Specific Signs of the 2008-2011 Credit Crisis in the Czech Republic

By Luboš Smrčka, University of Economics in Prague

Abstract

The study looks at the development of debt that non-financial corporations had with banks in the Czech Republic over the period of 2008 to 2010. It defines the Czech economy as open, liberal and transitional and, as a result, arrives at the general conclusion that Czech economic entities enjoy somewhat limited decision-making autonomy. The study presents facts concerning the credit crisis that emerged in 2008, gaining momentum over 2009 and into 2010, and was marked by reduced engagement of banks operating in the Czech Republic in the non-financial sector. Over a relatively short period, business debts with banks originally in excess of 1.04 trillion CZK (more than 61 billion USD) dropped to below 900 billion CZK (53 billion dollars). The reduced availability of credit to businesses did not come along with the first signs of the consumption crisis, i.e. in the last quarter of 2008, but rather came at the time when the crisis was in a full swing and statistics were reflecting fundamental decrease in production and sales. By that time, banks had already noticed the worsening repayment capacity of companies. Referring to data provided by the Czech Statistical Office, the study reveals that gross value added for each CZK in loans had started deteriorating even before the crisis. The behaviour of banks thus fully corresponded to the situation. The relationship between the development in the non-production sector and the subsequent decrease in credit availability could potentially lead to the creation of a "vulnerability index" that could be used as an auxiliary tool for predicting the impacts of future crises of similar nature.

Keywords

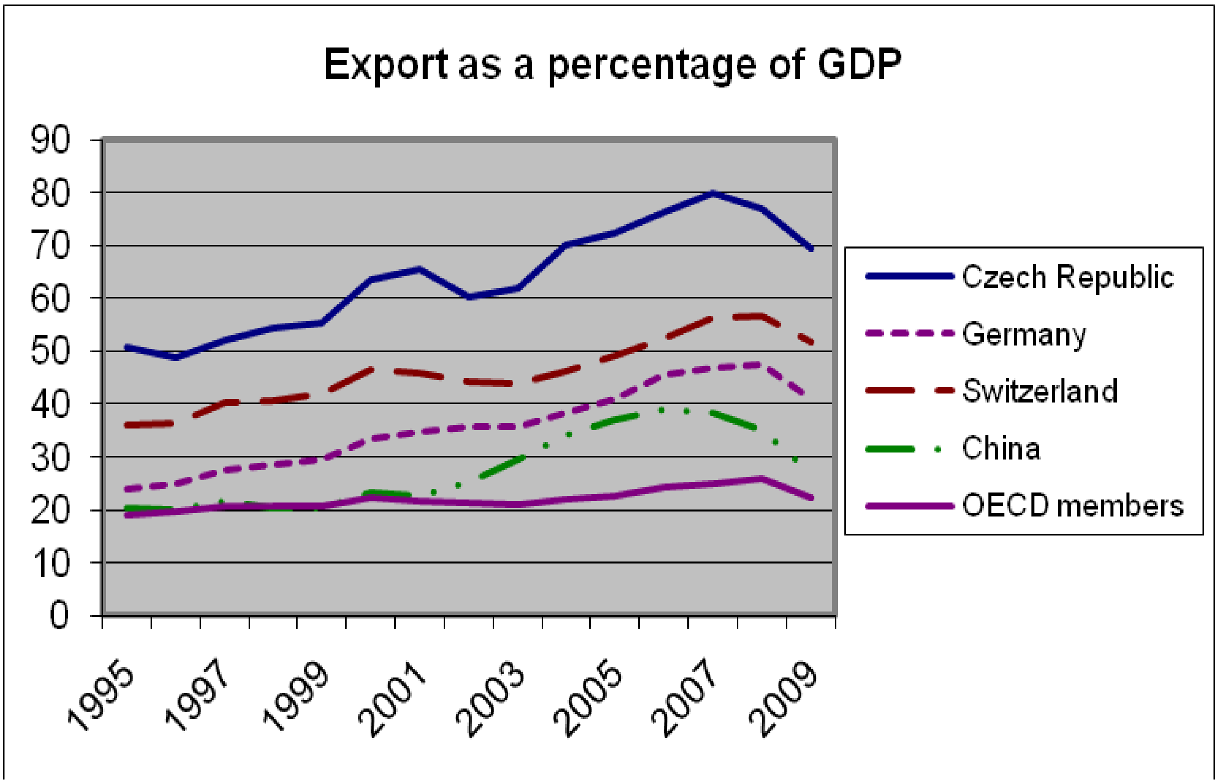
Credit, loans, crisis, banking, industry, debt

1) Overall economic situation in the Czech Republic in 2008-2011

The Czech economy is usually perceived as quite liberal, open (in terms of capital flows and foreign trade) and transitional, although there is a disagreement as to which phase the economy is currently in, whether it is still in transition or if it has already become a standard market economy. The latter two characteristics are nevertheless considered a fact.

