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**POLITICAL ECONOMY OF PUBLIC DEFICIT:  
PERSPECTIVES FOR CONSTITUTIONAL  
REFORM**

**Abstract:**

The paper uses a dynamic inconsistency model known from monetary policy to assess three alternative proposals how to reform fiscal constitution in order to limit government's incentive to use fiscal policy for maximizing political support. The return to ever-balanced-budget rule, state-contingent rules, and the establishment of an independent Fiscal Policy Committee with power to set public deficit with the aim of stabilizing the economy are discussed from the constitutional perspective, analyzing different incentives that these proposals create for government and alternative means to enhance credibility of the arrangement.

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## 1. Introduction

Over the past years, the debate on public deficits and public debt reemerged again, mainly as a response to serious problems of number of countries with bringing public finance into balance or surplus. Assuming that too high public deficits are harmful for the economy, a number of proposals emerged in the theoretical and empirical literature since 1950s how to eliminate or reduce them. Public deficit is besides some unexpected external shocks definitely a result of fiscal policy, which lies in the realm of collective choice and is therefore determined in the political process. Thus, the only appropriate way of how to treat the issue of public deficit and its reduction or elimination must inevitably include a deep analysis of the political process and especially the fiscal constitution, i.e. the rules that set incentives for political representatives in the realm of fiscal policy.

This paper was motivated especially by one strand of argumentation that suggests that we treat the problem of fiscal policy in analogy to the already solved problem of monetary policy. In particular, this literature, represented for example by Hagen (2003) or Wyplosz (2002), argues that when expansionary monetary policies were eliminated by the creation of an independent central bank, thus why should not we move the responsibility for fiscal policy to a body independent from the political process?

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From the point of view of constitutional economics, the creation of more independent central banks represents nothing else than a constitutional reform of political markets in the area of monetary policy. Even if central banks are nowadays regarded as independent from politics, they *in fact* still remain in the political process in a broader sense. The reason for that is not only that the rules setting responsibilities and duties of a central bank are usually written in the official political constitution of the country and that the representatives running the central bank are selected via political markets (for example appointed by some political body). The main reason is that central banks – regardless of their constitution – conduct activities that we, as members of the society, prefer to be done at the level of collective choice rather than private choice, in the sense of Buchanan and Tullock (1962).<sup>1</sup>

From this point of view, creation of an independent body assigned with responsibility for fiscal policy cannot as such solve the problem without discussing the precise constitutional position of such a body in the political markets.

The paper applies the standard analytical tools and arguments from the dynamic inconsistency literature on the issue of public deficit, its origins, and proposals for its elimination via reform of political constitution. A stylized model of dynamic inconsistency of fiscal policy will be presented and basic assumptions discussed. Why do politicians have incentives to run budget deficits if deficits can be also harmful, thus going against the interest of individuals, which in turn may decide not to reelect politicians who run deficits? The answer to this question lies in the intricate nature of political process, in the democratic institutions and in the way deficit financing of public expenditures propagate finally into political choice of individuals.

After having shown that current political constitution in the area of fiscal policy leads to public deficits, possible solutions in line with those suggested for expansionary monetary policies are discussed. I start with the simple and well-known proposal to legislate a requirement for ever-balanced budget. The problem of this solution is that it is not state-contingent, i.e. in the case of a large external shock it might be in interest of the public to allow for deficit. However, the state-contingent rules, an example of which may be the EMU Stability and Growth Pact allowing for higher public deficits in the case of unexpected shock, are much more difficult to legislate and enforce. Finally, the creation of an independent body assigned with the responsibility for fiscal policy is discussed.

## 2. Survey of the Literature

The paper is related to three lines of work on public finance and political economy. The first line of research aims at answering the question whether government should finance some of the public expenditures via issuing public debt, thus running public deficit by spending more than receiving on taxes. This issue has two basic dimensions that correspond to two roles of fiscal policy, i.e. provision of public goods (together with elimination of externalities and some redistribution or social security) and macroeconomic stabilization.

Balassone and Franco (2001) review the literature and arguments on public debt since the Bible age. Their findings can be summarized as follows: in principle, until 1950s the common approach to the public budget was to have it balanced. As they argue, this rule was probably based on an analogy between government and family finance, but additional economic rationale was found mainly with respect to the historical experience with bringing the state to bankruptcy when the debt rose beyond a certain threshold. To this rule, nevertheless, two exceptions are usually discussed, one related to the public good role and the other one to the stabilization role of fiscal policy.

As regards the former, a distinction between current and capital spending must be made. As Kilpatrick (2001) argues, government decisions on spending may have important impli-

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<sup>1</sup> The private solution of issuing money, in the literature usually called private banking, is not impossible (see for example (Hayek, 1976)), but there are good reasons to prefer central banking, discussed for example in (Goodhart, 1988).

cations across generations, especially if large-scale investments to infrastructure produce benefits over more than one generation. In such a case, it is fair that future generations also bear some of the costs, implying debt financing of such projects and imposing some of the burden to repay the debt on future generations. Nevertheless, even within one generation a debt financing can be welfare-enhancing, as argued by Wyplosz (2002), provided that citizens are credit-constrained, thus allowing the government to borrow on their behalf. As a result, a proposal to “double budget” was discussed and implemented in some countries: the budget is split into a current account and capital account. While the current account should be balanced, the capital account can run a deficit. This rule is known as a “golden rule” of public finance.<sup>2</sup>

As regards the latter exception to the ever-balanced budget, this relates to the current account of the public budget. Balassone and Franco (2001, pp. 42–45) survey the arguments based on Keynesian theory where public budget plays a crucial role in “cushioning the effects of cyclical downturns”. The stabilization role of fiscal policy thus implies that the current account of the budget should be balanced rather over the cycle than within one fiscal year, with deficits in recessions and surpluses in booms, dampening the effects of external shocks.

