

The Impact of the Global Financial Crisis: A Comparative Study between Thailand and Slovakia

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Abstract

This paper describes a comparative study on the impact of the global financial crisis on two countries, Thailand and Slovakia by aiming to define common characteristics and differences between both economies under the context of the global financial crisis and anti-crisis measures that were adopted in both countries. By having strong and healthy financial and banking system, global financial crisis was transmitted to both countries through export channels. There are, however a huge differences in their unemployment rates. Thailand is a country with one of the lowest unemployment rates in the world. Slovakia belongs to the countries with the highest. This can be partly explained by the different structure of their labor markets.

Keywords: Global Financial Crisis, Unemployment Rate, Anti-crisis Measures

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ผลกระทบของวิกฤตการณ์ทางการเงินโลก: การศึกษาเปรียบเทียบระหว่าง ประเทศไทยกับประเทศสโลวาเกีย

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บทคัดย่อ

งานศึกษานี้มีวัตถุประสงค์เพื่อศึกษาผลกระทบของวิกฤตการณ์ทางการเงินโลกในสองประเทศได้แก่ ประเทศไทยและประเทศสโลวาเกีย เพื่อให้เข้าใจถึงความคล้ายคลึงและความแตกต่างที่ทั้งสองประเทศจะต้องเผชิญกับวิกฤตการณ์ดังกล่าว จากการศึกษาพบว่า วิกฤตการณ์ทางการเงินที่เกิดขึ้นในช่วงปี ค.ศ. 2008-2009 ส่งผลต่อเศรษฐกิจของทั้งสองประเทศจากช่องทางการส่งออก ในขณะที่สิ่งที่แตกต่างกันอย่างเห็นได้ชัดก็คือผลกระทบต่อการจ้างงาน โดยประเทศไทยยังคงมีระดับของการจ้างงานสูง (การว่างงานต่ำ) ในช่วงที่เกิดวิกฤตในขณะที่ประเทศสโลวาเกียเป็นประเทศหนึ่งที่มีระดับการว่างงานสูงมาก สาเหตุสำคัญสามารถอธิบายได้จากโครงสร้างตลาดแรงงานที่แตกต่างกันในสองประเทศ

คำสำคัญ: วิกฤตการณ์ทางการเงินโลก, การว่างงาน, มาตรการลดผลกระทบจากวิกฤต

1. Introduction

The global financial crisis that arose in the mortgage market in the U.S. in mid-2007 peaked in autumn 2008, after the collapse of investment bank Lehman Brothers. This event represented a turning point in the further development of the crisis and demonstrated the systemic nature of the crisis. Distrust and uncertainty increased in the banking and financial sector and problems overflowed into other sectors (Aït-Sahalia et al, 2012). Many banks in the U.S. and Europe got into trouble. Holding company Washington Mutual went bankrupt, federal mortgage agencies Fannie Mae and Freddie Mac and insurance company AIG were nationalized. In Britain there was a run on a mortgage bank Northern Rock. Many investment banks have suffered billions in losses, including Citigroup, Merrill Lynch or Swiss UBS. In autumn 2008, the government had to take control over three largest banks in Iceland and the country subsequently declared national bankruptcy. In December 2009, Greece got under pressure from the financial markets due to high government debt. After Greece, other European countries announced troubles with high debts and crisis in Europe has entered a new form, such as a debt crisis.

The global crisis has had wide-ranging social and economic consequences. According to data from International Monetary Fund (2013), the world GDP declined by 1.3 percent in 2009. It has had the most serious impact on advanced countries, but influenced developing and emerging countries as well. In advanced countries the decline of GDP was 3.5 percent. The sharpest decline in GDP growth in 2009 was found in European countries (- 6.1 percent). The most affected country in Europe was Latvia, with GDP growth -17 percent, the least affected was Poland, with GDP growth rate 1.6 percent (Poland was the only country from Europe with positive GDP growth rate in 2009). The highest growth rate of GDP during the crisis and in subsequent years has been reached by region Developing Asia.¹ From this region the highest GDP growth achieved Timor-Leste (12.7 percent), China and India.

According to International Labour Organization (2013) global unemployment rate increased from 5.6 percent in 2007 to 6.3 percent in 2009. Employment to population ratio declined from 61.7 percent in 2007 to 61.2 percent in 2009. Since the beginning of the crisis the global jobs gap increased by 67 million (from 2007 till 2012). Over 30 million jobs are still needed to return the employment to the pre-crisis level (ILO, 2013).

¹ List of the countries that belong to the region Developing Asia can be found from www.imf.org.

To mitigate the impact of the crisis, governments around the world approved extensive stimulus packages. There have been coordinated monetary expansion and unconventional monetary policy measures adopted by a number of central banks.²

The financial crisis has started with problems in the mortgage market in the USA. The U.S. exported its subprime mortgages through mortgage-backed securities and other types of derivatives to many countries in the world. According to Lane et al (2010) global crisis was transmitted through (1) the exposure to US asset backed securities, (2) global increase in risk aversion and (3) global collapse in trade. (1) Many countries were exposed to risk through the purchase of U.S. mortgage-backed securities. According to data (U.S. portfolio liabilities) from the Department of Treasury (2008) at the end of June 2007 mortgage securities in foreign ownership amounted to 594 billion dollars, accounting for two thirds of all asset-backed securities owned by foreign investors. The largest share in the ownership of asset-backed securities and mortgage backed securities has had Cayman Islands and United Kingdom (UK accounted for 15 percent of all foreign owners). Other developed European countries were among the major holders of these securities, among them France, Germany, Ireland, Luxembourg and the Netherlands. (2) Global increase in risk aversion was related to the realization of the extent of systematic under-pricing of risk in previous years and prevalence of real estate and asset price bubbles. (3) A third channel of transmission operated through the reliance on those financial systems that got hit hardest by the crisis. The most obvious channel here would be through foreign banks pulling back funds and curtailing credit.

Berkmen et.al. (2012) describe crisis transmission in phases. In the first phase, crisis affected banks with direct exposures to the U.S. market and a few selected financial markets,

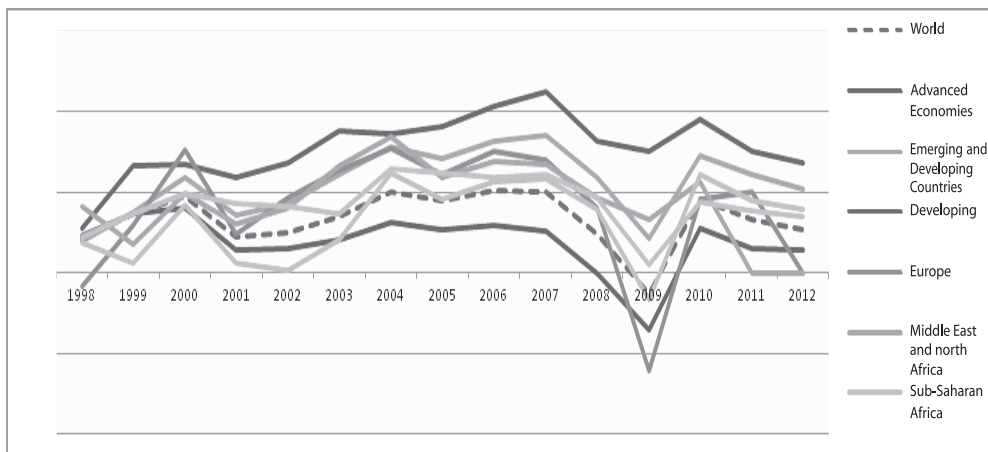
² In April 2009, at the London G20 summit, leaders agreed to provide assistance of more than 1 tn. dollars to promote international trade, financial markets and accelerate economic recovery. Individual countries adopted extensive fiscal stimulus to decrease the crisis impact on their economies as well. Monetary policy response in the first phase of the crisis was coordinated . The Fed, ECB and few other central banks lowered the key interest rates in autumn 2008. In the next phase, central banks adopted some unconventional measures. ECB during the period from May 2010 to June 2011 adopted refinancing operation with a fixed interest rate and long term refinancing operations (LTRO - 6 month LTRO and 12-month LTRO) and the covered bond purchase programs and programs for securities markets. From August to December 2011, the ECB reactivated the Securities Markets Programme and introduced a second round of covered bond purchase program. In December 2011, ECB decided on additional measures to support bank lending and liquidity in the money market. Fed after 2010 focused on supporting the economy through lower long-term interest rates, the Fed launched massive asset purchases, so called quantitative easing. (Linzert and Abbassi, 2011).

sometimes related to liquidity runs. A second phase of international spillovers was transmitted through asset markets. This happened through liquidity shortages, freezing of credit markets, and stock price declines, as well as foreign exchange fluctuations. The third phase occurred through large solvency concerns following the collapse of Lehman Brothers. In this phase, liquidity concerns gave way to solvency worries.

Naralli (2011) and Fratzscher (2009) mention foreign exchange channel. During August-October 2008 several local currencies depreciated³. Depreciation was on average 8-10 percent. The exchange rates of many developing countries have come under pressure due to lower global demand and lower capital flows. Weakened financial institutions from developed countries, particularly the United States began to move their capital from developing countries back to the U.S., which led to a decline in the value of currencies of some developing countries.

According to Lane et. Al. (2010), key channel of crisis transmission was the global collapse in trade, and particularly in demand for durable and investment goods. Because manufactured goods are more “cyclical”, their producers are likely to suffer more. Openness to trade increases the exposure to external demand shocks. International Monetary Fund in its World Economic Outlook states that for developed countries an important channel of transmission was financial. For developing countries in particular, sales channel was important, the more open economies have been more affected and countries that export mainly food have been less affected. Global collapse in trade is apparent when looking at the volume of exports and imports in the world economy. According to data from International Monetary Fund, export and import growth was negative in 2009 in all the countries except Australia and China.

