

# CONSEQUENCES OF THE GLOBAL ECONOMIC CRISIS ON THE CZECH ECONOMY

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***Abstract:** This paper studies the ongoing economic crisis and its consequences on the Czech economy. According to most economists the cause of the contemporary crisis was the financial crisis which is triggered by a liquidity shortfall in the United States banking system. It has resulted in the collapse of large financial institutions, the "bail out" of banks by national governments and downturns in stock markets around the world. The Czech economy has been severely hit by the global economic and financial crisis. Massive drop of GDP led to increase in the unemployment rate. After a brief history of the main events and an analysis of their possible causes the paper focused on a real economy analysis. In conclusion, a reminder of the challenges is provided and also some recommendations are suggested.*

***Keywords:** Economic Crisis, Financial Crisis, the Czech Republic, European Union*

## 1. Introduction

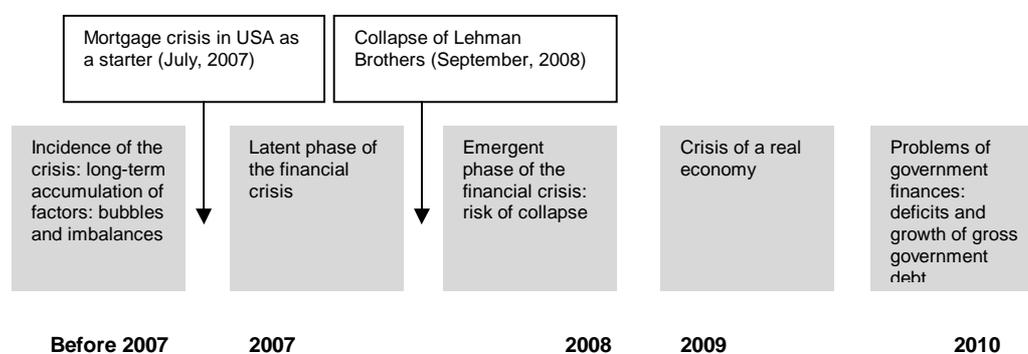
Deregulation and globalisation of financial markets helped create conditions that led to the global financial crisis. According to Crotty (2009) the severity of the global financial crisis and the global economic recession that accompanied it demonstrate the utter bankruptcy of the deregulated global neoliberal financial system. As the crisis unfolded in the U.S., a number of countries' real economies suffered from a decreased U.S. consumer demand, and credit problems arising from the U.S. mortgage sector rapidly have permeated across nations, ensnaring financial institutions worldwide (Fernández – Nikolsko-Rzhevskyy 2010). This crisis is seen as a synchronized one and is often compared with the Great Depression. The financial crisis has spread to a wider range of institutions and markets, including emerging economies, which until quite recently seemed to have been relatively unscathed, and there have been huge falls in global financial wealth (OECD 2008). Now the global economy is recovering from the deepest recession in the post-World War II era.

In this paper we analyze the transmission of the global financial crisis to business cycle in the Czech Republic and its consequences on a real economy. The Czech economy is characterized as a small open economy strongly dependent on foreign demand, especially German one. It generally displays a high degree of synchronization with other EU Member States. In the pre-crisis period, the Czech economy benefited from flourishing external demand shifting real GDP above its long-term potential. This dependence on foreign markets seems to be the main cause of macroeconomic vulnerability. According to PWC (2010) a limited internal market or high taxation burdens are other weaknesses of the Czech economy. On the other hand, high productivity and industrial competitiveness, high investment attractiveness and financial reliability, low government debt and low private debt or EU membership are the main strengths of the Czech economy.

The paper is structured as follows. The next section presents a literature survey on determinants of the global financial crisis. Section 2 describes impacts of the global recession on the Czech economy. Section 3 continues with an analysis of the labour market and the last section concludes.

## 2. Causes and evolution of the global economic crisis

Fig. 1 illustrates development of the financial crisis - the financial crisis began in August 2007, when subprime-related turmoil in other asset classes finally spilled over into the currency market. This initial phase of the crisis was manifested in a major carry trade sell-off. Then in November 2007, credit restrictions were associated with a major deleveraging in financial markets and many investment funds were forced to liquidate positions (Melvin – Taylor 2009). The crisis fully developed after the collapse of Lehman Brothers in September 2008.



