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BACHELOR THESIS

The Impact of the Financial Crisis on the World and Czech Economy

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Declaration

I declare I have worked on the Bachelor thesis on my own and I have used only the sources mentioned in the references.

Prague, the 30th April 2009 ....

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The Impact of the Current Financial Crisis on the World and Czech Economy
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Dopad současné finanční krize na Světovou a českou ekonomiku

Abstract
The Thesis aspires to analyze the most recent global financial crisis, which started in summer 2007 and continued onwards.

Considering the volume of the work, problems regarding the crisis of some countries are not mentioned in the thesis, such as problems in Hungary, Chinese economic slow down or others, and therefore the main focus is on the development of the crisis, its initiation and following consequences influencing economic development of the USA, Europe (mainly the EU) and the Czech Republic.

Souhrn:
Tato bakalářská práce si klade za cíl analyzovat nejaktuálnější globální finanční krizi, které začala v létě 2007 a pokračuje až do dnes.

Z důvodu objemnosti této práce, problémy vztahující se ke krizi v některých zemích nejsou zmíněny, jako například problémy v Maďarsku, čínská zpomalující se ekonomika a další, a proto hlavní soustředění je na vývoj krize, její počátek a následující význam ovlivňující ekonomický vývoj v USA, Evropě (hlavně EU) a České republice.

Keywords:
Crisis, EU, USA, GDP, unemployment, car production, funds, share markets

Klíčová slova:
Krize, EU, USA, HDP, nezaměstnanost, automobilový průmysl, fondy, akciové trhy

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1. Introduction

Description of the work
As Reinhart and Rogoff 2008 (45) conclude in their study, crises are always consequence of endless speculations referred to as speculation bubble. Its burst firstly causes restrictions at financial markets; consequently it has an impact on real economy. Moreover all crises are developing after very common profiles. The current crisis is a typical example of what Reinhart and Rogoff 2008 studied.

First half of 2008: The prices of properties are overestimated; great number of people is not able to pay their mortgage.

September 2008: The American financial sector is facing huge difficulty, how to stabilize the market. Three out of five pillars of the Wall Street (banks which are either overtaken by others or bankrupted) brought about consequences which are often compared to the Great Depression in 1930’s.

Last quarter 2008: Bankers and governments are facing one piece of bad news after another and what was valid a week ago, doesn’t count now. As peoples’ expenditure is decreasing, so is their consumption; companies are forced to economize which is reversing in households’ calculations.

Financial institutions confused and lost in the unpredictable and unstable situation rather reduce activities such as investments or borrowing money, without making a difference between large corporations and ordinary citizens.

Stockholders had lost a good amount of their market shares values. People are worried about their financial investments and fearing the future of financial institutions as they are aware of loosing money. Stock exchange indexes, the barometers of economical wealth, are experiencing hard attacks and the stockholders as well.

As the decrease of private spending is forecasted, companies are afraid of future commissions, so they rather cut their production plans and reduce number of employees. People are loosing their jobs and further savings and inability to pay for mortgage is occurring.

What deepened the current crises, how far the crisis would go and who and how will stop the consequences occurring since summer 2007? This thesis will try to answer those questions.

2. Objectives and Methodology of Thesis

The objective of the bachelor thesis is to describe events attached to the US, European and the Czech economy which were happening from August 2008 to approximately March 2009.

The thesis will sum up the major economical drivers of mentioned economies and will recognize the overall impact on the global and the local economy. The leading question states: “Is the crisis really so bad or are we experiencing just minor difficulties after having so prosperous good times?”

3. Literature Overview

3.1. The definition of Market

Business Dictionary (50) sees definition of market (domestic or international) as actual or conceptual place in commercial world where forces of demand and supply operate, and where buyers and sellers interact (directly or through intermediaries) to trade goods, services, or contracts or instruments, for money or barter. Markets include mechanisms or means for:

1. determining price of the traded item
2. communicating the price information
3. facilitating deals and transactions
4. effecting distribution

Market for a particular item is made up of existing and potential customers who need it and have the ability and willingness to pay for it. All markets, ultimately, consist of people.

3.2. Financial Markets

Burda & Wyplosz 2005 (49) describe financial markets as arenas where buyers and sellers of financial assets such as bonds, stocks, currencies, and other financial instruments meet to trade and communicate through prices. Together with banks and other financial institutions, financial markets gather resources from households in the form of savings and lend them out to others who will spend them. One specific feature these markets is the extreme day-to-day variability of prices at which financial instruments are traded.

Channels though which financial markets can affect the real economy directly is related to financial conditions. And the financial conditions are driven via physical investments (accumulation of productive capital) and consumption; therefore via supply and demand.

FM facilitates (51):

- The raising of capital
- The transfer of risk
- International trade

3.3. Types of Markets

Capital Market

A capital market is not a compact unit, but a highly decentralized system made up of three major parts:

Stock Exchange

A market in which securities (documents giving title to property or claims on income that may be lodged) are bought and sold. The economic importance of stock exchange is that they facilitate saving and investment: (52)

a) by making it possible for investors to dispose of securities quickly if they wish to do so.

b) in challenging savings into productive investment.

Bond Market

Exchange of fixed/interest security issued by central or local governments, companies, banks or other institutions. They are usually a form of long-term security but do not always carry fixed interest.

Money Market

The financial institutions that deal in short-term securities and loans, gold and foreign exchange. Money has a "time value", and therefore the use of it is bought and sold against payment of interest. Neither the money market nor the capital market exists in one physical location. (52)

Commodity Exchange

Exchange of commodities doesn't always mean only physical exchange but exchange of rights to ownership as well, which is sometimes more important. (52)

Derivatives Markets

Instruments derived from conventional direct dealings in securities, currencies and commodities. Trade in derivatives increased substantially in the 1990's, given their usefulness to company treasurers and fund managers as a hedge against security price changes and currency fluctuations, particularly in the disturbed currency markets of the period. (52)

Futures Markets

Markets exist for the sole purpose of pricing future deliveries of primary commodities. More advanced countries have stock markets which constantly place a value on companies, primarily on the basis of expected future earnings/profits. London's Commodity Futures, New York's Mercantile Exchange, or Rotterdam's Oil Futures deal in future contracts. (49)

Insurance Markets

Facilitate redistribution of risk – loss by an individual is compensated for at the expense of all those who insure against it. (52)

Foreign-exchange Markets

A market in which contracts are made to supply currencies at fixed dates in the future at fixed prices. In former case, the transaction takes place immediately, and it is in this market that exchange rates are kept at their managed levels by government intervention. (52)

3.4. Raising of Capital

Financial institutions and other intermediates play very important role. They commonly lend money in form of mortgages and loans to those who seek to borrow from those who deposit money to them. Through this way, borrowers don't have difficulties to find a lender since intermediates represent most of them.

More complex transactions than a simple bank deposit require markets where lenders and their agents can meet borrowers and their agents, and where existing borrowing or lending commitments can be sold on to other parties. A good example of a financial market is a stock exchange. A company can raise money by selling shares to investors and its existing shares can be bought or sold.

Lenders

- *Individuals*

Many of us don't even realize that we lent money. There are various ways ship redistributes somebody's financial capital.

We lend money when:

- Deposit money into a bank's saving account
- Invest into a pension plan
- Pay premiums to an insurance company
- Invest into bonds
- Invest into shares

- *Companies*

Companies tend to be borrowers of capital. When companies have surplus cash that is not needed for a short period of time, they may seek to make money from their cash surplus by lending it via short term markets

There are a few companies that have very strong cash flows. These companies tend to be lenders rather than borrowers. Such companies may decide to return cash to lenders. Alternatively, they may seek to make more money on their cash by lending it (e.g. investing in bonds and stocks.)

Relationship between Lenders and Borrowers			
Lenders	**Financial Intermediates**	**Financial Markets**	**Borrowers**
Individuals Companies	Banks Insurance Companies Pension Funds Mutual Funds	Interbank Stock Exchange Money Market Bond Market Foreign Exchange	Individuals Companies Central Government Municipalities Public Corporations

Borrowers

- *Individuals* – usually borrow money in form of short-term or long term loans and mortgages for e.g. purchase of car, house
- *Companies* – lending to companies aid to improve cash flow and help with future expansion, business plans or modernization
- *Governments* - it is a common feature that government's expenditure exceeds tax revenue and when they reach budget deficit it is time to borrow money to make up the difference. Governments also borrow on behalf of nationalised industries, municipalities, local authorities and other public sector bodies. Governments borrow by issuing bonds. Indeed the debt seemingly expands rather than being paid off and government debt seems to be permanent. One strategy used by governments to reduce the value of the debt is to influence inflation.
- *Municipalities* and *local authorities* may borrow in their own name as well as receiving funding from national governments.
- *Public Corporations* typically include nationalised industries. These may include the postal services, railway companies and utility companies.

Many borrowers have difficulty raising money locally. They need to borrow internationally with the aid of Foreign exchange markets and little help of globalization.

3.5. Informal Economy

So called "Underground", "Black" or "Popular" economic activity which avoids government regulations. In developing countries, such activity is likely to contribute

to employment. It has been estimated that about 25% of workers worldwide are employed in the informal sector but in developing countries this could reach up to 80%. (52)

3.6. Speculations

Speculators had been blamed for causing the current financial crisis by increasing value of shares too high and creating so called financial bubble. Their aim is to buy and sell with a view to buying and selling at a profit later when prices have changed.

3.7. Financial Instruments

FI are cash, evidence of an ownership interest in an entity, or a contractual right to receive, or deliver, cash or another financial instrument.
Financial instruments can be categorized by form depending on whether they are cash instruments or derivative instruments:
Cash instruments are financial instruments whose value is determined directly by markets. They can be divided into securities, which are readily transferable, and other cash instruments such as loans and deposits, where both borrower and lender have to agree on a transfer.
Derivative instruments are financial instruments which derive their value from the value and characteristics of one or more underlying assets. They can be divided into exchange-traded derivatives and over-the-counter (OTC) derivatives.

3.8. Why we need Central Banks? & Gold Standard

Before central banks were created for the purpose of backing banknotes, financial crises occurred occasionally as the result of the banknotes which were not fully backed. Central banks displaced private banks as issuers of paper money and they were formally required to hold close to 100% gold or silver to back their issues of banknotes which were convertible into gold, coins, or bullion at the holder's request.

The resulting arrangement, known as the *Gold Standard* ("the money supply is determined solely by the balance of payments"), lasted from 1879 to 1914. The gold standard era is associated with the fast growth and rapid industrialization of the time, and is regarded as a great economic success story. Gold standard returned during the inter-war period from 1926 to 1931.

Despite the gold standard advantages (e.g. market is entirely determined by the stock of gold, which it is out of the politicians' hands or inflation is not likely to emerge on any significant scale), it has its limitations and negatives. As sterling became the leading currency, Britain as the largest creditor country was able to set the interest rate for the rest of the world and the demand for sterling allowed Britain to finance long-running balance of payments deficit.

But the main problem lied in natural supply of gold dependent on discoveries of natural resources. Economic growth implies a continuously expanding demand for real balances. Therefore if gold discoveries do not match the demand needs, increases in the real money supply can occur only if the price level declines (i.e. price of gold must rise).

4. Causes and Consequences of previous World's Financial Crisis

"Some of the financial crises (like the Great Depression in 1930's) spread major infection and influence on huge part of the world. Others are fatal locally, but mainly isolated episodes (like the Russian crisis in 1998)."

Jan Švejnar[1] (17)

4.1. The Great Depression 1930's

In the next following pages is described the Great Depression of 1930's according to Murray 2000. (53) The Great Depression of the 1930s was the economic event of the 20th century. The depression is interesting because, in perception after the fact, the downturn could have been much shallower had policy makers not made certain mistakes. Some of these mistakes have been well researched by economists over the years. There are also lessons to be learned from the depression on human behaviour and society in general.

The Great Depression began in 1929 when the entire world suffered an enormous drop in output and an extraordinary rise in unemployment. World economic output continued to decline until 1932 when it touched bottom at 50% of its 1929 level. Unemployment soared, in the United States it peaked at 24.9% in 1933. It remained above 20% for two more years, unwillingly declining to 14.3% by 1937. It then leapt back to 19% before its long-term decline. Since most households had only one income earner the equivalent modern unemployment rates would likely be much higher. Real economic output (real GDP) fell by 29% from 1929 to 1933 and the US stock market lost 89.5% of its value.

Another unusual aspect of the Great Depression was deflation. Prices fell 25%, 30%, 30%, and 40% in the UK, Germany, the US, and France respectively from 1929 to 1933. These were the four largest economies in the world at that time.

Millions of people and companies were wiped out completely. The lack of adequate social programs left people of all social groups depending on relatives and friends for charity. Spending became paralyzed with fear as the downturn was so unexpected. Many did not realize how severe the downturn was until 1932 or 1933 when the economy had technically hit bottom and even begun to re-establish. People's resources were depleted by then and so were many of their friends'.

The political backlash to the miserable economic situation is often blamed for precipitous democracies, bringing fascist governments to power in Germany, Italy, and Japan, and ultimately provoking the Second World War. *Hitler's* rise to power can be directly linked to the profound economic crisis in Germany at that time. The German economic crisis was compounded by the huge war reparations imposed upon the Germans following World War I

[1] Jan Švejnar - economist, born October 2, 1952 in Prague. 1994-2003 an adviser to former Czech president Václav Havel.

4.1.1. What Caused the Great Depression?

There are several explanations for what happened but the most obvious conclusion is that it was the confluence of several short-sighted and regrettable factors. Three main themes emerge: historical factors, central bank policies, and political decision making. Prior to the crash the stock market had been an important source of funding for industry; therefore the crash itself was a contributing factor to the downturn as well as an indication of things to come. Since stock prices are based on estimates of future earnings potential, the stock market performance of the 1920's notify a story of fugitive optimism for the future. When it peaked a few weeks before the crash, *The Dow Jones* had risen 597% over the previous 8 years.

The freeing of capital from government use to commercial use following World War I caused commodity prices to inflate. In 1920, *Ben Strong* of the *US Federal Reserve* Bank of New York raised interest rates sharply to prevent inflation. This caused a recession and the stock market to fall. Once hard assets like commodities and real estate were no longer rising in price, money began to pour into stocks and bonds.

