The Czech Banking Sector: Two Decades with the Shuttle Changes[1]

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Abstract[3]

According to stress-test of the Czech National Bank at the end of 2011, the banking sector in the Czech Republic is able to absorb the scenario of the Czech Republic's GDP hypothetically dropping by 5–6%. This analysis elucidate the question of how is possible that the banking sector remained sound and strongly capitalized, even when the parent companies of the largest banks in the Czech market, which comprise nearly the entire banking sector of the Czech Republic in terms of assets, loans and deposits, struggled with existential problems. It describes the history of the practical disappearance of the small and medium-sized banks during 90th and also the development of large banks using a model of sustainable growth. The analysis also includes circumstances of privatization and post-privatization development, as well. Final part of this article enlightens main reasons why the banking sector of the Czech Republic in the decade 2001–2011 was able to expand with high profitability with a relatively low level of risk.

Keywords	***JEL code***
Banking, bad loans, sustainable growth, retail banking	*G, G01, G21, M2, O52*

INTRODUCTION

The banking sector in the Czech Republic in the early 1990´s was characterised by significant increase in the number of entities with followed crashes of a lot of small and medium sized banks and with high concentration in the banking sector. This article analyzes the period 1993-2011 and seeks to answer the question why recent global financial crisis has not harmed significantly the banks in the Czech Republic. Financial management theory was used in the analysis comparing real and internally generated

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sustainable growths of banks in a period of the second half of the 90th which was critical for the destiny of the largest Czech banks.

1 THE BANKS IN THE CZECH REPUBLIC IN THE EARLY 90'S

After the split of Czechoslovakia and the emergence of the independent Czech Republic in 1993 the economic transformation from plan economy to a market-driven model continued. In the sphere of financial intermediation, this development reflected an extreme increase in the number of entities in the banking sector. Its high concentration was evident even then.

The four largest banks occupied prevailing market shares. Czech Savings Bank (CS, Ceska sporitelna) which has historically focused primarily on retail clients was profiled as a distinct entity in the market and interbank deposits. Due to its high volume of primary deposits from retail customers the Czech Savings Bank provided loans on the interbank deposit market, particularly to small and medium-sized banks, which arose during the first half of 1990 by the dozens in the Czech Republic. The country only had 10 million inhabitants and its GDP in 1995 amounted to only 1% of the EU GDP so it was over the top in financial intermediation. The high credit exposure of the Czech Savings Bank in the small and medium-sized banks segment threatened its stability due to the fall of these smaller entities, which started to occur around the first half of the 1990s.

The second largest bank in terms of assets was the Commercial Bank (KB, Komercni banka). Its business was concentrated mainly on corporate clients. This was formed substantially in the lending business, where its share in total loans to corporate clients was 50%. Afterwards, only this bank suffered significant losses in the quality of its loan portfolio due to the fact that the loans provided to companies were secured by real estate whose prices fell. KB provided loans to a large number of companies that had moved into private hands, but also to predominately nationalized based companies. After a decline in the prices of these properties which were collateral for loans - but mainly due to a change in regulatory rules of the Czech National Bank – the loan portfolio of Commercial Bank (and partly also of other large banks) deteriorated. This ultimately led to the need to set aside a large amount of bad loans and convert them into a special institution called the Consolidation Agency (Konsolidacni agentura) established by the state. Without this "bail-out" three of the four largest banks would have collapsed. Over 50% of the entire deposits of the banking sector were deposited in these banks.

The Czechoslovak Trade Bank (CSOB, Ceskoslovenska obchodni banka), which was number three in the bank market in the Czech Republic, focused mostly on servicing foreign trade operations. In comparison with other banks CSOB suffered significantly less loss in its quality loan portfolio due to falling prices of pledged property, as used in far more than any other bank liability claims. However, in the case of CSOB some loss occurred with the transfer of bad loans on the shoulders of the state. These bad loans were often associated with CSOB' loans provided to exporting businesses. Its business did not suffer as much as the other banks. The loan portfolio quality of those banks deteriorated due to a decrease in prices of mortgaged property. But CSOB preferred rather pledged receivable.

The last of the four major banks in the Republic, Investment Bank (IPB, Investicni a postovni banka), with the smallest share of the state, was characterized by a strong expansion strategy (see below). This strategy was in some cases on the border of the rules of prudent bank behavior. Ultimately, however, this strategy inflicted the fall of IPB bank.

