MACROECONOMIC AND DEFENCE POLICY OF THE CZECH ECONOMY DURING 2009-2013

Vendula Hynková

Abstract

The aim of paper is to analyse using tools of monetary, fiscal and defence policy of the Czech Republic so as to alleviate consequences of ongoing recession, started in the United States, 2008. The first part of the paper is devoted to monetary policy and currency intervention of the Czech National Bank during the latest recession. Mainly the relationship between the setting the main monetary instrument and gross investment spending will be examined. The second part focuses on fiscal and defence policy of the Czech Government. Defence policy here is subordinated to fiscal policy and mostly the development of military spending during the chosen period will be demonstrated there. The third part consists of analysis of GDP and its components (i. e. final spending, investment spending and net export) during the recession. There will be also considered whether the Czech macroeconomic policy has been consistent and conforming when choosing specific macroeconomic tools.

Key words: recession, defence policy, fiscal policy, monetary policy

JEL Code: E52, E61, E62, H50, H62

Introduction: Macroeconomic Theory vs. Real Macroeconomic Policy

Up to now we know a lot about macroeconomic policies and economic schools and theories; we understand setting the goals of separate policies, we are able to examine the consequences of using the concrete tools of the policies, and we can also observe that in reality there are some distinctions between what the macroeconomic theory recommends and how the real macroeconomic policy is provided under specific conditions of the economy.

This paper will deal with the Czech macroeconomic policy during the recent recession started in United States in 2008 and the main emphasis will be put on monetary, fiscal and defence policy of the Czech Republic. In the text the character of these policies will be described and effects of main tools of the policies will be analysed.

The first part of the paper is devoted to the monetary policy of the Czech National Bank during the recent economic recession – the changes of the setting of main monetary instruments, the development of very important variable, i.e. gross investment, a comparison between macroeconomic theory and between practises of the Czech National Bank.

The second part will explore the insights into fiscal policy of the Czech Government – the setting of the tools, the development of state budget revenues and expenditures, the prevailing character of this policy, a comparison between macroeconomic theory and between practises of the Czech Government and defence policy (spending) as a consequence of the Czech Government´s decisions.

And the third part will interpret the development of GDP and its components – domestic consumption and government spending as a final spending, gross investment and net export and try to understand the relationship between the development of GDP and consequences of fiscal and monetary policy.

1 Monetary Policy and Currency Intervention of the Czech National Bank during 2009-2013

Monetary policy is the process by which the monetary authority (a central bank) controls the money supply, often targeting rates of interest for the purpose of promoting economic growth or slowing inflation. The character of monetary policy can be expansionary or contractionary, where an expansionary policy increases the total supply of money (by lowering the main interest rates), and contractionary policy reduces the money supply (by increasing interest rates). Expansionary monetary policy is traditionally used to try to combat unemployment in a recession by lowering interest rates and contractionary policy is usually intended to slow inflation.

1.1 Monetary Policy

The Czech National Bank is said to provide an independent monetary policy. The main objective of the Czech National Bank is to maintain price stability via the inflation targeting. The monetary policy decisions are based on the macroeconomic forecast. At the beginning of the global recession when world aggregate demand was decreasing, the central bank (the Bank Board) decided to provide expansionary macroeconomic policy. In 2008 the forecast was not optimistic in the whole Europe and thus the Czech central bank decided to help the economy. According the macroeconomic theory, expansionary monetary policy affects the gross investment (the purchase of capital goods) via the Keynesian transmission mechanism. The first stage of this mechanism is the appropriate setting of monetary policy instruments –

lowering the main interest rates. This policy will engender a change in the behaviour at the interbank market and then at the capital market where savings and investment are figuring. As a result, an increase of investment activity is expected. The expansion of investment will enhance aggregate demand and gross domestic product (GDP).

Table 1 shows the changes of setting of the main monetary instruments (2-week repo rate, discount rate and lombard rate) during the period 2008-2013. The main interest rates were lowered four times in 2008 and 2009, once in 2010 and three times in 2012 and the fastest decrease of the instrument can be observed at the turn of 2008 and 2009. There is no change of the monetary instruments in 2013, because the interest rates dropped to their technical minimum in November, 2012.