The Dow started climbing from its low at 63.90 in 1921 and rose 150% over the four years to 1925. According to *Ron Chernow*, in *The House of Morgan*, It was in 1925 that *Ben Strong* made a secret commitment to *Montague Norman*, Governor of the *Bank of England*, to help England reinstate the Gold Standard. This action would later be shown to have undermined the British economy but the Pound had been the main medium of international exchange at that time and it was felt to be in everyone's interest to have it be exchangeable for gold. With moral support from the *US Treasury*, *Strong* chose to help strengthen the value of the Pound by depressing US interest rates. This depressed the value of the US Dollar and caused the already robust economy to boom.

It was suddenly cheaper to borrow money to invest in the stock market. Since the *Dow Jones* had risen steadily since 1921, "small investors leapt frivolously into the stock market in large numbers". With artificially low interest rates and a booming economy people and companies were more suitable than ever to invest in grandiose business expansions and over-priced stocks.

In 1927, Britain ran into trouble with its gold standard again and *Ben Strong* lowered US interest rates in sympathy for a second time. This ignited the boom into the speculative frenzy that brought the market to its peak on September 3, 1929. Such action was like pouring gasoline onto a fire - the flames rose up, no lasting fuel was added, but the economy sure looked great.

George Harrison, successor of *Ben Strong*, immediately lobbied for higher interest rates to cool the speculative passion. Rates were finally raised 1% in August of 1929, but by then it was way too late. First it was the end of war-related inflation and booming exports for war reparations, next artificially low interest rates in 1925 and 1927 and booming exports due to a reduced value of the Dollar vs. the Pound. There were major tax reductions instituted by the *Republicans* under *Hoover* and finally in June of 1929 an international accord was struck with the Germans over the financing of war recompense, a major issue of the decade. By Monday, October 28,

1929 the Dow had fallen 20% to 300. It fell 40 more points that day and another 30 on Tuesday (Tragic Tuesday) to reach a temporary bottom at 230.07. It was down 40% from the peak 56 days earlier.

The market recovered a good bit of ground but began to fall again before year-end. In early 1930, there were 60 bank failures per month in the US but when the *Fed* started to keep more money, things got much worse. 254 banks failed in November and 344 in December of 1930. Among these was the *Bank of the United States*, with 450,000 depositors it was the fourth largest bank in New York. Although it was a private bank, the biggest bank failure in American history, the *Bank of the United States* bankruptcy expanded a psychological fear that gripped depositors across the country.

In spite of further tax cuts, public works programs and optimistic speeches, spending and thus economic activity just kept going down. The stock market would make temporary recoveries, catching buyers in, only to free fall again. The *Dow Jones* finally hit bottom at the level of 41.22 on July 8, 1932, 10.5% of its peak three years prior.

It is generally agreed today that the money supply, which refers to the total amount of money circulating in the economy, should grow at the same rate that the economy grows. Any faster is inflationary and any slower is deflationary. When a bank fails the *Fed* has the option to either bailout that bank by lending it money or to lend more money to other banks to fill in the shrinkage in the money supply. Otherwise the amount of money in circulation shrinks and the economy weakens.

The *Fed* had allowed the money supply to grow at the annual rate of 2.7% from 1921 through 1929, slightly slower than the economy grew over that period, thus the economically booming 1920's was a period of price stability and even modest deflation. Between 1930 and 1933 the *Fed* refused to replenish the banking system sufficiently, even though the money supply was shrinking due to hoards of bankruptcies and bank failures. The money supply fell 27% from 1929 to 1933 and real economic output fell 29% accordingly. Thus early bank failures led to further bank failures and bankruptcies.

The three main factors contributing to the severity of the Great Depression were:
1. The over-stimulated economic euphoria of the 1920s.
2. The draconian monetary policy pursued by the *Federal Reserve Bank* from 1930-1933.
3. The sudden rise of global protectionism leading to the collapse of world trade and the dramatic rise of income taxes in 1932.

There were many other factors which made the human experience much worse than it had to be such as the lack of adequate social safety nets like Unemployment Insurance, Social Security, Medicare, and Welfare programs. These programs were mostly implemented in response to the Great Depression and have well served the function of automatic economic stabilizers since.

4.1.2. New Deal

Murray 2000 (53) further writes about the New Deal. *President Hoover* came to the legislative session of 1932 in an atmosphere of crisis, ready for drastic measures. In his annual message to Congress, on December 8, 1931, *Hoover* first reviewed his own accomplishments of the past two years:

"Many undertakings have been organized and forwarded during the past year to meet the new and changing emergencies which have constantly confronted us . . . to cushion the violence of liquidation in industry and commerce, thus giving time for orderly readjustment of costs, inventories, and credits without panic and widespread bankruptcies."

Measures such as Federal and state and local public works, work-sharing, maintaining wage rates ("a large majority have maintained wages at high levels" as before), curtailment of immigration, and the National Credit Corporation, *Hoover* declared, have served these purposes and fostered recovery. Now, *Hoover* urged more drastic action, and he presented the following program:

1. Establish a Reconstruction Finance Corporation, which would use Treasury funds to lend to banks, industries, agricultural credit agencies, and local governments
2. Broaden the eligibility requirement for discounting at the Fed
3. Create a Home Loan Bank discount system to revive construction and employment measures which had been warmly endorsed by a National Housing Conference recently convened by Hoover for that purpose
4. Expand government aid to Federal Land Banks
5. Set up a Public Works Administration to coordinate and expand Federal public works
6. Legalize Hoover's order restricting immigration
7. Do something to weaken "destructive competition" (i.e., competition) in natural resource use
8. Grant direct loans of $300 million to States for relief
9. Reform the bankruptcy laws (i.e., weaken protection for the creditor)

Hoover also displayed anxiety to "protect railroads from unregulated competition," and to bolster the bankrupt railroad lines. In addition, he called for sharing-the-work programs to save several millions from unemployment.

4.2. The Asian Financial Crisis 1997

Financial globalization during the 1990s impinged upon world savings and investment flows, macroeconomic developments, challenges confronting policy makers, international investors, and financial market regulators (D. K. Das, 1999) (40).

The most recent passed financial crisis would be the Asian crisis in 1997. Referring to work of University of California (39), the Asian financial disorder started off in Thailand immediately after Honk Kong's retrocession to China in July 1997. By the second half of 1997, financial troubles in Japan and corporate bankruptcies in South

Korea rocked North Asia. In early 1998, the fall-out in Indonesia gave a further shock to South East Asia and the rest of the region. These events have tended to compound each other, resulting in serious regional crises with profound implications for the global financial markets. The effects of the financial crisis were similar throughout the affected countries.

As a research paper of House of Commons notes (41), the explanation for the Asian Crisis has been the subject of much argument. There is no easy consensus to be reached on what lay behind the problems of these afflicted economies. Not so long ago, many aspects of their economies had been thought praiseworthy. It is possible, however, to make a distinction between underlying weaknesses in the South East Asian economies and the initial triggers that brought events to a head.

Weaknesses of Asian Economies before the Set Off

- Unsuitable Current Account Deficits

Most of the South East Asian economies in crisis had large current account deficits, in some cases exceeding 5% of their GDP. These deficits were financed by attracting inflows of capital from abroad, often short-term capital. (41)

- Over-Dependence on Short-Term Foreign Funds

The problem in the South East Asian countries was not merely allowing harmful current account positions to build up, but of the form that they took. Driving a large part of their capital inflows were lending booms, which led domestic banks in a number of these economies to actively seek foreign funds from the West to finance the lending. The banks were motivated by the prospect of large profits, especially as they could take advantage of fixed exchange rates in order to reduce the cost of this borrowing. (41)

- Poor Regulation of the Economy

A third contributory factor to the Asian Crisis has been the absence of an adequate regulatory framework for businesses, especially the banks, in South East Asia. This omission allowed unsound and possibly corrupt relationships to develop. (41)

- Over-Inflated Asset Prices

Another weakness of the South East Asian economies that made them vulnerable to a sharp downturn, if not crisis, was the unrealistically high asset values in most of the South East Asian countries. The cause was that the money supply was growing too quickly for the real economy to absorb. Excess credit was used to fuel speculative booms in real estate, factories and the stock market. (41)

- and (with the exception of Hong Kong) Macroeconomic Policy: exchange rates. (41)

Whereas the factors outlined above have been recognised as probably contributing in one way or another to the crisis, there is less agreement amongst economists over the question of whether the governments of the Asian Tiger economies made basic errors of policy in running their economies. The policy most intensely discussed is the decision to unofficially fix the value of their currencies to the dollar.

The previous fifteen years had seen the global debate over exchange rates move in favour of some type of pegged or fixed exchange rate. In Europe, the quest for a zone of stability is well known; an interest in fixing exchange rates in developing economies was also evident.

The major outflow of cash from the region affected the business sectors causing businesses to experience widespread liquidity squeezes as the banking sectors exercised stringency on account of their diminishing deposits, falling value in collateral and worsening quality of loans.

The Global Impact of the Asian Crisis

The loss of global financial wealth in the three months following peak in July 1997 was 2.3 trillion dollars which was equivalent to 19% of OECD consumers' expenditure, so it was a big hit to world wealth. There have only really been two episodes like this in the 20th century, the first being 1929 and the second 1987. Partly in response to this we have, like most others, revised our forecast down for world GDP very substantially. (41)

The financial effects on countries outside South East Asia was, for obvious reasons, the chief initial concern of governments outside the region. The Asian Crisis has already affected emerging economies such as those in Eastern Europe and Latin America extremely severely. Effects on the real sector of the western industrialised countries were being seen: reduced trade flows and lower foreign direct investment. (41)

- The Wealth Effect: Falls in Equity Markets

When equity markets in South East Asia fell, they caused a negative wealth effect on investors across the world, just as they had upon investors from South East Asia itself. Furthermore, these stock market falls directly initiated market declines across the globe. Some investors managed to avoid some of the collapse in South East Asian markets by repatriating funds before the crisis emerged. It appears that some "smart money" was withdrawn from the region's markets relatively early in 1997. (41)

- International Trade

Another obvious effect on industrialised countries of the Asian Crisis was likely to be an income effect caused by falling international trade. Because South East Asian currencies have devalued, there was a weakening of demand for western goods in these countries, which are relatively more expensive. Western goods are likely to be relatively more expensive in third-party countries as well. There was therefore being a brake on the growth of exports from the major economies. (41)

- Foreign Direct Investment

While depreciating currencies give a competitive trade advantage to South East Asian companies, the cost of acquiring overseas assets will increase at the same time, just as the companies face a shortage of available funds. The UK has been a particularly large recipient of foreign direct investment from South East Asia in recent years, and the announcements of delay or termination of projects by Korean companies, such as Samsung and LG Electronics, have been highly publicised.

However, inward investment from South East Asia was actually a small proportion of the UK's inward investment. (41)

- Economic Growth

Given the economic turmoil, it is inevitable that there will be some downturn in economic growth. A constant downward revision of economic growth forecasts has taken place since the crisis began. (41)

5. The Current Financial Crisis

"The global financial crisis showed a need for improvement of international economic co-ordination."

Angela Merkel[2] (38)

5.1. How has it started?

According to public questionnaires, social researches and other resources of public opinion which were published in media, the starting point of the current financial crisis is considered to be September 2008, when the financial institutions *Fennie Mae, Freddie Mac* were taken over by the US government. *Fennie Mae* and *Freddie Mac* as the biggest financial institutions in the USA controlled and guaranteed almost half of all mortgages (worth of approximately $12 trillion) which were issued there. The purpose of the government intervention was to calm the financial system. As *Henry Paulson*, the US minister of finance explained (3): "*Fannie Mae* and *Freddie Mac* are so big and linked with the US financial system that a collapse of one of them would cause chaos on domestic and foreign financial markets". Unfortunately, the situation instead of being settled down opened areas for speculations and fears. Consequences which followed are often compared with the fall on the *Wall Street* after the 9/11 terrorist attack on the WTC.

The first who felt the crisis were the share holders and people who invested into funds. Drain of funds had been recognized since the start of 2008, but September 2008 meant a disaster for most investors and investing into shares suddenly became less objective than termed accounts. On 15/9/2008, financial markets were hit by the biggest crash in modern banking history, when *Lehman Brothers* announced their bankrupt, shares rapidly dropped down due to the brokers' confusion. Since then, macroeconomic news has mainly negative bulletin and the chain reaction lead to falls of exchange markets, people's loss of savings in investment funds and shares.

The crisis is referred to as the consequence of irrational investments into risk mortgages which has been taking place a few years back from now. As it was stated in an article from 19/11/08 in iDnes.cz (10), the situation from September 2008 on was not a consequence of the invisible market hand intervention, but the rehabilitation of global economy into real values, from which it had been locked out by state interventions disrespecting basic monetary rules. A risk mortgage means flexible mortgage whose interest rate is drawn from the central bank's interest rate.

Yearly approaches towards banks were concentrated on higher control over their investments as many of the world politicians presumed that banks had had enough freedom. For some (e.g. *Nicolas Sarkozy*), such control over financial institutions was referred to as the end of free capitalism. A proposition, which should come into effect in a few years time, should limit risks which banks face when lending each other, and control banks operating in many different countries (35).

After the end of the internet boom and the attack on *WTC*, it was clear that blowing money had to stop and American economy was supposed to fall, some companies were supposed to finish and unemployment was meant to increase. Instead the *Fed*

[2] Angela Merkem - born 17 July 1954, in Hamburg, is up to date Chancellor of Germany

pumped up a lot of money into the economy, so it avoided the slowing down of the growth and the fall down of assets and equities. As a reaction of the *Fed's* action, banks started to invest that money and the roundabout was spinned again, not only in the USA. Therefore, if the *Milton Friedman's* theory (inflation is a function of money volume increase in an economy) holds, then his rule was highly disrespected and bypassed. Inflation occurred, but mainly in the properties and share market. The central bank applied increase of interest rate to deal with the inflation and this effect caused that people (who had flexible mortgage) suddenly didn't have enough money to pay for their mortgages because their instalments rose along with increase of the interest rate and a problem, which was describe in the first paragraph, occurred! After all, prices of some properties dropped almost by 50%, compared to prices in 2006.