**Fig. 7: Phases of the crisis in advanced economies**

*Source: Singer 2010*

The causes of overheating of the U.S. credit market and a consequent global housing bubble, which peaked in the U.S. in 2006, are (Tomšík 2010): (i) excessive risk taking by private entities; (ii) new complicated financial products (securities); (iii) poor regulation and lax supervision of financial markets; (iv) government support for ownership housing for low-income population; (v) excess liquidity and very low FED interest rates. All these factors combined with fall in prices on the real estate market have led to expansion into to other segments of the financial sector and it was followed by nationalisations and takeovers of banks and insurance companies (Northern Rock, Fannie Mae and Freddie Mac, Merrill Lynch, Washington Mutual, Wachovia, and AIG). The financial crisis then spilled over into the real economy.

Consequences of the global economic crisis would be characterized as follows (Tomšík 2010): (i) sharp deterioration in the expectations of firms and households; (ii) increase of problems related to funding of business, production or investment; (iii) fall in production and foreign trade; (iv) firing employees; (v) reduction in consumption and investment.

The global recession was triggered by a severe financial crisis in key advanced economies that coincided with the freezing of global financial markets and the collapse in global trade flows. The intensification of the financial crisis in September 2008

caused an abrupt increase in uncertainty and led to a downward reassessment of wealth and income prospects (IMF 2009). The crisis had four features in common with other crises: 1) asset price increases that turned out to be unsustainable; 2) credit booms that led to excessive debt burdens; 3) build-up of marginal loans and systemic risk; and 4) the failure of regulation and supervision to keep up with and get ahead of the crisis when it erupted (Claessens et al. 2010). Some authors have even compared the contemporary global recession with the Great Depression: Eichengreen – O'Rourke (2009) found out that the decline in world industrial production in the first nine months was at least severe as in the nine months following the 1929 peak. Moreover, global stock markets and world trade were falling even faster now than in the Great Depression. Helbling (2009) stressed the need to distinguish between setting, initial conditions, transmission, and policy responses:

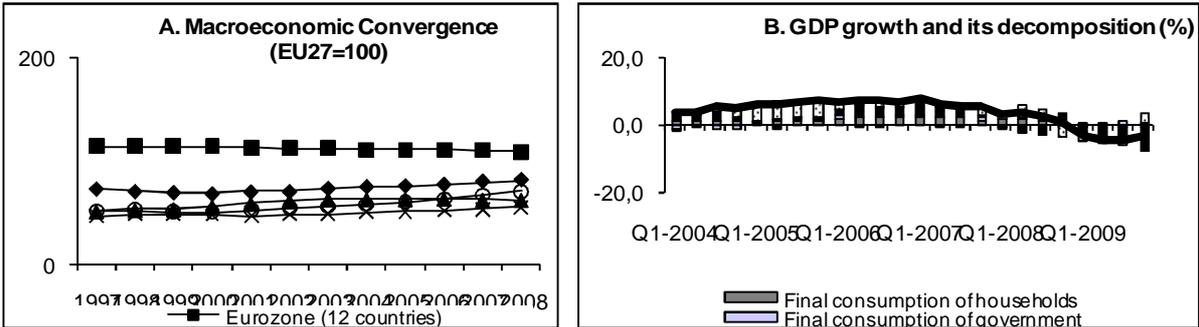
- U.S. as the epicentre of both crisis;
- Both episodes were preceded by rapid credit expansion and financial innovation that led to high leverage. However, while the 1920s credit boom was largely US-specific, the 2004-07 boom was global.
- Liquidity and funding problems have played a key role in the financial sector transmission in both episodes.
- Unlike in the Great Depression, when countercyclical policy responses were virtually absent, there has been a strong, swift recourse to macroeconomic and financial sector policy support in the current crisis.
- Despite the stunning contraction of industrial production and trade across the globe in the second half of 2008, the global economy is still a far cry away from the calamities of the Great Depression.

While the crisis quickly resulted in deep recessions in a number of advanced economies, the emerging market and developing economies were also seriously affected (see Fig. 2) but the impact varied across regions and countries (Claessens – Kose – Terrones 2010). Economic development is determined both by domestic (e.g. aggregate demand shocks and budgetary policy) and international factors (external demand and international prices of traded goods). In open economies, the latter are playing an increasingly important role and often determine also domestic policies, which are aimed at insulating the economy from adverse external economic shocks (Fidrmuc – Korhonen 2009). According to World Bank's Report (2010) governments face the challenges to secure the recovery, bring about fiscal consolidation, raise productivity, and generate jobs.