1.1 The high number of small and medium-sized banks at the beginning of economic transformation

A large number of small and medium-sized banks which emerged in the Czech Republic in early 1990s proved to be unsustainable both in terms of size of the Czech economy, and especially the quality of management of these banks.[4] Between 1990–1998, 15 small and medium-sized banks failed and had their banking licenses withdrawn and another three ended up merging with another bank. In total, 18 banks out of a total of 54 banking institutions in the Czech Republic market ceased to exist this way.

4 Czech National Bank (CNB) used this operative measure if the bank's capital falls below a certain threshold, i.e. 1/3 of assets.

All of their clients were fully compensated and often beyond the statutory deposit insurance. Five other banking entities expired at the time without liquidation. They continued with the status of joint stock companies without a banking license. Also the German Hypo-Bank and WestDeutsche Landesbank CZ as well as Austrian Bank Creditanstalt CZ, disappeared from the Czech market.

After 2000, seven other banks disappeared through liquidation or withdrawal of banking license.[5] In total, by 2002 thirty banking institutions had disappeared from the Czech market through liquidation or dissolution without liquidation, which was more than a half of their number from the early 1990s.

1.1.1 Crashes of small and medium-sized banks in the Czech Republic

Banka Bohemia (BB) was the first bank in the Czech Republic, which had to close down in 1994. It was also the first financial institution in the post-communist countries, which ended up in forced administration. The Czech government compensated all clients of this bank. The State paid CZK 17 bn that represented at that time about 18% of GDP. The government had to save clients of BB because it was the first failed financial institution and Deposit Insurance Fund had not existed at the time. The Vice President BB escaped shortly before planned police arrests.

The collapse of Banka Bohemia, however, differed significantly from the crashes of the almost two dozen other banks. It was not due to mismanagement by banks but scandal. The public was informed that the management of banks had issued unsecured bank guarantees. The bank at the time of collapse was actually healthy. Its end was precipitated by the "run", but most likely it would have collapsed later by bad loans like other banks. The liquidators detected dozens of small credit fraud when entrepreneurs lured money from the bank and used it for completely different purposes.

Managers of small and medium-sized failing banks were often accused of credit and other fraud, violation of duties of trust and misuse of information in business relations (insider trading). They put banks into bankruptcy mainly by providing loans which were disadvantageous for those banks. They approved of such high loans to companies that did not show any activity, nor employees, and with registered capital only on the minimum amount required for the establishment of limited companies. Subsequent investigations were very complicated – such as the investigation of the collapse of another medium-sized bank, i.e. Industrial Credit Bank (Kreditni a prumyslova banka), which collapsed in 1995. The Czech judiciary took 15 years for came to the verdict.[6]

Overall, the failures of small and medium-sized banks were the result of a wild transition of the Czech economy. Lack of regulation related to the privatization process caused excessive tolerance of risks and also criminal conduct on the part of management and owners of large numbers of small and medium-sized banks in the country. Finally, the term "tunneling" arose in the Czech Republic which has become synonymous to fraudulent money outflows.

2 SUSTAINABLE GROWTH OF LARGE BANKS IN THE CZECH REPUBLIC IN THE PERIOD BEFORE THE PROBLEMS WITH CREDIT PORTFOLIOS

In the first half of the 1990s, very strong growth was typical for the Czech banking sector. Banks' assets went up by more than a fifth in 1994 and almost by a quarter in 1995. In the following years, the volume of assets has increased by about one tenth.

[5] This list, however, include foreign bank branches, which later bought the state-owned shares in the large Czech banks. So for the same owner it lost on the merits of maintaining the two entities in the Czech market. This was the case of Erste Bank Sparkassen (CR) when the Austrian Erste Bank privatized state share in the Czech Savings Bank and also the case of Societe Generale Bank, as after the privatization of state share by French parent company in the Commercial Bank.

[6] The accused manager complained about the length of the investigation of the case at the European Court of Justice in Strasbourg. The court confirmed his complaint as for the duration of the legislative process. It ruled in his favour and confirmed unacceptably long duration of the legislative process.

In the 1990s, the largest Czech banks have become the main source of funding for transformation of the Czech economy. By 1995 TOP 4 accounted for approximately two-thirds of total assets of the banking sector and in later years of one half. Nevertheless, even these large banks subsequently found themselves in trouble. In view of subsequent developments, it is interesting to see how these banks were governed by their own dynamics, how banks were able to look at their sustainable growth with regard to capitalization and risk environment, i.e. how banks operated their level of financial management. An analysis of sustainable growth shows to what extent the real dynamics match their capabilities as their financial conditions and capital strength has allowed. Financial management theory allows to analyze and to express by model the growth possibilities of banks. It is used for these purpose:

- The bank's basic performance parameters derived from the profit – return on assets (ROA) and return on equity (ROE); in the logic of the matter is that the lower net profit implies weaker growth capacity for the future.
- Average assets and equity (such as variable values, which measure the dynamics).
- Return on assets (indicates which operating revenue generating unit of total assets).
- Dividend policy (notably, the percentage of net income paid out as a dividend in cash).
- Retained earnings, profit margin, etc.