Financial sector differs from other services, industry and agriculture, so that its collapse can cause enormous damage of the whole economy, and consequences, which followed after September 2008, mainly due to the crash of *Lehman Brothers* and the takeover of *Merrill Lynch*, caused deterioration of situation on the global financial markets. Mainly banks had to cope with the lack of free money; they became more careful who they lend to by changing the coefficient of security (which calculates the sum needed for clients to remain after all instalments and other bonds are paid), which started to effect the functioning of the real economies. According to a research of the *Confederation of Industry* (CoI) of the Czech Republic from September 15th (8), 98.5% of the Czech businessmen (members of the CoI) were expecting partial or absolute impact on their business coming from foreign markets. 42% of firms are expecting limiting of investments, 30% would cut outputs of goods and services and almost 25% saw resort in downsizing. In the final commercial impact, all those actions would mean decrease in households' income.

Not only had the companies started to have difficulties, because banks preferred to keep money for themselves and reaching money was becoming more and more expensive. Furthermore, banks sharpened the conditions for getting mortgages and loans and reacted by increasing interest rates in order to ensure as much cash as possible (6) and the situation was logically complicated by consumers who decreased their expenditure of consumer goods.

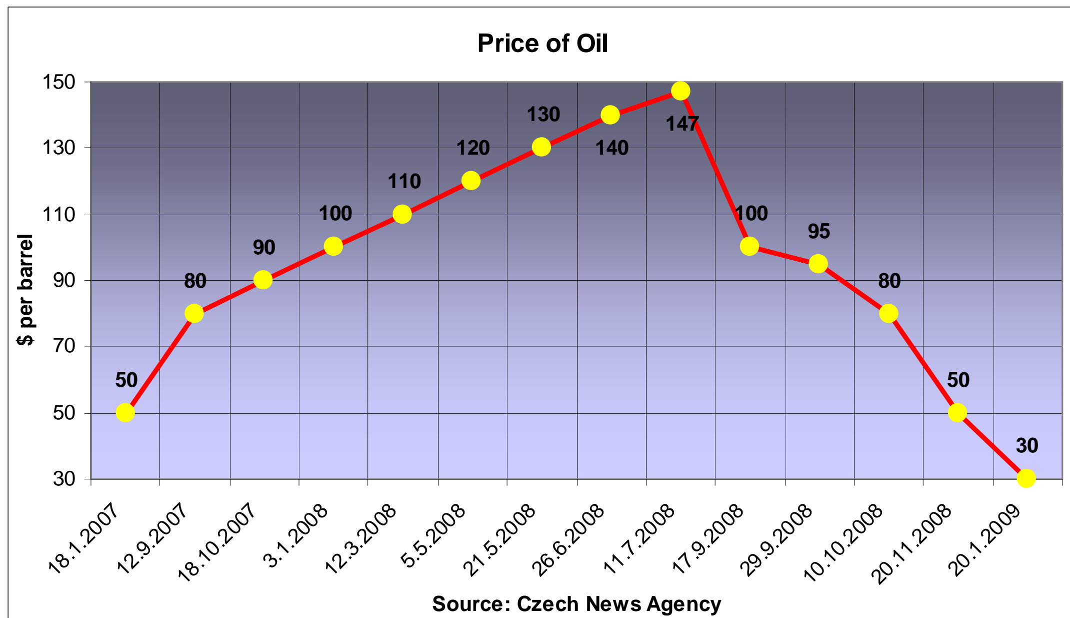
5.2. Areas Affected by the Crisis:

5.2.1. Oil Price

Oil is one of the most important natural resources for running the global economy and whenever there is an increase or decrease of its price all sectors of economy would notice that more or less.

During the first year of the financial crisis oil prices doubled from about $70 per barrel in August 2007 to over $140 in July 2008. According to Taylor (2008) (43) rapid cut in the US federal funds rate caused sharp depreciation of the dollar and the very large rise in oil prices. Price of oil had been reaching its historical price maximum, and the price rose over $147 per gallon on 11/7/08 (43). If since (5 months horizon), the price dropped by $110 to below $38 (which was the lowest price on 24/12/08), it was inevitable that the global economy would slow down

extremely. The slow down of the economy was caused by lowering production in various economic sectors, with transport of goods decreasing along with it.



Basic economic rules say if there is a decrease in demand, than the price has to go down as well. That was what was done by oil producers to boost the consumption. They cheapened the price, but at some point the price became so low, that they started to fight for higher prices by lowering the production to reach market equilibrium (or cause shortage) of oil so they could increase its price (OPEC target aims at $70-$80 per barrel). Production of oil dropped to 24.845 million barrels per day (34).

Some prognoses predict the price of oil to drop at $25 per barrel in 2009 if the crisis hits China and global demand for oil would be the lowest since 1982 (31). Since the production of oil is one of the most important factors influencing domestic budgets of world leading countries (USA, Russia, JAR), falling price of oil then could have negative impact on especially Russia, in contrast to the United Arab Emirates which profit from being the financial centre of Near East and a tempting tourist destination.

5.2.2. Car Industry

People were expected to postpone their expenses, regarding especially high investment into new houses, or more likely cars. Car industry is a specific segment of the economy which is a typical example of long-term good expenditure, highly sensitive to financial situation of firms and households. Due to its high cohesion with the employment and high public spending, via this economics sector it is the quickest way how the real economy could be hit.

As an example we could use the reaction of the car manufacturers, when the effect of the crisis could have been noticed during the first couple of weeks. As the crisis was spreading, also because of a sudden loss of confidence and massive withdrawal of capital by both domestic and foreign investors as well as unhedged debtors, the demand for new cars decreased on the world markets. No surprise, who would

invest into a new car if there is uncertainty of your money savings and investments? Further more, it is becoming more expensive and difficult to get a loan or a mortgage since banks need to keep as much cash as possible in order to be able to release money to customers if needed.

Unfortunately, for a car manufacturer, special machines for the production of a specific car have to be fabricated, and therefore the company sets a production plan which is an essential for making business and the company is dependent on it. Car manufacturers can cope with small changes in demand, by e.g. adjusting the price of a car, but dealing with such fall as e.g. 25% is very dangerous for the company's existence. Due to the decrease in production, job positions would start to diminish in all sectors of the car industry.

5.2.3. Share Markets

During September and October 2008, shares on global exchange markets were experiencing huge falls. Statistics were referencing worlds' indexes such as stock market index of world stock MSCI (Morgan Stanley Capital International). For example the *Dow Jones* index reached its peak on October 9, 2007, closing at 14164 points. A year and half later on 9/3/09 the index had lost over 50% of its value which was 6547 points.

According to an estimate of the IMF (12), only the banks wrote off $500 billion due to the bad loans. Other $500 billion will be written off by ordinary firms. Bloomberg estimates the losses at $2 trillion.

Maybe there would have been no crisis at all if the markets didn't react to every single piece of news about the political, business or customer behaviour. Some argue that media were responsible for the economical instability and worsening of the situation by bringing catastrophic news.

5.2.4. Unemployment

As result of the crisis, the unemployment rate has been raising significantly. The UN predicted between 18 and 51 million job positions to be lost in 2009. So far the higher number has not been reached.

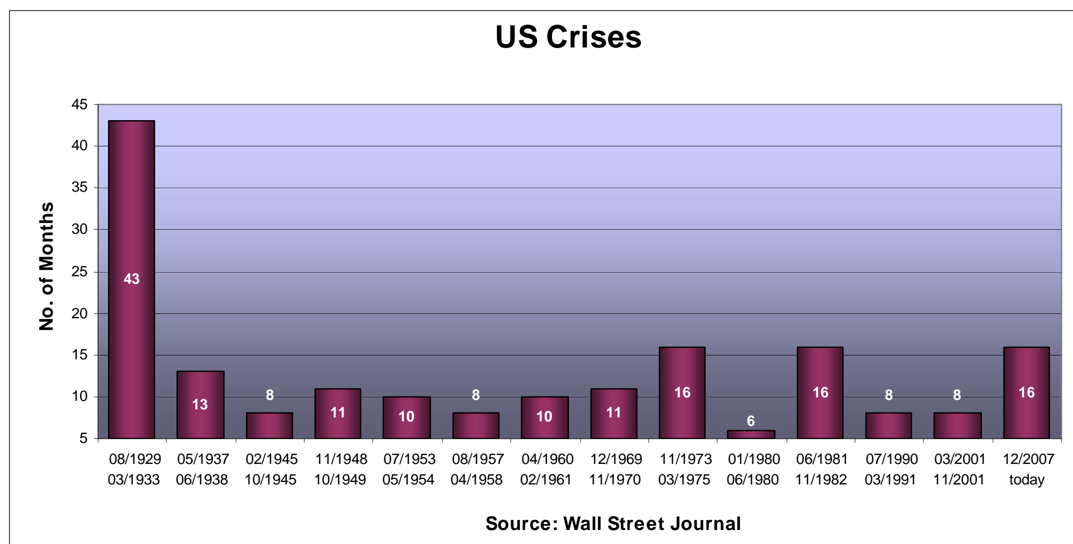
6. The Impact of the Crisis on the Global Economy

"During a time of crisis when investors lose their confidence and pull back investments, it is only up to the government to enter the market, invest, spend and borrow money to activate the economy again."

John Maynard Keynes[3] (44)

6.1. USA

The USA was used to constant and relatively rapid economic growth, low unemployment and inflation, and above all living in debt for last 16 years. It was all going to change. Market was suddenly jammed and for the US economy (which is so dependent on smooth functioning of financial markets more than any other country) it meant fast engagement of the crisis in the real economy.



6.1.1. Government's Actions against the Crisis

American central bank (*Fed*)

To avoid deepening of the crisis, and to prevent private banks from keeping money, central banks were forced to pump up billions of US dollars of short-term loans, in order to enhance conditions of liquidity on global financial markets. To soften the impact of the financial crisis, the *Fed* started to accept shares as a deposit for additional loans in cash (4). The involvement of *Fed* was consider rather point-blanked due to its effort to keep the markets liquid, while growing sums of unpaid mortgages forced banks to reject money borrowings, because number of people who were unable to pay for their mortgages increased to 2.3 million and executors confiscated over 860 000 households (37). Similar approach was used in March 2008 when *Fed* supplied $1 billion to *JPMorgan Chase*, to make easier the takeover of *Bear Stearns*, because of the doubt that a collapse of the investment bank could cause a crisis in the whole system.

[3] *John Maynard Keynes* (5 June 1883 – 21 April 1946) was a British economist whose ideas have had a major impact on modern economic and political theory as well as on many governments' fiscal policies.

Fed didn't want to make the situation look any worse than it was, so during September 2008 *Fed* didn't decrease the interest rate, explaining that such action would have little impact on the economy. Fed forecasted that economic growth would be inhibited by slowing of credit markets, building market and export in the USA.

A major Fed's intervention into the financial sector was the transformation of *Goldman Sachs* and *Morgan Stanley* from investment banks into ordinary banks which would offer such service as deposit accounts and ATMs. Until September 2008, those institutions were under the control of *Equity Commission* which allowed them to invest their clients' money as much as they wanted, so their actions were rather more risky.

Together, the US government and *Fed* took actions in supporting most of financial institutions and sectors of the economy, which was necessary to keep the economy from a recession. Later on, the recession was confirmed, via various coefficients, such as the index of the Institute for Supply Management (ISM) (3/11/08 in report *JPMorgan Global PMI: Global Report on Manufacturing*), and slowing down of the real economy was inevitable. (48)

Government's Financial Injections

On 20/9/08, the US ministry of finance delivered a proposal to the Congress, which suggested earmarking of 700 billion US dollars (circa 11.9 trillion CZK) for recovery of losing and risk actives, which would be the second biggest from the 1930's "New Deal", and more than the US investments into war in Iraq since 2003. The *Emergency Economic Stabilization Act of 2008* (EESA) could be simply understood as an act of nationalization, but the government is meant to sell the actives as soon as the market calms down, making potential profit as well. That is an answer to the question "Why such step, which involves spending money of American citizens, is (in theoretical sense speaking) cheaper, than if they let the crisis to carry on?"

EESA involved e.g.: (15)

- Lowering of bankers' astronomical income, which were an outcome of risk investments reduction, since their income is dependent on the amount of profit they earn from their clients.
- Ban of managers' golden parachute.
- Higher security of bank deposits, plus a raise of limit insuring deposits from $100,000 to $250,000.
- Foundation of a special bank which would invest in and buy only toxic actives

The plan for rescuing American economy was firstly rejected by *House of Representatives*, and on 02/10/08 it was authorized by US senators.

It wasn't that the expectations of the first financial injection were not satisfied but share markets didn't react positively; neither the economy where number of unemployed people was increasing, nor the production drivers were showing the end bad times. Therefore, on 25/11/08, the *Fed* brought about an idea of the second financial injection worth $800 billion where $600 billion would be used for

purchase of toxic actives and $200 billion for security of consumer loans. At the end, the second huge financial injection was worth of $787 billion (acknowledged in March 2009) and it is consisted of government's subsidies and decrease of taxation. US senators believed that the new financial injection would help the middle class and create up to 4 million job positions. (47)

6.1.2. List of US Financial Institution hit by the Crisis

- *American Home Mortgage Investment (AHMI)*
  The first financial institution (providing mortgages) was hit by the crisis in August 2007.
- *Bear Stearns*
  It was taken over by *JPMorgan* with the government's $1 billion promise (supplied by *Fed*) to cover the losses.
- *Fennie Mae* and *Freddie Mac*
  Same problem as *AHMI*, but in bigger extent, had the two biggest US mortgage agencies. 07/09/08 (after the US government decided to take over the control over those two institutions) could be understood as a detonator of the wave of bankruptcies, state financial injections, change in ownership of financial institutions and nationalization (14). The institutions were saved by a $25 billion financial injection.
- *Lehman Brothers (LB)*
  On 12/9/08, big companies from *Wall Street* were arguing about the problematic situation with *LB* to find a solution for eventual feasibility that no company would want to overtake the financial institution. At the beginning of September 2008 the most probable new owner was considered to be the *Bank of America* or the British *Barclays*, which could help *Barclays* to enter the US market. *LB* was hit by the collapse of mortgage market, and therefore the fears of bad condition of the American bank system led to the fall of the *Wall Street* shares. Emissions of *LB* fell by 13.5% during one day (12/9/08) and during the week 37 (8/9 – 14/9/08) its market price dropped by 78% from $11.2 billion to 2.5 billion. *Richard Fuld*, *LB's* CEO, is being blamed for the end of the bank, because he was the one who bought the toxic mortgages. Previously he earned $4.2 billion due to his speculations but now the bank doesn't exist because of him.
  As iDNES.cz stated (4), during the weekend on 13th and 14th of September 2008, *LB* didn't find a buyer who would overtake the institution and therefore *LB* asked the *Fed* for a protection against creditors, which protected the bank from sudden crash (the protection has certain restrictions such as broker's activity or some other divisions). *Reuters* further explains (4) that the *Fed* didn't intervene with any money because the findings from weekend showed that there would be low impact on the system in the event of a collapse of the institution.
- *Merrill Lynch (ML)* – the biggest brokers' company
  At the same time horizon, as was the problem with Lehman Brothers, the stockbroker company *ML* was sold out for $50 billion to *Bank of America (BoA)*, and therefore its employees were not discharged. The price was approximately equal to $29 for a share, which is $21 less than the value from May 2008 and $69 less than at the beginning of 2007 and *ML* had to write back over $40 billion during last 12 months (5).