Tab. 1: The changes of the settings of the main monetary instruments during 2008-2013

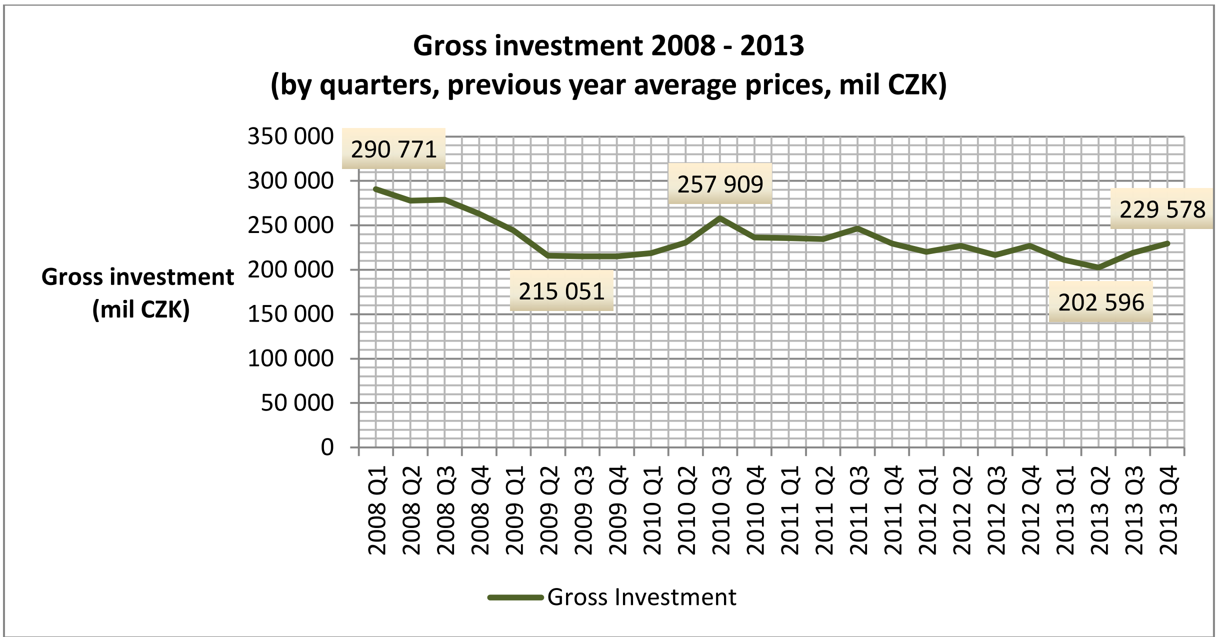
Change 2008-2013	2-W Repo rate (%)	Discount rate (%)	Lombard rate (%)
8th February 2008	3.75	2.75	4.75
8th August 2008	3.50	2.50	4.50
7th November 2008	**2.75**	**1.75**	**3.75**
18th December 2008	**2.25**	**1.25**	**3.25**
6th February 2009	**1.75**	**0.75**	**2.75**
11th May 2009	1.50	0.50	2.50
7th August 2009	1.25	0.25	2.25
17th December 2009	1.00	0.25	2.00
7th May 2010	0.75	0.25	1.75
29th June 2012	0.50	0.25	1.50
1st October 2012	0.25	0.10	0.75
2nd November 2012	0.05*	0.05*	0.25*

**current rates (valid in April 2014)*

Source: The Czech National Bank. Retrieved from: <http://www.cnb.cz/en/monetary_policy/instruments/index.html#history>. Note: Reserve requirements ratio of 2 % has not been changed since October 1999.