The relations between these parameters are fixed. They allow you to detect and measure the mutual dependence and sensitivity of each to the other factors change. Application of model also allows the comparison of the growth of banks with what could be reached. In other words, to what extent each of the banks respected possibilities offered measurable capacity to increase their assets. This internally generated sustainable growth[8] of the bank is as follows:[9]

$$SG = \frac{ROA \times (1 - D)}{EC/TA - (ROA \times (1 - D))}, \tag{1}$$

where:
SG .... sustainable growth rate or the annual rate of increase in average total assets that can be supported by internally generated equity capital,
ROA .... return on average total assets, or net income after taxes divided by average total assets,
D .... percentage of after-tax net income paid in cash dividends,
EC .... average equity capital,
TA .... average total assets.

As for analysing of four largest Czech banks, it was possible to determine on the one hand those who in that period expanded with less caution (i.e. their real dynamics measured by growth of total assets were higher than possibilities which were offered according to their internally generated sustainable growth which was detected by model). Conversely, it also determines which banks that evolved more cautiously (in term of risk environment they amounted to real growth rates of their assets that were below their potential for sustainable growth).

[8] This formula had been used with regard to data options and accounting standards of bank statements at that time and shows sustainable growth of the bank's assets based solely on internal capital formation. Therefore it does not record other growth opportunities, such as the external capital formation, subordinated debt, asset securitization, asset sale and leaseback. However, most of these options have not been used by banks in the Czech Republic..

[9] Other three equations for internally generated sustainable growth (SG) can be used with the parameters ROE, profit margins, asset yield and leverage multiplier.

Analysed banks diverged on, as evident from Table 1, the average dynamics of the Czech banking sector but from their internally generated growth capacity, as well. It seems to be logical that their objectives and strategies were generally affected by much better or worse predictable variables: the development environment with regard to the balance sheet structure, the strategy of competing banks, the increase in deposits and loans, profit and loss projections, presupposed movement in interest rates, good identification (or rather optimization) of the balance sheet and profit and loss sensitivity to changing market conditions, etc.

CS was a traditional bank with risk aversion, which is a typical feature of saving societies. This fact was also confirmed by the lower speed with which CS increased its total assets. However, CS was forced to abandon its position as the largest bank due to gradual changes in the distribution market (more and more banks gained its clients that the bank provided as a source). The trend toward reduction or lower dynamics of growth was logical. In spite of CS´ total assets and the large dimension in other parameters (branch network, staff, etc.) CS generated relatively lower profits. This fact had impact to the worse performance indicators derived from profit. Generally, the CS volume of assets increased more slowly than it would have been possible according to its capacity for sustainable growth.

In the case of IPB assets additions in 1994 and 1995 were almost four times higher than the potential for sustainable growth and almost three times higher in 1996. It was not until the subsequent correction in 1997 on asset growth of 3.5% which showed that the bank began to perceive an imbalance in its expansion due to the risky environment and its own financial position. The model effectively highlighted the need for negative growth, i.e., having effectively and markedly reduced the total assets of the previous year.

CSOB showed a long-term balance sheet growth well below potential, which offered its performance parameters. According to the model, it would have been possible to increase the annual balance sheet total up to a quarter. A heavily cautious strategy with an emphasis on the real and potential risks held the bank at the maximum performance without market expansion.

Unlike other major Czech banks in this analysis KB banka as the only one revealed prudent asset growth in 1994. Other banks were over their possibilities. Nevertheless, the sharp increase in total assets in 1995 has already been "overshooting" compared with results of the sustainable growth model. But the next year, it changed. In 1997, the bank had only grown by 1.4% according to its capacity. The real magnification was slightly above it.

2.1 Model results of sustainable growth of banks

Results from the model for sustainable development of the largest Czech banks in the 1990s and their second half showed (Table 1) that their subsequent development actually corresponded to what their internally generated sustainable growth had previously indicated: strongly expanding IPB bank went bankrupt in 2000 (despite the fact that the share of the state in IPB was previously purchased by Japanese investment bank Nomura). Heavily cautious CSOB bank, with asset growth well below potential possibilities of its performance parameters, eventually acquired all the assets of the bankrupt IPB and its valuable financial group (subsidiaries with significant market shares). This happened under extremely favourable conditions for CSOB as the Czech government promised to guarantee all of IPB´s failed assets. The price was one Czech crown (CZK 1). It was a significant interference in the reported government sector deficit in relation to GDP.