The second line of research relates to what is known as political business cycle, pioneered especially by Nordhaus (1975). A detailed survey of the political business cycle literature may be found in (Mueller, 2003) or (Wagner, 2001). In short, if voters reflect macroeconomic conditions when voting in elections for or against the incumbent government, and if the government maximizes reelection chances, it will always have an incentive to use macroeconomic policy for its political objectives. With respect to preceding argumentation, this would mean that the government does not run the public deficit in order to maximize citizens’ welfare, in both public good provision and stabilization roles, but only to maximize political support. In this paper, we concentrate only on stabilization role of fiscal policy.<sup>3</sup>

Methodologically, this paper belongs to a part of the political business cycle literature that is based on the dynamic inconsistency model, known mainly from the monetary policy (Kydland, Prescott, 1977), (Gordon, Barro, 1983a, 1983b). While in the monetary policy model the policymaker “plays” with inflation, here the policymaker plays with public deficit, which serves as a proxy for expansionary fiscal policy. As both monetary and fiscal policy constitute the macroeconomic stabilization policy, it is necessary to make an assumption about their interaction. In this respect, this paper makes use of the modern game-theoretic approach to the issue, as can be found for example in (Buti, Veld, Roeger, 2001).

The third line of research emphasizes the necessity to impose rules on fiscal policy and discusses alternative reform proposals. Even if the issue of restraining public finance is an old and ever-lasting one, starting with the notion of the ever-balanced budget and continuing with golden-rule-like constraints (Buchanan, Vanberg, 1986), (Wildavsky, 1980), (Brennan, Buchanan, 1980), (Buchanan, 1967), (Buchanan, 1958), reform proposals attracted a lot of attention quite recently. The main reason was of course the establishment of the Economic and Monetary Union within the EU and introduction of the Stability and Growth Pact aimed at enhancing fiscal discipline of the countries adopting the common currency.<sup>4</sup> The very recent proposals, made especially by Wyplosz (2002) or Hagen (2003), suggest using an analogy with monetary policy: if making the central bank independent from political pressures eliminates the inflation bias, why should not we make fiscal stabilization policy independent as well, for example by creating a kind of Fiscal Policy Committee? Hence, rather than on fiscal rules we should concentrate on institutional reform in the field of politics, an issue emphasized in constitutional

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<sup>2</sup> However, a number of practical problems were found when dealing with the golden rule, see (Balassone, Franco, 2001) or (Schneider, Hedbavny, 2003) for the discussion.

<sup>3</sup> Political support motives in provision of public goods and redistributive government’s policies are largely discussed in other public choice literature, especially within economic theory of regulation or interest group theory, see (Mueller, 2003).

<sup>4</sup> For a thorough discussion of the Stability and Growth Pact see (Coeure, Pisani-Ferry, 2003), (Hagen, 2003) or (Balassone, Franco, 2001).

political economy (Buchanan 1975, 1990) and applied for the monetary policy case by Moser (2000).

Before we start with the theoretical background for analysis of constitutional reforms of the fiscal policy, some issues must be clarified. First, in what follows we assume that the government is able to set deliberately the level of public deficit. In reality, this does not have to be always the case: both public revenues and expenditures are to a large extent tied to the performance of the economy, a phenomenon known as automatic stabilizers.<sup>5</sup> Thus, if a negative shock hits the economy and raises unemployment, higher expenditures on unemployment benefits and lower than expected tax revenues due to a number of companies in default will automatically imply public deficit if the public finances were balanced before. However, we assume that the government has always the power to balance the budget and act against the automatic stabilizers, cutting public expenditures as needed. Thus, letting automatic stabilizers work is equivalent to running public deficit discretionarily.

Second, we abstract from the long-term capital investment motives for issuing debt and concentrate only on the stabilization role of fiscal policy. Thus, when referring to a deficit or surplus, we actually refer to capital-investment-adjusted deficit. This does not have to be a concern if we assume that the government keeps the borrowing for financing infrastructure investment constant, i.e. rolling over the debt. In such a case, any increase of public debt reflects only macroeconomic considerations.

### 3. The Model

The setup of the model is inspired by the seminal dynamic inconsistency model that already became an obligatory part of current monetary policy textbooks (Obstfeld, Rogoff, 1996), (Bofinger, 2001).<sup>6</sup> However, seen from the political economy perspective, we do not aim at identifying social welfare consequences, concentrating purely on incentives of government with discretionary power over fiscal policy.

Assume a self-interested government or policymaker whose sole interest is to maximize the political support function, and thus the re-election chances. In line with the dynamic inconsistency literature, his objective function is expressed in terms of a loss function that is given by (1) and that will be minimized.

$$L = (y - y^*)^2 + ad^2, \quad a > 0 \quad (1)$$

The loss function, here denoted  $L$ , has two main arguments: the real output  $y$  and the public (capital-investment-adjusted) deficit  $d$ . Both variables enter the loss function  $L$  in terms of squared deviations from the targeted values, or policymaker's "bliss" points  $y^*$  and  $d^*$ , which are treated as parameters, assuming additionally that, for simplicity,  $d^* = 0$ . Thus, both too low and too high levels of output and both public deficit and public surplus are undesirable. The term  $a$  denotes the relative weight the policymaker places on the deficit goal as against the output goal. It must be stressed that this objective function is not directly aligned to general preferences of the agents in the economy, as might be the case in some traditional models of dynamic inconsistency in monetary policy.

The specification of the political loss function requires some further clarification. First, why is the political loss function based on deviations rather than on absolute levels of real output and public deficit, and second how, i.e. through which channels, do changes in both variables influence the political support? As regards the first question, there are two possible

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<sup>5</sup> For automatic stabilizers see (Mills, Quinet, 2001) or (Balassone, Franco, 2001).

<sup>6</sup> Modeling the political incentives of the government using the dynamic inconsistency model represents only one of the possibilities how to capture the inherent motives to run public deficits. For other models, but similar explanation see (Persson, Tabellini, 2000), (Mueller, 2003) or (Strauch, von Hagen, 2000). The advantage of using the dynamic inconsistency model lies in the numerous contributions already written for monetary policy.

explanations: first, the government might have announced its desired level of real output and deficit before being elected, thus, while in office, aiming at reaching these levels. Second, the government might recognize that, for the real output, there are some “natural” limits as on the rate of possible increase, thus aiming only at “reasonably high” values of real output, treating too high values equally undesirable as too low values. For the public finance surplus, the government may simply be politically rewarded only for zero public deficits, with surpluses generating no additional political support. Thus, public surplus is not rewarding as the money could be spent on different public projects to maximize political support.