³ Currency of Brazil, Chile, Columbia, Hungary, Mexico, Poland, South Africa or Turkey experienced depreciation.

Figure 1: Percentage Change of Real GDP during 1998-2012 in Selected Economies

Source: Based on data from the International Financial Statistics.

In this paper we present a comparative study on the impact of the global financial crisis on two countries, Thailand and Slovakia. Slovak republic is a country from the region that was hit hardest by the crisis. Slovak GDP growth in 2009 decreased sharply by 4.9 percent. In Europe, however the decrease was even more pronounced -6.1 percent. Thailand belongs to the region that did not experience a large impact. Region Developing Asia reached economic growth of 7.5 percent in 2009. GDP growth rate of Thailand in 2009 was at the level of -2.3 percent. Another motivation for choosing these two economies is a huge difference in their level of unemployment. High unemployment is the major issue in the Slovak republic. Specific numbers can be found in table 1 and 2, which summarize the main macro economic indicators for Thailand and for Slovakia. The aim of this paper is to define common characteristics and differences between the two countries, in the context of the global financial crisis and to compare anti-crisis measures that were adopted in both economies. Based on this, identifying the main features, that determined development during the crisis.

The rest of the paper is organized as follows. In the first section we present an analysis of the crisis impact on the economy of Thailand. The next section analyzes the impact on Slovak economy. Final section summarizes the main findings and compares anti-crisis measures adopted in these two economies.

Table 1: Overview of Selected Macroeconomic Indicators for the Slovak Republic

| Year | Real GDP % Change | Unemployment Rate % | Inflation HICP (%) | Current Account Balance % of GDP | Government's Borrowing % GDP | Gross government debt % of GDP |
|------|----------------------|------------------------|-----------------------|-------------------------------------|---------------------------------|-----------------------------------|
| 1997 | 4.4 | 11.8 | 6.0 | -11.4 | -6.3 | 33.7 |
| 1998 | 4.4 | 12.5 | 6.7 | -10.1 | -5.3 | 34.5 |
| 1999 | 0.0 | 16.2 | 10.4 | -3.9 | -7.4 | 47.8 |
| 2000 | 1.4 | 18.6 | 12.2 | -4.3 | -12.3 | 50.3 |
| 2001 | 3.5 | 19.2 | 7.2 | -7.3 | -6.5 | 48.9 |
| 2002 | 4.6 | 18.5 | 3.5 | -7.5 | -8.2 | 43.4 |
| 2003 | 4.8 | 17.4 | 8.4 | -1.7 | -2.8 | 42.4 |
| 2004 | 5.1 | 18.1 | 7.5 | -2.7 | -2.4 | 41.5 |
| 2005 | 6.7 | 16.2 | 2.8 | -4.6 | -2.8 | 34.2 |
| 2006 | 8.3 | 13.3 | 4.3 | -2.9 | -3.2 | 30.5 |
| 2007 | 10.5 | 11.0 | 1.9 | -0.1 | -1.8 | 29.6 |
| 2008 | 5.8 | 9.6 | 3.9 | -1.0 | -2.1 | 27.9 |
| 2009 | -4.9 | 12.1 | 0.9 | 0.2 | -8.0 | 35.6 |
| 2010 | 4.4 | 14.4 | 0.7 | 0.2 | -7.7 | 41.0 |
| 2011 | 3.2 | 13.5 | 4.1 | 1.8 | -4.9 | 43.3 |
| 2012 | 2.0 | 14.0 | 3.7 | 5.7 | -4.6 | 52.2 |

Source: based on data from the Statistical Office of the Slovak Republic and the National Bank of Slovakia

Table 2 Overview of Selected Macroeconomic Indicators for Thailand

| Year | Real GDP % change | Unemployment rate % | Unemployment rate % | Inflation % | Current account balance % of GDP | International reserves Billions of USD | Government Borrowing % of GDP | Government Debt % of GDP |
|------|----------------------|------------------------|------------------------|----------------|-------------------------------------|---|----------------------------------|-----------------------------|
| 1996 | 5.9 | 1.5 | 1.1 | 5.9 | -7.9 | 38.7 | 2.7 | 15.2 |
| 1997 | -1.4 | 1.5 | 0.9 | 5.6 | -2.0 | 27.0 | -1.7 | 40.5 |
| 1998 | -10.5 | 4.3 | 3.4 | 8.1 | 12.7 | 29.5 | -6.3 | 49.9 |
| 1999 | 4.4 | 4.2 | 3.0 | 0.3 | 10.2 | 34.8 | -9.0 | 56.6 |
| 2000 | 4.8 | 3.6 | 2.4 | 1.6 | 7.6 | 32.7 | -1.8 | 57.8 |
| 2001 | 2.2 | 3.3 | 2.6 | 1.6 | 5.4 | 33.0 | -1.8 | 57.5 |
| 2002 | 5.3 | 2.4 | 1.8 | 0.7 | 5.5 | 38.9 | -6.7 | 55.1 |
| 2003 | 7.1 | 2.2 | 1.5 | 1.8 | 5.0 | 42.1 | 2.1 | 50.7 |
| 2004 | 6.3 | 2.0 | 1.5 | 2.7 | 1.7 | 49.8 | 1.2 | 49.5 |
| 2005 | 4.6 | 1.8 | 1.3 | 4.5 | -4.3 | 52.1 | 1.5 | 47.4 |
| 2006 | 5.1 | 1.5 | 1.2 | 4.7 | 1.1 | 67.0 | 2.2 | 42.0 |
| 2007 | 5.0 | 1.4 | 1.2 | 2.3 | 6.3 | 87.5 | 0.2 | 38.3 |
| 2008 | 2.5 | 1.4 | 1.2 | 5.5 | 0.8 | 111.0 | 0.1 | 37.3 |
| 2009 | -2.3 | 1.5 | 1.5 | -0.9 | 8.3 | 138.4 | -3.2 | 45.2 |
| 2010 | 7.8 | 1.0 | 1.0 | 3.3 | 3.8 | 172.1 | -0.8 | 42.6 |
| 2011 | 0.1 | 0.7 | 0.7 | 3.8 | 1.2 | 175.1 | -0.7 | 42.1 |
| 2012 | 6.5 | 0.7 | - | 3.0 | -0.4 | 181.6 | -1.7 | 45.4 |

Source: Based on data from the International Monetary Fund, the Bank of Thailand, and the World Bank

2. Impact of the global crisis on Thailand

According to the World bank, Thailand has been one of the great development success stories, with sustained strong growth and impressive poverty reduction. Poverty has been reduced over the last decade from 42.6 percent in 2000 to about 13.2 percent in 2011.⁴ Thailand was one of the world's fastest growing economies, with an average growth rate of 8-9 percent per year almost a decade before it was hit by the Asian Crisis in 1997-1998.

Before the 1997 crisis, there had been rapid increases in capital flows from developed to developing countries. Several Asian economies, including Thailand liberalized their financial sector. According to Pholphirul (2009) Thailand experienced large inflows of deposits and foreign funds but its financial system was not sufficiently sound. Thailand had cumulative balance of payment problems, mainly large current account deficit. Country became effectively insolvent due to high public debt and inability to meet its foreign obligations. Due to large current account deficit and high short-term external borrowing, Thai baht came under attacks and foreign reserves were not sufficient to defend the currency and fixed exchange rate, Thai baht collapsed in mid 1997.

The consequences of the Asian crisis were so devastating that it took several years for the economy to recover. Fortunately, the global economy was in a good shape. The U.S. and other advanced countries experienced a boom period, which created conditions that accelerated economic recovery in Thailand. After recovering from the Asian crisis, Thailand had to cope with another shock in 2007-2009, which was the global financial crisis.⁵

In comparison to other regions in Asia, Thailand was in a relatively good position to deal with the financial crisis in 2007-2009. It accumulated enough official reserves, it had a good economic fundamentals and a healthy banking system. This might be partly the result of the increased risk aversion after the Asian crisis, during which financial institutions encountered large losses. While during the Asian crisis, external debt relative to GDP was relatively high, at

⁴ Poverty headcount ratio at national poverty line (percent of population). National poverty rate is the percentage of the population living below the national poverty line. National estimates are based on population-weighted subgroup estimates from household surveys. Source : World bank Statistics. According to National Economic and Social Development Board, the official poverty line in Thailand in 2002 was 922 baht per capita per month.

⁵ Besides the global financial crisis, Thai economy was affected by the political crisis in 2009 and floods in 2011.

67 percent, during the current crisis it has been reduced to 30 percent (Pongpattananom and Tansuwanarat, 2010). International reserves have increased from 29 billion dollars in 1998 to 138 billion in 2009. External stability was strong. After the 1997 crisis, exchange rate was changed from fixed to managed-float regime. This increased open authority of the Bank of Thailand to internally stabilize the economy and running stabilization policy toward an inflation targeting.