According the macroeconomic theory, the expansionary monetary policy should boost the investment activity. Now as been seen in Figure 1, the development of investment activity can be analysed and to a certain extent the effectiveness of the monetary policy. First, the numbers of gross investment in the first quarters in 2008 and the third quarter 2013 can be compared. In 2008 it was 290 771 mil Czech Crowns and in 2013 it was 229 578 mil Czech Crowns. At the beginning of the year 2014 the Czech economy is still evincing the lower rate of investment in comparison with the situation before the economic recession affecting the Czech economy. Although the main interest rates were lowered eight times in 2008 and 2009, the expansionary monetary policy started to be effective in the first quarter of 2010 (after the decreasing trend and stagnation during 2009). This increase turned out to be only temporary till the third quarter of 2010, there was 257 909 mil Czech Crowns of gross investment. And then, negative trend with ups and downs of investment activity prevailed and ended in the second quarter of 2013 with the lowest 202 596 mil. Czech Crowns. Then there is a positive trend in investment activity started in the half of 2013. Also in 2014 we can expect an increase in gross investment and then in gross domestic product.

Fig. 1: Gross investment during 2008-2013 (mil CZK)



Source: The Czech Statistical Office, the Ministry of Finance of the Czech Republic.

In spite of a considerable drop in investment spending in 2009, the monetary policy of the Czech National bank participated on an interrupted increase in investment spending (mainly in 2010 and 2013) and this policy is in compliance with the macroeconomic theory (i. e. choosing the expansionary monetary policy during a recession). And we have to take into account that investment spending is also related to firm´s expected returns (marginal productivity of capital) and firm´s expectation about the future.

1.2 Currency Intervention

A central bank can provide a currency intervention (an exchange rate intervention, a foreign exchange market intervention) that means purchase or the sale of the currency on the exchange market in order to affect the value of the domestic currency. Because the Czech National Bank could not lower the technical zero interest rates and monetary policy had probably lost its effectiveness: *"The monetary policy targets the short rates; however, during zero interest rate policy (ZIRP), the short end of the yield curve cannot serve as a policy instrument"* (Ullah, W., Matsuda, Y., Tsukuda, Y., 2013).

The board of the Czech National Bank at its meeting in November 2013, for the first time since 2002, stepped in to devaluate the Czech Crown, against the Euro. The Czech central bank increased foreign exchange reserves by printing new Czech Crowns to buy foreign currency and weaken domestic currency. Since March 2010 the exchange rate had ranged between 24 and 26 Czech Crowns per Euro and after the intervention the exchange rate raised to 27 Czech Crowns per Euro. The central bank was said to sell about 200 billion newly-issued Czech Crowns during its foreign exchange rate interventions, and increased its foreign exchange reserves to €39.49 billion, from the €34.61 billion in reserves at the end of October 2013. The target of Czech central bank 27 Czech Crowns has been fulfilled and is expected by the Czech National Bank to sustain till the beginning of 2015.[1] There were two main reasons for the intervention: to help the weak domestic economy and to avoid deflation, thus the Czech central bank was not afraid of inflation. According to the central bank, the weaken Czech Crowns serves as a long term tool to stave of deflation and return inflation rate to its target range (i. g. 2% inflation rate with a zone of +-1%).[2]

This intervention seems to be a problematic topic. The positive aspect of the devaluated Czech currency has been seen in higher competitiveness of exports – in attracting foreigner´s purchases of consumer or capital goods. Then an increase in aggregate demand, GDP and employment could be expected (after the adaptation of Czech exporters). On the other hand, prices of imported goods have risen, both for firms and households that buy imported goods. Mainly employers and trade unions have criticised the intervention, because of higher costs (such as of fuel and raw materials). Some economists have stressed the unfairness of this step (a devaluation /depreciation of exchange rate favours only exporters), they criticise its short term influencing and possible volatility of exchange rate. To evaluate the currency intervention we have to wait about 2-3 years and then we will be able to analyse the effect on net export, because exporters need some time to increase their production.