We assume that political support has two related forms. The first, obvious one is the political support in terms of political popularity among potential voters; the other one reflects the necessity to build up reputation of being the “good” government, as seen by independent observers, economic journalists, and international institutions regularly assessing the compliance of their member countries with “best practices of economic policy”.<sup>7</sup> It seems clear that for the first form of political support the real output is the key variable, because of the direct effect on income and wealth of citizens of a country, while for the reputation a prudential and sound fiscal policy aimed at balanced budget plays the role. The reputation is additionally important not only because of the open access of policymakers to the facilities provided by international institutions to those member states that comply, but as well due to its effect through media on public opinion.

Hence, the specification of the loss function of the government means that citizens are aware of possible negative consequences of public deficit, but only to a limited extent. Molander (2000) emphasizes two basic reasons given in the literature for why citizens do not fully internalize effects of public deficits when generating political support. First, the fiscal illusion, i.e. the natural difference between immediate and visible benefits of extra public spending and related, more concealed and lagged costs in the form of higher taxes, and second, the deficit bias, i.e. the incentive to maximize revenues from public programs and minimize the taxes paid to public budget. Additionally, if we take into account the voter’s rational ignorance bias (Mueller, 2003), i.e. the rational incentive not to invest resources into complicated analysis of effects of public deficit, the citizens will consider more or less only the *real* income and to some extent the *public* opinion when voting for or against incumbent government. Thus, even if we assume that citizens may know that running public deficit *usually* implies higher long-term interest rates, higher upward price pressures and inevitable rise of taxes in the future, as well as resulting negative effects on real output, they are biased towards present output and resulting consumption.

Government minimizes the political loss function by setting the level of public deficit accordingly, subject to two constraints: first, the IS curve denoting how the economy works, and second, the reaction function of an independent central bank. The very simplified IS curve shows how the output depends on structural parameters, fiscal policy, monetary policy and shocks:

$$y = \bar{y} + bd - ci + z, \quad b, c > 0 \quad (2)$$

where  $y$  stands for potential (natural) output,  $i$  denotes the nominal interest rate gap (i.e. the difference between the current nominal interest rate and “natural” interest rate),  $z$  represents the supply shock,  $b$  gives the responsiveness of output gap (i.e. difference between actual and potential output) to the public deficit and  $c$  the responsiveness of output gap to the interest rate gap. We further assume that supply shocks  $z$  are distributed with zero mean and a positive variance. The natural level of output corresponds to the natural level of employment that, following Friedman (1968), is determined only by real forces like structure of the labor and

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<sup>7</sup> Similarly, in the traditional interest groups literature the policymaker maximizes political support from both voters (potential votes) and interest groups (means for financing election campaigns) – see (Mueller, 2003, chapters 15 and 20).

commodity markets, costs of mobility etc.<sup>8</sup> The natural level of interest rate may be understood as such a level that is compatible with natural output, i.e. which neither raises nor lowers the output above or below the natural level. Interest rates are set by the central bank, natural interest rate is assumed to be known and constant.

The relationship (2) is very simplified, but it serves the purpose of the model very well. The IS curve is based on the assumption that, within a period, quantities adjust in the short term faster than prices because of existence of menu costs or other real and nominal rigidities that prevent price-setters to change prices. Assume first that there are no external supply shocks to the output and that the central bank acts neutrally (i.e.  $I = 0$ ). If a government decides to run public deficit, it will succeed in raising the real output above its potential level. The effect of public deficit on real output follows the traditional logic: public deficit as such will raise the output above its potential level by definition as government consumption forms a part of the GDP. However, there are two other effects: first, public deficit may have a multiplication effect of the private consumption and thus output, and second, because of inflexible prices in the very short run, the fiscal impulse will have only real impact, but no inflation impact that would lower the real value of increased output.

The central bank, which has a sole objective of price stability and long-term horizon, influences the economic activity as shown in equation (2) via changes in policy interest rates that result from an analysis of output gap.<sup>9</sup> It is believed in what has been called by Blanchard (2003) “divine coincidence”, i.e. the idea that stabilizing inflation is under some reasonable assumptions equivalent to stabilizing output around its natural level. Thus, it is assumed that if current output is expected to be higher than natural/potential output, i.e. if a positive output gap is expected, inflation pressures will follow, leading the central bank to raise interest rate above the level of natural interest rate, calming the economic activity back to the natural level via standard transmission channels of monetary policy.

The preceding logic can be written formally as follows: due to important lags in transmission mechanism, the central bank must adjust its interest rates *before* the period, using the forecast of the output gap (i.e. expected output minus natural output). Using equation (2), expected output is equal to

$$E[y] = y^e = \bar{y} + bE[d] - cE[i] + E[z] \quad (3)$$

but because expectations of shocks are by definition equal to zero and the interest rate gap is the instrument variable of the central bank, equation (3) simplifies to

$$y^e - \bar{y} = bE[d] - ci \quad (4)$$

written already in the form of output gap. The central bank sets the interest rate to stabilize the output around its natural level, i.e. to reach a zero output gap. Thus,

$$\begin{aligned} 0 &= bE[d] - ci \\ i &= \frac{b}{c}E[d] = \frac{b}{c}d^e \end{aligned} \quad (5)$$

From equation (5), the central bank reaction function follows that the central bank sets interest rates according to the expected level of public deficit. Central banks regularly assess the so-called fiscal policy stance, i.e. the fiscal impulse coming from the public sector and influencing the rest of the economy. If a fiscal impulse is not neutral, say for example positive, it will raise current output above its natural level. The optimal response of the central bank is to offset fully the effect of expansionary fiscal policy by restrictive monetary policy.