### **3. The global economic crisis and its influence on the Czech economy**

Economic transition in the Czech Republic ran into difficulties in the late 1990s with a banking crisis, currency problems and an economic recession. However, during the years 2004-2008, the Czech economy grew steadily and rapidly, and its growth rate was more than twice higher compared with Eurozone Member States (see Fig. 2A). Significant growth was based on increasing exports and improving labour productivity. Large foreign direct investment (FDI) inflows fostered trade integration, underpinning

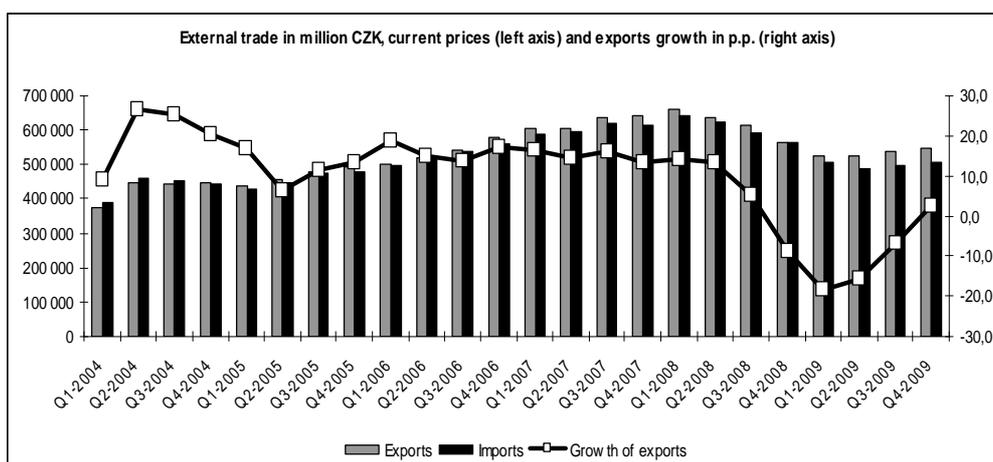
an export-led expansion. All these factors created conditions for real convergence of the Czech economy or for so called the catch-up effect. Despite the good macroeconomic performance and the stable banking sector, the Czech economy has been impacted by spillover effects from the global crisis (mainly through decline in foreign demand). Heavy dependence on industry, which is most affected, caused that industry' performance drop pulls down the whole economy. Global financial and economic crisis erupted in full force in 2008 and first signs of the coming economic crisis, we could see already later than in other western European countries, in the last quarter of 2008, where GDP growth over the same period last year, reached only 0.5%. Although the Czech Republic is not among the countries most affected by the crisis, it still faced with substantial year on year decline in real GDP in every quarter of 2009 (according to preliminary data released by the Czech Statistical Office, real GDP fell by 3.1 percent year-on-year, 4.9 percent in 4Q 2009 respectively). As it is seen from Fig. 2B, the downturn was largely driven by a sharp contraction in investment, as companies scaled down their production capacities in view of low access to financing and uncertainty about future prospects. The contribution of investment to GDP growth declined, and the year-on-year reduction reached -7.0 percent in the last quarter 2009. Private consumption held up better. It was supported by modest inflation, stable wages, and still largely robust labour markets. Large declines in domestic demand led to increasing net exports.



**Fig. 2: GDP Development**

Source: (<http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home>)

From a historical perspective, the drop is astonishing. After a sizable fall, real GDP growth turned positive in the second half of 2009, driven by exports while private consumption remains subdued (OECD 2010b). Automotive and manufactured metals production continues to be the main driving force of better economy' performance. According to the macroeconomic forecasts (OECD 2009b or IMF 2010) a gradual recovery is projected for 2010 and 2011, driven by stronger investment and export demand, though weak consumption will act as a drag on growth. However, fixed capital formation and corporate credit growth are projected to remain depressed, while consumer spending will suffer from a decline in disposable income due to still raising unemployment, low wage growth, and the withdrawal of fiscal stimulus (IMF 2010).



