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IS THE FISCAL POLICY OF THE CZECH REPUBLIC PRO-CYCLICAL?

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Abstract

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The main goal of this paper is to analyse whether the fiscal policy of the Czech Republic is anti-cyclical. This analysis is carried out through decomposing the government's balance into its cyclical and structural part. The first differences of the structural part are then put in relation to the output gap to determine whether the fiscal policy is pro- or anti-cyclical. Moreover, the correlation of government expenditures and revenues with the business cycle is also subject of our analysis. We also examine whether the fiscal rules which the Czech Republic would have to adhere to once it enters the euro area limit fiscal policy as a stabilizing mechanism.
The paper concludes that the fiscal policy in the Czech Republic was for the most part rather of a random character than anti-cyclical during the examined period 1998–2013. This conclusion has two implications. Firstly, there is still room for improvement in fully and consistently utilizing fiscal policy to stabilise the Czech economy throughout economic cycles. Secondly, fiscal rules would not limit the Czech government to practice anti-cyclical fiscal policy if they have been implemented since 1998.

Keywords: fiscal policy, discretionary fiscal policy, government, structural primary balance, semi elasticity

INTRODUCTION

Having the Czech Republic joined the second stage of the Economic and Monetary Union of the European Union, the final stage in this integration process is to join the euro area. Adapting euro inherently involves disposing of discretional monetary policy in favour of the European Central Bank (ECB). Therefore it is of paramount importance to a possible entrant country to have other adjusting mechanisms in cases of from the entrant's perspective unfavourable ECB's monetary policy. The primary mechanisms are the flexibility of the labour market and fiscal policy, see e.g. Mandel, Tomšík (2009). This paper is focused on the functionality of the later one. Even though fiscal policy as a stabilizing mechanism is to some degree crippled in a small open economy, which is the case of the Czech Republic, it should in principle dampen economic fluctuations by accumulating surpluses of the government budgets in economic upturns and utilizing them in economic downturns.

The main goal of this paper is to analyse whether the fiscal policy of the Czech Republic is anti-cyclical and thus can be considered as a stabilizing mechanism which helps to stabilise the Czech economy throughout economic cycles. We also examine whether the fiscal rules which the Czech Republic would have to adhere to once it enters the euro area limit fiscal policy as a stabilizing mechanism. The paper does not discuss the efficiency and legitimacy of the respective fiscal policies. We set our attention to determine the form of the fiscal policy during the years 1998–2013.

A similar analysis of the cyclicity of discretionary fiscal policy have been carried out by Gnip (2011), who focuses on Croatia, as well as Málek (2011) and Czech National Bank (2012), who both examine the Czech Republic. Another study was conducted by the Ministry of Finance of the Slovak Republic (2007) for the Convergence Programme for the years 2007–2010. The contribution of this paper is to extend a current methodology and apply

it while determining the cyclicity of fiscal policy in the Czech Republic.

Determining the Form of Fiscal Policy

For the purposes of the analysis, we divided the tools of fiscal policy into two big groups: discretionary fiscal policy and built-in automatic stabilizers. Built-in automatic stabilizers are mechanisms that automatically tend to dampen economic cycle fluctuations without direct government interventions. These are mainly included in the revenues side of the government budget and take the form of various taxations. On the contrary, discretionary fiscal policies are the interventions in the economy via deliberate manipulations of government revenues and expenditures to promote macroeconomic goals. While built-in automatic stabilizers are by definition anti-cyclical, the cyclicity of discretionary fiscal policy is determined by the competence of the government. Thus, in order to determine the form of fiscal policy, we focused on the discretionary fiscal policy.

Structural Primary Balance

We quantified discretionary fiscal policy by the first differences of the structural primary balance. The structural primary balance is calculated according to Tab. I. The primary balance is the actual balance adjusted by debt service cost as the government cannot directly influence these expenditures in the current period. The primary balance then includes the built-in automatic stabilizers which are caused by the fluctuations of the real GDP around its potential. These cyclical effects have to be filtered out to finally reach the structural primary balance.

To filter out the cyclical effect of economic cycle fluctuations, we used the semi elasticity of the primary balance of the government's budget. Semi elasticity in principle gives the percentage change in the primary balance to GDP ratio in response to a one percent divergence of real GDP from its potential (ceteris paribus, i.e. holding constant all the other determinants of the primary balance). More formally, see e.g. Mourre *et al.* (2013):

$$\text{semi elasticity} = \frac{\mathrm{d}\left(\frac{\text{primary balance}}{\text{GDP}}\right)}{\mathrm{d}(\text{output gap})} \times \text{GDP}.$$

Given the semi elasticity, we can adjust the primary balance as follows:

$$\frac{\text{structural primary balance}}{\text{potential GDP}} = \\ = \frac{\text{primary balance}}{\text{real GDP}} - \left(\text{semi elasticity} \times \frac{\text{output gap}}{\text{potential GDP}}\right), \quad (1)$$

where

$$\text{output gap} = \text{real GDP} - \text{potentialGDP},$$

$$\text{semi elasticity} = 0.39.$$

Equation (1) says that in order to calculate the structural primary balance, the primary balance must be decreased by additional tax revenues and smaller unemployment benefits due to positive output gap (i.e. economy working above its potential). Vice versa, the economic recession decreases the primary balance by the amount of the excessive spending on unemployment benefits and lower tax revenues. We need to add this sum back to the primary balance to obtain structural primary balance.