<sup>8</sup> Alternatively, the potential level of output may be understood as a level that corresponds to the NAIRU, i.e. the non-accelerating-inflation-rate-of-unemployment.

<sup>9</sup> This logic is typical for inflation targeting central banks, see (Coats et al., 2003).

The last building block of the model is a simple assumption that the policymaker's output bliss point  $y^*$  is higher than the natural level of output  $\bar{y}$ , thus

$$y^* - \bar{y} = k, \quad k > 0 \quad (6)$$

Within the welfare economics tradition, there has been a large discussion on why should the targeted level of output be higher than natural level. Some have argued that this is because of distortion in the economy like non-lump-sum income taxes or unemployment benefits (Barro, Gordon, 1983a); others have shown that labor unions have impact on the level of real wage, unemployment, and thus natural output (Canzoneri, 1985). However, from the political economy point of view, the reasons are obvious: the government seeking the political support must target a level of output that is above the current natural level because, when being elected, it usually promised to raise the welfare of citizens.<sup>10</sup>

#### 4. Discretionary Solution

We can denote the interaction of government and the central bank as a game of two players. The government plays with the variable  $d$  (public deficit), minimizing the political loss function, subject to the IS curve and the central bank's reaction function:

$$\min_d L = \left[ \bar{y} + bd - c\left(\frac{b}{c}d^e\right) + z - (\bar{y} + k) \right]^2 + ad^2 = \left[ b(d - d^e) + z - k \right]^2 + ad^2 \quad (7)$$

Differentiating with respect to  $d$  and setting equal to zero yields

$$\frac{\partial L}{\partial d} = 0 = 2b \left[ b(d - d^e) + z - k \right] + 2ad \quad (8)$$

Thus, the optimal public deficit  $d^{opt}$  will be set as follows:

$$d^{opt} = \frac{b^2}{a + b^2} d^e + \frac{b}{a + b^2} k - \frac{b}{a + b^2} z \quad (9)$$

The central bank "plays" with the interest rate gap that depends on the expected public deficit  $d^e$ . What level of public deficit should a central bank rationally expect? At the first sight it seems reasonable to assume that the central bank should expect the level announced by the government as its target (or bliss point, i.e.  $d^e = 0$  in our model), and set policy neutral interest rates. However, this is not rational: if the central bank expects a zero deficit, the government will set the deficit according to the equation (9)

$$d^{opt} = \frac{b}{a + b^2} k - \frac{b}{a + b^2} z \quad (10)$$

Thus, even without any shocks the government will run a positive public deficit. Hence, expecting a zero deficit is not rational from the central bank's point of view. The rational expectations of public deficit must take into account the government's optimal response, i.e. the expected deficit must be equal to expectation of the government's optimal deficit,

<sup>10</sup> Of course, the government could reach the aim via raising the natural output, using structural policies and indirect, market-comfortable instruments aimed at improving the legislative and institutional framework of the economy. However, this way is much more complicated due to special interest groups that would eventually lose during structural reforms, as well as due to much more delayed positive effects of such policies, see (IMF, 2004).

$$d^e = E \left[ d^{opt} \right] = E \left[ \frac{b^2}{a+b^2} d^e + \frac{b}{a+b^2} k - \frac{b}{a+b^2} z \right] = \frac{b^2}{a+b^2} d^e + \frac{b}{a+b^2} k \quad (11)$$

where we made use of the certainty equivalence principle, i.e. that expectation of expectation (of the deficit) is simply the expectation itself, and of the assumption of the zero mean of shocks  $z$ . As a result, the rationally expected level of public deficit is equal to

$$d^e = \frac{b}{a} k \quad (12)$$

Substituting equation (12) back into the optimal response function of the government (9) yields – with the exception of the effect of shock  $z$  – the rationally expected level of public deficit (subscript  $D$  stands for “discretionary” equilibrium level):

$$d^D = \frac{b}{a} k - \frac{b}{a+b^2} z$$

Substituting (12) into (5) yields the equilibrium interest rate gap

$$i^D = \frac{b^2}{ac} k \quad (14)$$

which substituted into the IS curve (2) together with the public deficit (13) gives the real output  $y$ :

$$y^D = \bar{y} + \frac{a}{a+b^2} z \quad (15)$$

As we can see, the output is equal to the natural output and a proportional part of shock  $z$ . The shock does not transmit fully to the output as would one think from the specification of

the IS curve (2) due to the stabilization role of fiscal policy: as  $\frac{a}{a+b^2} < 1$ , the government

actively uses the fiscal policy to accommodate the impact of shocks on real output and adjusts the public deficit accordingly because of political support concerns. From (15) also follows that government did not succeed in raising output above the natural level in spite of expansionary fiscal policy. As a result, the economy remains operating on a potential level, but suffers from higher than necessary deficits and higher than necessary interest rates, leading to inefficiency and lower expected political support for the government,

$$E \left[ L^D \right] = \frac{a}{a+b^2} \sigma^2 + \frac{a+b^2}{a} k^2 \quad (16)$$

( $\sigma^2$  stands for the variance of shocks  $z$ ).

Why is the discretionary solution inefficient? Assume that the policymaker could credibly pre-commit to follow zero-deficit fiscal policy in times of no shocks and to use public deficits to stabilize output in response to the supply shocks  $z$ . Such commitment would correspond to maximizing a modified political loss function

$$L = (y - \bar{y})^2 + ad^2, \quad a > 0 \quad (17)$$

in which  $k$  is set to zero. Using equations (10), (12) and (13), it is easy to show that in times of no shocks the public deficit will be zero and in case of a shock the deficit will be set according to

$$d^C = -\frac{b}{a+b^2}z \quad (18)$$

(subscript  $C$  stands for “commitment” equilibrium level). Thus, if a negative shock hits the economy, government will run a public deficit to get output back towards the natural level, but not completely back due to political support concerns given by the second part of the political loss function. On average, the central bank and the public will expect zero budget deficits and get natural output,

$$y^C = \bar{y} + \frac{a}{a+b^2}z \quad (19)$$

while the political loss of the policymaker will be (using the original political loss function) equal to

$$E[L^C] = \frac{a}{a+b^2}\sigma^2 + k^2 \quad (20)$$

and thus lower than in the discretionary case. The public is left with natural output on average, i.e. the same is in the discretionary case, but with no public deficits and neutral interest rates. The policymaker is also better off now.