[1] Source: *The Czech National Bank. Retrieved from: http://www.cnb.cz/en/monetary_policy/weakening_koruna/index.html.*

[2] Source: *The Czech Natinal Bank. Retrieved from: http://www.cnb.cz/en/monetary_policy/inflation_targeting.html.*

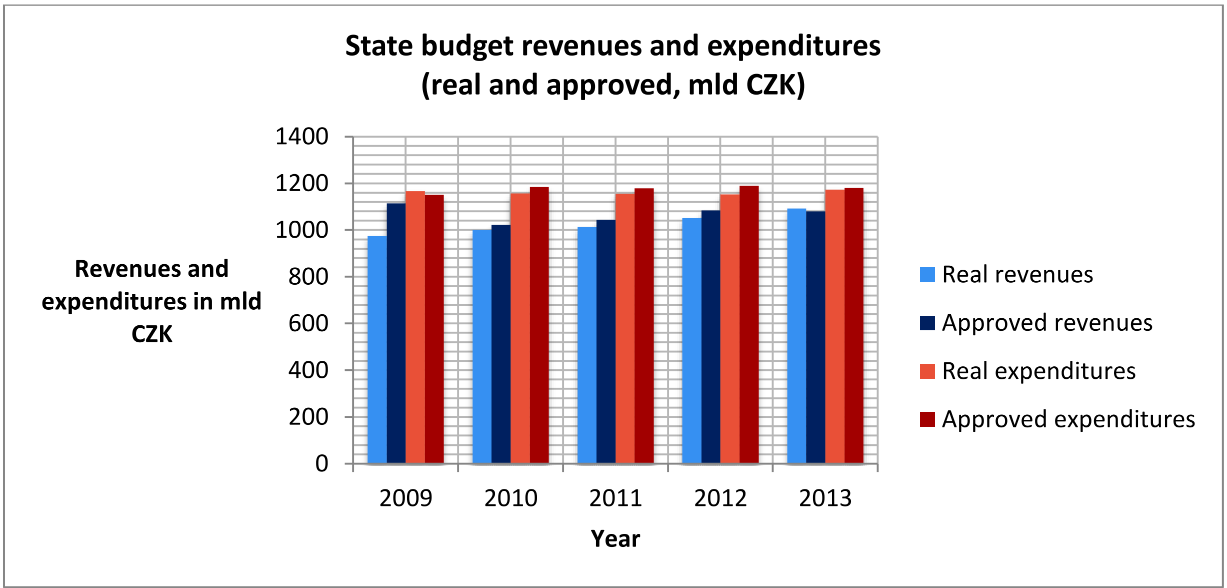
2 Fiscal and Defence Policy of the Czech Government during 2009-2013

Fiscal policy is the use of government revenue collection (taxation) and expenditure (spending) to influence the macroeconomic variables – GDP and price level. It involves the government changing the levels of taxation and government spending in order to influence aggregate demand or aggregate supply and thereby GDP and rate of unemployment. Defence policy is subordinated to fiscal policy and here it means how the quantity demanded of defence and defence budget is formed and what does it mean for defence sector.

2.1 Fiscal Policy

During the recession the Government of the Czech Republic has been providing largely restrictive fiscal policy. The Czech Coalition Government decided to increase tax burden and reduce government spending. The main goal was to decrease government debt and start it with the restraint of budget deficits. As can be seen in Figure 2, we can compare approved and real state budget revenues and expenditures. In 2009 there was a serious drop in real state budget revenues, mainly because of lowering aggregate income taxes. According to Czech Statistical Office, the state budget deficit in 2009 went up to 5.8 % of GDP (from 2.2 % in 2008). The deficit was deepened by lower real state budget revenues and higher state budget expenditures in comparison with the approved ones. Then state budget revenues have been rising gradually until now. The situation was stabilized in 2013 when real figures did not diverge so much from approved ones and state budget deficit descended to 2.7 % of GDP. The development of real state budget deficits and government debt can be seen in Table 2. Nevertheless, government spending was managed to decrease very slightly during the period and not so rapidly for the purpose of reducing debt. Thus, mainly due to mandatory expenditures, the Czech economy has to accept budget deficits and it is still getting into debt. The situation of every indebted economy has been worsened due to the consequences of recent global economic recession.