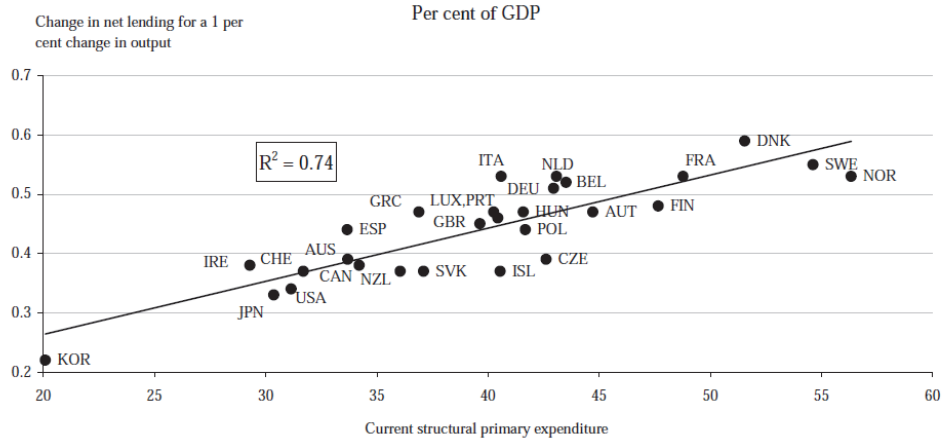
We assumed that the semi elasticity is at the constant level of 0.39 for the whole examined period. The assumption that the semi elasticity reasonably oscillates around 0.39 can be supported by the reference from Girouard and André (2005), where the semi elasticity for the Czech Republic is estimated at 0.38 for 1996 and 0.39 for 2000 and 2003. A similar value, 0.35 for the period 1994–2000, is listed in Bezděk *et al.* (2003). Comparable values may be found in Mourre *et al.* (2013) as well. The fact that the semi elasticity is in relatively strong positive correlation with the share of the government expenditure on domestic output (Fig. 1) and the stability of this share in the Czech Republic over time imply the stability of the semi elasticity.

The estimations of the primary structural deficits to GDP are presented in Tab. II. The data of the real GDPs and the output gaps were collected from Eurostat and the OECD Economic Outlook, respectively. All the partial calculations can be found in the annex of this paper.

I: *Balance of the government's*[1] *budget*

+ Total government revenues – Total government expenditures
Actual balance
+ Debt service cost
Primary Balance
+/– Cyclical effect of the economic cycle fluctuation
Structural primary balance

1 In our analysis, by *government* we mean general government, which according to the ESA95 (2013) definition (paragraph 2.68) includes "*all institutional units which are other non-market producers whose output is intended for individual and collective consumption, and mainly financed by compulsory payments made by units belonging to other sectors, and/or all institutional units principally engaged in the redistribution of national income and wealth.*"



1: *The relationship between the semi elasticity and the share of government expenditure in domestic output*
Source: Girouard and André (2005)

II: *The overview of the deficits of the government's budget and its components to GDP*

Year	Primary deficit to GDP in % (1)	Estimation of cyclical component of the primary deficit in % (2)	Estimation of structural component of the primary deficit in % (3)
1998	–3.72%	–0.73%	–2.98%
1999	–2.63%	–1.07%	–1.56%
2000	–2.83%	–0.58%	–2.25%
2001	–4.62%	–0.67%	–3.95%
2002	–5.38%	–1.27%	–4.11%
2003	–5.64%	–1.29%	–4.35%
2004	–1.75%	–0.97%	–0.78%
2005	–2.15%	0.11%	–2.26%
2006	–1.31%	1.42%	–2.73%
2007	0.36%	2.37%	–2.01%
2008	–1.18%	2.44%	–3.62%
2009	–4.52%	–0.24%	–4.28%
2010	–3.33%	0.09%	–3.42%
2011	–1.82%	0.24%	–2.06%
2012	–2.73%	–0.62%	–2.11%
2013	–0.06%	–1.68%	1.62%

Source: authors' calculation

The following information can be inferred from Tab. II:

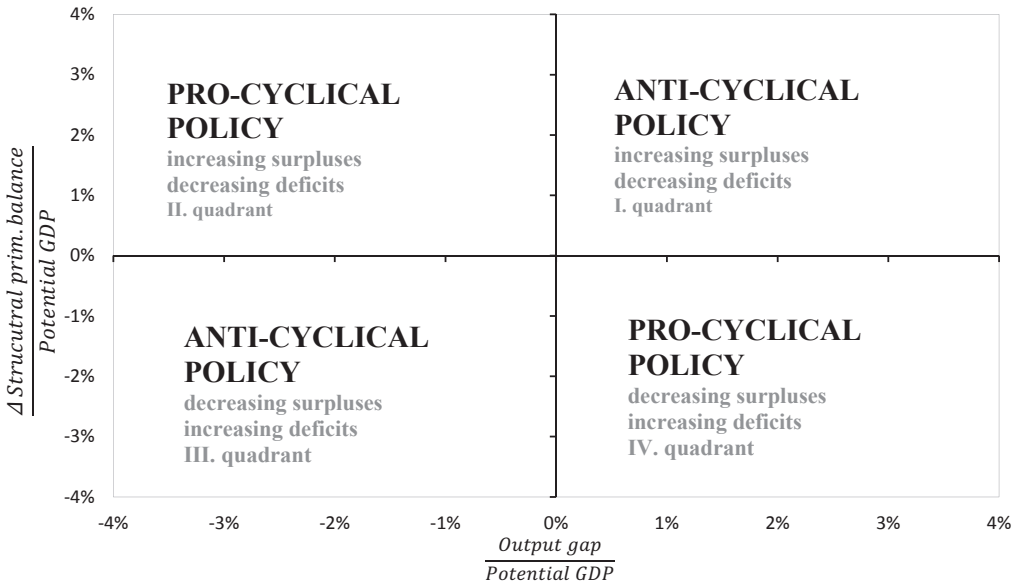
- The structural balance was in deficit throughout 1998–2012, no matter whether the government was right or left-wing orientated. Moreover, the structural deficits of 2005–2008 were notably masked by the positive cyclical component of the primary balance. For example, in 2007 the structural deficit equalled to –2%, but due to the positive output gap the primary deficit was positive 0.36%, incidentally the only positive primary deficit in the observed period. This tells us that the government did not take the advantage of the sound economic situation during 2005–2008 to accumulate surpluses for the bad times, which came later on with the outburst of the financial crisis.
- The primary balance breakdown also displays the fact that the government had a greater impact on the deficit of the primary balance than the latest financial crisis itself as the primary deficits were predominantly made up of the structural deficits.
- The right-wing orientated political parties built their campaign on promoting fiscal responsibility before the elections to the lower house of the Czech parliament in 2010. Moreover, they claimed if we were not fiscal responsible, we might as well end up in the situation of so called "Greek bankruptcy". Such an aggressive campaign could have been one of the factors which helped the two major right-wing parties win the elections and form the government for 2010–2013. Though the fiscal effort of this government is evident, can we

consider it as fiscal responsible since its overall balances were still in deficits?

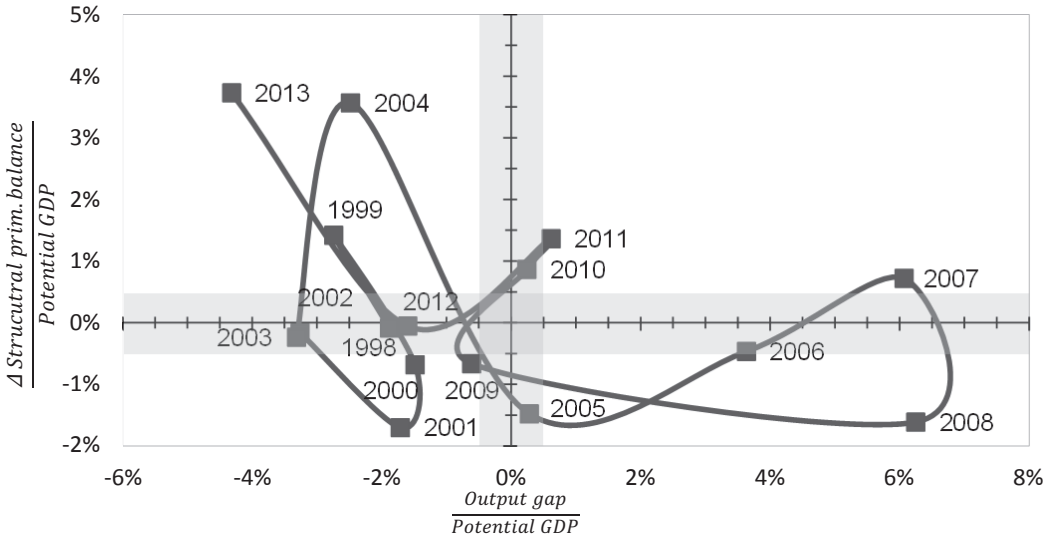
Determination of Policy Using Phase Diagram

Having estimated the discretional component of the fiscal policy, the next step is to define the cyclicity of the fiscal policy. The following approach of determining the fiscal cyclicity is adapted from Deroose, Larch, Schaechter (2008). Pro-cyclical fiscal policy is defined as the policy during which the government either increases the structural primary balance while the real product is under its potential (II. quadrant of Fig. 2) or decreases the structural primary balance while the real product is above its potential (IV. quadrant). On the contrary, anti-cyclical policy is characterised by either decreasing the balance when the real product is under its potential (III. quadrant) or increasing the balance in times of positive output gap (I. quadrant). The results of our observations are summarised in Fig. 3.