We have little space here to discuss how liberal the Czech economy is; however, this issue is better left to local political representation as discussions of the kind tend to be futile anyway. Nevertheless, the questions relating to the transitional character of the Czech economy and the effects of its openness are indeed exciting. As Karel Dyba [1] once said: *"…the inflation levels in transitional economies have been – unless the much needed further inquiry into the topic proves to the contrary – significantly overrated."* This is the fundamental dispute dating back to the early 1990s: How substantial was the decline in the economic output during the first years of transitioning from the socialist, planning-driven economy to a market one? Or, if approached from a different angle: Was inflation during the period in question really as high as the statisticians said, i.e. did they apply the correct GDP deflator? Or are we to conclude that in transitional or open economies (especially if these are on the smaller side), we are unable to gather exact statistical data, with the subsequent

decision-making processes relying more on (more or less accurate) fiction rather than solid facts? Contributing to the debate, Kamila Janáčková [2] has pointed out that *"The Czech economic practice leads to doubts as to the validity of the thesis on effectiveness of monetary policy in small open economies with floating exchange rate. This is due to the high, and sometimes even prevailing, influence that imported goods (i.e. the exchange rate) have on domestic inflation. What is to be said about the effectiveness of monetary policy in controlling inflation analogically applies to the policy's capacity to affect external imbalances (i.e. trade balance deficit). Internal and external imbalances may take place as dependent events, with the economic imbalance merely flowing back and forth between the two."* Similarly, Randall and Hanousek [3] are of the opinion that: "*Mismeasurement of inflation is likely to be more severe in a transition economy than in a more stable environment. Reasonable estimates of the size of the inflationary bias in the Czech Republic suggest that conventionally reported declines in real output and living standards during the transition may be a statistical artefact rather than a real phenomenon.*"
Bearing the limited autonomy of Czech-like economies in mind, we will later analyze the behaviour of banks operating in the Czech Republic. This will be instrumental in proving that banks' reactions to the processes within the national economy were fully in line with the economic situation at large, i.e. they did not only correspond to development of indicators such as industrial output, but most notably they reflected the fact that the Czech economy may have no longer been considered a fully autonomous system and, as such needed to be perceived as far less autonomous a unit than major economies or those not falling into the "transition" or "post-transition" category. It is natural that if referring to an economy as "small, open and transitional" means that state authorities and national banks adopt a specific strategy, then private entities must also act with that in mind, adjusting their processes accordingly. In this respect it may be useful to present some evidence documenting the transitional and open nature of the Czech economy. It is worth noting that the CZK is fully convertible and the CZK exchange rate is not controlled in any way and the only method of affecting it is via the key rates published by the Czech National Bank (CNB).
There is nevertheless a narrow link between the CZK and EUR exchange rate. As of April 2011, the key rate of the European Central Bank was at 1 percent (increasing to 1.25 on 6 April) but at 0.75 percent the corresponding CNB's rate was lower. Given the existing interest rate ratio between the two, the CNB is more likely to achieve further strengthening of the Czech currency, as opposed to its weakening (at least definitely not without risking inflation). As far as the economic openness is concerned, the following chart is very illustrative, showing the export share in gross domestic product for selected countries.



Source: World Bank, World Development Indicators

It is apparent that exports represent an exceptionally significant share of Czech Republic's GDP (although countries with even a higher export ratio do exist, e.g. Slovakia). This clearly shows that the behaviour of Czech entities cannot not be autonomous since, essentially, there is no such thing as an autonomous Czech economy.

2) Development of debt in the private non-financial sector and its interpretation

One of the hints suggesting that the Czech economy is in the transitional phase is the frequent attempts at interpreting the behaviour of economic entities as having an agenda, i.e. that besides making profit the entity in question pursues "strategic aims" of another state, acting on its behalf. Another variation on the theme is forcing economic entities to behave in a "socially responsible" way. In this context, responsible does not relate to environmental or social issues; instead, corporations are called upon not to primarily seek their own profit and are expected to contribute to achieving aims pursued by the society at large. While the phenomenon is also identifiable in developed and completely standard economies, transitional economies suffer from excesses such as this with increased frequency as they often become subject to official government rhetoric or even agenda.
These "conspiracy theories" or the calls upon banks "to become involved in the national reconstruction" were already apparent during the first credit crisis that the Czech economy went through in 1997 to 2000, with its impacts being tangible in banking until 2002. The first crisis emerged as the result of specific Czech factors: the situation was triggered by a currency crisis that had been ushered in due to attempts at maintaining a solid exchange rate in an increasingly imbalanced economy. The continuing crisis of the banking sector was a part of the overall

economic downturn. It had begun in the mid 1990s after a series of bankruptcies of small and middle size private banks that collapsed due to classified loans. The crisis then continued with an extensive "recovery" of the entire state banking industry which totalled 140 billion CZK (some 4 billion USD at the time); the situation peaked with the fall of the third largest bank in the country at the beginning of the new millennium and, again, this was due to classified loans and risky transactions. Following the privatization of major banks, a more sophisticated approach was applied to credit risk management which influenced the situation in 2002 to 2004. Identifying a lesson to be learned from this specific crisis is therefore not an easy task.
As far as the second major credit crisis is concerned, it began in 2008 as apparent from the following two tables.