Equity shares of the Czech state in the CS and the KB were acquired shortly after 2000. The small Austrian bank Erste Bank (based on the sum of assets, only about one third compared with CS) bought a share in the Czech State Savings Bank. The French Société Generale (bank with global reach) acquired a stake in the Commercial Bank (KB) in 2001. The small Belgian KBC bank bought CSOB at the end of the 1990s, i.e. before operation with IPB.

Table 1 Comparison of real and sustainable growth rate of total assets in large Czech banks in the period before privatisation (annual % change)

Bank	KB		CS		IPB		CSOB		Real growth of banking sector
Year	RG	**SG**	RG	**SG**	RG	**SG**	RG	**SG**	
1994/1993	12.5	**24.2**	10.0	**7.2**	27.0	**7.5**	31.4	**17.2**	20.5
1995/1994	25.3	**16.2**	1.4	**1.4**	27.6	**7.6**	19.1	**29.6**	23.9
1996/1995	15.9	**14.8**	1.2	**8.7**	15.4	**5.5**	7.6	**23.8**	11.6
1997/1996	4.6	**1.4**	2.5	**7.0**	3.5	–	12.8	**23.3**	11.4

Note: RG = real Growth, SG = sustainable growth.
Source: Annual Reports, own calculations

3 THE SALE OF STATE SHARES IN THE LARGEST CZECH BANKS

The balance sheets of the three largest Czech banks, i.e. KB, CS and CSOB were cleaned of bad claims before offering the sale of equity shares. They were on a massive scale transferred into specially established government agencies and then those claims were sold in packages (yield from sale of bad debts was compared with similar agencies rather just average). Until 2002, the Czech government cleansed the Czech banking sector of an overall amount of CZK 450 bn, which corresponded to 18% of GDP generated in that year. However, the Czech government did not help to clean the bank IPB bank from bad loans before selling off in 1998. The Japanese investment bank Nomura acquired a relatively low share of state in this bank and declared that it was not a strategic investor, but only a financial one. This was also confirmed because a lot of the most valuable assets of the IPB bank, such as stakes in the brewing industry (Pilsner Urquell into the hands of the South African investor) were sold during Nomura´s exposure in IPB.

The Austrian Erste Bank, on the other hand, proved to be an important strategic investor also because of its activities aimed at the promotion of the Czech corporate sector and loans to households were part of the contract for the sale of the state share of the privatized entity. The bank then actually provided preferential interest rates on loans to small and medium companies. However, bonus mortgage interest rates for the public from privatized CS were significantly more successful. This bonus actually started mortgage lending in the Czech Republic, because until then the volumes of housing loans had been low and with limited segment of clients with the highest rating. Between 2003–2007, the volume of mortgage loans in the Czech Republic grew by more than 30% by a year. Moreover, the ratio of loan-to-value have been still favourable for the banks when the outstanding of housing loans were – and still are – only about half of the value of the real estate representing the collateral.

Societe Generale, which won the state share in KB, continued its strategy of orientation primarily on corporate clients. KB, as a subsidiary of Societe Generale, did not concern itself with special operations of an investment nature, especially derivative transactions. This strategy proved to be a great advantage in the later development of the global financial crisis, because the bank's balance sheet and its off-balance were without these special papers. Proceeds from the sale of the state stake in KB (CZK 40 bn) have been used mainly for the subsidy of the State Fund of Transport Infrastructure.

Sale of CSOB into the hands of the relatively small Belgian KBC Bank had attracted attention mainly because the German banks were favourites for tender. In 2000, CSOB had became bank the number one in the Czech banking market by volume of assets thereafter it took over the failing IPB. Nevertheless, the combination of both entities and completion of the merger took a relatively long time due to the very different corporate culture, incompatible IT systems and refining balances. The bail-out continued for several years.