Fig. 2: State Budget Revenues and Expenditures during 2009-2013 (mld/billion CZK)



Source: Ministry of Finance of the Czech Republic.

Moreover, the fiscal restriction is said to have a multiplier effect on aggregate demand and then on real GDP. The immediate effect of the decrease in state expenditures is lower demand and this means the occurring output gap, raising rate of unemployment, higher state benefits and lower profits for private firms. As the workers get lower earnings and firm owners get lower profits, they respond to this decrease in profits and salaries by reduction of their own spending on consumer goods and services. As a result, the government restriction lowers the demand for products of many other firms in the economy. Some economic papers deal with problems with measures of fiscal multipliers (such as a paper written by Perry, N.; Vernengo, M., 2013: *„The rehabilitation of fiscal policy is seen as a necessary step in the reinterpretation of the positive role of New Deal policies for the recovery*).

Tab. 2: Real state budget deficits and Government debt in the Czech economy during 2008-2013

Variable/Year	2008	**2009**	**2010**	**2011**	**2012**	**2013**
Real state budget deficit (mld/billion CZK)	-85.9	**-218.3**	**-179.1**	**-122.3**	**-170.4**	**-106.6**
State budget deficit as a share of GDP (%)	-2.2	**-5.8**	**-4.7**	**-3.2**	**-4.4**	**-2.7**

Government debt (mld/billion CZK)	1,104.3	**1,286.0**	**1,454.4**	**1,583.3**	**1,775.4**	**1,820.1**
Government debt as a share of GDP (%)	28.7	**34.6**	**38.4**	**41.4**	**46.2**	**46.9**

Source: the Czech Statistical Office; the Ministry of Finance of the Czech Republic.

Another serious restriction lies in increasing Value Added Tax (VAT). Table 3 demonstrates an intensive rise in both, basic VAT rate and reduced VAT rate during the period 2008-2013. This measurement reduces consumer spending and real incomes, because of higher prices of goods and services.

Tab. 3: Changes in VAT setting during 2008-2013

Period	**Basic VAT rate %**	**Reduced VAT rate %**
January, 2008 – December, 2009	19	9
January, 2010 – December, 2011	20	10
January, 2012 – December, 2012	20	14
Since January, 2013	21	15

Source of data: Ministry of Finance of the Czech Republic.

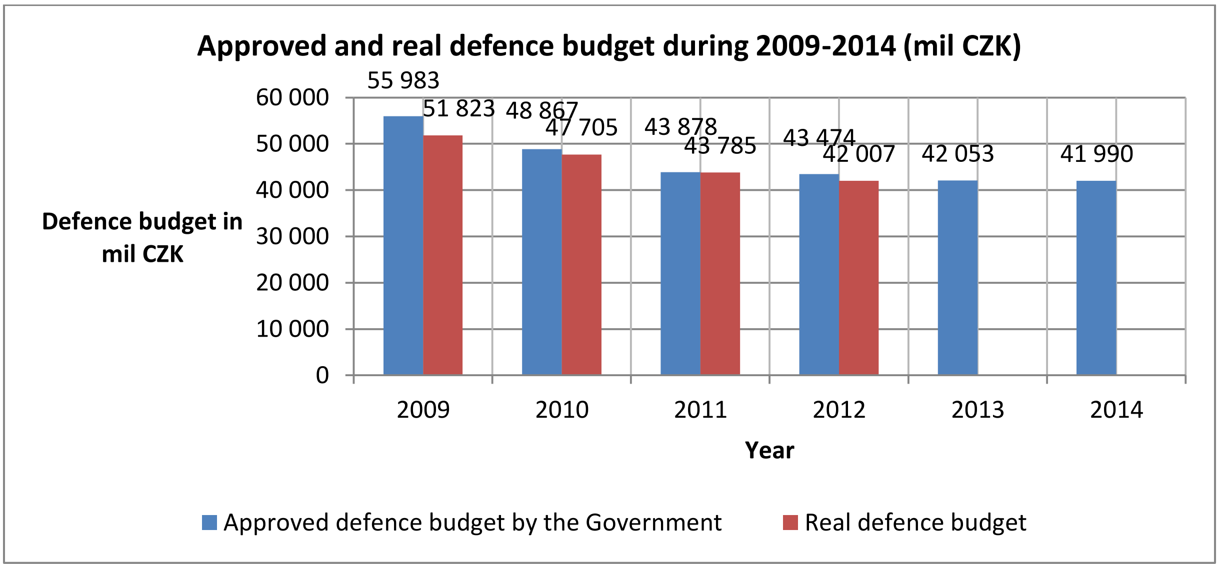
In contrast, The Czech Government worried about the development of real gross domestic product during the recession and decided to help the economy via some impulses, such as "cash for clunkers" in 2009 (designed to support auto sales and automobile factories that seems to be a problematic topic for economists and policymakers) or "kurzarbeit" in 2012 (short-time working in which companies enter into an agreement to avoid laying off any of their employees by instead reducing the working hours of all or most of their employees, with the government making up some of their lost income).