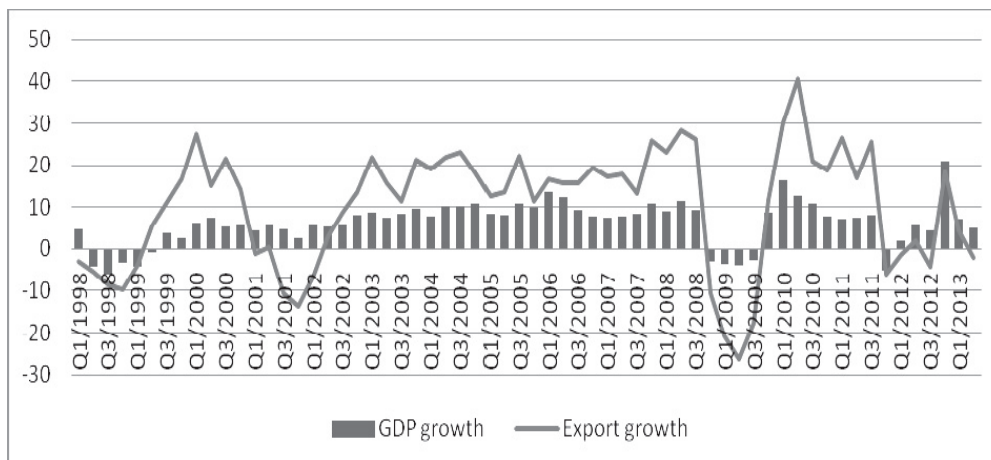
2.1 Export Channel

According to Chirathivat and Mallikamas (2011), global economic crisis hit Thailand's economy very hard mainly through the export channel. Thailand as a small and open economy has been affected by the global crisis through contagion. In the 60s, Thailand was mainly agricultural economy. During the 80s and 90s, its economy has become more diversified, modernized and industrialized. Focus has been shifted into industrial sector, manufacturing and export. This has led to the expansion of the industrial sector and to increased dependence on exports. Thailand increased its dependence on external trade considerably during last decades. In 1996, the total size of foreign trade to GDP was 91 percent. In 2001, it exceeded the value of GDP and in 2012 foreign trade reached 132 percent of GDP.⁶

While watching quarterly real GDP growth rate, we find that GDP growth was negative from the last quarter of 2008 till the third quarter of 2009. For the whole year 2009, real GDP decreased by 2.3 percent. Compared to the crisis of 1997-1998, decrease in GDP was significantly lower and shorter this time.

The same development can be seen from the growth of export. Decrease in export was significant during the last quarter of 2008 and third quarter of 2009. Decline in the value of export was the main channel through which the economic downturn has been transferred to Thailand. Strong linkage between GDP of Thailand and the world GDP through export channel is apparent. According to Pongpattananom and Tansuwanarat (2010) Thailand was influenced by sales channel directly as the foreign demand for its products decreased and indirectly as being a part of the supply chain (approximately 28 percent of all exports account for parts and components for production). During 2010, export experienced significant growth and helped GDP to recover as well.

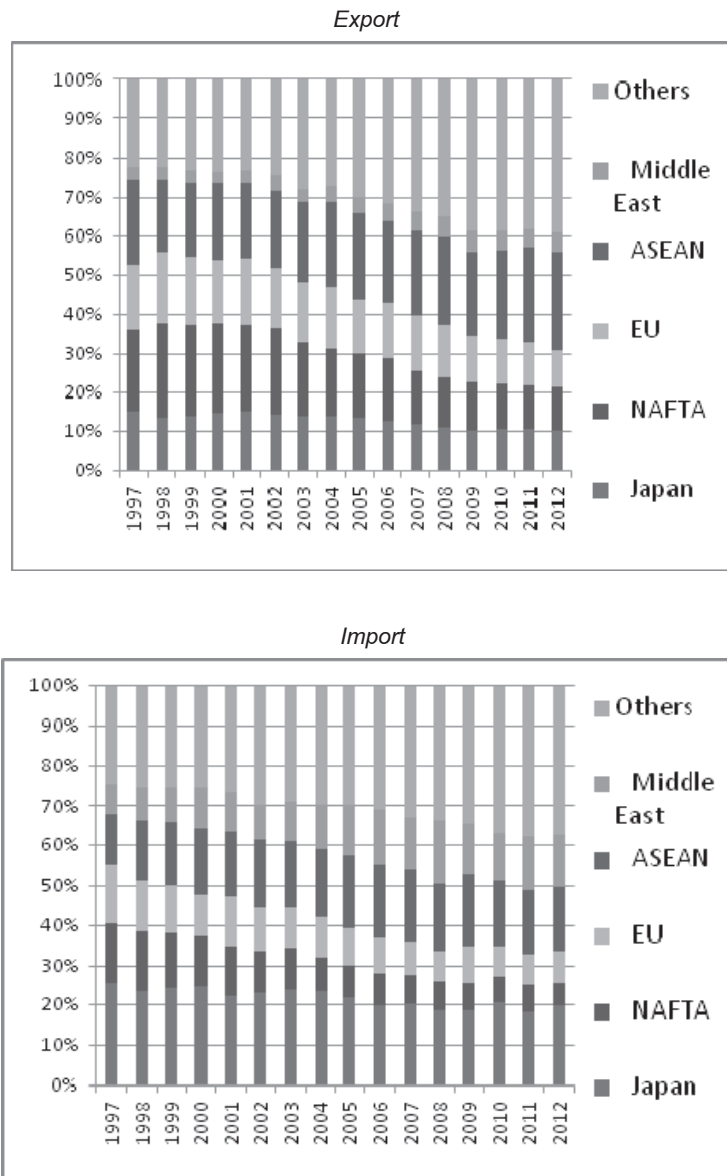
⁶ Measured by $(\text{EXPORT} + \text{IMPORT}) / \text{GDP}$

Figure 2 Quarterly Growth Rates of Real GDP and Growth Rates of Export

Source: Author's Calculaiton. Data from Bank of Thailand

The main export markets for Thailand in the years before the global financial crisis had been the U.S., EU and Japan. These are all advanced countries that were affected considerably by the crisis. Because of the weak economic conditions and low demand from these countries, Thailand experienced a major fall in its exports. Decline in total exports in 2009 was 14 percent. Collapse in demand from advanced countries forced exporters in Thailand to diversify their markets. The share of exports to EU decreased from 16 percent of total exports in 1997 to 9 percent in 2012. These markets have been replaced by ASEAN markets, China and the Middle East. The share of these markets increased from 28 percent in 1997 to almost 40 percent in 2012. Considering current economic development in advanced countries, shift to Asian markets seems to be a step in the right direction. The decline in economic activity, investments and exports during the crisis, caused a drop in imports as well. The main import markets for Thailand are Japan, ASEAN, Middle East and China. Important component of Thailand foreign trade is tourism. Pongpattananom and Tansuwanarat (2010) states that in 2009, tourism amounted to 43 percent of all income in the current account services and about 6 percent of GDP. Number of tourists declined from 14.6 million in 2008 to 14.1 million in 2009, but increased again to 15.9 million in 2010 and 19.1 million in 2011. The decline in a number of tourists in 2009 might have been caused also by fears from H1N1 flue and 8 days shutdown of international airport in Bangkok.

Figure 3 Thailand's Export Share and Import Share by Region

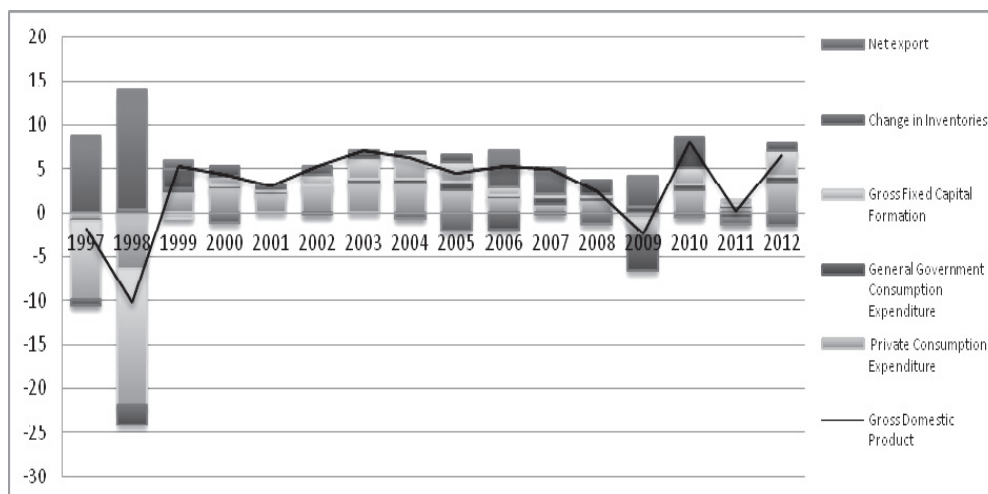


Source: Author's Calculaiton. Data from Bank of Thailand

2.2. Demand side

The main contributor to GDP growth during 2006 and 2007 was net export. In 2009, however, exports fell by 9.1 percent but imports fell even more, by 12.6 percent, all together created a positive contribution of net export to GDP growth. In 2009, there was a decline in gross fixed capital formation. However, compared to decline of investments in 1997-1998, this decline seems to be quite modest. General government consumption expenditure represented only a mild increase in 2009, despite the economic stimulus packages. In 2010, private consumption increased and together with investments created a positive contribution to GDP growth.