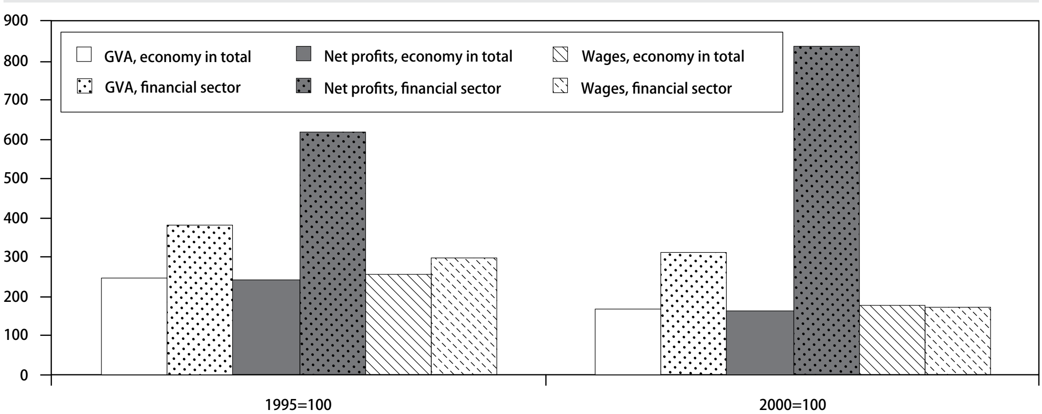
The entry of Japanese Nomura into the IPB has been criticized because of the low selling price of the state share. Operations over time proved controversial and were accompanied by a series of court cases, which also even CSOB led as follow-bank.[10] Nomura proposed to strengthen the bank's retail business. This finally happened and a special division for use of postal branches throughout the country as selling points was created. However, the strongly expansionist strategy of the bank without sufficient quality risk management was the reason for its later failure. This failure had been indicated by the interbank market for a long time to come. IPB gained money sources in the interbank market at much higher costs than other banks.

4 POST-PRIVATIZATION DEVELOPMENT OF THE BANKING SECTOR IN THE CZECH REPUBLIC

The beginning of decade of 2001–2010, when the vast majority of the assets of the Czech banking sector got through the sale of state's shares under foreign control, was associated with the credit-crunch. The largest banks in the country began to prefer strategy of buying securities and substantial reduction in lending. Their behaviour was caused by uncertainties in the economy and by fears of re-deterioration of their balance sheets due to the bad credit. Moreover, the experience of the fall of the fourth largest bank in the country, which was caused by over-expansion, remained a fresh memory. This state of perceived uncertainty lasted until 2004. It was also one of the reasons for the slow growth of the Czech economy because firms lacked financing from banks.

Development of the banking sector after 2000 crucially influenced the growth of gross value added, profits and wages in the financial sector of the Czech Republic. This growth was faster than the development of the indicators for the Czech economy as a whole (Figure 1). An extreme increase was observed especially in the profits of the financial sector which during 2000–2001 increased by 836% whilst in the economy as a whole grew by 165%. The lower profit growth of the financial sector for the period 1995–2011 (by 615%) compared with its growth in a shorter period from 2000 to 2011 (about 836%) is due to the fact that at the end of the second half of the 1990th years banking sector was in the loss.

Figure 1 IM and RME_{IM}, Czech Republic, 1995–2010



Source: Czech Statistical Office

[10] CSOB did not hesitate to sue Czech government although the conditions under which it gained sales network of IPB and its financial group have been particularly beneficial including hundred percent guarantees for total assets. Nomura also as a former majority owner sued the Czech government for about CZK 40 bn whilst CSOB has initiated arbitration against Nomura for about CZK 24 bn regarding of shares of Czech breweries.

4.1 Positions of banks under foreign control in the Czech Republic

Foreign owners after entry into the large Czech banks began to implement a policy of cost savings. They also focused on risk management, which was another reason why the credit-crunch lasted for a relatively long period of time.

The sale of state-owned shares in the largest banks into foreign hands meant that the banking sector of the Czech Republic nearly as a whole found itself foreign-controlled according to the volume of assets and other indicators. Segment banks under foreign control maintained and developed its high proportions during 2001–2010.

In late 2010, foreign owners controlled through the four largest banks 96.9% of the assets of the banking sector in the Czech Republic. They participated in the volume of loans granted to clients of 96.3% and the amount of bonds purchased and held in banks' balance sheets of 96.8%. Foreign-controlled banks also possessed 98.8% of total deposits in the banking sector in the Czech Republic as a whole.