To make a conclusion, the prevailing character of the Czech fiscal policy seems to be restrictive and it is not in compliance with the macroeconomic theory (i. e. choosing an expansionary fiscal policy during a recession). The reason lies in solving troubles with the government debt and cumulative state budget deficits. The Maastricht criteria seem to be week arrangement and many economists call for strict measures. German economist A. Auerbach stressed this problem: *"A standard argument for having budget rules that allow flexibility in times of recession is that otherwise governments will be forced into contractionary fiscal measures when deficits rise as a consequence of falling revenues and growing expenditures"* (Auerbach, A., 2013). According to document for International Monetary Fund called "Fiscal Policy for the Crisis" the Government should consider all types of fiscal stimulus and: *"Looking at the content of the fiscal package, in the current circumstances, spending increases, and targeting tax cuts and transfers, are likely to have the highest multipliers."* (Spilimbergo, A., Symansky, S., Blanchard, O., & Cottarelli, C., 2009).

2.2 Defence Policy

The defence policy of Czech Republic is subordinate to fiscal policy when deciding about financial framework for the Ministry of Defence. But there are also obligations related to the defence policy of European Union and the NATO. Figure 3 shows the development real defence budget during 2009-2012 and approved (passed) defence budget by the Czech Government during 2009-2014.

Fig. 3: Approved and Real Defence Budget during 2009-2014 (mil CZK)



Source of data: Ministry of Finance of the Czech Republic.

As can be seen, there is a significant decline from 55,983 mil Czech Crowns for defence in 2009 to 41,990 mil Czech Crowns in 2014 (this is a fall of 13, 993 mil). And in figure 4 we can see that also defence expenditures as a share of GDP dropped considerably from 1.43 % in 2009 to 1.08 % in 2013 and 2014.[3]