Figure 4: GDP Growth and Contribution of Different Types of Expenditure



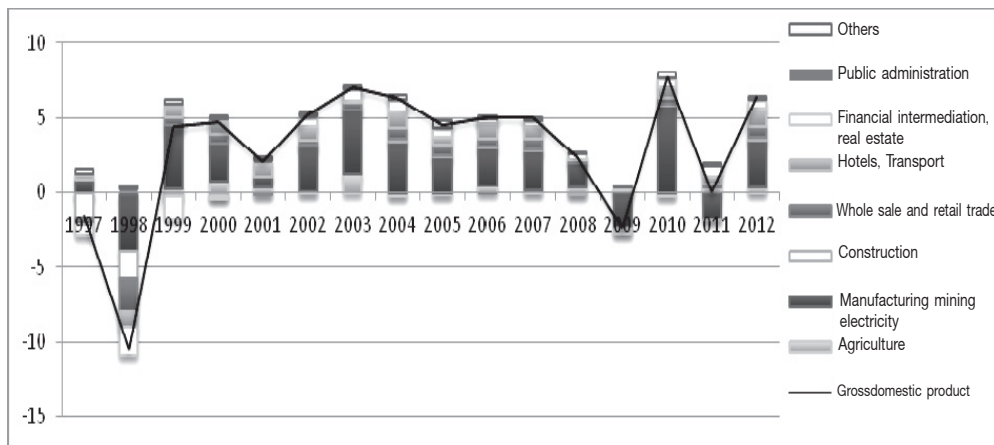
Source: Author's Calculation. Data from Bank of Thailand

2.3. Supply side

Looking at the GDP components from the supply side, we can identify that the economic growth before 2009 was driven mainly by the industrial sector. As that is mostly export-oriented sector, it experienced a major decline in 2009, but recovered in 2010 with a high growth rate. According to Thailand automotive institute (2012), one of the main industries that generate economic value is automotive industry. It accounts for 10 percent of GDP originating from manufacturing and creates over 500,000 jobs directly. Global crisis has had an impact on car production in Thailand. According to the International Organization of Motor Vehicle Manufacturers, car production in 2009 declined by 28.3 percent.

In 2011, country experienced vast floods that caused interruption in production of several companies and disruptions to supply chains. That resulted in negative contribution of manufacturing sector during this year. Agriculture has not been creating a large contribution to GDP in recent years. However, in 2008, it reached good results, with increasing production and incomes of farmers, because of the global food crisis. Chirathivat and Mallikamas (2011) state, that Thai farmers have benefited from several major export items such as rice, rubber or seafood.

Figure 5: GDP Growth and Contribution of Different Sectors of the Economy



Source: Author's Calculaiton. Data from Bank of Thailand

2.4. Unemployment

Thailand has one of the lowest unemployment rates in the world. During the current recession it rose slightly. In the first quarter of 2009 unemployment rate reached 2.1 percent, but for the whole year, unemployment rate was 1.5 percent (see table 2). Global crisis had the strongest impact on employment in manufacturing sector and mainly in Bangkok and surrounding provinces, as these are the places where factories are concentrated. About 40 percent of all employed persons were working in the agricultural sector in 2012. This ratio has not changed much during the last decade. The majority of Thai labour market is informal; therefore using official unemployment rate might not be a good measurement for Thailand. Another good measurement for crisis impact should be underemployment rate. According to National

Statistical Office of Thailand (2013) the number of underemployment workers, available for additional work were 0.23 million or 0.6 percent of the total employed persons.⁷ Imai (2000) states that one characteristic of Thailand's labor statistics is that the proportion of unpaid family workers is very high. As of February, 2000, the number of unpaid family workers was around 5.89 million, or 19.4 percent of the employed workforce. These may all be regarded as underemployed. According to International Labour Organization (2010) there are lessons to be learned from the previous Asian financial crisis of 1997-1998 when unemployment and employment rates varied little but major changes were seen in the rate of underemployment (working less than normal hours) and in the wages earned.

2.5. Financial and Banking Channel

Global financial crisis has been transmitted not only through the real sector but also through the financial sector. Financial system in Thailand was able to absorb shocks well, due to high levels of foreign reserves and also due to the fact that structured products form only a small part of banks' business in Thailand (Bank of Thailand, 2010). Some exposure was caused by advanced countries which, at the outbreak of the crisis, started to move capital from Asian markets to safer havens. This contributed to a decline in equity markets, depreciation of exchange rate and widening of sovereign bond spreads.

Sovereign bond spreads peaked in the region of Emerging Asia in the last quarter of 2008, as concerns over a slowing global economy intensified. CDS spreads are one of the indicators of the market's current perception of sovereign risk. CDS spreads have risen sharply in November 2008, but returned back to the normal range in the mid 2009. According to data from Bank of Thailand, the outstanding amount of government bonds was 1,759,902 million baht at the end of 2007, and at the end of 2009 it has risen to 2,155,562 million baht. Expansion of government bonds was the result of economic stimulus measures.

Years 2008 and 2009 were characterized by high risk aversion and uncertainty in general. This led to massive selloffs in the stock markets around the world. S&P Global Equity Index is the indicator that is important measure of overall performance (it covers approximately 11,000 securities from over 80 countries and measures the U.S. dollar price change in the stock

⁷ Here the underemployed is defined as a person working less than 35 hours per week and available for additional work.

markets). In 2008, stock market in Thailand fell by 50 percent. European stocks declined by 38.5 percent in 2008.

Market capitalization measured as a percentage of GDP is a proxy for the extent of stock market depth and development. Market capitalization of listed companies in Thailand in 2008 declined to 37 percent of GDP, but during the next year, started to rise again. Market capitalization fell in 2008 due to an expansion of government bonds. Sharp decline of global equity indices experienced Slovakia as well, however this decline continued in 2009.

During 2007, global foreign direct investment flows reached a historical high of around 2 trillion dollars. In 2009, global FDI flows declined by 40 percent. In Thailand Inward flows of FDI declined by 57 percent in 2009.

In the early 2008, due to better internal risk control and conservative politics, banks gradually reduced risk positions in the private external debt and CDO holdings and increased holdings of safe government foreign debt (Chiravat and Malikamas, 2011). The banking system therefore experienced very low direct impact from the financial crisis. The share of loans to deposits was less than 0.9 in 2008, for comparison it was 1.2 in 1997. There was no liquidity problem in the banking system. Despite the decline in production, all banks were able to make profit. Thailand's banking sector has been resilient, with low direct exposure to risky assets and a strong capital base.

2.6. Exchange rate channel

At the beginning of 2008, financial institutions in the United States began to move capital from Asia to the U.S., which led to a decline of Thai baht. According to Chandoevmit (2011), in september 2008 the Thai currency depreciated from 32 Baht/Dollar to 34.3 baht/dollar. However, this decline was not as pronounced, because Thailand did not experience as much capital outflows as other Asian countries. With high international reserves (see table 2), the central bank of Thailand was able to manage and limit currency volatility. In the first quarter of 2009, thai baht depreciated from investors' concerns over the global economic outlook.

Table 3 Labour Market Statistics in Millions of Persons

| Thailand | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Population | 62.80 | 63.08 | 61.97 | 62.42 | 62.83 | 63.04 | 63.39 | 63.53 | 63.88 | 64.08 | 64.46 |
| Labour Force | 34.26 | 34.90 | 35.81 | 36.13 | 36.43 | 36.94 | 37.70 | 38.43 | 38.64 | 38.92 | 39.41 |
| Employed | 33.06 | 33.84 | 34.91 | 34.21 | 35.69 | 36.25 | 37.02 | 37.71 | 38.04 | 38.46 | 38.94 |
| Agriculture | 14.04 | 13.88 | 13.91 | 13.62 | 14.17 | 14.31 | 14.70 | 14.69 | 14.55 | 14.88 | 15.43 |
| Non-agriculture | 19.02 | 19.96 | 21.00 | 20.60 | 21.52 | 21.94 | 22.32 | 23.01 | 23.49 | 23.58 | 23.51 |
| Unemployed persons | 0.82 | 0.75 | 0.73 | 0.66 | 0.55 | 0.51 | 0.52 | 0.57 | 0.40 | 0.26 | 0.26 |

Source: Author's Calculaiton. Data from Bank of Thailand

Table 4 Stock Market Indicators

| Country | Indicators | 2007 | 2008 | 2009 | 2010 |
|----------|--|-------|--------|--------|-------|
| Thailand | S&P Global Equity Indices (annual % change) | 39,40 | -50,52 | 72,77 | 52,14 |
| | Market capitalization of listed companies (% of GDP) | 79,38 | 37,64 | 52,40 | 87,09 |
| Slovakia | S&P Global Equity Indices (annual % change) | 57,39 | -35,99 | -23,10 | 5,36 |
| | Market capitalization of listed companies (% of GDP) | 8,29 | 5,19 | 5,36 | 4,77 |

Source: Author's Calculaiton. Data from The World Bank

**Table 5 Inward FDI flows, US Dollars at Current Prices and Current Exchange Rates
in Millions**

| FDI flows | 2007 | 2008 | 2009 | 2010 |
|-----------|--------|------|------|------|
| Thailand | 11 359 | 8455 | 4854 | 9147 |

Source : UNCTAD STAT, Inward and Outward Foreign Direct Investment Flows.

3. Impact of the Global Crisis on Slovakia

When the global economic crisis broke out, the Slovak economy was at the top of its economic cycle, respectively at the beginning of the decreasing phase. The economy was achieving superior results in terms of economic growth. In 2007, gross domestic product has increased by 10.5 percent, which was the highest economic growth among all EU member states. The level of inflation and the size of the public debt were within the Maastricht criteria. In the pre-crisis period, unemployment rate was decreasing as well, it declined from 19 percent in 2001 to 9.6 percent in 2008 (see Table 1).