If a pre-commitment technology to follow a rule such as (18) were easy to introduce, the government would gain by having it in place. However, any announcement by the government that it will onwards follow the rule (18) is not credible, since the government has always an incentive to disobey the rule and surprise the public with public deficits as the real objective function of the government is (1) and not (17). Indeed, the best strategy for the government to follow is a dynamic inconsistent strategy, i.e. to announce before the “game” that zero-deficit fiscal policy will be followed, influencing the central bank’s expectations  $d^e$ , but as soon as the game starts to set the deficit according to (10) and surprise the public and the central bank. In this “surprise” case, the government would on average gain more political support than in both discretionary and pre-commitment cases (i.e. lower political loss)

$$E[L^S] = \frac{a}{a+b^2}\sigma^2 + \frac{a}{a+b^2}k^2 \quad (21)$$

In the surprise case, the public deficit would equal to the one already given in (10), i.e to

$$d^S = \frac{b}{a+b^2}k - \frac{b}{a+b^2}z \quad (22)$$

while the output would equal to

$$y^S = \bar{y} + \frac{b^2}{a+b^2}k + \frac{a}{a+b^2}z \quad (23)$$

i.e. it would be higher than natural output even in case of no shocks.

Nevertheless, as we have already mentioned, this strategy cannot in fact succeed as the central bank behaves rationally and will never expect a zero deficit if the government has discretion to choose the fiscal policy according to its political support function. As a result, a positive public deficit will be expected, leaving the government with the only option to reaffirm it, as delivering a zero deficit if a positive one is expected is according to (9) not rational (yields higher political loss) if there are no shocks hitting the economy.

The optimal level of public deficit  $d^*$  from the point of view of government, here for simplicity, but without loss of generality assumed to be zero, does not have to be necessarily

constant over time. However, we do not believe that the optimal level of public deficit  $d^*$  should vary with economic cycle. In our view, after adjusting for capital investments, public deficits should be rather small (and probably close to zero) in a stable environment, i.e. without shocks, similarly to “optimal” inflation. This does not mean that optimal fiscal policy should not respond to shocks: on the contrary, actual “optimal” public deficit can vary with shocks. However, in this paper we do not aim at discussing or quantifying the optimal public deficit  $d^*$ .

## 5. Enhancing Fiscal Discipline: Introduction to Constitutional Analysis

As we have seen, political motivations of the government lead to an inherent deficit bias of the public finance, implying higher deficits and interest rates than necessary. Before we discuss any of the reform proposals that would eliminate this bias, we have to clarify two questions, both regarding normative issues. First, who should judge which proposal is best to implement? Second, according to which criteria the judgment should be made?

As regards the first question, the only entitled entity that should decide on what is the best are of course the citizens. The ideal – in reality rather unattainable – is a consensual and unanimous decision. As regards the second one, citizens would of course decide according to their individual utility functions, which we may make dependent only on the output  $y$ . However, and this is the main difference, the decision must be made on a constitutional level in the sense of Vanberg (1994), i.e. taking into account all possible future contingencies and resulting impact of alternative proposals, and not only on the sub-constitutional level of current period.<sup>11</sup>

The difference between these two levels can be illustrated by comparing the discretionary, surprise and commitment cases of the “public deficit game” described above. If the utility function depends on  $y$ , in the sub-constitutional stage (i.e. within the current period) the highest output is attained in the surprise case. Thus, if the decision were made in the sub-constitutional stage, the citizens would propose to be surprised by the government and, additionally, to even eliminate the independence of the central bank that counteracts the surprise by rationally expecting higher public deficits.

On the constitutional level, when looking over more than one future period, the picture is much different. Citizens know that, without independent central bank, lasting public deficits would bring inflation, macroeconomic instability, doubts about the government solvency to repay all of its debts, leading to higher risk premium demanded for holding government bonds, and even a financial and currency crises, which would definitely mean lowering real output. As the independent central bank can partly prevent such a negative scenario to come out, the citizens would consensually retain the independent central bank, which serves as a kind of constitutional protection against large macroeconomic instability. However, even with independent central bank and thus the discretionary case of the game, the economy still suffers under higher than necessary public deficits, worsening the government’s credibility as of being able to repay all the accumulated debt in the future, as well as under higher than necessary interest rates if compared to the commitment case. Higher interest rates (especially the long-term interest rates due to future expected deficits and future high short-term interest rates) would calm the private investment activity, having negative effects on future levels of natural output. As a result, on the constitutional level the citizens would rather choose the commitment type of the game than the discretionary one.

Any policy measures that would make the output higher than natural one are from the citizens’ constitutional perspective undesirable, but equally undesirable are shocks that would push output above or below the natural output. As a result, the individual objective function is made to be dependent on the output gap, with smaller output gap yielding higher utility.

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<sup>11</sup> A key assumption used in constitutional analysis is that of “veil of uncertainty” by decision on alternative proposals, i.e. impossibility to preview citizen’s future position within the society, ensuring that the constitutional reform adopted will not harm any certain group and thus be on average “fair”, see (Buchanan, Tullock, 1962) or (Buchanan, 1975). Here, however, we treat the fiscal policy as unselective, having on average the same impact on all citizens, so that the assumption is not needed.

If the government was given the fiscal policy tool to stabilize the economy, which seen from the constitutional level is a reasonable objective to give to the government, but if it misused the tool to boost the economy only because of political considerations, a natural response of the citizens when considering constitutional reform can have two basic modalities. The first one is to impose some rules on how the government can operate the public budget, possibly limiting the use of deficit financing of public expenditures in case of no shocks, while the second one is to take the power to run public deficits completely away from the government. The basic aim of the constitutional reform must be, as Kopits (2001, p. 59) argues, “to confer credibility to the conduct of macroeconomic policies by removing discretionary intervention”.