Fig. 3 shows that discretional fiscal policy was anti-cyclical in 1998, 2000, 2001, 2002, 2003, 2007, 2009, 2010, 2011 and 2012 and pro-cyclical in the remaining years 1999, 2004, 2005, 2006, 2008, 2013. Needless to say, our ex-post assessment of the fiscal policy is rather strict. The government does not have all the necessary information available when intervening into the economy via deciding its revenues and expenditures. Even if it



2: *Defining pro/anti-cyclical fiscal policy in phase diagram*
Source: modified from Deroose, Larch, Schaechter (2008)



3: *Observations of the Czech fiscal policy in phase diagram*
Source: authors' calculation

had, its interventions would be time-lagged. But since the government makes these decisions, it is responsible for them and thus the strictness is in place.

Due to the sensitivity of the calculations of the output gap and the semi elasticity (both values are estimates), we extended the model from Deroose, Larch, Schaechter (2008) by excluding the observations close to the horizontal and vertical axes. We excluded observations within ±0.5% from each axis (the grey cross in Fig. 3) for two reasons. Firstly, excluding observations in the area of ±0.5% near each axis results in better accuracy – the chance of error, i.e. marking pro-cyclical policy anti-cyclical and vice versa, is lowered. Supposing the correct estimation of the semi elasticity, the observations outside the grey cross would shift to the neighbouring quadrant only if the output gap was substantially misestimated. Secondly, the exclusion also indicates that we include only distinctively pro-cyclical or anti-cyclical fiscal policies in our analysis. When the economy works at its potential (the grey area around the vertical axis), the substantial changes of structural primary balance do not tell us anything about the cyclicity of the fiscal policy. The grey area around the horizontal axis then describes the situations when there might be a big output gap, however the changes of the structural primary balance are small and thus do not give evidence of the cyclicity.

So after the exclusion, the number of anti-cyclical fiscal policies accounts for 5 (56%) out of 9 during the analysed period. The rest 4 are pro-cyclical. To confront our results, we compared them with the ones of the Czech National Bank (2012), see Tab. III. The results differ in 2011, which we ascribe to the different estimation of the output gap. When the CNB carried out their analysis in 2012, it worked with the negative output gap, while we worked with the revised estimation of the positive output gap from 2014. The different result might as well be down to a different methodology used for cyclically adjusting the government's deficit or different criteria for determining the cyclicity of fiscal policy.

Fig. 3 also well describes the time development of the structural deficit and fiscal policies. While the observations under the horizontal axis imply the deepening of the structural deficits and fiscal expansions, the observations above the horizontal axis imply improving structural balances and fiscal restrictions. According to Keynesian economics, see e.g. Newman (1998), the ideal walk on Fig. 2 should be from I. and III. quadrant. Once the fiscal policy ends up in quadrant III. due to an economic downturn, it should then return to quadrant I. when the economy recovers to decrease deficits. Thus, the observations should ideally fill only quadrants I. and III. Such an ideal situation would inherently involve the oscillation of the government debt or savings around zero. As it can be seen from Fig. 3, the Czech government has been unsuccessful in conducting a proper return walk to quadrant I, failing thus to accumulate proper surpluses.

III: *Result comparison with Czech National Bank (CNB)*

Year	Our results before exclusion	Our results after exclusion	CNB
1998	ANTI	excluded	x
1999	PRO	PRO	x
2000	ANTI	ANTI	x
2001	ANTI	ANTI	ANTI
2002	ANTI	excluded	PRO
2003	ANTI	excluded	ANTI
2004	PRO	PRO	PRO
2005	PRO	excluded	PRO
2006	PRO	excluded	PRO
2007	ANTI	ANTI	ANTI
2008	PRO	PRO	PRO
2009	ANTI	ANTI	ANTI
2010	ANTI	excluded	PRO
2011	**ANTI**	**ANTI**	**PRO**
2012	ANTI	excluded	x
2013	PRO	PRO	x

Source: Czech National Bank (2012)

Decomposition of Fiscal Impulses

We took advantage of the process of adjusting the balance to GDP ratio using the semi elasticity and calculated potential revenues and potential expenditures as percentage of potential GDP. By potential revenues/expenditures we understand revenues/expenditures that would be observed if real GDP was ceteris paribus equal to potential GDP. To calculate these, we used the semi elasticity of revenues (ser) equal to –0.06 and the semi elasticity of expenditures (seg) equal to –0.45 from Mourre *et al.* (2013), which are used to calculate semi elasticity of overall balance using the following simple formula:

$$\text{semi elasticity} = \text{ser} - \text{seg}.$$

We assumed, as previously, these numbers to be valid throughout the whole observed period. Thus we can adjust equation (1):

$$\frac{\text{struct. prim. balance}}{\text{potential GDP}} = \frac{\text{revenues}}{\text{real GDP}} - \text{ser} \times \frac{\text{output gap}}{\text{potential GDP}} - \left(\frac{\text{expenditures}}{\text{real GDP}} - \text{seg} \times \frac{\text{output gap}}{\text{potential GDP}} \right) + \frac{\text{debt service}}{\text{potential GDP}},$$