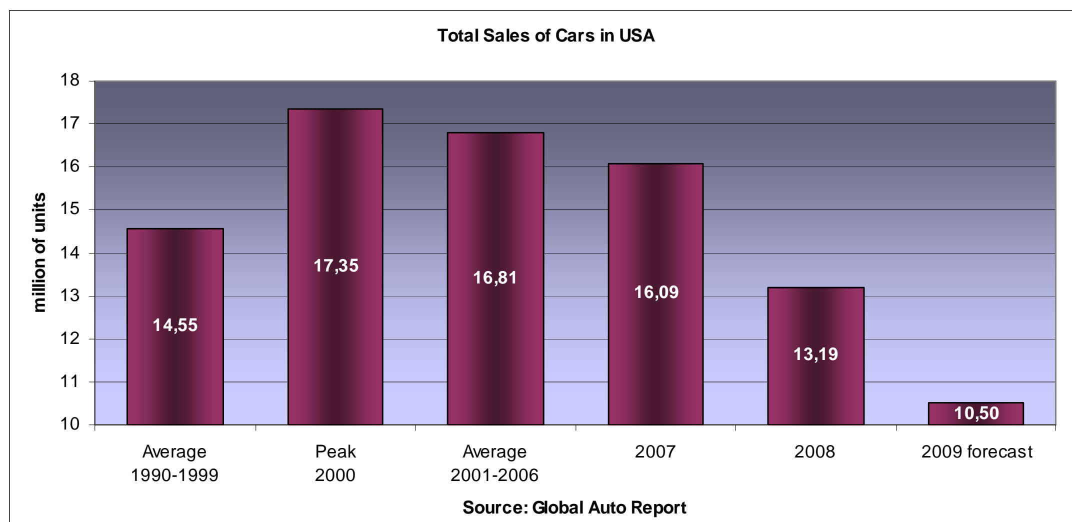
- *Wall Street*
  The events related to the bankrupt of the two financial institutions had the worst consequences for *Wall Street* since 9/11 (6). Many predicted that summer 2008 was the end of *Wall Street* as we knew it before.
- *American International Group (AIG)*
  It used to be an insurance company with the biggest market value, now a company with the biggest problems and with such expansion that the US government doesn't want to let it down, because there would be even more troubles. It is almost unbelievable how fast the bad information was spreading around the World. The increasing uncertainty about (just for the time being) the American economy caused that *Fed* provided an $85 billion loan, in exchange of 80% of *AIG's* shares and influence on the company management and decision making. Afterwards, *AIG* was provided additional $150 billion by the US government (27) and on 27/11/08 there was government's purchase of shares for $40 billion from the $700 package. As *AIG* was experiencing more losses (Q4 2008 – 61,7$ billion – which was the biggest quarter loss in the US history) it was granted 3rd additional support and analytics were hoping that it would finally work. (46)
- *Bank of America (BoA)*
  The second biggest American bank institution. In spite of the financial crisis, *BoA* gained better position on the financial market and by the acquisition of *ML* it won a strong stockbroker division aimed at small customs.
- *Goldman Sachs*
  It is considered to be the strongest investment bank due to the bankrupt of competitors and the acquisition of others.
- *Citigroup*
  It is the biggest US bank which had been coping with the crisis relatively well. On 24/11/08 the US government acknowledged support of $20 billion which essentially led to growth of share price, but unfortunately, due to other economical consequences, price of *Citigroup's* shares fell below $1 on 6/3 and the government agreed on additional purchase of total 36% *Citigroup's* shares. (46)
- *Washington Mutual*
  On 26/9/08, the US government closed down the savings bank, *Washington Mutual*. The company was merged by *JPMorgan Chase & Co.* for $1.9 billion. According to *Reuters*, the fall of the firm is the biggest crash in the history of US banking sector.
- *Franklin Bank* and *Security Pacific Bank*
  Bankrupted on 8/11/2008 (26).

6.1.3. Car Industry

The car industry plays a great role on the US market and the US economy and the GDP is largely dependent on it. American car manufacturers had to face decreasing demand which caused high losses. According to an article on iDNES websites (1), in case of bankruptcy of any of the three American car factories *General Motors (GM)*, *Ford Motor* and *Chrysler*, approximately 2.5 million of people would lose their jobs. Trade unionists from the *United Auto Workers* claimed that without help

all car producers could come to liquidation. The US Car industry employs directly 350,000 people and other 4,5 million indirectly.

American government tried to do a lot to support car manufacturers, but the question was whether it would be enough to support the whole car industry. The first government intervention started on November 6 2008 (2) when American car manufacturers could start to ask for special loans from the US government at the *Ministry of Energetics*. The *White House* specified that the loans would be for the reorganisation of the old shop floors, so they can start with production of energy efficient cars. The *American Congress* had authorized $25 billion for low interest loans for car manufacturers and related sectors and legislatives had to be notified about all steps leading to restructuring of production plant.



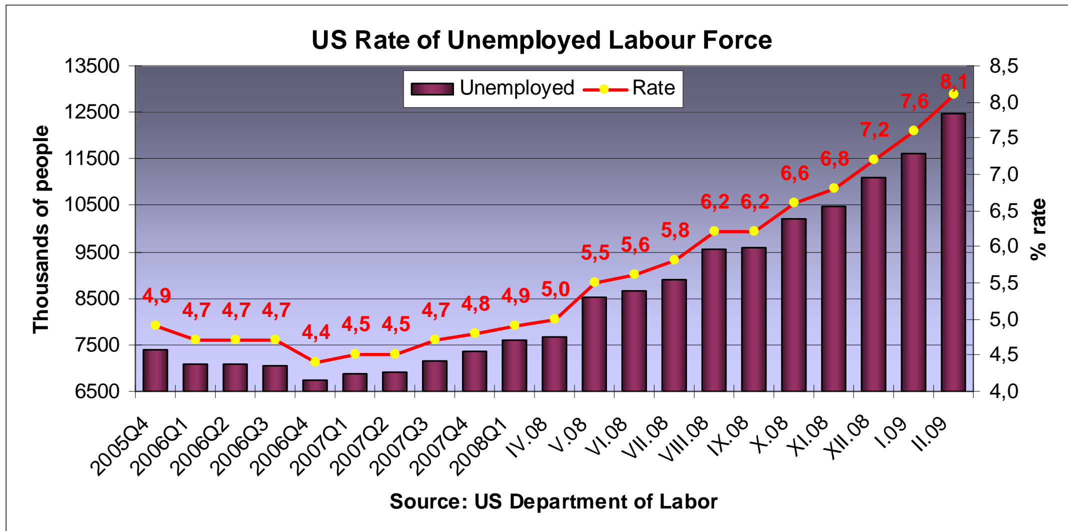
Further decrease of demand for cars, which actually dropped almost by 20% in 2008, ran automobile managers to ask for even bigger financial support and, to persuade the government, the managers lowered their annual wage at $1. The *White House* agreed on providing an additional $14 billion loan to keep the car producers secured from bankrupt up to March 2009.

But none of those actions seemed to help the car producers. Their production had been rapidly decreasing and more rumours about the future were expecting rather forfeiture than invigoration. Some of them put themselves into distinct position; like *Chrysler* which had been trying to buy *Fiat,* but now it was *Fiat* that is taking advantage from the crisis and offers *Chrysler* co-operation and hopefully more secure future.

The overall impact on car producers described the E15 journal. (11) GM lost $9,6 billion during the 3rd quarter of the year 2008 – total $31billion in 2008. *GM* has been coping with the crisis only thanks to government's $13,4 billion loan from autumn 2008 and in February 2009, *GM* asked the government for additional $16,6 billion along with presentation of it reconstruction plan which counts with cut of 49.000 job positions. *Ford* had lost $14,6 billion and another $13 billion owes to its retired employees in form of unpaid medical care. But, at the same time, *Ford* rejects any government's financial help.

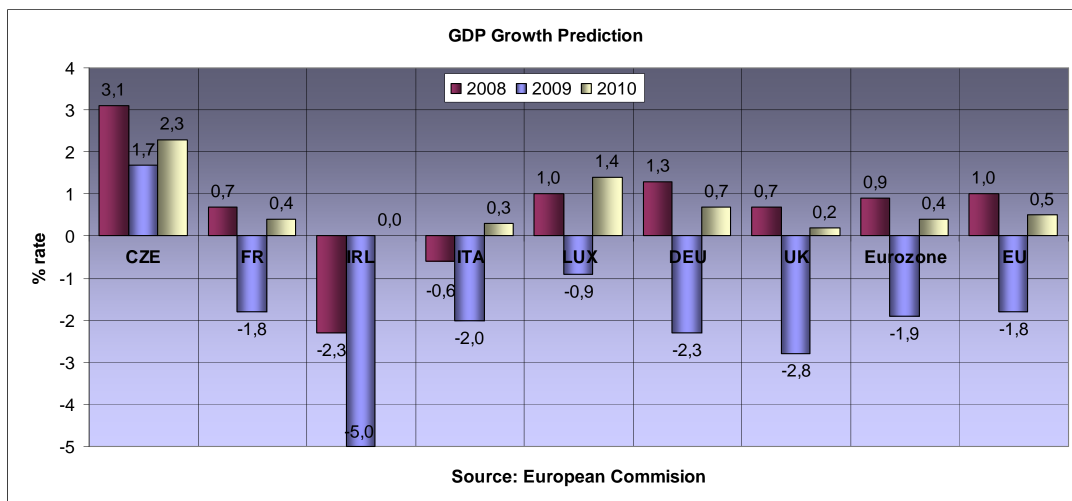
6.1.4 Unemployment

Number of unemployed labour force increased rapidly which would not be so bad if it didn't happen in a rather short-time. The unemployment rate increased by over 2% from summer 2008 to February 2009. Presentation of the unemployment rate is shown in the graph below.



6.2. Europe

As opposed to the USA, there is no uniform regulating plan in Europe, and therefore quenching of the crisis could be more difficult than in the USA. Even though European politicians were conscious about such scenario, and they tried to act together from the beginning of the crisis, by calling meetings of various interested groups, countries of the EU were bringing forward their own plans for saving their own banks, economies. Some discussions were initiated by the French president *Nicolas Sarkozy*, who was leading the EU, and consequently (as of 2009) by the Czech Prime Minister *Mirek Topolánek*.



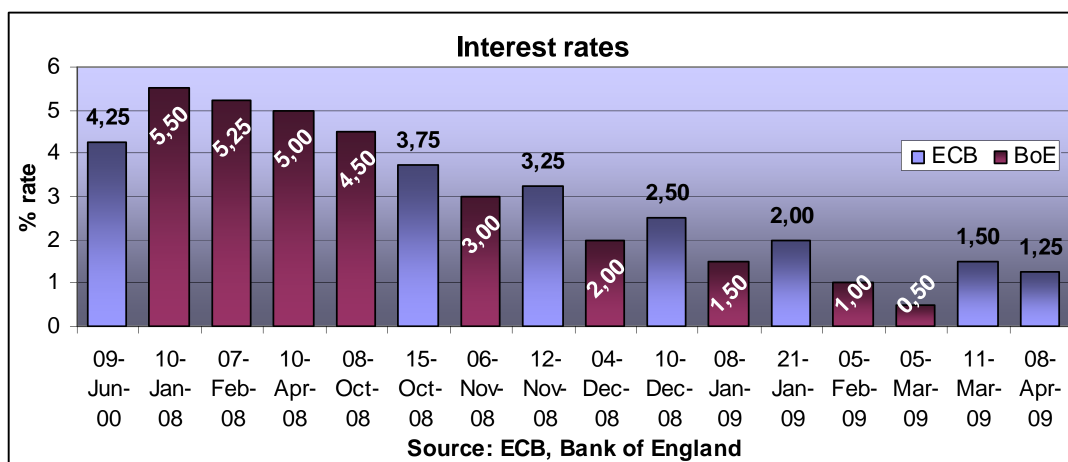
The first summit concerning the financial crisis was held on 04/10/08 in Paris with the four biggest European countries (France, Great Britain, Germany, and Italy) (16). An outcome of the summit was a promise that the EU would accommodate national budgets so it would react better to the crisis. It would mean breaking rules such as budget deficit – the Maastricht criteria (it cannot be higher that 3% of GDP in countries of the Eurozone) and public indebtedness (must stay under 60% of GDP).

But for stabilization of financial markets, Great Britain was planning to invest £250 billion into its economy (£50 billion would be used for purchasing shares of the 8 biggest UK banks) (19). Spain created a fund with €30 billion for purchasing risk shares from banks and Germany came up with €50 billion help for businessmen in the form of investments into infrastructure, education or modern technologies. Some argue that such way of investment is much better and more sophisticated than thoughtless pumping money as it had been partially done in the USA.