3.1 Export channel

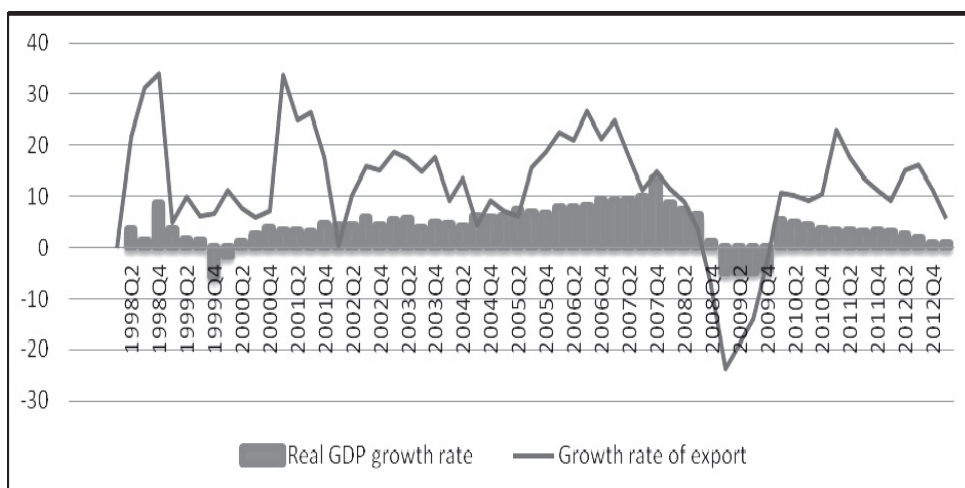
The economy of Slovak republic has certain characteristics that make it very vulnerable in case of negative external event; such was the global economic crisis. Slovak economy is extremely open and its development is largely determined by the situation on foreign markets, especially the markets of major trading partners. The degree of openness ($EX+IM/GDP$) of the Slovak economy in 2008, reported by the Statistical Office of the Slovak Republic, was 149 percent. The decline in foreign demand was the channel through which the global crisis has affected Slovak economy the most.

The following graph shows the development of quarterly GDP growth and the development pace of export growth. The overall decline in gross domestic product for 2009 was -4.9 percent, while the growth rate of exports in this period was -20.5 percent. Gross domestic product recorded a negative growth rate during all four quarters of 2009. The pace of export growth fell into negative numbers already in the last quarter of 2008. In the first quarter of 2009, gross domestic product fell significantly and decrease in export was several times higher. In 2010, GDP growth recovered, as well as export growth.

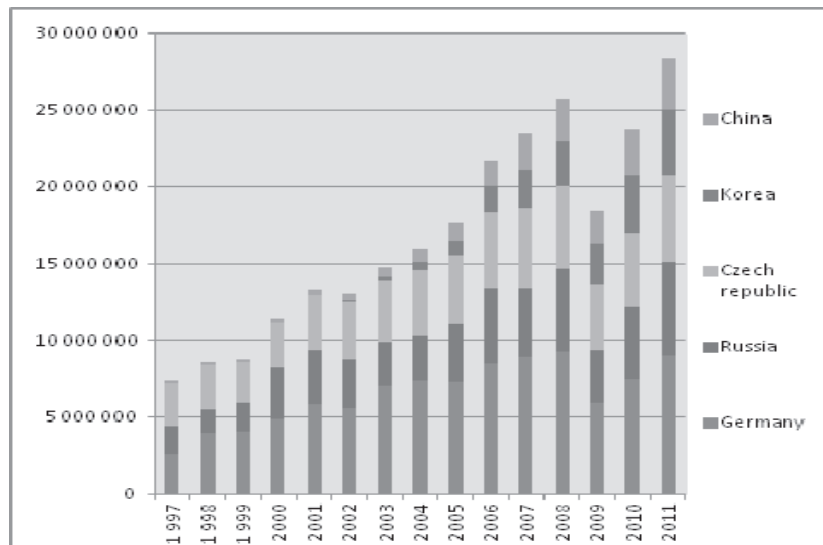
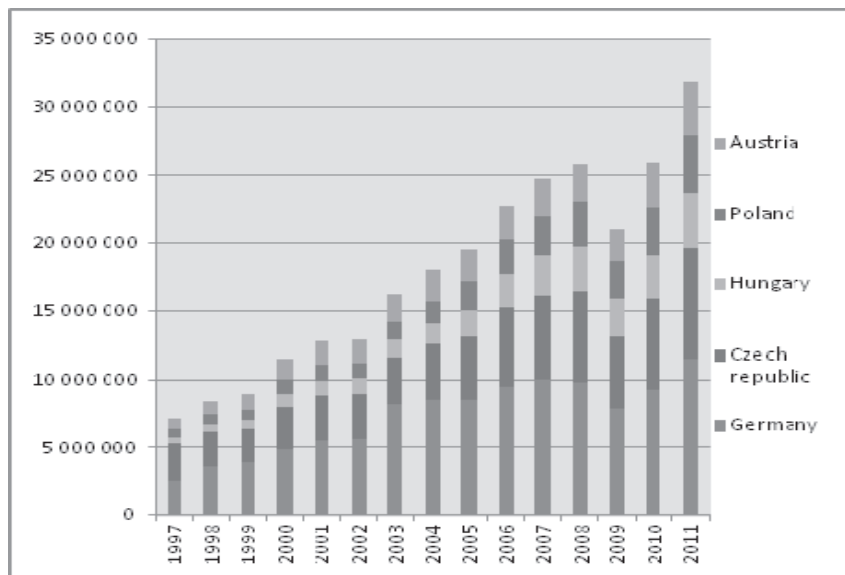
Value of exports and imports of goods and services grew continuously since 2000. The decline occurred in 2009, when the total exports of goods and services fell from 55 billion eur in 2008 to 44 billion eur in 2009. Imports declined in the same period from 57 to 44 billion eur. The balance of trade and services in 2009 reached a negative value of 303 mil. eur. The balance, however, was lower than the previous year. In subsequent years, exports and imports began to rise even above the pre-crisis levels. This development reflects the economic conditions on markets of the major trading partners. In the area of exports, it is particularly Germany, Austria,

Czech Republic, Hungary and Poland. All of these countries (except Poland) recorded a significant decline in economic activity in 2009. In the subsequent years, there has been a slight recovery in foreign markets. The largest foreign trade partner in terms of exports is Germany. Exports to Germany fell from 9.7 billion eur in 2008 to 7.8 billion eur in 2009, representing nearly 20 percent decline. Another business partner, which heads a large part of exports is the Czech Republic, where exports fell from 6.7 to 5.2 billion eur. The largest importer is again Germany. Imports from Germany fell from 9.2 billion eur in 2009 to 5.9 billion eur in 2009.

Figure 6 Quarterly Growth Rates of Real GDP and Growth Rates of Export



Source: Author's Computation. Data from Statistical Office of the Slovak Republic

Figure 8 Structure of External Trade by Country (FOB) in Thousand Euro*5 most important countries to import**5 most important countries to export*

Source: Author's Computation. Data from Statistical Office of the Slovak Republic

The degree of openness of the Slovak economy declined from 149 percent in 2008 to 125 percent in 2009. The recovery in foreign markets in the following years brought about a rise in the rate of openness too. For the year 2012 this indicator reached the level of 186 percent, which got the country into the position of fourth most open economy in the EU. According to National bank of Slovakia (2013), in 2012, export to countries of European Union represented 84 percent of total Slovak exports. This was clearly the most compared to other EU countries. Over-orientation on exports to the European market, may pose a significant risk to Slovakia, especially when one considers the current situation in the EU and persistent debt crisis.

Another risk for Slovakia arises from excessive orientation to the automotive industry, which has been recording downward trend in recent years. Sales of new cars inside the EU continue to decrease.⁸ According to Automotive Industry Association of the Slovak Republic (2013) Slovakia is the world leader in car production per capita. 171 cars per 1000 inhabitants were produced in Slovakia in 2012⁹.

3.2. Demand side

Domestic demand experienced significant decline in 2009. The most contributing component to this decline was gross capital formation. Final consumption in 2009 slightly increased, but the growth rate was significantly reduced, while it was mainly driven by increase in general government final consumption. Final consumption in the coming years increased very slightly. The growth rate of general government final consumption slowed down after 2009. In 2011, there was even a decrease in general government final consumption, which was mainly the result of government efforts to consolidate public finances. The year 2012 represented a slowdown in the recovery of domestic demand.

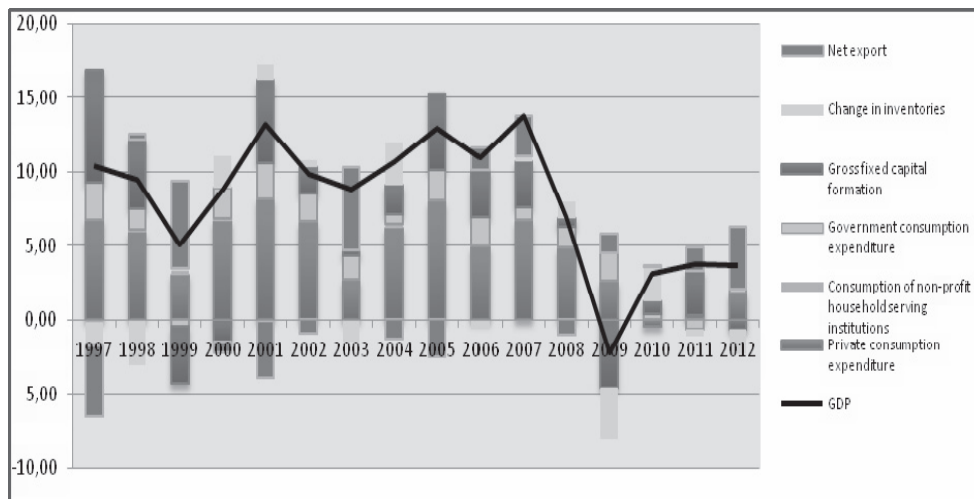
Investments are very sensitive to economic development and more volatile than consumer spending. Investments in a new plants and equipment are usually a response to increased demand for products of companies. Higher demand must be driven by higher consumer spending or another source of growth in investment can be foreign demand. That is the key

⁸ According to data from The International Organization of Motor Vehicle Manufacturers car sales in Europe is declining since 2008, in the U.S. after a slump in 2008 and 2009, sales began to increase slightly. Europe and the U.S. in 2012 has seen a lower number of sold cars than in 2005. Region, which pulls up the overall car sales is Asia, where the number of cars sold in 2012 compared to 2005 recorded an increase of 100 percent.