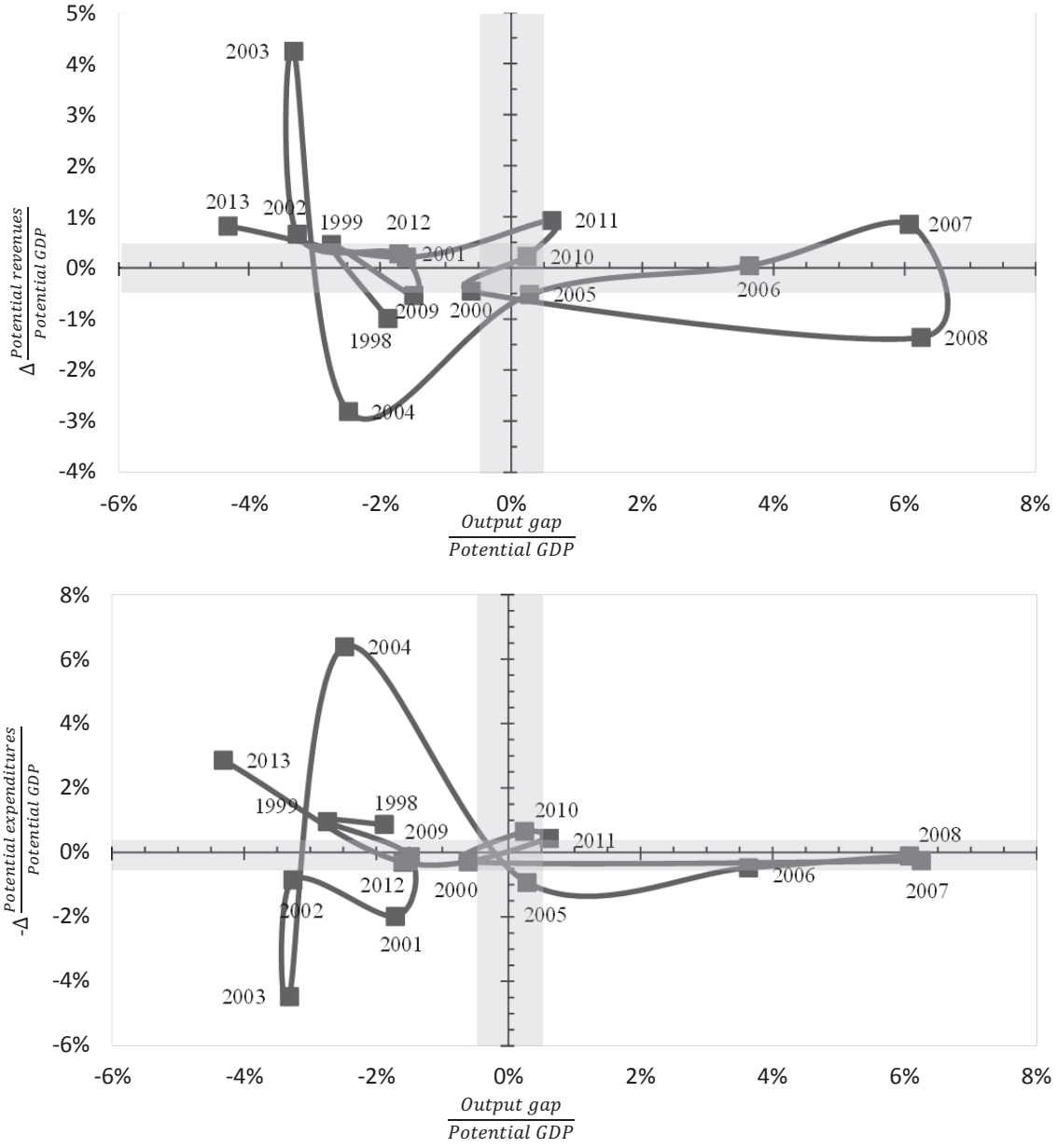
where

$$\frac{\text{potential revenues}}{\text{potential GDP}} = \frac{\text{revenues}}{\text{real GDP}} - \text{ser} \times \frac{\text{output gap}}{\text{potential GDP}},$$

$$\frac{\text{potential expenditures}}{\text{potential GDP}} = \frac{\text{expenditures}}{\text{real GDP}} - \text{seg} \times \frac{\text{output gap}}{\text{potential GDP}}.$$

The plotted results in Fig. 4 are interpreted analogously to Fig. 3. Again, we are interested in the first differences, however – in this case of potential revenues/expenditures – with respect to the output gap. The quadrants now therefore indicate whether the revenues and expenditures tend to act pro- or anti- cyclical. Notice, that in order to retain the interpretation of quadrants in accordance with the Fig. 3 and Fig. 2, the first differences of expenditures are plotted with negative sign (e.g. in 2004 the expenditures decreased by approximately 6%, which combined with the negative output gap yields the pro-cyclical expenditures' impulse). We also excluded the observations which present the absolute value of fiscal impulse (the first difference) of the revenues/expenditures lower than 0.5% or observations with absolute value of output gap lower than 0.5%.