A factor which was graduating the crisis was peoples' fear of security of their bank savings. In order to prevent mass withdrawings, heads of European countries announced raised or absolute guarantees of bank deposits. Later on, most of European countries raised their guaranteed deposits, as the EU raised it to €50,000, and people from neighbour countries (where guaranteed money deposits were higher) started to transfer their money (case of British deposits were transferring into Irish banks). Increase of guaranteed amount on bank deposit would force banks to keep higher amount of reserves for amortizations. First came Ireland followed by Germany, Austria, and Denmark. Moreover, European governments were lending financial capital to banks in order to secure confidence of its investors.

The fear of interference in real economies had been fulfilled and European countries started to announce their slowing down of economy and coming recession. To save weakening European economy, heads of the EU countries agreed, at Brussels's summit, on a €200 billion support for business, employment or development of ecological technologies (33).

Central banks of the Eurozone, the USA, Great Britain, Switzerland, Canada and Sweden were lowering their national interest rates together by 0.5% (20). Lowering of interest rate is the most effective way how to pump money into a financial cycle.



The crisis which started in the USA is a visual example of how the global economy is interconnected. Not long from the bad news happening in the US, Europe was forced to take action in its own cases. Even though the EU with other European counties had been trying to cope with the crisis by various financial injections into the economy, not much improvement was detected. Those actions were worth between 3,3 and 4 % of the EU's GDP (circa €0,5 trillion).

6.2.1. List of Europe's Financial Institution hit by the Crisis

United Kingdom

As a reaction on the crisis, British *HBOS* (the biggest mortgage provider in the UK) and *Lloyds TBS* (the fourth biggest mortgage provider in the UK with 8% share of the market) decided to become a joined institution and to cope with the crisis together (9).

Bradford & Bingley (B&B), already the second British financial institution (after *Northern Rock*) to be nationalized on 29/9/08

13/10 £31 billion from government into 3 banks – *Royal Bank of Scotland*, *HBOS* and *Lloyds TSB*

Additional bank support £100 billion by the British government – guarantees of toxic actives

Benelux

On 29/09/08, Czech media informed (13) that the global financial crisis had hit Belgian/Dutch bank *Fortis* and it had been argued about its sale or takeover. In the end, countries of Benelux agreed on joint financial injection, worth of €11.2 billion and each state would gain 49% in the national division of *Fortis*. The €11.2 billion were consisted of Belgian €4.7 b., Dutch €4 b., and Luxemburg €2.7 b.

A day after the announcement of governments' intervention in *Fortis* bank, Belgium, French and Luxemburg governments decided to lend €6.4 billion for *Dexia* bank (a French-Belgian financial institution).

Germany

Hypo Real Estate, the second biggest mortgage provider in Germany, was saved by the German government by €50 billion. Other supports occurred on 13/10 €500 billion by the German government for the whole financial system and followed on 1/11 €50 billion as a support for ordinary people, not financial institutions. On 13/1 the German government agreed on another financial support worth of €50 billion and further support for people to boost the economy. The government started to apply such tools as offering money for getting rid of old cars (€2,500) or decrease of income tax from 15% to 14%.

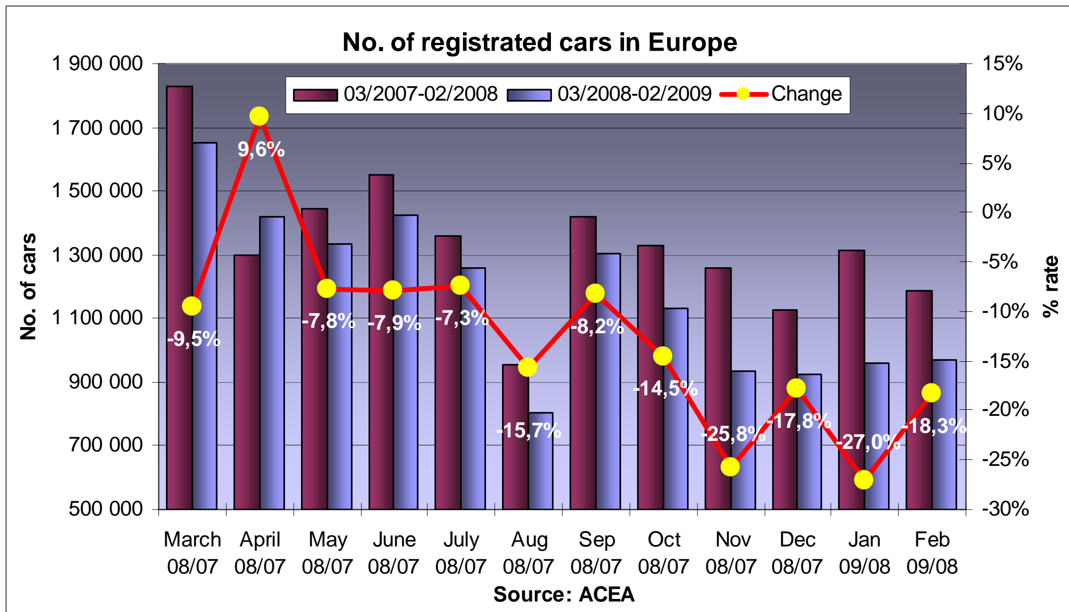
6.2.2. Car Industry

From 50 million cars produced worldwide, Europe is the biggest producer covering 32% of total production (18). Losses of car producers were not as huge as for American car producers but most of Europe's car producers had to ask for financial support either their national government or other institution (EU, IMF).

As the crisis was deepening, one by one, car producers were announcing their drops of profits and following restraints in production and number of employees. The production of some of them was stopped for many weeks in most of their branches. Worsening of the situation compelled ACEA (European Automobile Manufactures'

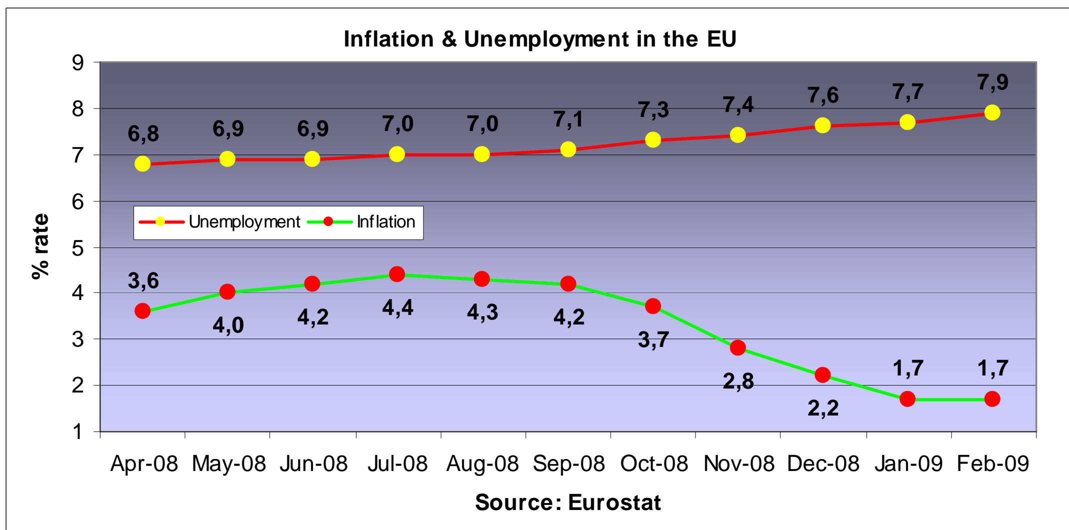
Association) to ask for a €40 billion loan in Brussels (25). The money would be used for development of "green" cars with lower emissions CO2.

Most of Europe's car producers didn't really witness as huge losses as the American producers. E15 (11) sums up that PSA lost €343 milion, BMW's profit dropped by 91% to €330 billion and VW earnings increased by 45%, but forecasts 90% drop of profit in 2009. Fiat's profit dropped only by 16% in 2008, due to good results from the beginning of the year. Fiat negotiates about strategic co-operation with Chrysler.



6.2.3. Inflation & Unemployment

Decrease of inflation reflects deepening of recession in the EU and the Eurozone. If the economic situation was developing so badly, inflation could have fallen even more. To prevent lower inflation or deflation, ECB lowered interest rate to 1,25%, which is the new minimum since 1999, when the Euro started.



In January 2009, *Vladimír Špidla* (the Czech Member of the European Commission) forecasted unemployment to rise by 2%. By February 2009, the number of unemployed people has increased by 3 million (0,8 % Points) in the EU, compared to February 2008. Nineteen European countries record an increase of unemployment, other 6 recorded a decrease.

6.2.4 Iceland

If the Czech Republic is relatively secured from the financial causes of the crisis, then Iceland stands exactly on the other side of the problem. Iceland was hit by the crisis extremely and it wasn't too far from national bankrupt, facing the worst economic depression in modern history.

Government's attempts to save first the third biggest financial institution *Glitnir* (which started to have problems with liquidity), then the second biggest financial institution *Landsbanki*, failed when the whole problem became too big to fix it with €600 billion and *Glitnir* went into tender. At least *Kaupthing* (the biggest Icelandic financial institution) was promised a €0.5 billion loan by the Icelandic central bank (21).

The exchange rate was fluctuating (which caused limited bank transaction with the rest of the World) so the National bank of Iceland had to fix it, and the government guaranteed all bank deposits. Unfortunately, later on, fears forced people to move out of the country and the Icelandic government had step off.

Curiously, while all European Central Banks were lowering their interest rates, Iceland had to raise it since it signed a contract with the International Monetary Fund (IMF) for $2 billion. Iceland raised the interest rate from 12% to 18% (24).

To energize the Iceland economy, Scandinavian countries lent Iceland $2.5 billion (29).

7 The Impact of the Crisis on the Czech Economy

“The crisis is a clear remainder that the World is a global economy.”

Jaroslav Míl[4] (32)

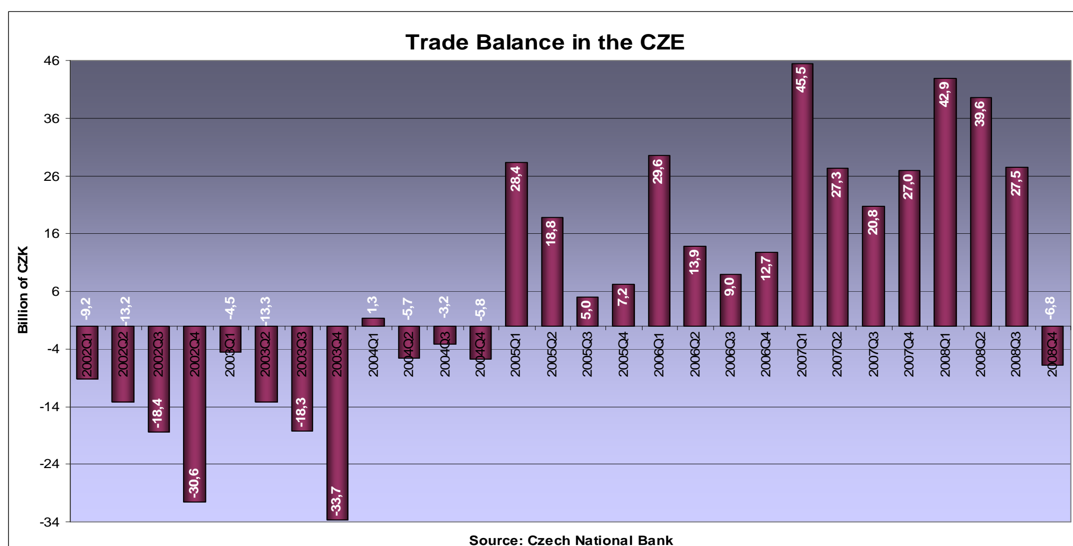
The Czech economy was in recession more than 10 years ago. Since, it had been growing every year (at best by 6.8% in 2006). The year 2008 started quite well. The economy was growing by 6%, prognoses forecasted 2009 growth at 5% and *Škoda* was producing at maximum.

It had been said that a collapse of the American financial system would infect the whole World, but the direct impact of the crisis on the Czech financial institutions wasn’t predicted, because as many of the experts said, they didn’t do business with American mortgage market. The *IMF* stated that the Czech Republic was protected from the crisis thanks to strong economical growth, currency and reformation of the common budget (30). The banks’ annual profit, which shows that all leading banks on the Czech market made profit, despite the economic slowdown which decreased it, could serve as a prove of the good condition of Czech banks.

Money which was lost in share markets will eventually recover and it is more important to follow if our economy can bear up against the global or at least the European recession, since we are so dependent on the foreign trade, with leading car industry.

7.1. Foreign Trade

One of the biggest threats was the slowdown of the German economy. Germany, as one of the most important export partners, plays a crucial role for the Czech foreign trade, since 1/3 of the Czech export goes to Germany. The German economy has been noticing slowdown since August 2008 as the volume of exports decreased and the recession occurred after ¾ 2008, when the GDP decreased by 0.5% (28). Other worries occurred during the fourth quarter of 2008 after realizing that Czech trade came into red numbers for the first time since 2004.



[4] Ing. Jaroslav Míl, MBA (1958) – president of *Confederation of Industry of the Czech Republic*

7.2. Government’s Actions

Unfortunately, not many steps had been taken to secure the economy. The Czech way of dealing with the crisis was considered rather political than economic and when things seemed to improve the government was forced to finish its term of office.

Most of the governments’ actions were taken in order to assure people about their savings in banks, but interestingly the financial crisis didn’t force Czech people to drastically withdraw money from their bank accounts, but their peace of mind could be linked with the fact that they don’t possess much money on their bank accounts.

The first step into dealing with the crisis was taken along with the EU, where all countries raised the security of bank deposits. The Czech government increased the basic guaranteed deposit up to €50,000 on 14/10/2008, after an extraordinary government meeting. Originally, the amount was half. Such action was taken in order to reassure Czech bank clients about the security of their account deposits.

Before more steps were taken, another problem occurred in the form of losses of foreign banks which had its branches in the Czech Republic. According to the vice governor of *ČNB Miroslav Singer* (22), Czech banks were too cautious about their liquidity and the biggest threat could pose their parent companies, which could withdraw up to 20% of the capital. Such step would not cause a problem to a bank itself but their clients could start to panic.