Total loans, corporate loans and household loans

(in CZK million)

Year	Total loans	Corporate loans	Household loans
1993	693,100	**600,300**	92,800
1994	811,500	**703,700**	107,800
1995	916,700	**814,900**	101,800
1996	1,013,900	**910,500**	103,400
1997	1,098,700	**988,200**	110,500
1998	1,046,700	**939,500**	107,200
1999	1,001,000	**888,700**	112,300
2000	963,900	**841,000**	122,900
2001	775,400	**636,100**	139,300
2002	724,198	**542,682**	181,516
2003	791,630	**554,102**	237,528
2004	889,421	**574,204**	315,217
2005	1,067,511	**649,712**	417,799
2006	1,286,118	**745,480**	540,638
2007	1,628,155	**901,883**	726,272
2008	1,889,847	**1,009,626**	880,221
2009	1,905,056	**921,752**	983,304
2010	1,960,767	**904,502**	1,056,265

Source: CNB – National Monetary Survey as of 4 February 2011
http://www.cnb.cz/cnb/STAT.ARADY_PKG.STROM_SESTAVY?p_strid=AACA&p_sestuid=&p_lang=CS

The first table reveals the impacts of the two crises on corporate and household loans in the periods of 1997-2002 and 2008-2010. During the first downturn, the reduced willingness of banks to provide loans was partially absorbed by banks transferring a part of their assets to institutions that had been set up by the government for the purpose, with the "cleansing" of bank portfolios prior to bank privatization thus distorting the picture. However, the second case is a statistically-documented credit crisis.
The next table shows the development of corporate loans provided by banks over the period of 02/2010 to 02/2011. The interpretation and analysis of these figures need to be performed along with the interpretation and analysis of the above table.

Corporate loans (in CZK million)

Year	2010											2011	
Month	02	03	04	05	06	07	08	09	10	11	12	01	02
Loans	908.3	901.0	897.6	898.7	903.9	900.7	906.9	900.2	910.4	911.3	904.5	908.0	909.7

Source: CNB – National Monetary Survey as of 4 February 2011
http://www.cnb.cz/cs/statistika/menova_bankovni_stat/narodni_stat_data/mp.htm

We may see that during the thirteen-month period (02/2010 – 02/2011) no major shift in banks' willingness to provide loans took place. In simplified terms, banking in relation to the real economy went through an unprecedented stagnation, worsened by the fact that it followed a dynamic period of reduced loan totals.

The development was marked by some statements by non-financial corporations and political representation that were not anchored in facts, whether partially or completely. They claimed that:

- Banks had ceased to provide loans since they did not have sufficient funds available as they had had to transfer some of their assets abroad to help their parent banks. This statement was based on the assumption that the parent banks of Czech financial establishments (Erste, Société Générale, KBC) had significant problems due to the decreased value of their assets and the possession of bonds issued by some governments. It seems logical that the parent companies would look for possibilities of alleviating these burdens by forcing their subsidiaries in the Czech Republic to buy them.
- Banks had refused to provide loans due to "erroneously setting" the risk assessment standards, which adversely affected even healthy operations. This belief was based on the assumption that the banking system is subject to straightforward directives, with the headquarters providing its branches with a comprehensive system of conditions and parameters that cannot be modified or adjusted in any way.
- The staff of banks were afraid of being dismissed so they tried to keep low-profile and avoid any mistakes, hence the excessive prudence in loan provision. This opinion was based on the assumption that due to the overall reduction of activity within the financial economy, banks would have to rationalize their operations, i.e. would reduce their headcount.

When we look at the above statements in more detail, we arrive at the conclusion that none of them provides a satisfactory explanation of the situation or, even, that it reflects the reality in any noteworthy way.

The first claim may be refused in its entirety – at the time when banks cut down on the amount of provided corporate loans, household loans continued growing as the former table reveals. Looking at "total loans" in 2008 to 2010, things are clear: while corporate loans continued plummeting (with the 2008-2010 reduction of 105 billion CZK, i.e. 6 billion USD) total loans continued growing (by 71 billion CZK over the same period, i.e. 4.1 billion USD) due to the growing indebtedness of families (household loans were up by 176 billion CZK, i.e. more than 10 billion USD). It is apparent that at the general level, banks did not suffer from a lack of funds.