The results are as follows: the impulses of the revenues were anti-cyclical in 56% of the cases, whereas the expenditures acted anti-cyclically in 43%. In years 1998, 2002 and 2003 we classified both revenues and expenditures even though their mutual effects were excluded when analysing structural primary balance as they netted each other so that the overall impulse was not above 0.5%. The interpretation may be that the fiscal policy is chaotic, when one arm (the one taking) does not know what the other (the one spending) is doing. The second possible interpretation is focusing



4: *Potential revenues' and expenditures' impulses in phase diagrams*
Source: authors' calculation

IV: *Result summary*

Year	Fiscal impulse of revenues	Fiscal impulse of expenditures	Overall
1998	ANTI	PRO	excluded
1999	excluded	PRO	PRO
2000	ANTI	excluded	ANTI
2001	excluded	ANTI	ANTI
2002	PRO	ANTI	excluded
2003	PRO	ANTI	excluded
2004	ANTI	PRO	PRO
2005	excluded	excluded	excluded
2006	excluded	excluded	excluded
2007	ANTI	excluded	ANTI
2008	PRO	excluded	PRO
2009	excluded	excluded	ANTI
2010	excluded	excluded	excluded
2011	ANTI	excluded	ANTI
2012	excluded	excluded	excluded
2013	PRO	PRO	PRO

Source: authors' calculation

on only one fiscal impulse channel, rather than combining both. The results graphically displayed in Fig. 4 are summarised in Tab. IV.

Determination of Policy Using Correlation

To look on the matter from another angle we have decided to analyse the correlation of government expenditures and revenues (at prices fixed at 2005 levels) with the business cycle represented by the output gap as defined above. We are aware of the fact that due to given constant government spending to GDP ratio and growing GDP, we do observe an upward drift in expenditures and revenues. This drift problem is clearly visible in the following graphs, where observations from earlier periods are at the bottom of the graph which in response means a weaker correlation. Therefore, we shall be more interested in the sign of the correlation rather than in its actual number.

Again, we need to adjust the actual values of revenues and expenditures to their values when GDP is at its potential. Since unemployment benefits form a negligible part of the government expenditures, in the following text we assume the actual expenditures to be equal to the potential expenditures. As we have stated earlier, revenues include the impact of the majority of automatic stabilisers such as decreases and increases in income, corporate and consumption taxes, VAT etc. Therefore the entire cyclical deficit is made up of cyclical revenues. Thus:

$$\text{cyclical deficit} = \left(\text{semi elasticity} \times \frac{\text{output gap}}{\text{potential GDP}}\right) \times \text{potential GDP},$$

$$\text{potential expenditures} = \text{expenditures},$$

$$\text{potential revenues} = \text{revenues} - \text{cyclical deficit}.$$

If the economy is working above its potential, we observe a positive cyclical deficit. In case of expenditures we say that automatic stabilisers have no effect. Actual revenues however are larger due to increased tax revenues, so in order to calculate potential revenues, we have to discount excessive revenues. Since we do not assign any part of the cyclical deficit to expenditures in this section, we discount the whole cyclical deficit from revenues.

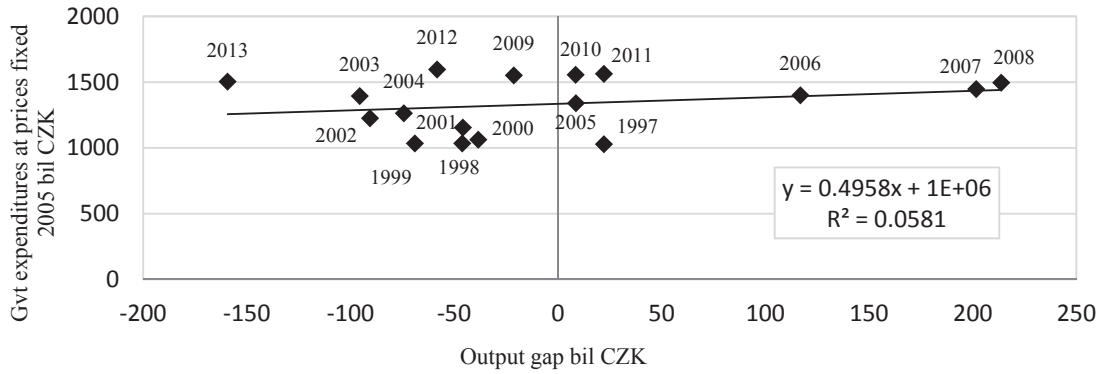
Firstly, we deal with potential expenditures. Governments tend to operate with expenditures in times of crises, which is a logical choice; money left to panicking people by lowering taxes would not be spent. So programs like scrappage, infrastructure (remember construction is usually hit hard), science and development, military, space, etc. are being introduced. Anti-cyclical fiscal policy is therefore characterised by a negative correlation between the output gap and potential expenditures and vice versa. That would imply a restriction in spending during economic booms and an expansion during busts. Correlation close to zero is expected for a-cyclical policy. The actual correlation coefficient in the 1998–2013 period, as illustrated by Fig. 5, is 0.241. This finding supports the previous conclusion about the character of fiscal policy, i.e. it is for the most part not in strong correlation with the economic cycle.