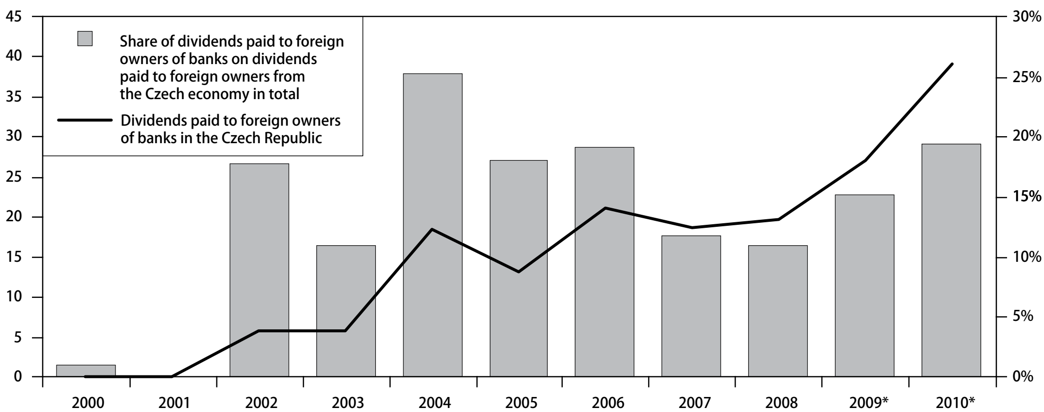
In the Czech economy in general, the position of foreign-controlled companies is relatively strong. The segments of non-financial companies (above all in manufacturing) and financial entities under foreign control together generated 42.5% of total production of these segments against 7.3% in 1995. These companies participated in the amount of paid wages from the one-third, but formed 60% of the total net profits in the Czech economy. This means that segments which are controlled from abroad are far more profitable than the rest of the economy.

The inflow of foreign direct investment in time showed the gain positions in the creation of gross value added in the financial sector itself. In 1995, the segment of financial entities under foreign control generated 10.0% of gross value added of the financial sector, but in 2010, it was already a full 97.1%. According to the data available for 2009 for the Czech economy, financial and non-financial firms under foreign control contributed to gross value added in economy from 30.6%.

Since 2002, high profitability is evident in the banking sector in the Czech Republic and its ROE is higher compared to the European average. Banks with majority of foreign capital accounted for 97.2% of the volume of reserves and the equity capital of the banking sector in the Czech Republic in 2010. They formed 98.2% of the net profit of the sector. The amount of retained earnings at the end of 2010 was roughly 2.5 times higher than the achieved net profit this year.

It is logical that such a strong share of foreign banks in the equity of its acquisitions in the Czech Republic is also reflected in the amount of repatriated profits. The volume of dividends of banks under foreign control which were sent to the countries of parent companies in comparison to the total volume

Figure 2 Dividends paid to foreign owners (in CZK bn on the left axis; in % on the right axis)



Source: Czech National Bank, own calculations of dividends to foreign investors paid from the Czech Republic (Figure 2) is significantly higher than the comparable share on gross value added created in the Czech economy.

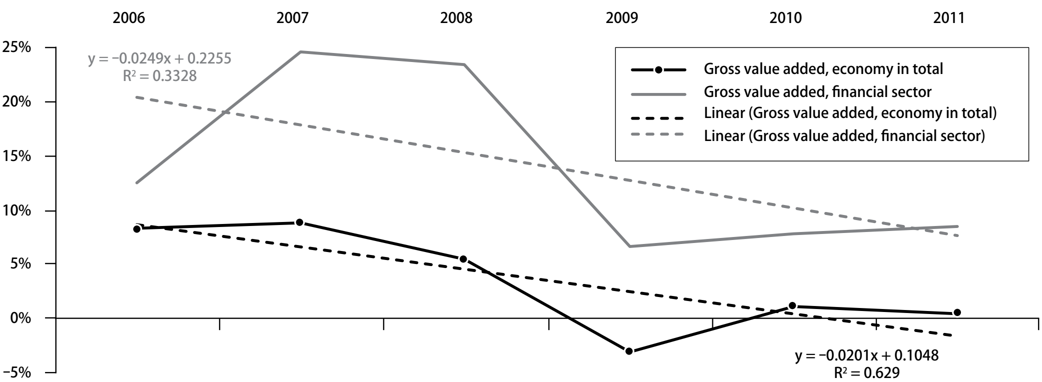
Despite the strong outflow of dividends from banks to abroad, the volume of reinvested profits in the banking sector which was left from foreign owners in the Czech Republic exceeded 53% of total direct investment in the banking sector during 1995–2011. It accounted for CZK 230 bn of the total volume of CZK 432 bn in foreign direct investment in this sector.