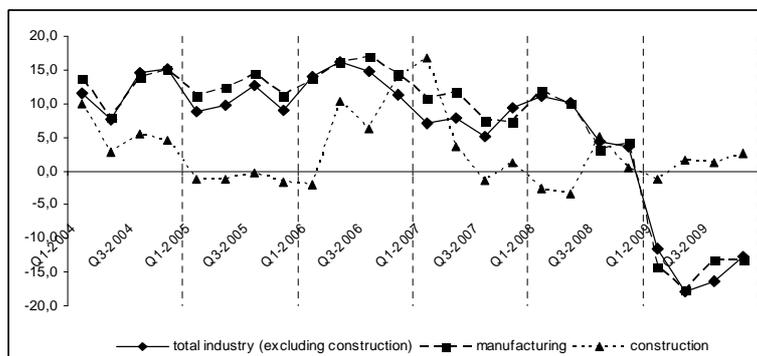
**Fig. 3: GDP External trade 2004-2009, quarterly data, seasonally adjusted**

Source: (<http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home>)

The Czech economy can be characterized as a small open economy, which is export-oriented. For this reason, it was likely that the economic crisis would spill-over into the Czech economy throughout anticipated fall in exports. The Czech economy is one of those most closely integrated with “old” EU Member States and one of the main channels through which the global economic crisis has affected the Czech economy is external trade. The Czech economy is currently experiencing a period of severe difficulties and stunted growth resulting mostly from a huge slump in export sales (PWC 2010). But this development is not exception as all 104 nations on which the WTO reports data experienced a drop in both imports and exports during the second half of 2008 and the first half of 2009 (Baldwin et al. 2010). As can be seen in Fig. 3, the breakthrough year in the development of external trade was 2008 when the growth rate of exports and imports started to decrease in 3Q 2008. This decrease grew considerably in the next quarter (exports -14.1 percent, imports -9.1 percent year-on-year). The decrease in exports and namely imports in comparison with 2008 led to a year-on-year decrease of the external trade turnover by 16.0 percent (in 2008 there was an increase by 0.2 percent compared with 2007). In 4Q 2009, Czech exports achieved growth. From these Fig.s we can deduce a signal of a recovery. Moreover, external trade balance reached in 2009 the highest surplus since 2005.

If we look at the territorial structure of Czech external trade, we will find that the EU market, especially the German one, has significant share in total Czech exports (85 percent). Therefore, the Czech economy is heavily dependent on an economic situation of major trading partners (Czech Statistical Office 2010a). One of the most important Czech industries is the automobile industry which accounts for almost four percent of total output (Haugh – Mourougane – Chatal 2010). Demand for cars fell sharply during the crisis, accentuating the difficulties of excess production capacity already faced before the crisis. Moreover, because of its strong linkage with other parts of the Czech economy the final impact of a shock in the industry on the broader economy is sizable. For that reason, many representatives of manufactures tried to persuade governments to take some supporting measures. Some neighbouring countries (Germany and Slovakia) have introduced car scrapping schemes to cushion the overall downturn in

economic activity, boosting sales in the short run. This measure was primarily designed for domestic carmakers, but foreign ones also profited - for example Škoda Auto with its new Fabia was one of the best selling foreign manufactures in Germany in the first half of 2009.

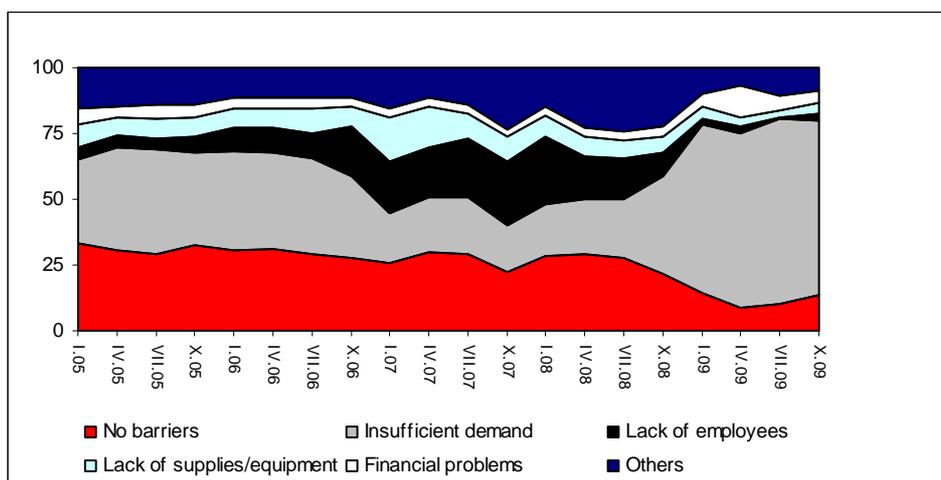


**Fig. 4: Gross value added changes 2004-2009, in %, quarterly data**

Source: (<http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home>)