In the following, I discuss three proposals to reform fiscal constitution, trying to remove the discretionary power from the government: a return to the ever-balanced budget, state-contingent rule, and establishment of a from the government independent institution in charge of fiscal policy (so called fiscal policy committee, FPC). All three proposals are heavily being discussed in current literature on fiscal policy (Wyplosz, 2002), (Calmfors, 2003) from different angles. Here, the emphasis is put on credibility of discussed institutional arrangements by answering following “constitutional questions” or “parameters”: Who decides on the level of deficit and how? In what (legal) form is the decision made? How difficult it is for the government to reverse the already agreed-on decision? How is the decision enforced? What sorts of new incentives are introduced?

The normative ideal in constitutional economics is to have an unanimous decision as to the “rules of the game”, but not necessary as to decisions made “within the game” on the collective level, especially due to transaction costs (see (Buchanan, Tullock, 1962)). Thus, we do not assess individual reform proposals with respect to how much “democratic” they are, i.e. to what extent the citizens themselves have influence on setting the level of deficit. We assume that all citizens share the objective of macroeconomic stability to the same extent, but decided to delegate the decision and implementation to a public body (be it the government or not) that can specialize in recognizing optimal reactions to shocks better than the average citizen, ensuring at the same time an appropriate incentive structure for the body.

## 6. Return to the Ever-Balanced-Budget Rule

The first possibility of reforming the fiscal constitution is to re-impose the ever-balanced-budget rule, a “standard” approach to public finance before 1960s – see (Balassone, Franco, 2001). Thus, as a rule, the public budget should be balanced in all periods.<sup>12</sup> A clear advantage of such a fixed rule is its simplicity, but the institutional framework of the rule may vary, resulting in different expected impact on citizens. Assume first that the rule is credibly implemented and enforced. In such a case, both the realized and expected deficit in all future periods is zero, implying that the output will fully reflect shocks  $z$ ,

$$y^{FIX} = \bar{y} + z \quad (24)$$

From the citizen’s perspective in current period, this result is worse than the one under discretion given by (15), as the government is prevented from stabilizing the output via fiscal policy measures. However, seeing from the constitutional level, the advantage of a credible fixed ever-balanced-budget rule lies in limits imposed on the debt increases, lowering the possibility of a future crisis, and in lower interest rates, preventing the natural output to decrease over future periods.

Let us in accordance with preceding discussion of constitutional interests of citizens assume that individuals, having an infinite horizon, minimize the expected intertemporal disutility function in form of

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<sup>12</sup> A variant of this rule may be a limit on public spending, as balanced budget may be reached via smart tax strategy, imposing politically neutral taxes and spending on politically rewarding projects. However, as we concentrate on macroeconomic effects, the public deficit is the best indicator of fiscal policy stance.

$$D = E \left[ C + \sum_{t=1}^{\infty} \frac{1}{(1+r)^{t-1}} (\bar{y} - y_t)^2 \right], \quad r > 0, \quad C \geq 0 \quad (25)$$

where  $r$  is the discount factor and  $C$  stands for the cumulative effect of high deficits and high interest rates on future  $y$  if the government has discretion (assuming that  $C = 0$  if the government is bound by the rule, and has a certain positive value if the government has discretion). In such a case, the expected disutility from the existence of the fixed rule is equal to

$$D^{FIX} = \frac{1+r}{r} \sigma^2 \quad (26)$$

while with the government having discretion the expected disutility is

$$D^D = C + \frac{1+r}{r} \frac{a^2}{(a+b^2)^2} \sigma^2 \quad (27)$$

The expected disutility is lower in the fixed rule arrangement if

$$\sigma^2 \leq \frac{r}{1+r} \left[ 1 + \frac{a^2}{b^2(2a+b^2)} \right] C \quad (28)$$

thus if the variance of shocks is lower relative to the cumulative negative effect of discretionary policies. Summarized, the fixed ever-balanced-budget rule is beneficial only if the lost stabilization tool does not “hurt” too much, which is the case with small variance of shocks, or if the future costs of giving the discretionary power to the government are too high, or both.

Do we have any general information as to how the actual relative ratio of variance of shocks to future costs of discretionary fiscal policy looks like? Empirical evidence suggests that both of the variables are quite high: economic globalization and capital mobility made shocks much more likely and increased their size (variance), while at the same time made economies much more prone to crisis if fiscal discipline is not carefully pursued, as the Argentina case in 2001–2002 showed ( $C$  higher). As a result, the fixed rule might be an alternative only for certain countries where the condition given in (28) is fulfilled. Generally, when looking at disutilities given in both (26) and (27), rising  $\sigma^2$  and  $C$  indicate that the fixed rule might have become relatively disadvantageous in comparison to other institutional arrangements.

Nevertheless, we have still assumed that the rule is credibly implemented and enforced, without having discussed the “constitutional” parameters. Whether the rule is credible and how does it influence the expectation of the central bank depends on at what level is the rule legislated, implying different possibilities of the government to officially reverse it or even break it. In principle, three levels are imaginable: the government itself, the national assembly (simple consent, but with different overriding schemes if there are two chambers) and the national assembly with qualified majority (with veto power of any chamber).

First, assume that the rule is well enforced, so that the only possibility for the government to renege on the rule is to change the law officially. The following table shows the relationship between credibility and easiness with which the government can change the law.

We assume a kind of parliamentary system with two chambers, with government party having majority in one of the chambers.<sup>13</sup> At the first level, i.e. government resolution, the credibility is very low, because the government can change the resolution any time, leading to a kind of a non-credible announcement of zero public deficit discussed earlier. Of course, because

<sup>13</sup> For an US-like presidential system the analysis would be similar, but would have to take into account the possibility that the government party could have minority in both chambers, thus increasing ceteris paribus the credibility of the second and third level.

the central bank knows the government's incentive to surprise, it will not expect a zero deficit, leading to the discretionary result. Legislation at higher levels is thus beneficial if citizens want to have the ever-balanced-budget rule in place, ensuring at the same time that the rule will be abandoned only if large consensus among political representatives is reached (for example in case of a large shock).<sup>14</sup>

TABLE 1 Level of Legislation and Credibility

	<b>easiness to change the law</b>	<b>level</b>	<b>form of legislation</b>	<b>check and balances</b>	<b>credibility</b>
I	*	government	government's resolution	no	*
II	**	national assembly	act	one chamber	**
	***			two chambers with overriding <sup>+</sup>	***
	****			two chambers without overriding	****
III	*****	national assembly	constitutional act	qualified majority with veto power of one chamber	*****

Note: Easiness to change the law: \* = easy, \*\*\*\*\* = very difficult; credibility: \* = low, \*\*\*\*\* = very high.