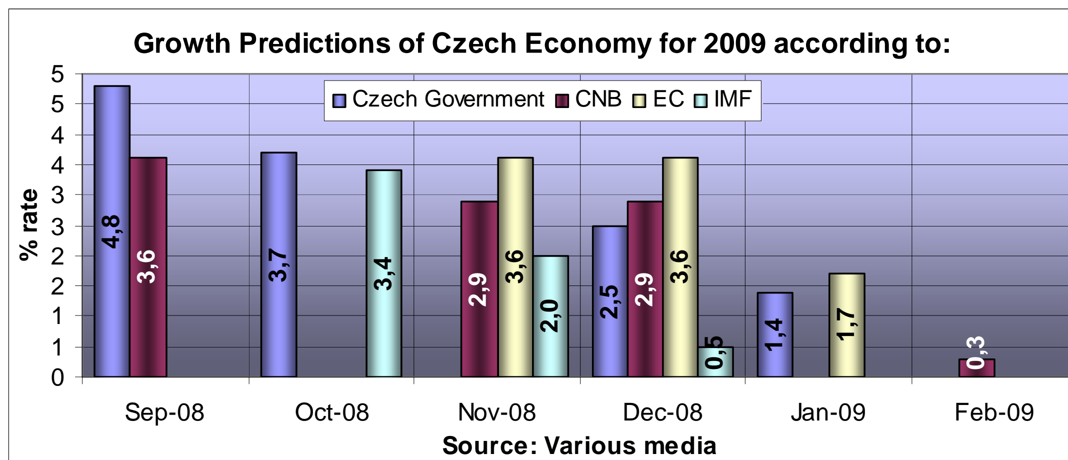
Because of the crisis many areas were about to change their structure, like pension savings, ways of bankers’ investments into shares and other instruments. To help with decision making of how to manage the Czech economy and mainly how to prevent consequences of the crisis and to keep the unemployment low, the Czech government collected the most authoritative managers who created a group of consulters for the government called *NERV*.
Their recommended ideas were e.g.:

- Temporary reduction of VAT
- Increase of unemployment support
- Effective use of financial support from Brussels’ funds
- Support of export
- Investments into infrastructure

Members of *NERV*:
Vladimír Dlouhý – former minister of industry and trade, consultant of investment bank *Goldman Sachs*
Martin Jahn – former vice-prime minister, member *Škoda Auto* advisory board
Jiří Kunert – CEO of Uni Credit Bank Czech Republic
Michal Mejstřík – banking lecturer at Charles Univerzity, founder of the *EEIP* consulting company
Jiří Rusnok – former minister of finance, director of *The Association of Pension Funds of the Czech Republic*
Tomáš Sedláček – economist of *ČSOB*
Jiří Schwarz – dean of *Faculty of Economics and Public Administration*
Jiří Weigl – chancellor of the Czech president *Václav Klaus*

7.3. State Budget

Government's budget for 2009, which had been drafted in mid 2008, was banking upon the growth of GDP by almost 5%. Since then, the impact of the global financial crisis was shown on all markets and economy of the EU and the Eurozone (which is closely related with the Czech economy) decelerated. Withal every percentage tenth means tens of billion CZK for the Czech budget and the deceleration of the economy would cause growth of the budget deficit. Deceleration of GDP estimated at 2% would be the biggest since 1997.



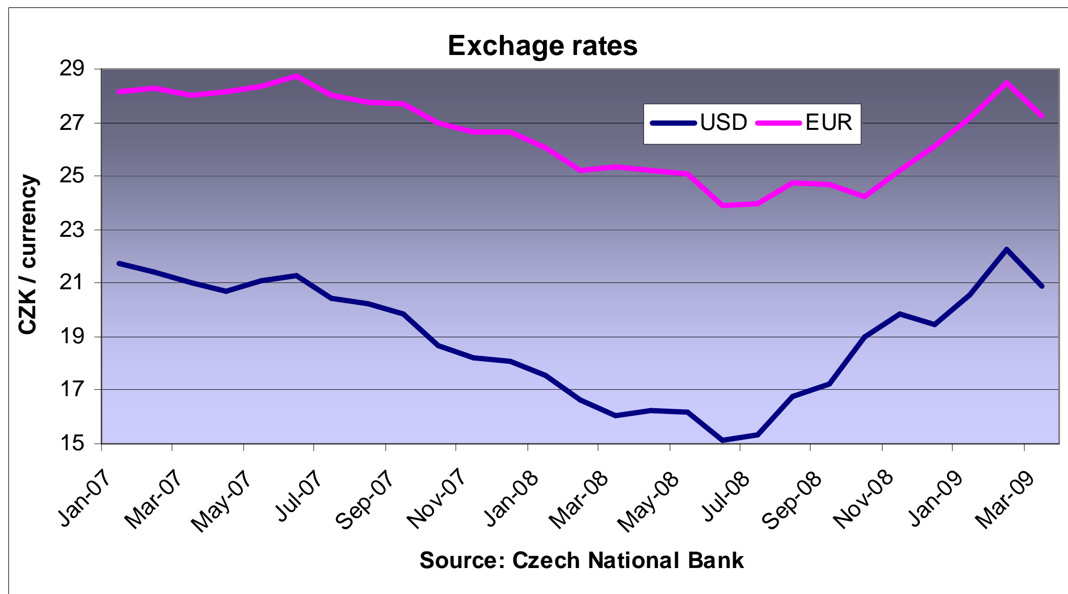
7.4. Foreign Exchange Rates

As the Czech and the European economy have been slowing down, the first notice about the worsen situation was registered by carrier companies. Whenever there is a slowing of consumption, expenditure or demand of any good, the carrier companies are most likely to be the first to notice. A factor which had been influencing their progress, for circa last year, was the strong Czech currency, which makes Czech products more expensive for foreign purchasers and they tend to shift to other suppliers.

The Czech crown has been having the strongest position on the currency market from mid 2007 to June 2008. The CZK/USD market: the Czech crown had the strongest position to USD on 22/07/08 when the price was 14.454 CZK for $1, the weakest on 20/11/08 with price of 20.438 CZK for $1. The Czech currency has been getting stronger until the end of July when *Zdeněk Tůma*, the governor of the *CNB* announced the probable increase of the interest rate. The CZK/EUR market: the Czech crown had the strongest position to GBP on 21/07/08 when the price was 22.970 CZK for $1, the weakest on 02/01/08 with price of 26.360 CZK for $1.

The strengthening of the currency had a negative impact especially on tourism where CZSO noticed a decreasing number of English speaking tourists (mainly British and American), which is a group spending the most money per capita. Numbers of tourists from other countries, particularly where Euro is not the national currency, had been increasing. On the other hand, thanks to cheap dollar, goods

from the USA became cheaper to purchase via mail than directly in the Czech Republic.



7.5. Car Industry

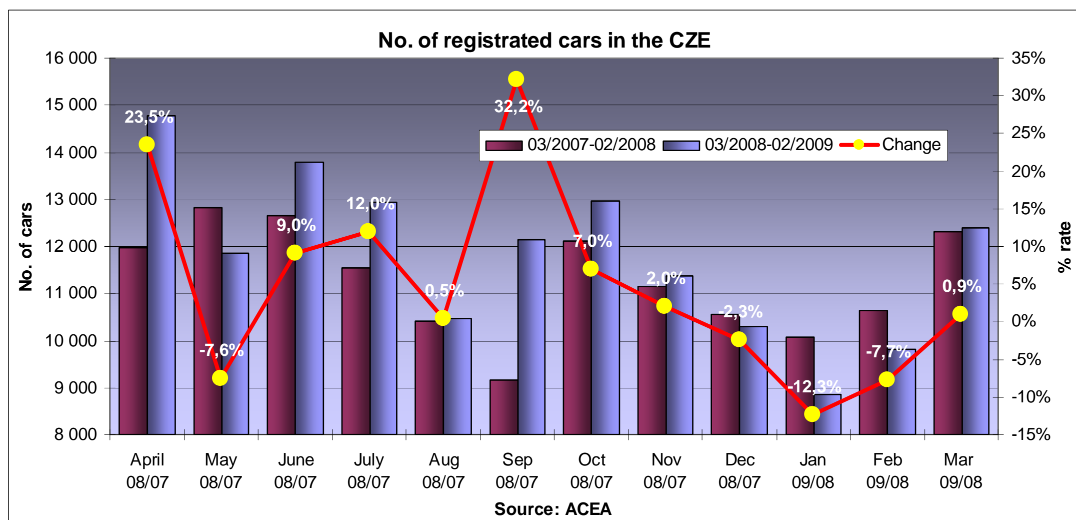
There are currently 3 car producers in the Czech Republic – *Škoda*, *Hyundai* and *TPCA* (*Tatra* and *Avia* are not included because they don't produce passenger cars). According to prognostics from October 2008, the crisis could have an essentially greater impact on the Czech economy than in other countries. The reasons lie in the structure of the Czech economy, which is mostly dependent on the car industry. Along with money withdrawing from the banks and savings in private sector worldwide, there was a decrease in demand for cars on the world markets, with the exception of small cars, where the demand was if fact increasing. In the case of the Czech Republic, there was actually noticed higher demand for cars by 8.4% in 2008 and decrease in demand of commercial vehicles by 3.3% in 2008 (36). Such paradox could be caused by delayed reactions of Czech private customers to market conditions, where on the other hand business people probably noticed the slowing down of the economy (presumably export/import markets) earlier.

25% of the Czech economy and of the GDP is consisted of the income of car industry (production of cars and components for them), which directly employs over 120,000 people and indirectly hundred thousands others. According to *Ivan Hodač*, the general secretary of the *Association of European car producers* (18), the European car industry market would fall by 10% in 2009, which could have existential causes for many car manufacturers as in Europe and the Czech Republic. Since the main trading outlet of domestic output goes to Europe, where the demand is decreasing, the Czech economy could suffer.

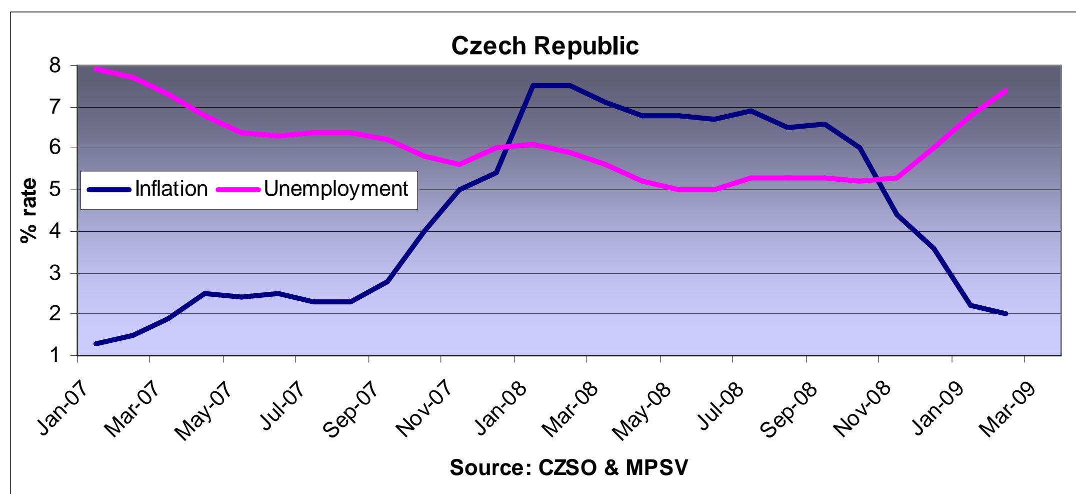
Hodač's predictions were actually rather optimistic. According to *ACEA* (see table), there is an average decline in number of registered cars in Europe by 22,7% during the first two months of 2009, compared to the first two months of 2008.

Škoda Auto was fairly predicting the forthcoming decrease in demand and in mid September Czech media (sourcing from *Škoda's* suppliers) informed (7) about the *Škoda's* cancellation of additional working shifts until the end of the year 2008, and the decrease in the production plan of the Roomster model. In sequence, *Škoda* cancelled special Saturday's shifts, then 5 working days in October, in December there were total of 12 days production pause which continued until January 11, 2009.

A positive outcome of the crisis came about in March 2009. Due to increase of demand for new cars thanks to regulations of other economics (crushing subsidy) and due to lower car prices, *Škoda's* outflow increased and the production plant started to work at full power again which caused a new demand for employees. While in January 2009 *Škoda* was facing 12% drop of sales, in March 2009 sales actually increased by 1% compare to previous year.



7.6. Inflation & Unemployment



Inflation should be low in 2009 and prices of goods should decrease, mainly the price of dairy products, bread, meat, beer and fruit & vegetables. Under low unemployment rate such statement would be positive, but the unemployment rose by

2% since the summer of 2008. Only due to the lower demand for cars, over 12 000 *Škoda's* part-time and full-time employees lost their jobs in 2008.

The Czech Government faced problems connected with the increasing unemployment of overseas workers as the number of registered working foreigners decreased for the first time in 2 years. To secure departure of foreign workers and ensure holding the crime rate low, the government came up with financial support for those workers in form of free flight ticket and €500 pocket money. Unfortunately not many people took the advantage because, in spite of such generous offer, it would not solve their debts in their countries, so they rather stayed.

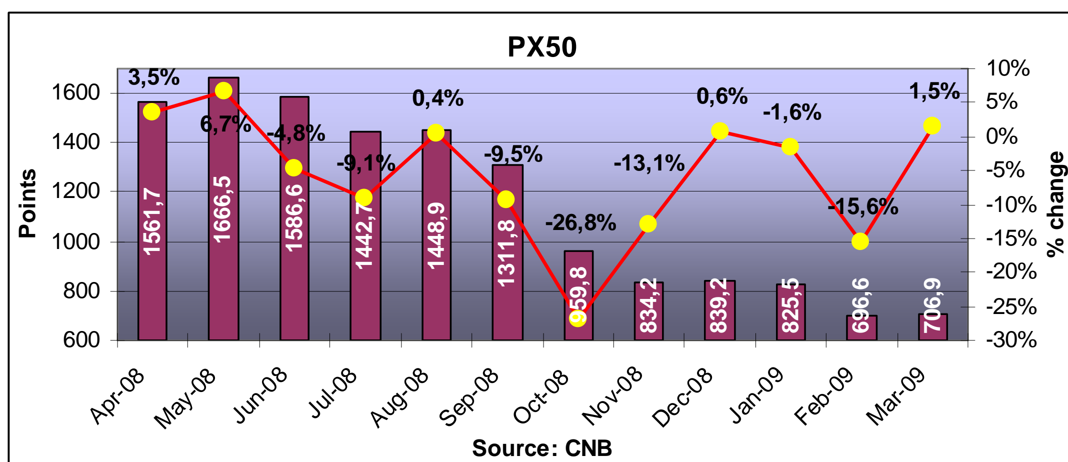
7.7. Stock exchange Market

PX50

Index *PX50* is the main index of Prague's exchange. Number of emissions in the index is variable, but currently it is consisted of 15 equities. Number of emissions cannot go over 50. The debut date was on 5/ 4/94, and the original value of the index was 1000 points.