5 SITUATION OF THE BANKING SECTOR IN THE CZECH REPUBLIC DURING THE GLOBAL FINANCIAL CRISIS AND IN THE SUBSEQUENT PERIOD

The Czech Republic was not hit by financial crisis in 2008. But immediately afterwards it was affected by the economic crisis, which was caused by a sharp decline in foreign demand. This new situation could not remain unanswered with regard to the strong export orientation of the Czech economy (export value formed 75% of GDP in 2011; for 1995–2004, it was an average of 55% and in the period 2005–2011 66%). GDP in real terms decreased by 4.7% in 2009, i.e. slightly deeper than the GDP of the European Union (–4.5%).

However, the financial sector of the Czech Republic, whose key part is banking, did not show a decline nor during the crisis of Czech economy as shown in Figure 3. The sector only significantly reduced its annual growth rates of gross value added as a measure of its performance. In 2010 and 2011, the gross value added in the financial sector rose slightly, although in 2011, the Czech economy has stagnated and since the 4th quarter 2011 to the 2nd quarter of 2012 already q-o-q was in recession.

Figure 3 Gross value added in the financial sector and the economy of the Czech Republic total (y-o-y in %)



Source: Czech Statistical Office

How is it possible that with such a huge participation of foreign capital in the banking sector the banks in the Czech Republic were able to resist the financial crisis? How is it that the problems were not introduced into the domestic financial market? After all, the crisis hit their parent companies with full strength, and struck in particular on the Societe Generale and Belgium's KBC, which had to be rescued by the Belgian Government. Erste Bank also had problems with its involvement in bonds, purchased from Iceland. These inconveniences with risk affected its profitability and weakened the confidence of the capital markets.

The resilience of banks in the Czech Republic during and after the global financial crisis is apparent in large part from the fact that they "relived“ their crisis previously in the 1990s. Their problems were at the time, due to bad loan portfolios, truly existential problems. The Czech government had to bail them through converting bad loans. Foreign investors then acquired the large Czech banks "cleaned" under relatively favourable conditions. This was followed by a period of high capitalization of banks in the Czech Republic, which resulted from higher net interest margins, and then also of significant revenues from increased bank fees. They were generated primarily by the bank's retail business. This segment of the retail clients had previously stood for many years considerably outside interest of banks´ lending. Banks also held in their balance sheets only very marginal amounts of asset-backed securities and the volume of their derivatives trades were also relatively small.

The high growth of loans to households for housing and consumption, evident since the beginning of the past decade and significantly amplifying in the boom years of the Czech economy in the period from 2005 to mid-2008, meant that bank profits grew strongly at relatively low risk for the banking sector. On the other hand, the persistent conservatism of Czech retail clients has simplified maintaining the volume of deposits in banks. Also the ratio of deposits to the usually monitored parameters remained at a favourable level for banks. The total volume of clients´ deposits in the banking sector is by about 49% higher than the volume of loans granted. Accordingly, the relatively large quantities of the primary deposits from retail customers that banks can use in their transactions on the asset side of the balance is very cheap in terms of interest rates paid. Conversely, rates on loans to retail clients are very high, particularly for loans for consumption, which accounts for roughly a quarter of all loans granted to households.

In total, it can be said that the profits of the largest banks in the Czech Republic, which completely dominated the whole sector, can significantly improve the economic performance of foreign parent companies. Their acquisitions in the Czech Republic have become extremely successful over time. It was so even in years when the non-consolidated results of foreign parent companies were not or are not successful. With certain dose of exaggeration it can be said that Czech savers help to improve the "health condition" of the parent companies of the largest banks in the country.

CONCLUSION

After the birth the independent Czech Republic in 1993, the segment of small and medium-sized banks in the turbulent development and in liquidity crises almost disappeared from the banking sector. The four largest banks whose total assets exceeded the total assets of the banking sector in the Czech Republic were in trouble due to the conditions of the wild transformation of the Czech economy. The model used in this article shows the variations of actual and sustainable growth of banks at the time. The fourth largest bank failed and the Czech government, in fear of the problem occurring for the other three big banks, cleaned their balance sheets through costly operations, i.e. transferring the bad assets into a government institution. Thus prepared banks were sold to the foreign hands.

The previous purification of bank portfolios from bad loans already at the end of the 90th and also subsequent years of intensive capitalisation supported the favourable financial position of the Czech banks. After failures of small and medium-sized banks in the 1994–1998, when less than half the previous number of subjects remained on the market, the Czech government decided to sell the state shares in four largest banks and to purify very costly their portfolios. A model and analysis of real and sustainable growth of banks from the period before privatisation demonstrates one of the causes of the fall of the fourth largest bank in the country (but not enough prudent banking supervision played negative role in this case, as well). Through sales into the hands of foreign owners the Czech banking sector became almost completely under foreign control. The jump of the capital forces of the largest banks and thus of whole banking sector began after 2002. Under foreign control were over 95% of the assets, loans and deposits of the entire banking sector. The subsequent credit crunch was replaced by a boom mainly in the retail business of the banks with high margins and a hard fee policy.