The second claim is based on the "erroneous setting" of parameters. However, the term "erroneous" has different interpretations from the bank's perspective and from that of non-financial corporation. A more careful analysis, which we are about to perform, is to prove beyond any doubt that the increased prudence of the financial sector fully corresponded to the development of the real economy; the reduced economic activity had caused banks to reduce their offering targeted at industry and,

as an analysis of the applicable statistical data reveals, the reduction in the economic activity was more important than the reduction in the amount of provided loans.
As to the third claim, it lies beyond the realm of economics and as such is very uneasy to analyze as the relevant data are not available. However, judging by the information that is available, we may assume that of the three claims presented by companies, this one is the most justified. But as usual in these cases, such circumstances are only of marginal effect and cannot provide a satisfactory explanation of the entire situation.

3) Debts of Czech businesses as an assessment parameter

To identify for the root causes of the decrease in loans between 2008 and 2010 (and their stagnation in 2011), we need to go further back in time. In 2002 and 2008, business debts almost doubled (growing by 467 billion CZK, i.e. 27.5 billion dollars). The amount of loans in 2008-2010 dropped by 10 percent, or, if we compared this reduction (of 105 billion CZK) to the situation in 2002 (where total loans were worth almost 543 billion CZK), it would represent approximately 19 percent.
This suggests that in terms of the entire first decade of the current century, the variation of 2008-2010 and the current stagnation of loans has been a rather unimportant or relatively less important shift, at least mathematically speaking. The period has nevertheless had a significant impact on Czech businesses and caused an increased number of insolvencies, overdue payments and payment incapacity as well as other phenomena, such as increased unemployment, that also need to be taken into account. As we are yet to see, the second credit crisis was nothing in comparison with the reduced loan totals and the duration of the first credit crisis. This claim, however, requires a data analysis.
Comparing both periods within the independent Czech economy (following the split of the Czech and Slovak Federative Republic on 1 January 1993 and the emergence of the Czech Republic) that we have defined as periods of “credit crisis”, we see two distinct developments that caused banks to reduce the amount of loans that they provided.
The first credit crisis was linked to a long period of economic stagnation that was marked by a five-year period of gradual lending reduction, with the total loans (at 988 billion CZK) at the beginning of the crisis (end of 1997) being higher than they are at the present time, i.e. in Q1/Q2 2011 (910 billion CZK). (One important thing to note is that in 2002 to 2011, industrial production sales grew by 42 percent and the average interest rate for new loans went down five percent.) And it was not until after the year 2002, when the total corporate loans hit the lowest point of 542.7 billion CZK, which was less than during the first year of the independent Czech economy in 1993, that the situation started to change, although the first two post-crisis years (2003 and 2004) were marked with stagnation and a very limited growth in lending.
The second crisis, which began in late 2008, lasted throughout 2009 and turned into stagnation in 2010, was much more dynamic. Loans hit their lowest mark in April 2010, with their total below 897.6 billion CZK, i.e. approximately at the levels of the end of 2007.
Even this basic analysis reveals that in comparison to the 1997-2002 crisis, the 2008-2010 credit crisis, triggered by the global financial turmoil, and the subsequent economic depression were by no means as durable and deep in terms of its effects on Czech businesses. The explanation is simple: The recently imported crisis found the Czech banking sector strong and stable as opposed to the crisis of 1997 that had

been ushered in by a CZK collapse that caught the sickly financial sector off guard; to make matters even worse, the Czech National Bank tried to tackle the issue of currency instability caused by economic factors by significantly increasing its interest rates. Understandably, this led to suffocation of the economic activity and further worsening of the damage although it did reduce inflation quickly. As we may see, the first crisis was so lengthy also as a result of the Czech economy suffering from significant imbalances.

We may therefore conclude that both crises are in fact incomparable; one of the reasons (and possibly the most important one) is that the second crisis hit the Czech banking sector that operated within a standard or near-standard financial system, with a healthy credit portfolio (at least relatively). As opposed to that, while before the first financial crisis, the state-run banks (or, more precisely, banks with majority stakes held by the state) had given loans out irresponsibly and smaller banks went out of business despite the prevailing economic boom, the second crisis hit a consolidated and well-secured sector where the amount of classified loans was on a par with the European average or even slightly below it.

So the major difference is in the way in which banks assessed risks earlier and in the period of 2007 to 2010. While in the 1990s, indebtedness of a company, slightly hyperbolically, was no issue to banks, recently it has been a very important (if not the key) indicator in the assessment of creditworthiness.