The American financial crisis shook up with all worlds' financial markets including the Czech Republic. The Czech stock exchange market didn't respond well after the American bank crash announcement. When *Lehman Brothers* and *Merrill Lynch* announced their bankrupt, the main commodities on the Prague's *PX50* were behaving unstably for a number of following weeks. As a result of the event, there were the continuous losses of companies' value of shares. Trading with many of them (mostly with building companies) was stopped because their value dropped by more than 20% during one day. *Orco* and *ECM* (building companies) had the biggest troubles with value of their shares as their dropped by over 80%.

The losses of domestic and foreign shares cannot be exactly measured but the main index *PX50* was cut by 26% only during a month from September 2008 to October 2008, total loss on the exchange market was estimated at 35,7%, which was a value equal to spring 2008. From the graph below we can see that the amount of points in March 2009 is a half value compared to the peak in May 2008 That is only one year time horizon, but stock exchange markets in other countries were not developing any better.

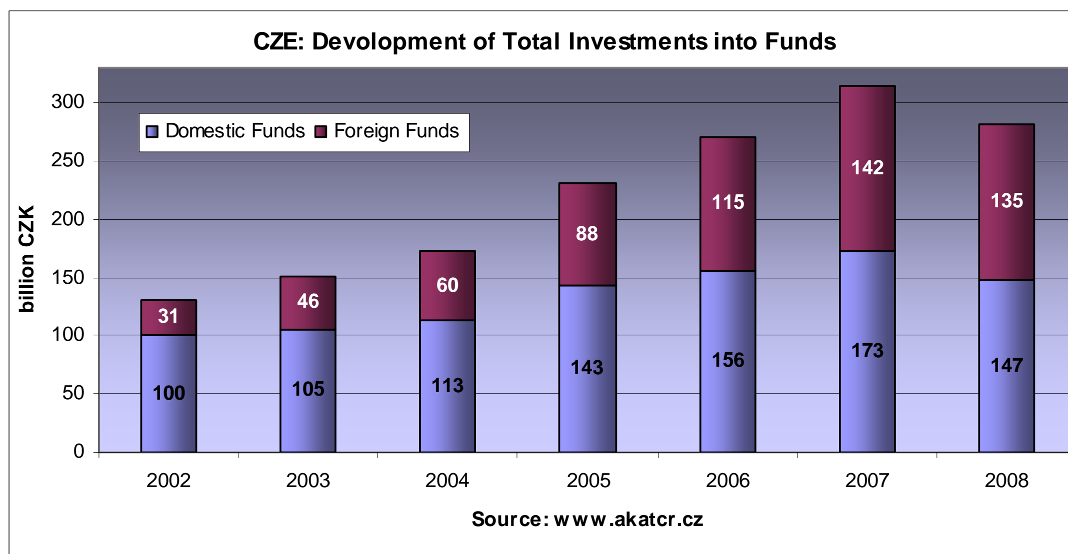


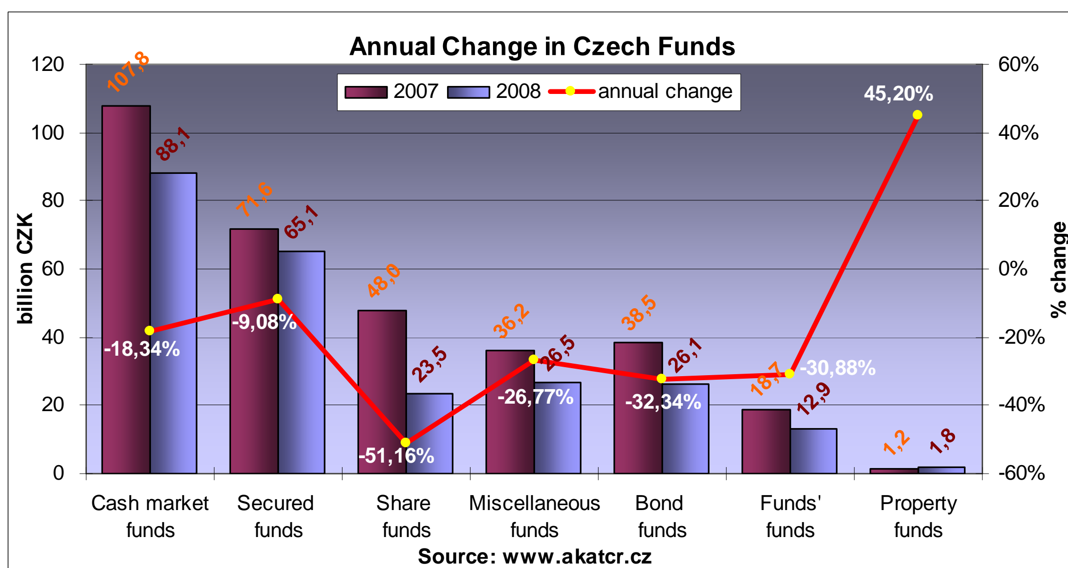
Source: CNB

7.8. Funds

The Czechs would be merely investing money into savings of various kinds, like building savings or insurance savings. They don't generally invest money into shares as much as people in the USA, where a lot of them probably lost their life savings.

Every quarter, the Czech Capital Market Association of the CR (ATAK) publishes statement of "The Development of asset management, collective investments and custody in the Czech Republic". ATAK associates the leading collective investment and asset management companies. The results of the development of total investment into funds from 2002 to 2008 and a comparison of investment into different funds in 2007 and 2008 are shown below in the graphs.





From the graphs above it is clear that there is an impact of the crisis on people's investment into funds. Except property funds (which rose, but not significantly) all other funds showed a loss compared to previous year.

7.9. Property Market

At the beginning of September 2008, there was a notice of higher difficulty to get a mortgage. People, who would easily get one a couple of months before, had suddenly minor chance to be successful. That was the way how banks were securing themselves; they lowered the amount lent to keep as much capital as possible. When lowering of interest rates didn't seem to help to persuade banks to provide more loans and mortgages, the government announced its plan to sell government's bonds to citizens.

On the other hand, the crisis had a positive impact on prices of apartments and properties, due to the sudden decrease in demand for new houses developers were forced to cheapen, especially the less popular apartments, such as in panel houses. Their price had decreased along with prices of building materials.

8. Conclusion

Different perspective of the Great Depression
An article published in Le Monde Diplomatique by Frédéric Lordon (54) looks at the crises from a different perspective. The origin and development of the current crisis is different from the previous ones only by its rapidity and global character, not by development.

The article mentions Mr. *Charles Ponzi* who became well known as a swindle speculator in 1920s. He took advantage of then huge boom in the USA connected with steep growth of shares values. His system worked according to a notorious principle of pyramid games. The first, who invested and earned money, spread the info to others who are attracted as well. However, the first ones are paid by the money of the ones who invested after them. The system stays and falls along with flow of new money.

If markets are growing, wealth seems easy to be achieved and every one wants to join. It is the case of the current crisis and other historical crises as well. Even the case of mortgage crisis counted on that there had to be as much people involved as possible. But because in all cultures credible debtors are a scarce resource its “supply” was soon exhausted. Therefore financial institutions had to offer loans and mortgages to other who wound not be able to get one under normal circumstances. If we take this explanation as a reason for start up of an actual financial and economical crisis, a similar principle was responsible for the majority of past big financial crises as well.

Every speculation bubble is in fact very sensitive. In the case of the mortgage bubble it was the silent increase of interest rates by the central bank for the purpose to cope with inflation. Even though an increase by e.g. 0,25% may not seem so drastic, the overall impact on an ordinary debtor was an increase of its interest rate from 6,3% to 11,25% in two years.

In August 2007, the New York Times published an article where it mentions an increasing number of missed payments of instalments and an increasing number of houses for sale. Disbelief spread as a fire even between banks which stopped lending to each other in the fear of even bigger troubles.

Especially European bankers and politicians were comforting themselves that the mortgage crisis is clearly a US problem. Unfortunately, they didn’t take into account today’s global interconnection and that many of European central banks did invest into American funds and mortgages.

A crisis of confidence on the bank market leads to banks’ mischance of providing money. Investment banks are facing the most difficulties because they can get capital only from financial markets in good condition and there are many companies losing their opportunity to realize investment objectives because of the shortage of cash.

Difficulties with investments lead to stagnation of economical activity and there arise a menace of a recession and repetition of the Great Depression and some

forecasts collapse of the whole financial system. Fortunately, the global financial system has not collapsed yet, which gives us a reason for optimism.

If the global financial system somehow resists its break-up, it is because governments of the most infected economies pump giant amounts of money to restore its circulation. They even reach for such steps as nationalization of big financial institutions. Nevertheless, the crisis is not over yet, and it is not clear when and how it will come to an end.

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10. Supplements

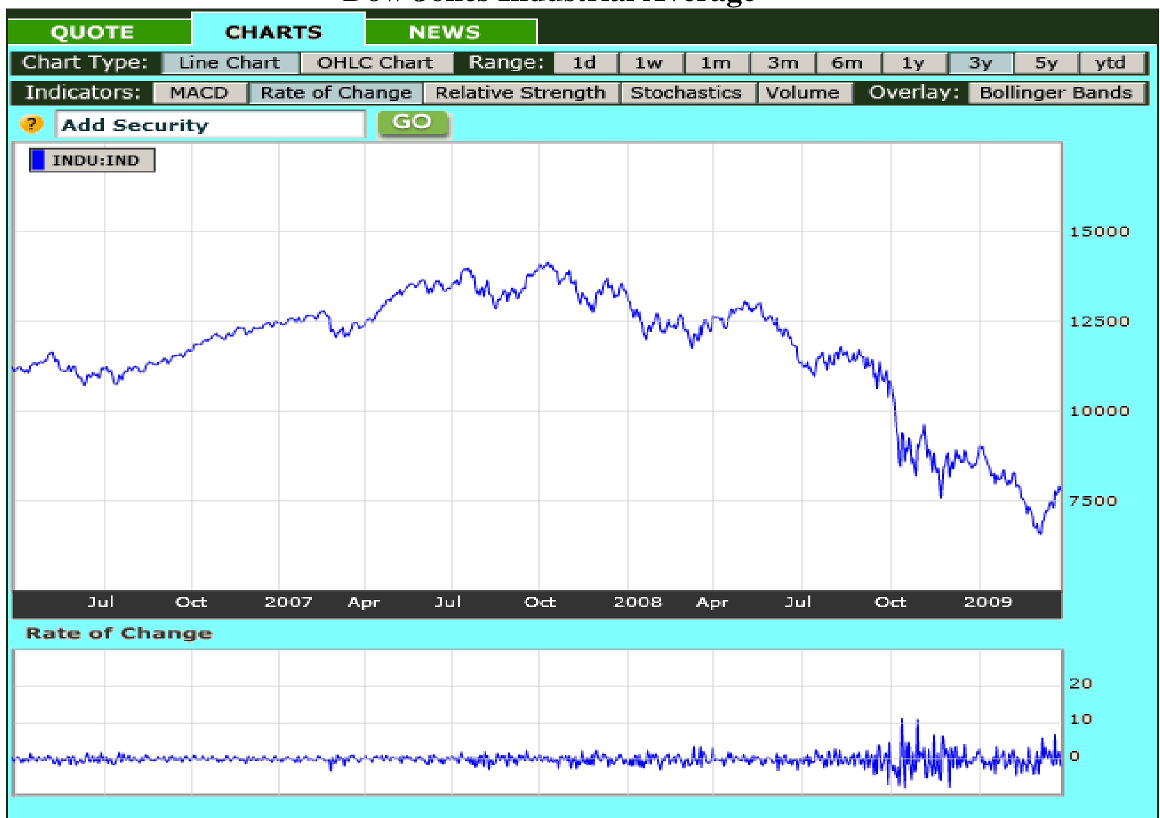
Development of the Crisis before summer 2008

		Banks	Government help	Financial Markets
2007	18/7	Investment bank *Bear Stearns* has to close down two big funds (in spite of $4.5 billions injections) due to investments into risk mortgages	Ben Bernanke, Fed CEO, warns that american crisis could cost up to $100 billions	
	9/8		Fed argues that the economy is strong and problem with mortgages will eventually diminish; interest rate remains 5.25%	
	11/8	French *BNP Paribas* freezed deposits withdraws from fund which did business with american mortgages	First notice of banks' distrust. ECB pumps €95 billions on the markets. Other central banks follow the actin in a few days later	
	16/8	Speculations about crash of the biggest american mortgage provider *Countrywide Financial*		Share markets are falling. Prague's stock exchange is experiencing the biggest fall in 15 months
	19/8		Fed decreased discont rate to cheapen loans for banks	
	2/9		American president George W. Bush promised help for people not being able to pay their mortgages	
	11/9			It is speculated that american economy is heading to recession
	16/9	Northern Rock's clients are uncertain about their bank deposit and they withdraw their money		
	18/9		Fed decreased interest rate by 0.5% to 4.75%	
	15/10			Prague's exchange market (PX) reached its historical maximum, 1936.1 points