⁹ Three car companies have their factories located in Slovakia : Kia Motors, PSA Peugeot Citroën and Volkswagen Slovakia.

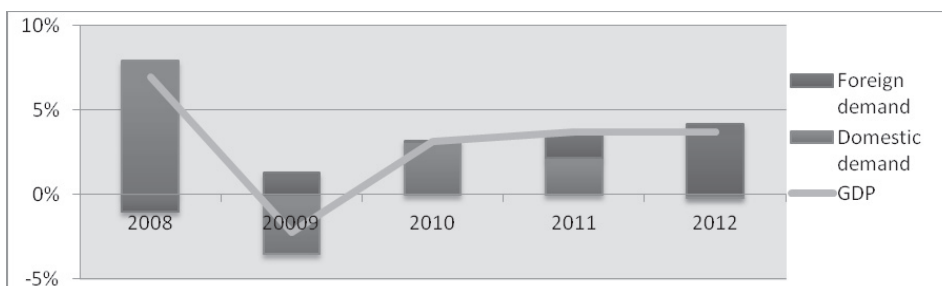
factor for the Slovak economy. Foreign demand has been the source of economic growth, particularly in 2011 and 2012.

Figure 9 GDP growth and Contribution of Different Types of Expenditure



Source: Author's Computation. Data from Statistical Office of the Slovak Republic

Figure 10 GDP growth and contribution of domestic and foreign demand to growth



Source: Author's Computation. Data from Statistical Office of the Slovak Republic

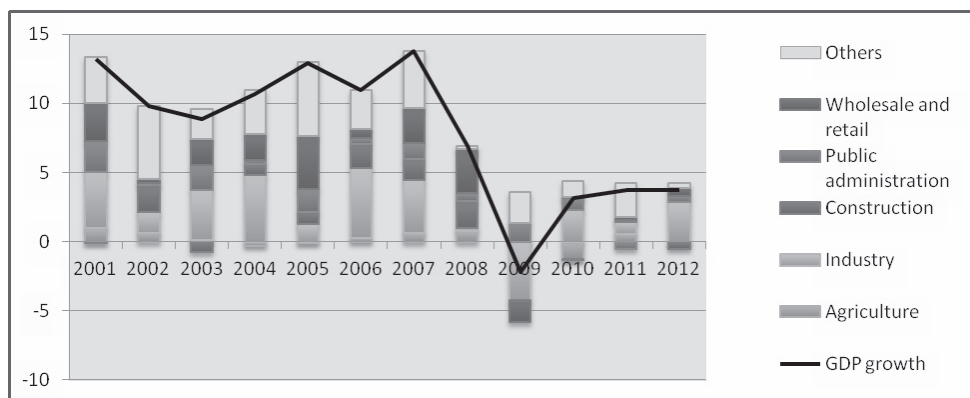
3.3. Supply side

Regarding the components of the gross domestic product from the supply side, a substantial share of all economic activities belongs to the industry (29 percent of GDP). Slovakia has the highest share of industry on GDP among all EU member states. According to Automotive

industry association (2013), the share of automotive industry on total industrial production represented in 2012, 41 percent (this is increase from 34,3 percent in 2009). It is a source of employment for over 60 000 employees and other 140 000 jobs are created indirectly. In total, this segment generates 9 percent of total employment. Global crisis has had an impact on car production in Slovakia. According to the International Organization of Motor Vehicle Manufacturers report in 2013, car production in 2009 declined by 19.9 percent.

The following graph shows the development of economic activities and their contribution to GDP growth. In 2009, production of means of transport and the electronics industry significantly decreased due to a drop in demand from foreign companies. Overall industrial production fell in 2009 by 25 percent. As for the other sectors of the economy, a significant decline in 2009 recorded the wholesale and retail. Negative contribution was created in 2010 by the agricultural sector, in 2012 it was a decline in construction. Since 2010, GDP growth was supported by the rebound of industrial sector. Production decline in 2009 was also reflected in the decline in profits. Profits in 2009, fell sharply in the manufacturing sector (22 percent), construction, wholesale and retail sector, but also in other sectors of the economy, with the exception of the information and communications.

Figure 11 GDP Growth and Contribution of Different Sectors of the Economy

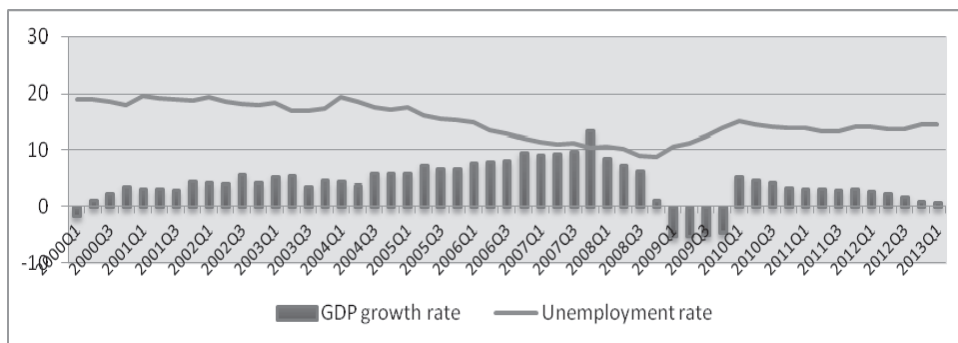


Source: Author's Computation. Data from Statistical Office of the Slovak Republic

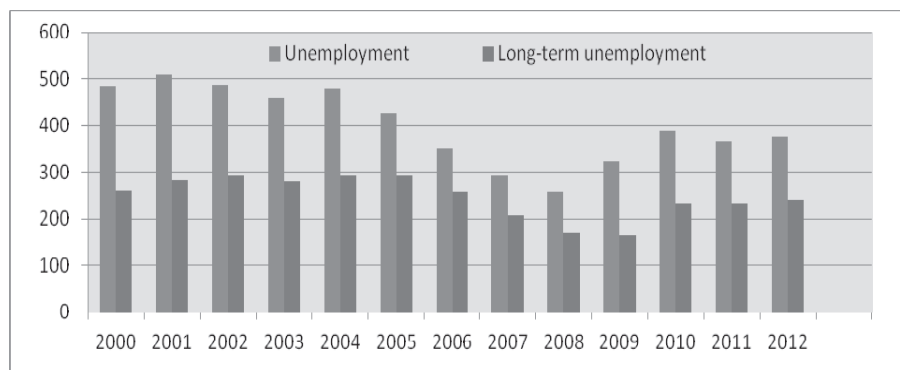
3.4. Unemployment

By lower gross fixed capital formation and lower stocks of capital, the crisis has caused not only a decrease in real GDP, but also decrease in the potential GDP. It is unlikely that there is a recovery period of growth higher than "normal growth" that will return the economy to the pre-crisis level of potential output and reduce unemployment. Elwell (2013) states that with the decline of potential output, economy bears the burden of permanent loss of product and the large increase in unemployment, which may then continue even after the economy reaches the level of trend growth. Negative consequence of the crisis is the increase in structural, long-term unemployment. The problem of long-term unemployment in Slovakia existed before the crisis, but after 2009 the share of long-term unemployed has increased. Unemployed persons with increased duration of their unemployment lose their work habits, motivation and willingness to work. It is increasingly difficult for them to assert themselves in the labor market. The unemployment rate in Slovakia in 2009, increased to 12.1 percent and continued to grow in the next years. Unemployment or employment rate did not respond to the economic recovery in 2010 and 2011. By contrast, the unemployment rate in 2010 increased to 14.4 percent and in 2012 remained at the level 14 percent. As seen from the figure 11, at the beginning of the recession unemployment rate followed the same pattern as the GDP growth, they started to move in the opposite direction in the same period. However unemployment has not responded to economic recovery in the subsequent periods.

Figure 12 Unemployment Rate and GDP Growth (Percentage Change)



Source: Author's Computation. Data from Statistical Office of the Slovak Republic

Figure 13 Numbers of Unemployed and Long-Term Enemployed Persons (Thousand)

Source: Author's Computation. Data from Statistical Office of the Slovak Republic

3.5. Financial and Banking Channel

The financial sector in Slovakia was affected very slightly by the crisis. Its resilience to financial shocks is given by high solvency, availability of funding resources and conservative business model of financial institutions. According to National Bank of Slovakia (2009) Slovak banking sector has compared to most of the banking sector in the EU a higher capital endowment, profitability, credit quality of assets and long-term liquidity. Table below shows some banking sector indicators for Slovakia and median for these indicators for EU-27 countries. According to Deane et.al. (2013), Slovak banks are very well capitalized, equity ratio is almost 15 percent, which is more than requirements from the new standards of Basel III (that is 9 percent).

Table 6 Selected Banking Sector Indicators for Slovak Republic and EU-27

| Countries | Total profit* | Return on equity, % | Cost-To-Income, % | Loan to Deposit ratio, % | Bank capital to asset ratio, % | Bank nonperforming loans to total gross loans (%) |
|--------------|-------------------|---------------------|-------------------|--------------------------|--------------------------------|---|
| | % of total assets | 2011 | 2011 | 2012 | 2012 | 2012 |
| Slovakia | 1,40 | 11,1 | 49,5 | 89,6 | 11,0 | 5,3 |
| Median EU-27 | 0,3 | 4,2 | 55,8 | 123,2 | 8,4 | 9,0 |

*Total profit before tax from continuing operations, 2011

Source : World Development Indicators and Financial sector indicators (World Bank).