3.1) Factors affecting corporate lending

Banks' willingness to lend money to businesses is generally affected by a number of external influences that play a decisive part in the amount of loans available. These influences may be divided in those on the part of the creditor (bank) and those that affect behaviour and actions of the debtor (company). These include but are not limited to the following:

Influences on the part of banks:

- Amount of funds available to the bank for investment;
- Existence of other investment opportunities;
    - Demand for loans on the part of the government;
    - Demand for loans on the part of households;
    - Other opportunities;
- Business default development (risks involved);
- Bank's assessment of future business development (production, sales, prices);
- Amount of projects that comply with bank's standards;
- The price that the central bank pays for monetary sterilization (i.e. the setting of key rates);

Influences on the part of businesses:

- Lending conditions offered by banks:
    - price,
    - repayment length,
    - other conditions;
- Securing options;
- Need for borrowing capital, necessity of investments, lack of operating capital;
- Value of equity;

External influences:

- Quality of the legislative framework and costs of company liquidation;
- Political stability;

- Consistency and predictability of actions on the part of the central bank;
- Regulation.

As apparent, some of the above decision-making factors on the part of banks merely reflect those on the part of companies and, as such, these factors may be coupled together: For example the amount of capital available to a bank for investment at a given time influences the conditions that the bank offers to its client – the price of money and the overall conditions. Based on these conditions, the company then decides whether the price is appropriate and the loan, as offered, is to the company's benefit. Risk assessment on the part of the bank is also linked to quality of collateral etc. While these relationships are so trivial that we take them for granted, in situations where financial system loses balance and is prone to fragility, i.e. in financial and credit crises, many people seem to be surprised that the above relationships do not apply absolutely but, rather, merely under "normal" circumstances. For example, business managers are reluctant to understand that banks refuse to lend them operating capital in spite of their company offering valuable collateral security and being a long-standing trustworthy client. In business we are willing to accept the idea that the price of money changes based on dozens of factors; however, we are not ready to accept that sometimes the price of money is overweight by a priceless risk premium that makes the owners of the capital refuse to grant any loans at all. External factors are also important; in this respect, let's look at the regulatory framework. To a large degree we may say that at times of economic boom the amount of loans grows more dynamically than the actual performance of companies. As opposed to that, in a crisis the amount of lending drops faster than the corporate performance (expressed e.g. as corporate sales). The reasons behind that are more or less summarized by the above parameters whose effects tend to be multiplied at times of economic boom as well as depression, as apparent from the extensive critique of the pro-cyclical character of BASEL II. In a valuable contribution to the discussion on the matter, its authors (Geršl, Jakubík, 2010) simulate the impact of regulatory measures on economic development, concluding that: *"The simulation of effects of reverse impacts has shown that under some circumstances the effect of reverse impacts on the real economy may represent 1-2 percentage points of y-o-y GDP growth over the period of at least one year. The pro-cyclical character of the financial system should thus be considered in drafting economic or macroprudential policy."* [4] This conclusion needs completing: BASEL II rules were adopted in 2006 and implemented, following extensive discussions, over the period of 2007 to 2009. It is fair to note that businesses were aware of the threats that regulation entailed for them and their financial stability in (back then merely potential) financial or sales crisis (as any wide-spread sales crisis will inevitably result in a credit crisis, as will any financial crisis. The former due to the decreasing sales of debtors, i.e. the increased risk of their default, while the latter due to a lack of liquidity on the part of banks or due to other financial reasons. It has been clear for a while now that just as BASEL II enables banks to expand more dynamically at times of growth, the same rules force them to a more significant restriction of lending at times of depression. The following table shows some interesting relationships between loans and sales (for the sake of simplification, only industrial corporations, representing the average non-financial debtors from among Czech businesses, have been considered).

Indices of corporate loans (Year-on-year, as at the year's end) and industrial production sales (year-on-year, as at December of the relevant year)

Period	Loans - index	Sales - index	Correlation I	Correlation II
2002/2001	85.3	110.1	+24.8	+8.0
2003/2002	102.1	102.3	+0.2	-1.3
2004/2003	103.6	114.9	+11.3	+1.7
2005/2004	113.2	106.6	-6.6	-8.1
2006/2005	114.7	105.7	-9.0	-15.3
2007/2006	121.0	109.4	-11.6	-2.5
2008/2007	111.9	89.6	-28.9	-1.7
2009/2008	91.3	98.2	+6.9	0.1
2010/2009	98.1	113.0	+14.9	-3.5[1)]

Source: CNB: National Monetary Survey as of 4 April 2011
http://www.cnb.cz/cs/statistika/menova_bankovni_stat/narodni_stat_data/mp.htm , CzSO: Sales of manufactured articles and industrial services of 6 April 2011,
http://www.czso.cz/csu/redakce.nsf/i/pru_cr , calculations by the author
Explanatory note:
Correlation I: Difference between the value of the loans index and the value of the sales index for the relevant period
Correlation II: Difference between the value of the loans index and the value of the sales index for the relevant period where the value of the index of loans in the next period (T+1) is subtracted from the value of index of base-period sales (T)
1) Author's estimate that is based on an assumption that the total loans provided to Czech non-financial corporations by banks will have attained 975 billion CZK by the end of 2011.