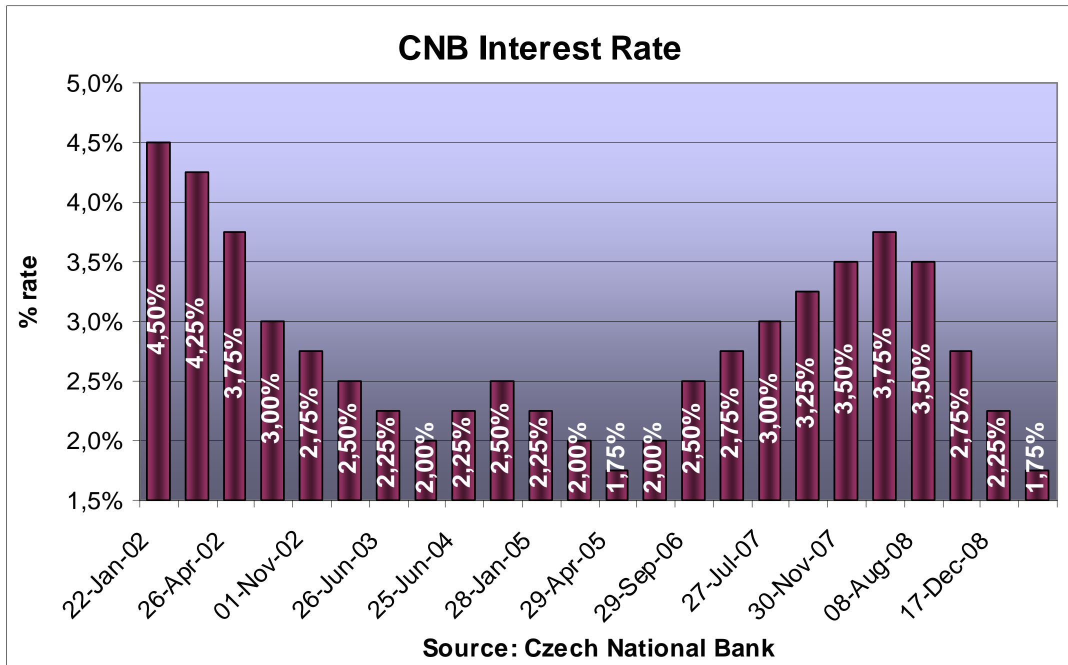
	2/11	Banks had written back $30 billions. A big deal loses Citigroup and Merril Lynch	Fed decreased expected 2008 GDP	Banks' shares are taky down share market. Big banks loses up to 10%
	21/11		Central banks, including Fed and ECB entered into agreement about security of Fed's additional liquidity rate to prevent recession	
2008	2/1			Price of oil reached over $100 per barrel
	9/1			PX experienced the worst year start. During the first week shares lost 6.5%
	10/1			PX falls into the worst values since the crash of Bear Stearn's funds
	17/1	World bank are announcing high loses due to the crisis		
	22/1		Interest rate decreased to 3.5% on Fed's extraordinary meeting	Exchnge market are loosing their last year's profits
	29/1		US Congress acknowledged tax concession package	
	18/2	Northern Rock was nationalized		
	17/3	JP Morgan bought Bearn Stearns		
	9/4			Price of oil reached over $110 per barrel
	5/5	Swiss bank *UBS* wrote off $44 billions. Banks's loses are worth of $320 billions		
	14/7			Price of oil run to $147 per barrel. Afterwards the price started to decrease
	15/7			Another sale on exchange markets. PX went down to 2006 values
	19/8	Banks had written off over $500 billions		
	7/9	US gov saved mortgage institutions Fannie Mae and Freddie Mac		Due to falling price of oil, shares of energetics are dropping
	11/9			Price of oil dropped below $100 per barrel
	15/9	Bankrupt of Lehman Brothers		

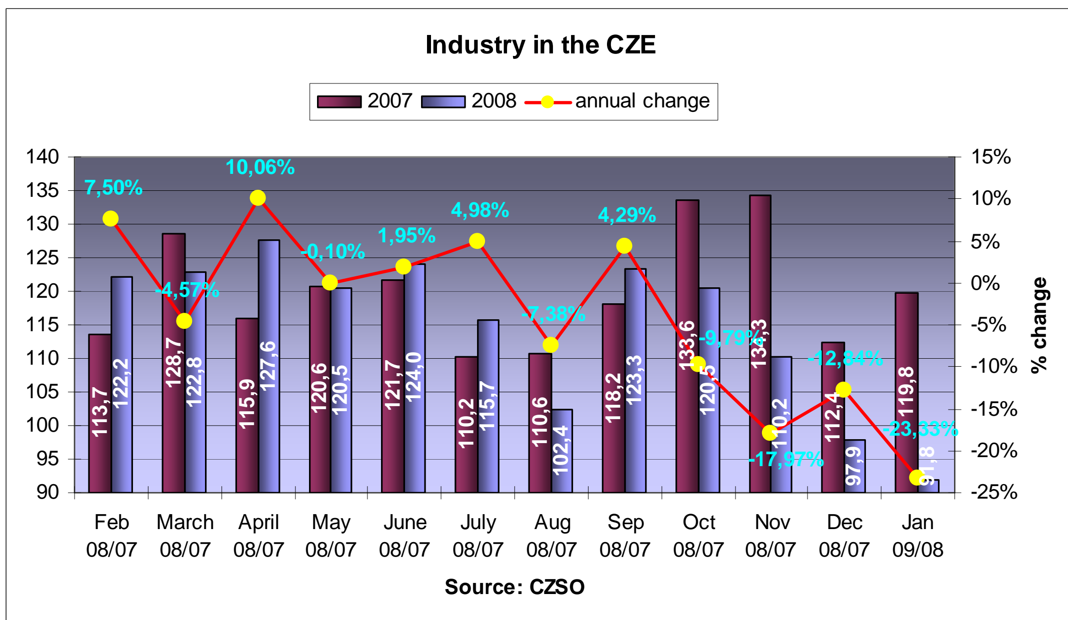
	16/9	*AIG* was nationalized. *Bank of America* overtook Merrill Lynch		
	17/9	*HBOS was* overtaken by Lloyds		PX dropped to values f
	18/9		Central banks pour $180 billions on financial markets	
	25/9	*Waschington Mutual* was nationalized and sold to *JPMorgan*		
	28/9		Bank crisis was noticed in Europe, Belgian bank Fortis was nationalized	
	29/9	British *Bradford and Bradley* was nationalized, *Wachovia* merged with *Citigroup*	Congress rejected plan for saving the US economy	NY exchanged market was experiencing the worst fall in its history
	30/9	Belgium had to save Dexia		
Source: Hospodářské Noviny				

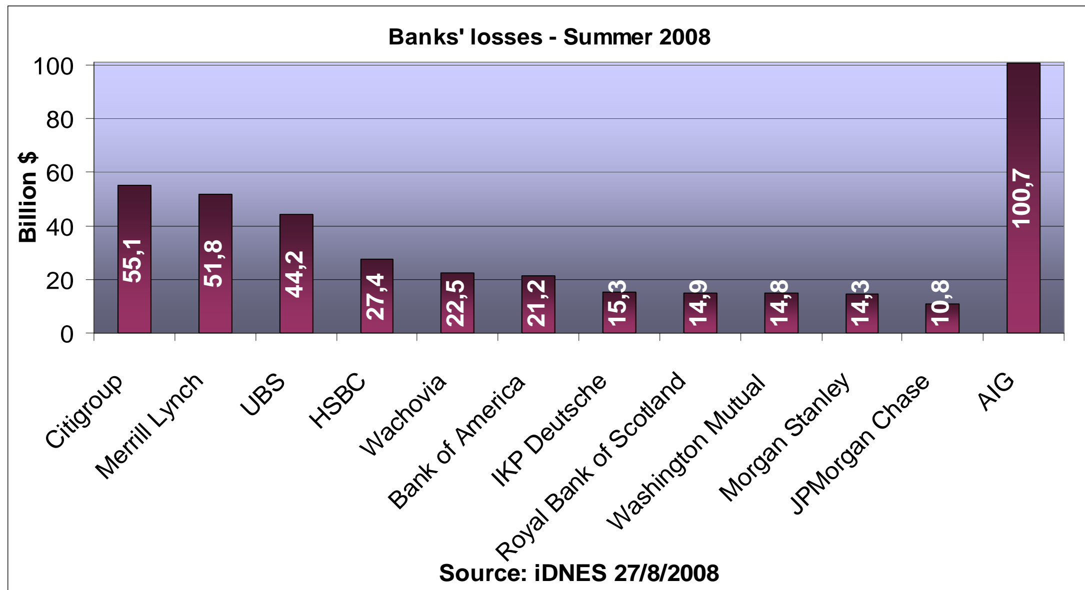
Dow Jones Industrial Average

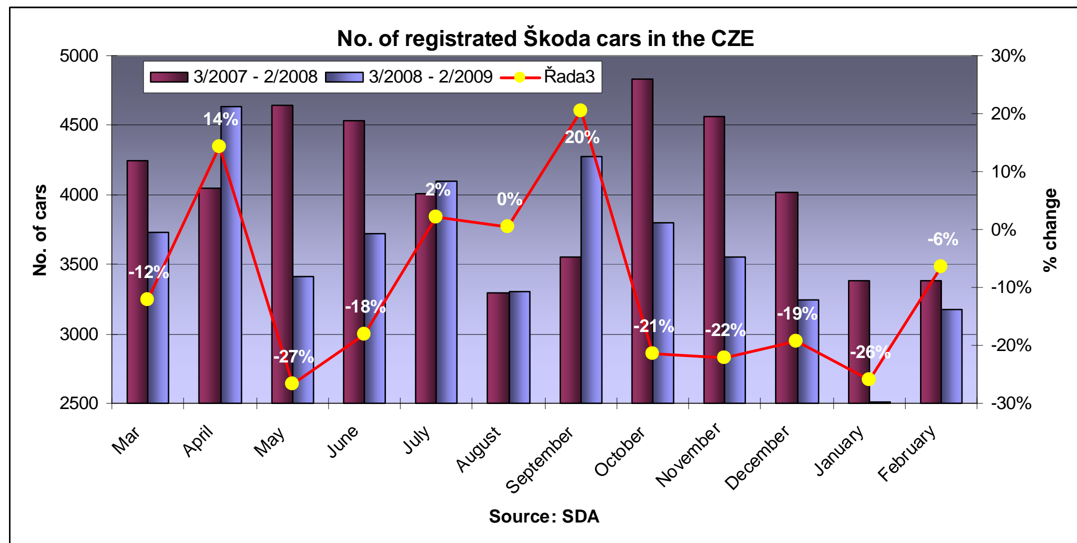


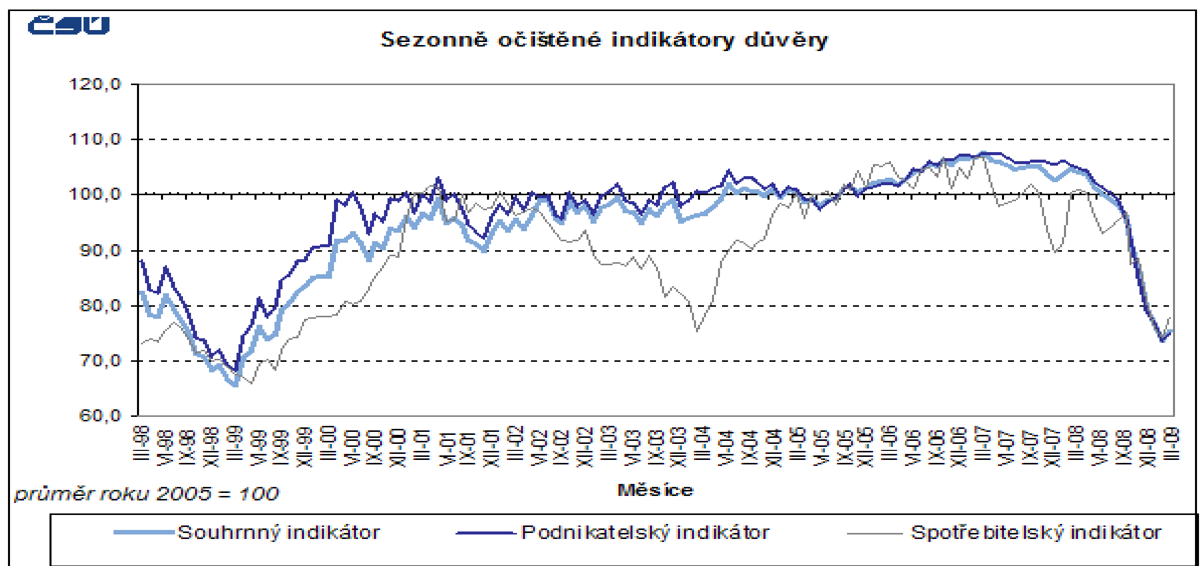
Source: Bloomberg


CNB Interest Rate
% rate
5,0%
4,5%
4,0%
3,5%
3,0%
2,5%
2,0%
1,5%
4,50%
4,25%
3,75%
3,00%
2,75%
2,50%
2,25%
2,00%
2,25%
2,50%
2,25%
2,00%
1,75%
2,00%
2,50%
2,75%
3,00%
3,25%
3,50%
3,75%
3,50%
2,75%
2,25%
1,75%
22-Jan-02
26-Apr-02
01-Nov-02
26-Jun-03
25-Jun-04
28-Jan-05
29-Apr-05
29-Sep-06
27-Jul-07
30-Nov-07
08-Aug-08
17-Dec-08
Source: Czech National Bank


Industry in the CZE
2007
2008
annual change
140
135
130
125
120
115
110
105
100
95
90
15%
10%
5%
0%
-5%
-10%
-15%
-20%
-25%
% change
7,50%
-4,57%
10,06%
-0,10%
1,95%
4,98%
-7,38%
4,29%
-9,79%
-17,97%
-12,84%
-23,33%
113,7
122,2
128,7
122,8
115,9
127,6
120,6
120,5
121,7
124,0
110,2
115,7
110,6
102,4
118,2
123,3
133,6
120,5
134,3
110,2
112,4
97,9
119,8
91,8
Feb 08/07
March 08/07
April 08/07
May 08/07
June 08/07
July 08/07
Aug 08/07
Sep 08/07
Oct 08/07
Nov 08/07
Dec 08/07
Jan 09/08
Source: CZSO







http://www.czso.cz/csu/csu.nsf/informace/ckpr032509.doc