On the supply side of the economy, year-on-year growth of real gross value added (GVA) was different in individual sectors during 2004-2009. While the development of GVA in the industry and manufacturing sectors copied the economic cycle, the development of GVA in construction seems to be volatile, and not just during the contemporary economic crisis but also in previous years. Fig. 4 shows that the construction has not yet been affected by the global economic recession in such intensity such as manufacturing (in other countries such as Ireland and Lithuania the annual decline amounted up to 45 percent).

The share of the industry sector in total GVA is higher compared with other EU Member States. Whereas this sector was hit by the global economic crisis the most, one would assume that it will have a significant impact on the Czech economy as a whole. The following Fig. 5 illustrates barriers of growth in the Czech industry sector. As is seen from the Fig., the most limiting factor of growth in the industry sector is the insufficient demand from mid-2008. That seems logical and in line with the pace of decline in orders. However, as is evident from the previous Fig., the dynamics of a loss of contracts appeared earlier than the delay on the part of managers as to their perception of barriers to growth (value of foreign orders declined annually since the beginning of 2008). On the contrary, a lack of employees was felt at the time of significant economic growth as a barrier to further growth but this problem considerably reduced due to a loss of the industry dynamics since 2008.



**Fig. 5: Barriers of growth in the industry sector, percentage share**

Source: (<http://www.czso.cz>)

Insufficient fiscal discipline is among the most problematic issues of the Czech economy policy. The structure of government budget revenues and expenditures was inadequate even before the global economic recession: government budget deficits existed since 1997 and continued even in the period of significant economic growth. In this context, we believe that this is a clear illustration of the structural deficit. The problem is more serious if take into account that government budget also provides a very important cushion for economic activity in the downturn, principally through the workings of automatic stabilisers and discretionary fiscal easing. According to OECD 2009 the government responded to the downturn with two stimulus packages and cyclical factors will further increase the general government deficit. However, there is little room for further discretionary fiscal easing and the Czech parliament has already approved a fiscal consolidation plan to reduce the government deficit. Another issue associated with the fiscal stimuli is fulfilling the convergence criteria, respectively the narrow space for massive measures of fiscal policy - the Czech Republic made a commitment to adoption of the euro in the Accession Treaty, which is a subject to compliance with convergence criteria. If look at the structure of convergence criteria we can divide them into two groups: (i) monetary criteria and (ii) fiscal criteria. Fiscal criteria consist of (i) the ratio of the annual government deficit to GDP must not exceed 3 percent at the end of the preceding financial year. If this is not the case, the ratio must have declined substantially and continuously and reached a level close to 3 percent or, alternatively, must remain close to three percent while representing only an exceptional and temporary excess; (ii) the ratio of gross government debt to GDP must not exceed 60 percent at the end of the preceding financial year. If this is not the case, the ratio must have sufficiently diminished and must be approaching 60 percent at a satisfactory pace. At the situation of the economic crisis fulfilling these fiscal criteria is threatened much more than monetary criteria, mainly because of growth-enhancing fiscal measures and long-term problems associated with the poor state of government budget. According to OECD and ECB forecasts the deficit should be held in the year 2010 to climb to 5.6 percent of GDP. This value is almost twice higher than the maximum permitted limit of three percent of GDP. And in the next three years, the

annual government deficit will remain above this level. It should be slightly reduced to 5.0 percent of GDP in 2011 (see Table 1). Moreover, the Czech Republic is at present subject to an EU Council decision on the existence of an excessive deficit. Council recommended terminating it by 2010 in a credible and sustainable reduction of government deficit to GDP ratio below three percent. We argue that the government deficit is currently the biggest obstacle to the introduction of the euro which will be postponed. On the other hand, given the relatively low initial level of general government gross debt the Czech Republic has no problem to fulfil the second fiscal criterion, although the dynamics of growth of debt from 2009 onwards, increases substantially, mainly due to problems connected with the low tax collection during the crisis and a high share of old-age pension in the budget expenditures. As a risk for future development is considered population ageing - we can expect further increasing in proportion of general government gross debt to GDP unless the necessary reforms of the pension and health care system are introduced. In addition, the value of these limits is also influenced by the attainment of GDP – if we compute these criteria as the share of total GDP - it means the slower economic recovery is the faster approaching is to this level (accompanied by budget deficits).