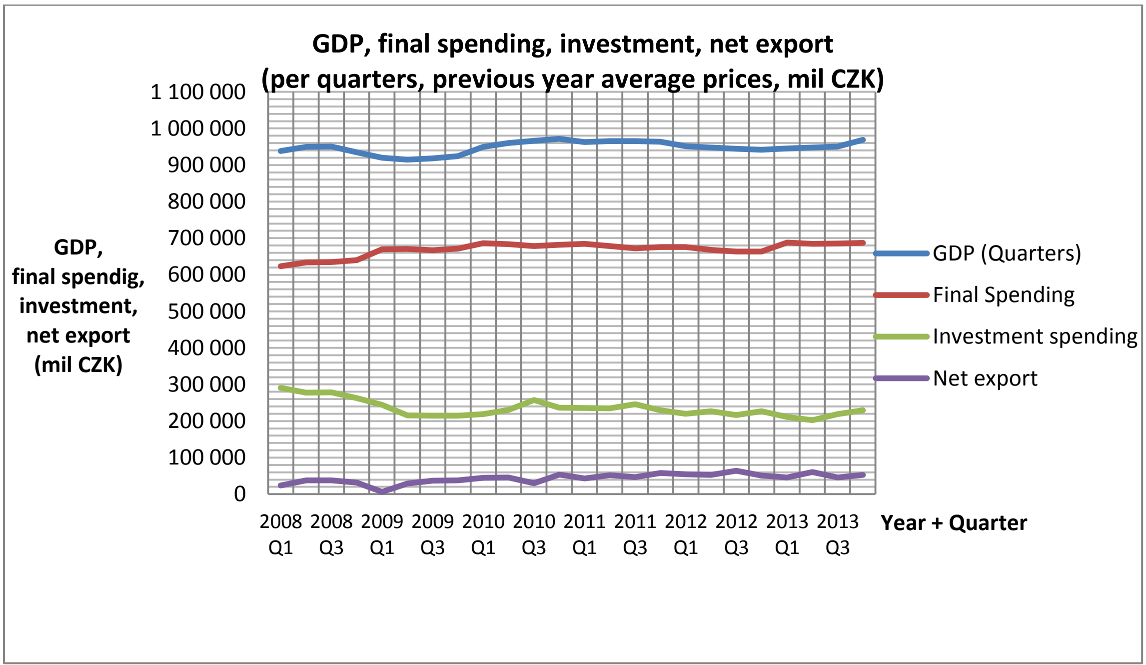
According to the NATO commitment, the Czech Republic and the rest of European member states should maintain the 2 % GDP defence spending. This non-fulfilment of the commitment causes a difficulty in the NATO´s defence policy.

3 The development of GDP, Final Spending, Gross Investment and Net Export during 2008-2013 in the Czech Economy

[3] Source: Defence expenditures as a share of GDP. Retrieved from http://www.army.cz.

Recent economic recession affected most European countries by falling their real GDP, consumption, government spending or exports. Figure 4 presents data from the Czech Statistical Office related to the GDP, final spending (consumption and government spending), gross investment (netto and replacement) and net export (export – import). The quarter statistics seem to be more accurate and we can observe both, the synchronised or inverse development of the indicators. In 2008 gross investment was decreasing, net export started to fall in the fourth quarter, but final spending was rising and GDP started to decline in the third quarter. The Czech economy was affected by the recession significantly in 2009 when gross investment fell to the second minimum of the period, and there is also a drop of net export. Final spending and gross investment remained almost constant from the second quarter, but GDP decreased to its minimum during this period. In 2010 we can observe better situation in terms of increasing GDP and gross investment (the main interest rates of the Czech national bank were lowered more quickly in 2008 and 2009).

Fig. 4: GDP, final spending, investment and net export (per quarters, mil CZK)



Source of data: The Czech Statistical Office. Retrieved from http://www.czso.cz/csu/redakce.nsf/i/hdp_cr.

Nevertheless, another decline in investment and GDP followed this recovery. Since the half of 2013 GDP have been stimulated by the increase of investment spending. When the Czech central bank decided to provide the currency intervention (November, 2013), the balance of exports and imports had been positive and stabilized and gross investment had started to rise.

Conclusion

The main problem of the Czech macroeconomic policy lies in its inconsistency. Whereby the Czech monetary policy has been combating unemployment and trying to help the economy by increasing aggregate demand and GDP, the fiscal policy of the Czech Government was predominantly oriented to decrease government debt by increasing taxation and lowering government purchases (aggregate demand and supply have been lowered), using the restrictive type of macroeconomic policy. Many economists and policymakers call for a greater cooperation or compliance of both policies.

"But changing policy interaction and greater cooperation between fiscal and monetary authorities have been an inevitable aspect of effective policy initiatives to meet our macroeconomic objectives in the current financial and economic crises."(D. L. Kohn, 2009).

Whereby the character of the Czech monetary policy has been in compliance with the macroeconomic theory, the total character of the Czech fiscal policy has been not.

Moreover, the fiscal restriction can bring a serious problem for the Alliance and European defence policy and it will probably evoke greater demand of defence in the future.

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Contact

Ing. Vendula Hynková, Ph.D.
University of Defence
Kounicova 65, 612 00, Brno
E-mail: Vendula.Hynkova@unob.cz