The interpretation of the values of Correlation I and Correlation II is clear: When comparing the sales and the loans in each of the years, we see clearly that under the growing economic boom following 2004, the loans started to grow faster than the sales (years with the minus sign); we can also see that the process was getting more dynamic up until 2008 where the difference was almost 30 points due to the significant decrease in sales. We see that banks acted in a pro-cyclical manner and that their effort to further boost the already booming economy by providing additional loans was increasingly less justified by corporate performance (provided we accept sales as the key indicator of the repayment ability).
However, Correlation II shows that banks were able to adjust their behaviour to deal with the economic reality over the next year. The differences identified under Correlation II are far less important than those identified under Correlation I, which points to the fact that banks were able to detect risk in a timely manner, which, in turn, enabled them to act relatively rationally.

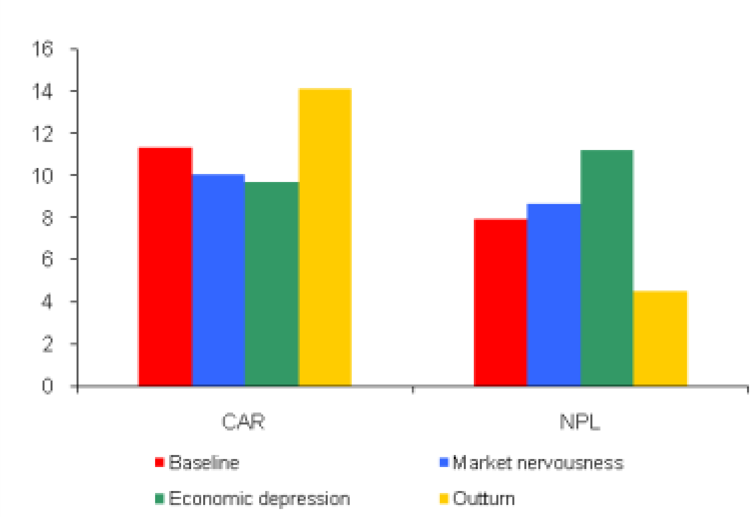
3.2) Development of debts and gross value added for each CZK in loans

The threats that banks had to increasingly deal with included most notably the development of the overall economic parameters within the Czech economy, with a few red flags becoming apparent even before the economic downturn started at the end of the first decade of the 2000s. Even though based on the latest studies, Czech corporations are among the least indebted within the European Union (both in terms of their debts with banks or in terms of borrowed capital within their balance sheets), some relevant surveys carried out in the Czech Republic have revealed [5] that the share of gross value added generated for each CZK in loans within the national economy has declined steadily. This decline, however, has not been the result of the

2008-2010 economic downturn but had been triggered several years before the emergence of the crisis that came along with the deep recession in developed countries. This inevitably ushers in the question whether the “credit crisis” in the Czech economy might have had been marked by other specific features.
Let’s now try to look at the issue from a different perspective, through the yeas of an investor. Based on an Erste Group study, Czech corporations are among the least indebted within the European Union. The study, some parts of which were published in the media in 2010 [6] shows that most debts have been incurred by the corporate sector in Ireland, Spain, Portugal and Belgium. Their gross indebtedness amounts to 300 to 400 percent of value added that they produce, or, to their net profit (net of taxes) from nine to twenty years ago. The corporate sector in the Czech Republic and Slovakia has incurred the lowest amount of debt from all EU non-financial corporations and its gross indebtedness is lower than the value of its value added generated over a year, or in other words, corresponds to the corporate sector’s net profit from three to four years ago. Juraj Kotian, a member of the research team and Erste analyst for Central Europe, has commented on the situation as follows: *"Over the last decade, the non-financial corporate sector has become net borrower in many European countries. The strong growth of investments has resulted in a sharp increase in revenue, although debts have increased equally as much. That is why the corporate sector has to focus on balancing out this development by improving profitability of their business operations and by removing debts.”* Equally as interesting is another of his statements: *“Given their higher capital returns, the countries of Central and Eastern Europe should remain attractive for corporate sector investments. As soon as investments are back up, businesses in these countries will be able to profit from a stronger influx of foreign capital thanks to their significantly lower debts.”*
While the data provided within the study seem interesting, their interpretation is carried out purely along the lines of banking. The interpretation is based on an assumption that growth in investments (or the growth in lending offering) is purely dependent on valuation of capital; this, however, is not the case and if we looked at a random list of influences affecting lending, we would find quite a few items that have nothing to do with or are only vaguely connected to capital returns. Additionally, other studies have proven that even though the Czech production sector is not among significantly indebted, its capacity to repay borrowed funds has been declining for some time (although this has not necessarily resulted in a higher number of credit defaults).
This means that the credit stagnation, as seen in the second half of 2010 and in 2011, must have another explanation since Czech businesses and the production sector in general have not had excessive debts and, to the contrary, should be able to absorb new capital unlike some other sectors.
This could logically lead us to a conclusion that banks do not lend because they cannot do so due to regulatory requirements; however, this is equally not true. As the following chart shows, the health of the banking sector in the Czech Republic has not been significantly affected due to the crisis and its key parameters remain solid. As far as capital adequacy of banks is concerned, the situation in 2009 was much better than had been predicted. By the same token, while credit defaults showed some growth (as we are yet to see), their number was far from posing a threat to the stability of the entire system. In this respect we may say that the implementation of BASEL II within the Czech banking sector has not brought the kind of pro-cyclical effects that theoretical works warned against and that some other countries have