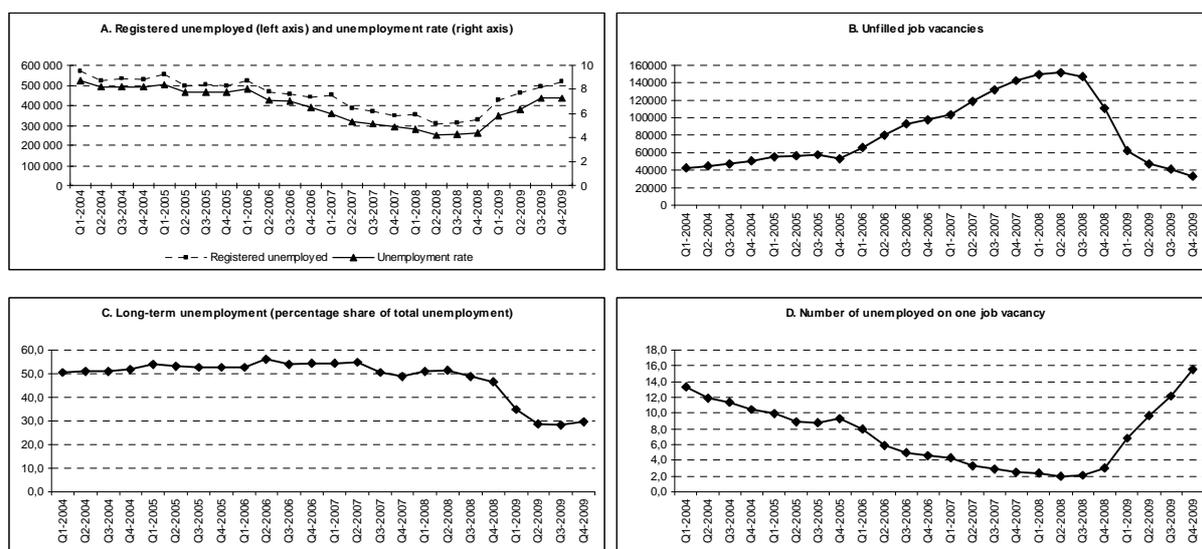
**Tab. 1: Government deficit and gross domestic debt (estimates for years 2010-2011)**

	2004	2005	2006	2007	2008	2009	2010	2011
General government deficit (as a percentage of GDP)	-3.0	-3.6	-2.6	-0.7	-2.7	-5.9	-5.6	-5.0
General government gross debt (as percentage of GDP)	30.1	29.7	29.4	29.0	30.0	35.4	42.2	49.0

*Source: ECB;OECD*

#### **4. Labour market development**

The deep recession in the Czech Republic has led to a marked deterioration of labour market performance. Unemployment generally fluctuates depending on a phase of the economic cycle - it tends to increase during the economic crisis and tends to decline during economic growth. In addition, Abraham – Shimer (2001) mentioned that there is a strong correlation between the unemployment rate and the average length of an unemployment spell. Moreover, there is an interesting fact that unemployment durations did not fall nearly as much as the decline in the unemployment rate might led one to expect. OECD (1993) even declared that long-term unemployment tends to grow for a year or two since the first decrease in the unemployment rate occurred. In the context of the global recession, Guichard – Rusticelli (2010) argued that thank to labour and product market reforms, in the majority of countries, the impact of the crisis on long-term and structural unemployment is likely to be more moderate than in past severe downturns.



**Fig. 6: Labour market indicators, 2004-2009, quarterly data**

Source: (<http://stats.oecd.org/index.aspx>)

The increased pace of growth had a significant impact on the labour market. The employment rate has increased by over two percentage points since 2004 and the unemployment rate has fallen substantially. The main factors of labour market improvement were a massive inflow of foreign direct investment, increased household consumption as well as overall economic growth in Western Europe, especially Germany. The global recession resulted in a severe shock to the Czech labour market. Moreover, the Czech economy got even beyond its potential in the first half of 2008, which in conjunction with public finance reform caused inter alia by the rise of the inflation rate. At the consequences of the recession the number of unemployed rose, employment declined and many employees are working fewer hours than before crisis. Fig. 6A shows a gradual reduction in the number of registered unemployed persons (2004-2008), while increasing the level of the initial nearly quarter of 2004 took during the five consecutive quarters (3rd quarter of 2008 and whole year 2010).