European Banking Federation: The New EBF Banking Sector Statistics Database 2012

The high capital position is reflected in the positive results of macrostress testing. These estimates confirm the robustness of banking sector against adverse developments in the real economy and the financial markets.

At the end of 2007, extreme risk aversion and lack of trust led to wider than normal spreads in US and European government bond markets. Slovak banks have one of the highest shares of Slovak government bonds on their balance sheets within the EU (National Bank of Slovakia, 2009). The situation in financial sector in Slovakia was therefore improved by the rise of domestic government bonds prices.

During the crisis, businesses, particularly the small and medium, were influenced by tightened lending standards by banks. Lending portfolio of the corporate sector was reduced by 3.3 percent. Lending to households also fell, in 2009 by 10.2 percent. The profitability of the banking sector at the end of 2009 fell by more than 50 percent. This was due to both the ongoing crisis but also the transition to a common currency, the euro. However, in 2011, banks already reported the highest cumulative profit for the last five years (National Bank of Slovakia, 2012).

Foreign direct investments represent an important source of economic growth and innovation activities in Slovakia. Global financial crisis has had a several negative impacts on the development of FDI. In general, global financial crisis has caused a decline in profits, reduction of access to financial resources, decline of opportunities, economic downturn in developed regions and suspension or cancellation of investment projects. In Slovakia, the flow of FDI was completely interrupted in recessionary year 2009, but in subsequent years, the upward trend resumed. Slovakia is a passive recipient of FDI, outward flows from Slovakia to foreign countries are extremely weak.

Table 7 Inward FDI Flows (US\$)

| Inward FDI flows | 2007 | 2008 | 2009 | 2010 |
|------------------|------|------|------|------|
| Slovakia | 4017 | 4868 | -6 | 1770 |

Source: UNCTAD STAT

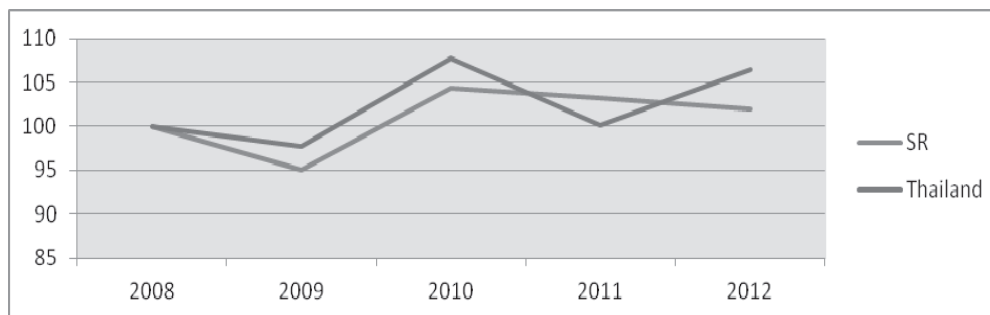
4. Comparative Analysis between Thailand and Slovak Republic

From the previous chapters we can identify some similarities between these two countries and their development during the recent years.

Both economies are extremely open and dependent on export to their major trading partners. Global crisis was transmitted to these countries through export channel by global trade, respectively decline in global trade. Year 2009 was characterized by decline in gross capital formation and decline in exports and imports. Both countries did have strong and healthy financial and banking systems, so the crisis did not have a significant impact on them.

In terms of GDP loss during the crisis, both encountered some decline in GDP. In Thailand, GDP growth declined in 2009 by 2.3 percent. During period 2000-2007 its average growth rate was around 5 percent. Slovak GDP decreased more deeply in 2009, by 4.9 percent, while average growth rate during 2000-2007 was 5.6 percent, which makes the difference of -10.5 percent. Recovery in Thailand was very strong, with 7.8 percent growth in 2010. In 2011 situation was highly affected by extensive floods, but year 2012 saw impressive growth again. In Slovakia, we saw a recovery in 2010 as well, but in subsequent years, the dynamics of this recovery has slowed down. The recovery was driven mostly by the foreign demand in 2011 and 2012. In Thailand, foreign demand was more volatile. Both countries already in 2010 managed to get above the pre-crisis level of real GDP.

Figure 14 Cumulative Impact of the Crisis on Real GDP of Slovak Republic (SR) and Thailand



Source: International Monetary Fund (GDP at Constant Price)

Gross domestic product measures the total production and income level of the economy. When we want to see how the crisis has affected people's lives, it is better to focus on indicators that measure the situation at the level of households and individuals. One such indicator is real household consumption expenditure per capita. According to the World Bank data (2013)¹⁰, the household expenditure per capita in Thailand fell by 1.2 percent in 2009, but the following year 2010, increased by 4.6 percent and in 2012, by 6.3 percent. Slovak consumption expenditure per capita in 2009 fell only slightly by 0.04 percent, but continued in decline. For 2010 decline was -2.7 percent. In 2011, growth rate was weak, in 2012 this indicator decreased by 0.7 percent, while in the period before the crisis (2000-2007), the average growth was 4.9 percent. In Thailand, the average growth rate in per capita consumption expenditure was only 3.6 percent.

Global crisis has caused a slight increase in unemployment rate in Thailand, but it was decreased in the next years and during 2012, the rate was below 1 percent. Slovakia experienced in 2009 increase in unemployment rate by 2.5 perc. points and almost the same increase in 2010 when it reached 14.4 percent. In 2012, the unemployment rate was still at the level of 14 percent. High unemployment is the main problem of the Slovak economy. Development of unemployment in Slovakia is significantly influenced by foreign demand but Thailand is the country with high degree of openness too. Explanation for the difference can be found in different structure of their labour markets. Thailand has a large share of informal sector and a high proportion of people working in agriculture. Unemployment rate therefore does not state true impact. According to National Statistical Office of Thailand (2013), the share of informal employment on total employment was 62.7 percent (of which being constituted 62 percent of agricultural employment) in 2012. This percentage has remained stable over the period 2007-2012. In 2009, the share of informal employment increased slightly (63.7 percent in 2008) but declined in subsequent years. The share of agricultural employment on total employment in 2012 was 42 percent.

It is difficult to find one source containing statistical data for both countries on measures such as underemployment or employment in informal sector. According to ILO (2012), persons in informal employment in 2010 represented 9,642,000, that is 42.3 percent of non-agricultural employment. In Slovakia it was 139,000 workers, that is 7.4 percent of non-agricultural

¹⁰ World bank Statistics : Indicator name : Household final consumption expenditure per capita growth (annual percent)

employment.¹¹ In the study of ILO (2012) informal employment was found to be negatively correlated with income per capita.

According to National Statistical Office of Thailand (2013), underemployment workers, available for additional work, represented 0.6 percent of the total employed persons.¹² Eurostat (2013) provides some statistical data on underemployment in Europe. According to this data 0.7 percent of active population were underemployed part time workers in 2008, in Slovakia. This percentage increased to 1.4 percent in 2012. European average was 3.1 percent in 2008 and 3.8 percent in 2012.¹³ But as we can see, there is a difference in definition, as Eurostat provides percentage of active population and Statistical Office of Thailand provides percentage of employed persons.

Monetary policy measures in Thailand during the crisis included a loosening of monetary policy, the provision of liquidity to financial markets and the banking sector, assistance to banks to manage the risk of introducing a scheme sponsored by the government loan guarantees for small businesses and encouraging banks to provide assistance in restructuring and rescheduling debt of consumers (Pongpattananom and Tansuwanarat, 2010). During the second half of 2007 and the first half of 2008 a key interest rate, 1-day repurchase rate, was 3.25 percent, in order to stimulate the economy after the political crisis. In August 2008, this rate was increased to 3.75 percent, due to rising inflation. In December 2008, in response to the global crisis interest rate has been sharply reduced to 2.75 percent and from April 2009 till June 2010 it was at the level of 1.25 percent in order to stimulate economy. From May 2013, key interest rate is 2.5 percent, which is certainly much higher than in advanced countries, such as US, Japan or Eurozone, where the interest rate is near 0 and there is no room for other monetary stimulus.

Slovakia is from January 2009 a member of Economic and Monetary Union, which means that monetary policy is no longer conducted autonomously by National bank of Slovakia, but is part

¹¹ Persons in informal employment (a job-based concept) represents the sum of informal jobs in formal enterprises, informal sector enterprises, and households producing goods for own consumption or hiring paid domestic workers

¹² Here the underemployed is defined as a person working less than 35 hours per week and available for additional work.

¹³ Here the underemployed part-time workers are persons aged 15-74 working part-time who wish to work additional hours and are available to do so. Part-time work is recorded as self-reported by individuals. Name of the indicator : Underemployed part-time workers, in percentage of active population. In Supplementary indicators to unemployment.

of a common monetary policy conducted by European Central Bank. ECB's interest rate was set at the level 4 percent from June 2007 till June 2008, then for the next three months it was increased by 0.25 perc. points. In late 2008, after the first signs of economic slowdown, ECB had to decrease its key interest rate. It went down gradually. In May, key interest rate reached 1 percent and it was held on this level till April 2011, when it was increased slightly. In 2013, because of persistent debt crisis, interest rate has been kept at the very low level 0.5 percent.