experienced. This has been the case namely because the impacts of the crisis across the Czech financial sector have not been as hard-felt as in other countries and banking in the Czech Republic has proven resilient to the crisis, both in term of liquidity as well as potential losses due to classified loans.

Estimates of non-performing loans (NPL) ratio and capital adequacy ratio (CAR): last year's scenarios versus 2009 outturns



Source: CNB, Financial Stability Report 2009/2010, http://www.cnb.cz/cs/financni_stabilita/zpravy_fs/FS_2009-2010/index.html

The already cited work *"Comparison of Effectiveness of Bank Loans in Production Industries within the Czech Economy"* by Drahomíra Dubská offers some very interesting insights*:*

- The performance of borrowed funds started declining as early as 2006, i.e. at the time when the growth in industrial production was above 10 percent and inflation was more or less negligible;
- Obviously, the demand for borrowings in an environment of "cheap money" went beyond the real need of businesses. As the development was not reversed even during the subsequent periods, we may conclude that corporations would mostly spend the money on their operation (cost expansion) and on investments that later proved insufficiently profitable;

The following table (showing differences in some data concerning loan totals due to the slightly different calculation method used by the Czech National Bank, with its results being somewhat lower, although the overall trend is still visible) reveals that in 2005-2008, gross value added generated for each CZK in loans went from 3.13 CZK to 2.44 CZK, i.e. was at below 80% of the state earlier in the decade. In simplified terms, this translates into the "profitability" or "productivity" of loans being more than 20 percent lower.

Gross value added (in CZK million, current prices) and bank loans in CZK and foreign currencies (in CZK million) for selected sectors

	2005			**2006**		
Sector	Gross Value Added	Loan totals	GVA generated per 1 CZK in loans (in CZK; based on loan totals)	Gross Value Added	Loan totals	GVA generated per 1 CZK in loans (in CZK; based on totals)

Agriculture, hunting, fishing	80,420	22,603	3.56	73,489	25,444	2.89
Mining, quarrying	36,401	10,591	3.44	37,944	17,148	2.21
Manufacturing	704,925	171,671	4.11	762,847	194,443	3.92
Electricity, gas and water supply	103,791	33,737	3.08	127,705	29,979	4.26
Construction	167,996	20,331	8.26	179,756	28,764	6.25
Wholesale and retail trade, repair of motor vehicles and personal and household goods	342,396	133,707	2.56	380,314	153,025	2.49
Hotels and restaurants	52,839	6,914	7.64	50,753	10,277	4.94
Total	2,205,760	703,646	3.13	2,398,140	809,320	2.96
	2007			**2008**		
	Gross Value Added	Loan totals	GVA generated per 1 CZK in loans (in CZK; based on loan totals)	Gross Value Added	Loan totals	GVA generated per 1 CZK in loans (in CZK; based on loan totals)
Agriculture, hunting, fishing	75,761	28,826	2.63	77,076	34,565	2.23
Mining, quarrying	36,261	30,099	1.20	47,431	30,674	1.55
Manufacturing	872,407	217,334	4.01	850,106	244,624	3.48
Electricity, gas and water supply	129,171	34,737	3.72	139,800	46,041	3.04
Construction	199,240	34,105	5.84	208,902	36,009	5.80
Wholesale and retail trade, repair of motor vehicles and personal and household goods	401,670	162,932	2.47	452,142	177,024	2.55
Hotels and restaurants	55,071	12,037	4.58	59,521	13,377	4.45
Total	2,647,901	992,040	2.67	2,756,646	1,129,262	2.44

Source: Czech Statistical Office, Czech National Bank, calculations by Drahomíra Dubská, http://www.czso.cz/csu/csu.nsf/informace/ckta061709.doc

Considering data in e.g. manufacturing, which is essentially the key industry, gross value added generated for each CZK in loans in 2005 was at 4.11 CZK; in 2008, the same value stood at 3.48 CZK. While the decrease was less pronounced than for the entire national economy, at 15% it was still significant – a development like this could not go unnoticed by banks and shows that there had been processes within the economy that must have resulted in some difficulties even before the actual crisis set in.