<sup>+</sup> Overriding means that one chamber can override the decision of the other chamber via higher voting rule such as qualified majority.

Now, how should be the rule enforced? If it were easy for the government to disregard the rule, the credibility would decline dramatically. Enforceability means that there is an immediate sanction for the government if it disobeys the rule. In principle, we can imagine two kinds of enforcement mechanisms: a market-based mechanism and an institutional enforcement device.

Market-based enforcement (here, political-market-based) means that the sanction is provided via market mechanisms: if a government breaks a rule, it will loose in the political competition due to bad reputation. It is in the constitutional interest of citizens to have such an institutional framework of the political market that would diminish reelection chances of a government that reneges on rules. Within our model the size of this kind of immediate sanction is represented by the parameter  $a$  in the political loss function. Thus, all measures that may help to increase  $a$  are beneficial.

But even if  $a$  were very high, the incentive to surprise the public with deficit and opportunistically use the fiscal policy is still present. An institutional enforcement device, ideally external to the government (i.e. one that cannot be easily influenced by the government), is needed that would impose a more direct sanction (in form of financial fine or threat of new elections). The enforcement mechanism should be legislated at a level higher relative to that of the fixed rule, if it is possible, so that it becomes more complicated for the government to change it. The aim is to make the rule so binding for the government, that the only possibility to renege on it is to initiate its change officially through political procedures.

Does the ever-balanced-budget rule account for any changes in incentives? As any change of institutional framework brings a change in incentives, introduction of the ever-balanced-budget rule is not an exception. Two changes can be emphasized: first, a new created incentive for the government to announce knowingly rather pessimistic outlook of public

<sup>14</sup> Having the large consensual parliamentary decision on public finance in case of a big shock is not a never-reached ideal. Finland and Sweden, for example, decided at the parliamentary level on special fiscal measures to consolidate the financial sector hit by serious crisis in early 1990s, see (Pesola, 2001).

revenues to be able to use extra money for political reasons together with the incentive not to reveal true figures as regards public finance<sup>15</sup>, and second, an incentive to renege on the rule (either officially changing it or simply breaking it) if the central bank just expects that the government could renege, leading to an instable equilibrium and actually lowering the credibility for every level of legislation.

Only the second problem is discussed here:<sup>16</sup> under discretion, the reaction function of the government is given by (9), which substituted into the output equation (2) together with (5) yields output as a function of expected deficit, which then substituted to the political loss function (1) together with the reaction function (9) gives the ex post political loss under discretion:

$$L^D = \frac{a}{a+b^2} (bd^e + k - z)^2 \quad (29)$$

Under the fixed rule, the government's loss would instead equal

$$L^{FIX} = (bd^e + k - z)^2 \quad (30)$$

which is higher than  $L^D$  for a given expected deficit because it does not permit the government to optimize.

Assume now that renegeing on the rule involves additional costs  $Q$  for the government, which are simply the minimum of costs related to official change of the legislation and costs incurred via breaking the rule (so that the government chooses the less costly way to renege on the rule). Given these costs, the government will renege on the rule only when  $z$  will be high enough (in absolute terms) that it pays to invest the costs  $Q$  to renege on the rule, i.e. when

$$L^{FIX} - L^D > Q \quad (31)$$

i.e. when  $z > \bar{z}$  or  $z < \underline{z}$ , where

$$\bar{z} = \frac{1}{b} \sqrt{Q(a+b^2) + k + bd^e} \quad (32)$$

and

$$\underline{z} = -\frac{1}{b} \sqrt{Q(a+b^2) + k + bd^e} \quad (33)$$

The central bank's rational expectation of public deficit must thus be

$$E[d] = E[d | z > \bar{z}] \Pr(z > \bar{z}) + E[d | z < \underline{z}] \Pr(z < \underline{z}) \quad (34)$$

As the expected deficit by the central bank depends on probabilities that  $z > \bar{z}$  and  $z < \underline{z}$ , but these depend via the level of  $\bar{z}$  and  $\underline{z}$  on the expected deficit, multiple equilibrium may emerge. Assume for example that some seemingly unimportant announcement of the government makes the central bank think that the government will renege on the balanced budget rule and run public deficit. This will in turn raise both  $\bar{z}$  and  $\underline{z}$ , changing the probabilities upwards, so that even a small shock that would have been before the announcement left unnoticed will now force the government to break the rule in spite of the costs  $Q$ . Of course, the "instability" of the equilibrium is dependent on  $Q$ , providing additional argument for having  $Q$  as high as possible, i.e. legislating the rule at higher levels and searching for efficient enforcement mechanisms.

<sup>15</sup> Note that both the legislation and enforcement of the ever-balanced-budget rule relates to the ex ante deficit publicly announced to be strived for in the current period.

<sup>16</sup> This part draws on the famous second-generation model of currency crises, presented in (Obstfeld, Rogoff, 1996, chapter 9).

## 7. A State-Contingent Rule

A state-contingent rule is a rule that makes the deficit dependent only on the shock  $z$  without any other constant terms. The main idea behind the rule is that the government should use the fiscal policy only to mitigate shocks, which means having and expecting on average balanced budget because of a symmetric distribution of shocks around zero. The empirical counterpart of this theoretical concept is to have the budget balanced over the economic cycle.

From the perspective of the model presented above, the state-contingent rule is theoretically ideal way how to run fiscal policy without having deficit bias due to political motives. However, a number of questions arise with design, implementation and enforcement of such a rule. First, to what extent should fiscal policy react to shocks, and second, how should the constitutional parameters be set in order to make the rule work properly.