Governments conducted expansionary policies as well. Slovak government approved three stimulus packages, which were subsequently extended to certain other measures. In 2009, 282 million eur (0.4 percent of GDP) were approved for anti-crisis measures from the government budget. In 2010, the sum was 399 million eur (0.6 percent of GDP). Within these packages, measures aimed at various sectors of the economy. In Thailand, in 2009 the Government introduced the first stimulus package of 117 billion baht. The second stimulus package was approved by Thai parliament in the sum of 1.43 trillion baht. Major government measures in Slovakia and Thailand are summarized below

Both countries adopted several measures to tackle the crisis. The first stimulus packages consisted of measures focused on increasing demand and consumption in both countries. Some measures had the objective to increase the income of low or middle income class. In Slovakia, it was increase in tax allowance for PIT and increase of employee premiums. In Thailand government approved living allowances for low income class, seniors or village health volunteers and increased the years of free education to 15. In Slovakia, several measures to promote employment were adopted as this is one of the key issues. Another stimulus package concentrated more on long-term measures, such as public investments and infrastructure projects in both countries.

Both countries adopted measures to promote automotive industry as it is important industry in both countries.¹⁴ In Slovakia, it was the contribution for purchasing a new car while handing the old to the scrap yard. In Thailand, government provided first time car buyers excise tax rebate on the purchase of locally manufactured car.

¹⁴ According to International Organization of Motor Vehicle Manufacturers (2013) during the first 6 months of 2013 Thailand produced 575,835 cars (that means position number 13 among the world producers), Slovakia produced 515,071 cars (that means position number 15 among the world producers).

Table 5 Summary of Major Government Measures in Slovakia and Thailand

| SLOVAKIA | THAILAND |
|---|---|
| 1. <u>stimulus package.</u> | <u>SP1 – special package programme of government</u> |
| Adopted in november 2008 and actualized in december 2008. Measures implemented in 2009-2010. | Adopted in March 2009. Implementation 2009 |
| For 2009 from government budget 282 mil. eur | 117 bn. baht |
| Measures to increase demand and employment (short term effect): | Measures to increase income and promote consumption (short term effect) |
| <ul style="list-style-type: none"> • Increase of the tax allowance for PIT and increase of employee premiums.¹⁵ • Reduction in premium rates to reserve fund for self-employed mandatorily insured from 4,75% to 2% • Contribution to support the maintenance of employment (for employer that can not assign work to employees because of the serious operational reasons and provides employees the wage compensation in the amount of at least 60 percent. • Contributions for the creation of new jobs and contributions to the promotion of self-employment • Scrapping – financial contribution for the purchase of a new car while handing the old to the scrap yard where it is ecologically disposed.¹⁶ | <ul style="list-style-type: none"> 2000 baht living allowance for low income groups (that is below baht 15,000 per month) 500 living allowance for seniors 600 living allowance of village health volunteers, free 15 years of education- free tuition fees, books, uniforms and materials for 8.5 mil. students (increase of free education from 12 to 15 years) First car program¹⁷ small water development projects for farmers, river and canal development productivity improvement for unemployed – trainings tourism promotion measures tax measures – income tax deduction on new home purchase from 100,000 to 300,000 baht, increase of minimum corporate taxable income from 60,000 to 1 million baht per year. Other measures – support to prices of agriculture products and credit guarantees. |

¹⁵ Increase in the tax allowance will increase monthly income of employees by 9.35 eur (on condition that gross salary is lower than 1474 eur) and an increase in employee premium of 15.09 eur per month for taxpayers with income at minimum wage.

¹⁶ The condition was that the total price of the car does not exceed 25,000 euros including VAT. Vehicle had to be manufactured before 1999. Scrapping took place in two waves. In the first round of the scrapping (9.-25.3.2009), the subsidy was provided in two alternative amounts: 1,500 or 1,000 euros. In the second wave (6.-14.4.2009) maximum amount of subsidies was modified. In the first and second wave together 443,000 units of vehicles were scrapped.

¹⁷ Under the First Car Program, the Government provides first-time car and pick-up truck buyers no more than Bt100,000 excise tax rebate on the purchase of each locally manufactured car and pick-up truck on which a purchase contract has been made by the end of 2012. Eligible cars are those below Bt1 million and with engine capacity no more than 1500 cc. Pick-up trucks of any engine size below Bt1 million are eligible. Each vehicle is non-transferable for 5 years. The rebate will be given 1 year after the vehicle is registered with the Land Transport Department" Source : World Bank (2012).

| SLOVAKIA | THAILAND |
|---|---|
| 2. and 3. Stimulus package. | 2. stimulus package. |
| Adopted in February 2009. | Adopted in mid 2009. Implementation : 2009-2012 |
| For 2010 from government budget 399 mil. eur | 1,43 tn. baht (1,11 mld baht government projects and 321 bn. baht state-owned enterprise investment projects) |
| Measures : | Measures focused on long term economic development |
| <ul style="list-style-type: none"> • Absorption of EU funds • Realization of PPP projects for the construction of highways (1. and 2. Package) • Completion of 3. a 4. blocks of nuclear power plant Mochovce • Decreasing deadline for the refund of excess VAT from 60 days to 30 days. • Incentives for research and development carried out by businesses • Increase in capital of Eximbank – business support (pro-export projects, SMEs) | <ul style="list-style-type: none"> Public investments Infrastructure Public health facilities Investment loan for water resource management - allows the government to borrow at most Bt350 billion by June 2013 to finance infrastructure projects for water resource management |
| Measures in financial sector | Measures in financial sector |
| <ul style="list-style-type: none"> • Amendment to the Deposit Protection Act – introduced in november 2009, refund of unavailable deposit in full amount, without limit. (From december 2010 bank deposit are protected only up to 100,000 eur) • Stricter requirements for liquidity management of banks and branches of foreign banks. ¹⁸ | <ul style="list-style-type: none"> The Deposit Protection Agency (DPA) in august 2008 replaced the Bank of Thailand's Financial Institutions Development Fund, which has given a blanket guarantee on all deposits in all financial institutions since the 1997 financial crisis. ¹⁹ |

Source: Jitsuchon (2010), Chirathivat and Mallikamas (2011), World bank (2012), Ministry of Finance SR (2009a), and Karasz (2009)

¹⁸ During the crisis, there were concerns that parent banks will move funds from the peripheral branches in Central and Eastern Europe. In order to prevent this, the NBS introduced a minimum liquidity ratio for banks applying to all assets with a maturity of 30 days or less (Dean et al, 2013)

¹⁹ According to the new agency, in the first year, between August 11, 2008, and August 10, 2009, the depositors receive a blanket guarantee. In the second year, between August 11, 2009, and August 10, 2010, the depositors get a Bt100million guarantee. In the third year, between August 11, 2010, and August 10, 2011, depositors got a Bt50million guarantee. In the fourth year, between August 11, 2011, and August 10, 2012, depositors got a Bt10million guarantee. After that, from August 11, 2012, the depositors have a Bt1million guarantee each of combined accounts in a financial institution.

Analyses from Bank of Thailand by using SAM have shown that the SP1 could increase Thai GDP by 0.9 percent and contribute to the increase of employment by 0.4 percent. SP2 is a three year program. It is estimated that it could increase growth in 2010 by 1,5 percent, in 2011 by 1.2 percent and in 2012 by 1.1 percent (Sangsubhan and Wangcharoenrung, 2011). SP2 would help increase GDP by 1,3 percent per year (Chirathivat and Mallikamas, 2010). For SR, expansive fiscal impuls in 2009 was estimated at the level 2,4 percent GDP in 2009 and 1.9 percent in 2010 (Ministry of Finance, 2009b).

The estimated expenditure for SP2 from the government budget for 2009-2010 represented 2.23 percent of GDP, 4.2 percent in 2011 and 4.7 percent of GDP in 2012. Total cost of stimulus measures in SR in 2009 amounted to 1 462 million eur, which represented 2,3 percent of GDP, in 2010 the total cost were 579 million eur, representing 0.9 percent of GDP (Ministry of Finance, 2009a).

Economic stimulus resulted in an increase in budget deficit in SR. Since 2009, SR is in the excessive deficit procedure. Based on that, it is required to reduce the deficit below 3 percent in 2013. In 2012, the budget deficit has been reduced to 4.3 percent of GDP, or about 0,8 percentage points compared to 2011. The extent of this deficit reduction was more pronounced than the EU average. Government debt increased in 2012 by almost 9 percentage points to 52.1 percent of GDP. In addition to deficits, guarantees from participation in the ESM and ESFS have contributed to higher debt as well. Although the fiscal consolidation may act as a burden on economic growth, it is important and necessary for long-term fiscal stability of the economy.

Public debt in Slovakia increased mostly because of the global crisis. Before the crisis, Slovakia had a lower public debt to GDP than Thailand, but in 2009 debt increased by 7 perc. points. Thailand accumulated large debt during the Asian crisis and in subsequent years. In recent years government deficits have been considerably lower. Public debt to GDP ratio was in 2012 the same as in 2009 that is 45 percent of GDP.

It is going to be extremely difficult for Slovakia to fight high unemployment when the demand is low or unstable and there is no room for fiscal stimulus due to the need for fiscal consolidation.

Additional risks for the future arise from excessive orientation to the automotive industry and too much focus on European markets. Opportunities for both countries can be found in a shift from slow-growing European and advanced markets to emerging Asian markets.

5. Conclusion

This paper describes a comparative study on the impact of the global financial crisis on two countries, Thailand and Slovakia by aiming to define common characteristics and differences between both economies under the context of the global financial crisis and anti-crisis measures that were adopted in both countries. By having strong and healthy financial and banking system, global financial crisis was transmitted to both countries through export channels. There are, however a huge differences in their unemployment rates. Thailand is a country with one of the lowest unemployment rates in the world. Slovakia belongs to the countries with the highest. This can be partly explained by the different structure of their labor markets. Thailand has a high share of employment in the informal sector and a large proportion of the population employed in agriculture. For Slovakia, risks for the future arise from excessive orientation to the automotive industry and too much focus on European markets. Opportunities for both countries can be found in a shift from slow-growing European and advanced markets to emerging Asian markets.

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