These undoubtedly included the gradual increase in total credit defaults that grew, in 2009 alone, more than 10 billion CZK each quarter, approaching six percent of total loans [7]. While these amounts were not too bad, and could even be considered excellent in some economies at the time of boom, the conservative Czech banking industry (that had become less accommodating following the first credit crisis of 1997 to 2002) perceived them as a potential threat (for example, the percentage of credit defaults on total loans in early 2010 had doubled compared to end 2007).

4. Conclusion

In searching for the specific signs of the Czech credit crisis and the subsequent stagnation, we should not omit other facts such as the increasing payment incapacity among businesses and the resulting number of insolvency petitions. In both cases, the period of 2008 to 2010 saw their dynamic development that was getting progressively faster, with the situation worsening over the time. None of these parameters however attained values that could be perceived as posing threat to the entire industry; we may equally assume that they peaked in 2010. Other notable factors include political instability in the Czech Republic as well as a number of legislative issues that are linked to the protection of investors' rights and the overall legal certainty and, at last but not least, to insolvency legislation and the limited enforceability of law at large, with the enforcement requiring substantial investments in time and money.

What seems obvious is the fact that the "credit crisis" was to a large extent (if not entirely) the result of excessive lending of 2006-2007 that continued until mid 2008 and that was a part of the reduced performance of borrowed funds in industry, the key sector of the Czech economy. The excessive growth of lending, which went beyond the actual needs of businesses, took place despite the generally very conservative behaviour of banks in the country. The feeling of "credit crisis" on the part of debtors and potential debtors was raised by the banks quickly reverting to their standard behaviour. It is worth noting in this respect, that the development between 2008 and 2010 was not even close in terms of its duration and dynamics to the situation experienced during the credit crisis of 1997 to 2002.

As far as the specific signs of the Czech credit crises are concerned, we may say that local banks essentially continue pursuing their conservative strategy, which seems to be the main reason behind the lending stagnation in the second half of 2010 and in 2011. As the estimated Correlation II parameter comparing the years 2010 and 2011 (-3.5) shows, Czech banks might be expected to continue implementing their prudent policy that we call conservative. Estimates of loan totals for year's end in 2011 stand at 9.5 percent above the 2010 level (based on which the estimated value of Correlation II has been derived); the activity of Czech banks is thus expected to pick up in the second half of 2011. If we were to summarize the facts concerning the credit crisis of 2008 to 2010 in the Czech financial industry, we would conclude that its duration and seriousness were significantly influenced by the conservative lending policies of the Czech banks that might be credited with not prolonging, and even with mitigating, the crisis' effects. Thanks to the fact that even under the soaring levels of lending in the pre-crisis period, the Czech banks had not (at least essentially) changed their standard procedures, they were able to enter the financial crisis in a consolidated state, with the relatively significant worsening of parameters of credit portfolios not resulting in their destabilization. As a result, the 2008-2010 credit crisis is not comparable in terms of its parameters and impacts to the crisis that the Czech Republic experienced in 1997-2002.

Literature

[1] DYBA, Karel (2001): *„Měříme správně inflaci?“*, in: Ekonomika, právo, politika. Sborník Centra pro ekonomiku a politiku no. 10, March 2001, Prague, pp

[2] JANÁČKOVÁ, Kamila (2000): *„Malá otevřená ekonomika, kurzové režimy a měnově politická autonomie“, in:* Ekonomika, právo, politika. Sborník Centra pro ekonomiku a politiku no. 4, May 2000, Prague, pp

[3] FILER, Randall K. and HANOUSEK, Jan, *„Output Changes and Inflationary Bias in Transition. Economics Systems“*, Economic Systems, Vol. 24, Issue 3

[4] GERŠL, Adam and JAKUBÍK, Petr (2010): *„Procykličnost finančního systému a simulace ´feedback´ efektu“.* In: Financial Stability Report 2009/2010, CNB, Prague 2010, pp. 105-114, http://www.cnb.cz/miranda2/export/sites/www.cnb.cz/cs/financni_stabilita/zpravy_fs/FS_2009-2010/FS_2009-2010_clanek_III.pdf

[5] DUBSKÁ, Drahomíra: (2009): *„Srovnání výkonnosti cizích zdrojů ve formě bankovních úvěrů v produkčních odvětvích české ekonomiky.“* Prague 2009, Czech Statistical Office http://www.czso.cz/csu/csu.nsf/informace/ckta061709.doc

[6] http://www.financninoviny.cz/zpravy/erste-podniky-v-cr-a-sr-jsou-v-evrope-nejproduktivnejsi/554733

[7] CNB (2010): *„Zpráva o finanční stabilitě 2009/2010“*, CNB, Prague 2010, http://www.cnb.cz/cs/financni_stabilita/zpravy_fs/FS_2009-2010/index.htm