As for revenues, anti-cyclical fiscal policy is characterised by positive correlation between the output gap and revenues whereas pro-cyclical policy is, on the other hand, characterised by negative correlation. Anti-cyclical policy would imply rising revenues during upturns and decreasing revenues during downturns. A correlation close to zero is again expected for a-cyclical policy. As it is illustrated by Fig. 6, the correlation is still positive, equal to 0.157, and discretionary potential revenues therefore behave a-cyclically since the correlation is almost zero. This supports the previous analysis.

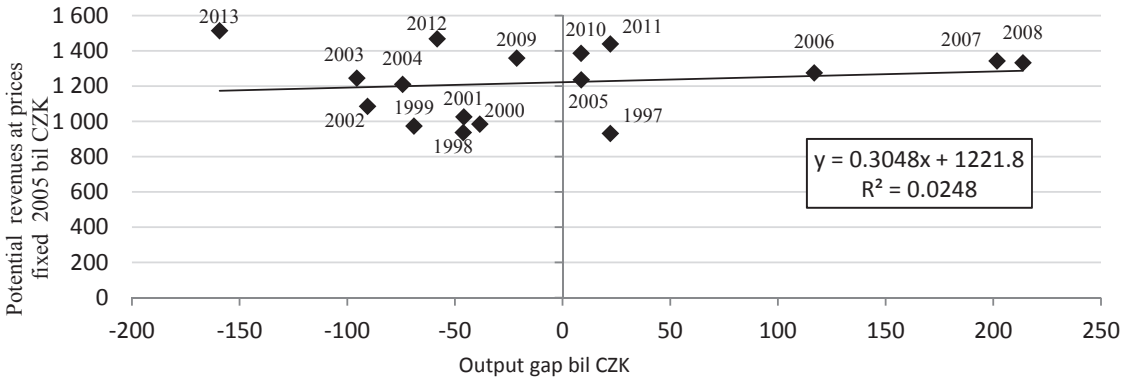
As we have mentioned earlier, the results of regressions suffer from the drift problem. We had therefore replaced the nominal measures of expenditures (only in case of expenditures, since we assumed revenues would behave in the same manner) with percentages of GDP and the first differences represented by yearly changes of expenditures. We had calculated correlations and linear regressions for various couples, illustrated by Tab. V. They yield the same results supporting a-cyclical or moderate tendency to a pro-cyclical behaviour of expenditures.

Fiscal Policy and Rules

If the Czech Republic enters the euro area which means that it would no longer be able to practise an isolated monetary policy, the question is whether the fiscal rules embodied in the recently



5: *Regression of potential government spending and economic cycle*
Source: authors' calculation



6: *Regression of discretionary government revenues and economic cycle*
Source: authors' calculation

V: *Various variables and their correlations*

Variable Y	Variable X	Correlation
Δ expenditures at prices 2005 mil CZK	Output gap (% of potential GDP)	0.197
Δ expenditures at prices 2005 mil CZK	Output gap CZK	0.228
expenditures index $(Y_t - Y_{t-1})/Y_{t-1}$	Output gap (% of potential GDP)	0.128
expenditures index $(Y_t - Y_{t-1})/Y_{t-1}$	GDP index real growth rate	0.223
Δ expenditures at prices 2005 mil CZK	Δ GDP at prices 2005 mil CZK	0.196

Source: authors' calculation

reformed Stability and Growth Pact (SGP) would limit the Czech fiscal policy as one of its remaining stabilising mechanisms.

The results in this study show that the SGP has not been preventing the Czech government from practicing anti-cyclical discretionary fiscal policy since the discretionary fiscal policy was for the most part a-cyclical. Moreover, the design of the SGP does not even limit the fiscal policy to be anti-cyclical as a whole (discretionary fiscal policy and built-in automatic stabilizers). The 3% limit on the actual deficit of the government's budget, which involves about 1%[2] limit on the structural balance prescribed by the reformed SGP presents comfortable room for built-in automatic stabilizers. Suppose the model example where the semi elasticity is 0.39 and the structural primary balance zero. The output gap would then have to exceed negative 7.69% (= 0.03/0.39, see equation 1) of potential GDP to deprive the government of its discretionary policy as the 3% limit of the government's budget deficit would be exhausted by built-in automatic stabilizers and would not leave any space for discretionary fiscal policy. If this extreme economic condition

2 The Structural deficit is specifically calculated for each country. The calculation is based on a broad economic and fiscal situation as well as their development forecasts to ensure the midterm fiscal stability. The current target for the Czech Republic is 1%, see e.g. IMF report: Prague visit (2014).

