crisis impacts in parent's economies.

This area of interest is much larger. It is connected with the problematic of the financial groups' corporate governance and companies as well as with the questions connected with the independence of the central bank in our country. We should also pay more attention to the development of banking fees, structures of the non-consolidated financial statements in the Czech Republic. We could clearly prove our opinions from empirical part of the present paper in future research then. We think it is possible prove that in some cases even from public information.

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Appendix A. Correlation matrix of panel variables

	Impaired Loans SUB	Impaired Loans PAR	Total Deposits SUB	Total Deposits PAR	Net Interest SUB	Net Interest PAR	Gross Loans SUB	Gross Loans PAR
Impaired Loans SUB	1.0000							

Impaired Loans PAR	0.2844	1.0000						
	1.5700	-----						
	0.1276	-----						
Total Deposits SUB	0.5362	0.2711	1.0000					
	3.3616	1.4906	-----					
	0.0023	0.1473	-----					
Total Deposits PAR	0.1524	0.7912	0.2645	1.0000				
	0.8160	6.8459	1.4512	-----				
	0.4214	0.0000	0.1578	-----				
Net Interest SUB	0.7027	0.2535	0.9303	0.2506	1.0000			
	5.2265	1.3866	13.4252	1.3697	-----			
	0.0000	0.1765	0.0000	0.1817	-----			
Net Interest PAR	**0.4040**	0.7217	0.1685	0.6442	0.2892	1.0000		
	2.3371	5.5171	0.9046	4.4564	1.5984	-----		
	0.0268	0.0000	0.3734	0.0001	0.1212	-----		
Gross Loans SUB	0.6987	**0.4757**	0.8454	**0.4831**	0.9020	**0.4326**	1.0000	
	5.1677	**2.8615**	8.3746	**2.9198**	11.0525	**2.5386**	-----	
	0.0000	**0.0079**	0.0000	**0.0068**	0.0000	**0.0170**	-----	
Gross Loans PAR	0.1243	0.7394	-0.1035	0.7869	0.0105	0.7565	0.1691	1.0000
	0.6627	5.8116	-0.5505	6.7483	0.0553	6.1212	0.9079	-----
	0.5129	0.0000	0.5863	0.0000	0.9563	0.0000	0.3717	-----

Note: First number in columns means correlation, second t-statistic, third number means probability.