Expansion in high-yield business with retail clients also meant a substantial risk diversification and generally lower level of this risk compared to corporate loans. Significantly, it also increased the volume of fees and their share in the structure of bank income (fees for the various banking services in the Czech Republic are higher than in the countries of the parent banks in Western Europe). Banks benefited from a "hunger" of the Czech households for their own housing and mortgage boom. Another reason for the good financial health of Czech banks was that their portfolios had contained only negligible amounts of risk and asset backed securities. Later, this was to protect the banks in the Czech Republic from the impact of the global financial crisis.

Since 2002, the return on equity of the acquisitions of foreign investors is higher than returns on average in the European Union. All this resulted in the strong capitalization of banks in the Czech Republic. Capital adequacy is almost twice as higher than the Basel convention determines. Also, other indicators of the "health of banks" are at a high level. The Czech banking sector practically has not felt the global financial crisis. The banks also endured the economic crisis better than the Czech economy as a whole.

Czech households, however, have felt that bank services are expensive. The crisis hit Czech households later. In 2011 and 2012, it expressed itself by stagnation in real wages, by a non- decreasing level of unemployment, increasing tax burdens and through tough budgetary restrictions. However, these restrictions are greatly exaggerated, because the comprehensive debt, i.e. debt of the government sector and the households and also debt of businesses together as a percentage of GDP is the second lowest in the European Union.

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ANNEX

Table A1 Indicators of the banking sector and in the Czech Republic and related indicators

	2006	2007	2008	2009	2010	2011
Macroeconomic environment						
Real GDP growth (y-o-y, %)	7.2	5.7	2.9	–4.5	2.6	1.7
Public finance deficit/nominal GDP (%)	–2.4	–0.7	–2.2	–5.8	–4.8	–3.1
Financial sector						
Financial sector assets / GDP (%)		133.3	135.6	141.3	142.9	150.2
Share of banks in financial sector assets (%)		76.8	77.5	77.5	77.6	78.2
Banking sector						
Bank assets / GDP (%)	94.0	102.4	105.1	109.5	111.0	117.5
Share of client loans in total assets (%)	45.2	48.4	50.8	50.3	50.6	50.5
Share of bond holding in total assets (%)	23.1	22.6	20.0	21.2	21.1	21.9
Share of client deposits in total liabilities (%)	66.7	65.6	64.2	66.6	67.3	65.9
Share of bond issued in total liabilities (%)	8.5	9.4	9.0	8.8	8.4	8.4
Client loans / client deposits	67.7	73.8	79.1	75.5	75.2	76.6
Share of non-financ. corp. in total liabilities (%)	44.9	41.7	40.9	37.2	35.9	35.9
Share of households in total liabilities (%)	35.0	37.5	38.9	42.7	44.2	43.8
Growth in loans (y-o-y, %, end of period)						
Total	19.9	26.4	16.4	1.3	3.5	6.0
Non financial corporations	20.8	17.2	14.1	–7.8	–0.3	6.1
Households	30.4	35.1	20.9	11.1	7.0	5.0
- loans for house purchase	32.5	37.6	20.1	11.5	6.4	6.1
- consumer credit	26.5	26.1	22.8	9.8	7.	–1.6
Non-performing loans / total loans (%)						
Total	3.6	2.7	3.2	5.2	6.2	5.9
Non financial corporations	4.4	3.1	4.2	7.9	8.9	8.2
Households	2.9	2.7	2.7	3.8	5.0	4.9
Coverage of non-perform. loan by provisions (%)	53.6	60.0	58.1	50.1	46.8	48.9
Aggregate LTV for housing mortgages	42.6	44.7	43.3	*56.4	56.3	57.0
Capital adequacy (%)	11.4	11.5	12.3	14.1	15.5	15.3
Return of assets	1.2	1.3	1.2	1.5	1.3	1.2
Return of Tier 1	22.5	24.4	21.7	25.3	26.1	26.9
Quick assets / total assets (%)	30.4	24.0	23.1	25.3	26.1	26.9
Quick assets / client deposits	45.5	35.6	35.9	38.0	38.8	40.8
Net external position (% of GDP)	9.4	9.2	6.6	6.2	5.7	5.0

* The definition of mortgages was changed in 2009.
Source: Czech National Bank, Financial Stability Report 2011/2012