Massive in-flows of foreign investment have created 140 thousand new jobs, significantly contributed to the manufacturing industry. Development of this indicator was similar. It means a gradual increase of unfilled job vacancies (maximum was reached in the second quarter of 2008). As the consequence of the global economic crisis, a deep slump has been followed and in the fourth quarter of 2009 the number of vacant jobs has dwindled to below the initial number of the first quarter of 2004 (see Fig. 6B)

Job vacancy statistics provide information on unmet labour demand. Information on job vacancies is used for business cycle analysis and assessing mismatches on labour markets. A job vacancy is defined as a paid post that is newly created, unoccupied, or about to become vacant: (i) for which the employer is taking active steps and is prepared to take further steps to find a suitable candidate from outside the enterprise concerned; and (ii) which the employer intends to fill either immediately or within a specific period of time.

In the second quarter of 2008 accounted for one job vacancy less than two registered unemployed - a significant improvement over four years, when this ratio was 13:1. Shortages felt most sectors of the economy, from software developers over the drivers, welders and construction workers. Strong growth of Czech industry, however, exceeded the possibilities of the educational system to give it enough workers with secondary vocational education, because due to societal trends, young people began to prefer the economic study and humanistic orientations. Growth in number of graduates of secondary schools and technical colleges was not enough demand. Moreover, the problems intensified with the real readiness of school leavers - the structure of education and actual knowledge of young people are increasingly lagging behind the demands of the labour market as employers seen.

A number of new jobs were rising until 2Q of 2008, when production has been negatively affected by the global economic recession. The gap between the number of job seekers and the number of available has started widening since 3Q 2008. In the fourth quarter of 2009, the ratio of registered unemployed and job vacancies exceeds 15:1 (see Fig. 6D). A general trend of rising unemployment was accompanied by the improvement of a further indicator – percentage share of long-term unemployed (12 months or more) in total unemployed. It has decreased year on year by 2.6 percentage points to 29.6 percent in 4Q 2009 (see Fig. 6C). Causes of this development are obvious: (i) the increased number of young people after leaving school who have not yet found their first job; (ii) firing of workers at the end of 2008 and during 2009; (iii) some long-term unemployed have moved to a group of economically inactive. But these changes, on the contrary, do not mean the improvement of a situation on the labour market. In this context, it is clear that the share of long-term unemployed in total unemployment is itself a very misleading indicator and it needs to be viewed in a broader context. However, according to CZSO 2010b, if no significant changes are introduced in the labour market than it will be expected return to long-term unemployment shares in total unemployment reached about two years ago but with the higher rate of unemployment.

## **5. Conclusion**

The paper focused on the global financial and economic crisis and its impacts on the Czech economy. Transmission of the crisis in the Czech economy was not surprising because of a high degree of integration with EU-15. The high negative output gap in the economy is evident in the extremely low use of production capacities in industry, the significant rise in unemployment, the decrease in the number of job vacancies, and inflationary pressures. According to latest data the world economy is recovering from the global financial and economic crisis. Industrial output and exports have begun to revive in the Czech economy; however, we can assume that the recovery will be slower depending on the recovery speed in Western Europe from historical perspective. Moreover, higher unemployment can be expected over a longer period as a result of the inflexible labour market. Accompanying phenomenon of the economic crisis is a significant burden on public finances, while fulfilment both the fiscal convergence criteria will be difficult even in mid-term period. Especially when the second one - gross government debt - is predicted alarming development, since it may

affect adopting of the Czech Republic to the Euro area. These will require a combination of additional external and fiscal adjustment, particularly through structural fiscal measures, which will bring benefits not only during the crisis but also in the medium term. According to OECD 2009 the growth projection is subject to significant risks stemming from uncertainties surrounding performance in major export markets, above all Germany. The koruna should continue its previous appreciating trend. On the other side, appreciation of domestic currency might be an obstacle of exports growth as the result of relatively expensive Czech merchandise. On the domestic demand side, the main downside risk lies in a possible weakening of private consumption in response to the deteriorating labour market and the 2010 fiscal consolidation package.

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