VI: *Annex*

Year	Revenues mil CZK*	Expenditures mil CZK*	Debt service mil CZK*	GDP mil CZK*	Semielasticity	Output gap in %
t	R(t)	G(t)	D(t)	Y(t)	e	O(t)
1998	786 113	885 611	22 856	2 061 583	0.39	–1.880
1999	830 319	907 393	20 472	2 149 023	0.39	–2.741
2000	862 981	945 255	18 133	2 269 695	0.39	–1.485
2001	938 082	1 074 920	23 792	2 448 557	0.39	–1.712
2002	1 003 019	1 170 746	29 469	2 567 530	0.39	–3.262
2003	1 164 216	1 343 996	28 144	2 688 107	0.39	–3.314
2004	1 184 834	1 267 720	31 619	2 929 172	0.39	–2.481
2005	1 239 031	1 340 123	34 047	3 116 056	0.39	0.280
2006	1 327 765	1 406 993	35 313	3 352 599	0.39	3.633
2007	1 476 428	1 503 113	39 821	3 662 573	0.39	6.069
2008	1 498 574	1 583 527	39 449	3 848 411	0.39	6.248
2009	1 462 139	1 679 551	47 436	3 758 979	0.39	–0.609
2010	1 481 054	1 658 193	51 083	3 790 880	0.39	0.242
2011	1 528 418	1 650 364	52 546	3 823 401	0.39	0.617
2012	1 550 637	1 711 712	55 975	3 845 926	0.39	–1.598
2013	1 588 353	1 644 746	53 896	3 883 780	0.39	–4.317
Year	**Primary balance mil CZK***	**Prim. bal./GDP**	**Struct.Prim. bal./GDP**	**Struct. Prim. bal./GDP in %**	**Δ Struct. Prim. bal./GDP**	**Δ Struct. Prim. bal./GDP in %**
t	B(t) = R(t) – G(t) + D(t)	F(t) = B(t)/Y(t)	R(t) = F(t) – [e × O(t)]	S(t) = R(t) × 100 (%)	T(t) = R(t) – R(t – 1)	U(t) = T(t) × 100
1998	–76 642	–0.037	–0.030	–2.984	–0.001	–0.088
1999	–56 602	–0.026	–0.016	–1.565	0.014	1.419
2000	–64 141	–0.028	–0.022	–2.247	–0.007	–0.682
2001	–113 046	–0.046	–0.039	–3.949	–0.017	–1.702
2002	–138 258	–0.054	–0.041	–4.113	–0.002	–0.164
2003	–151 636	–0.056	–0.043	–4.349	–0.002	–0.236
2004	–51 267	–0.018	–0.008	–0.783	0.036	3.566
2005	–67 045	–0.022	–0.023	–2.261	–0.015	–1.478
2006	–43 915	–0.013	–0.027	–2.727	–0.005	–0.466
2007	13 136	0.004	–0.020	–2.008	0.007	0.719
2008	–45 504	–0.012	–0.036	–3.619	–0.016	–1.611
2009	–169 976	–0.045	–0.043	–4.284	–0.007	–0.665
2010	–126 056	–0.033	–0.034	–3.420	0.009	0.865
2011	–69 400	–0.018	–0.021	–2.056	0.014	1.364
2012	–105 100	–0.027	–0.021	–2.109	–0.001	–0.054
2013	–2 497	–0.001	0.016	1.619	0.037	3.729

* current prices

went even worse, it would require the government to react to fulfil the 3% limit the of government's deficit. In this case, the discretionary fiscal policy would have to be automatically pro-cyclical. However, such an extreme scenario is unlikely. For example, the biggest output gap in the Czech Republic was so far "only" 4.3% of potential GDP in 2013, which left 1.33% for the structural deficit in the actual deficit; this is more than prescribed by the reformed SGP.

CONCLUSION

From the above-mention results, we conclude that the fiscal policy in the Czech Republic was for the most part rather of a random character than anti-cyclical during the examined period 1998–2013. This conclusion implies that there is still room for improvement in fully and consistently utilizing Czech fiscal policy as a stabilizing mechanism. If not improved, the tendency to a random fiscal policy can be one of the arguments speaking against the Czech Republic entering the euro area in the near future.

Although the 1% limit on the structural deficit can limit anti-cyclical discretionary fiscal policy as a stabilizing mechanism in times of long and deep recessions, we conclude that this limit is suitable taken the results of our study. Increasing the limit would probably lead to larger deficits throughout economic cycles.

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