As regards the optimal reaction of fiscal policy, two possibilities can be discussed. The first one is to depart from the disutility function of individuals and to ask to what extent the fiscal policy should mitigate the impact of shocks on  $y$ . The second one is to start with the government loss function and to ask which state-contingent rule is incentive-compatible with the government's objective function. As the state-contingent rule makes deficits dependent only on the shock  $z$  that has zero mean, the expected deficit will be zero regardless of the concrete specification of the rule. The first approach then yields the state-contingent rule optimal from the point of view of citizens (SCC)

$$d^{SCC} = -\frac{1}{b} z \quad (35)$$

while the second approach the state-contingent rule optimal from the point of view of government (SCG)

$$d^{SCG} = -\frac{b}{a+b^2} z \quad (36)$$

which equals the commitment-case rule given by (18). From the citizens' perspective the best rule is of course that in (35) as it compensates the impact of a shock on  $y$  to the full extent (see equation (2)). The incentive-compatible rule (36), even if compensating the impact of shocks less than fully, has a big advantage because it partly decreases the still existent incentive of government to break the rule and set deficit equal to (10), as it is just equal to the second part of the optimal deficit given in (10). Thus, the citizens should decide for the rule (35) only if the costs of enforcement mechanism are the same for both rules.

The same discussion of constitutional parameters as in the case of ever-balanced-budget rule applies here. The rule can be legislated on any of the levels defined, with resulting effect on credibility. In comparison with the fixed rule, the state-contingent rule is difficult to legislate precisely because it is impossible to describe all contingencies and all shocks that may hit the economy, as stated by Lohmann (1992) or Moser (2000). As a result, the legislation may only specify *procedures* through which the existence and size of a shock is determined together with an optimal reaction of fiscal policy and, eventually, a penalty if the reaction is not adequate. Thus, *what* is written in the legislation influences credibility of the rule in addition to at what level the rule is legislated and enforced.

There are two types of what the procedures can regulate. In the first type, government is left free to set fiscal policy and the procedures specify the control mechanism by which the fiscal policy is assessed ex post, while in the second type government is forced to follow the procedures when determining the existence of a shock and optimal policy reaction. It is clear that the second type is ceteris paribus more credible as the control works during the period and eliminates the possibility of politically motivated actions that would be justified ex post as reactions to in reality rather non-existent shocks.

In order to warrant as much credibility as possible, the procedures must follow at least two basic principles: first, division of powers when deciding about the existence of a shock,

appropriate fiscal reaction and sanctions (i.e. checks and balances), and second, transparency of the whole process. At least two bodies with different preferences should determine existence of a shock and necessity to react, with government taking the lead, i.e. proposing the fiscal policy measure, and the other one approving it or not. Moser (2000, chapter 10) shows how shared responsibility increases credibility of macroeconomic policies. However, coping with shocks requires flexibility of fiscal policy, while reaching consent about existence, impact of shock and appropriate fiscal reaction may take quite a long time. Thus, there is a trade-off between credibility and flexibility, leading often to recommendations to implement the first type of procedures: government has free hands as to fiscal policy measures, but is ex post accountable to a body with different preferences.

In order to facilitate the efficient ex post control of fiscal policy conduct, the government decisions must be as transparent as possible, providing the public and the body to which it is accountable with all necessary underlying information. As the state-contingent rule changes the incentives of the government towards hiding information, providing too optimistic forecasts of public revenues and magnifying the impact of a shock, transparency measures must be enforced, too.

A good example of a state-contingent rule is the Stability and Growth Pact (SGP) in the EU. The rule is legislated at a very high level (international association of states), includes an enforcement mechanism (a deposit of a country with the Community that can be turned into a fine) and specifies in detail the procedure through which the existence of an excessive deficit and of "exceptional circumstances" (i.e. a shock) is determined. The whole process seems to be transparent, as all materials are published at the Commission's website. The body deciding about appropriateness of fiscal policy is the ECOFIN (with information input provided by the Commission), at first sight an external body. However, as the ECOFIN consists of representatives of national governments (ministers of finance), the body does not have truly different preferences: actually, as Hagen (2003, p. 5) argues, "a group of sinners judge the performance of fellow sinners", so that the checks-and-balances principle is not fulfilled.

Thus, with the state-contingent rules, one has to put more emphasis on checks and balances, requiring at least ex post accountability of the government to political bodies that does not share the government's political incentives. A second chamber's ex post consent provides a possible check as to the desirability of public deficits in the national case, while the consent of the European Parliament or even the apolitical Commission or Court of Justice would be an appropriate kind of checks and balances in the SGP case in the EU.

## **8. An Independent Fiscal Policy Committee**

Quite recently, a proposal to establish an independent institution in charge of fiscal policy emerged, motivated by the successful conduct of monetary policy by independent central banks. Fiscal Policy Committee (FPC, Wyplosz, 2002) or Stability Council (Hagen, 2003) would set the public deficit according to the best forecast of macroeconomic shocks with the aim to stabilize the economy. The underlying assumption is that it is possible to dismantle the fiscal policy into a macroeconomic stabilization, a rather technical exercise without value judgments, and structural issues concerning the size of the government, redistribution, tax and expenditure structure, which involve value judgment and thus should remain in realm of political decisions.

Two basic models of FPC are discussed in the literature (Calmfors 2003). An advisory FPC would provide the government or the parliament with forecasts and information about future performance of the economy, serving as a basis for setting public budget, while an executive FPC would directly set public budget balance for the future period, making it binding for the government. The idea behind the advisory FPC is that it raises public concerns for appropriate stabilization policy, influencing the reputation costs for the government, which in our model are represented by the parameter  $a$  in the political loss function. The more radical proposal of delegating the decision to a FPC aims at eliminating the politically motivated deficit bias.

From the constitutional point of view, establishing an independent FPC with decision power represents rather a new kind of checks and balances within the state-contingent rule than a truly new institutional arrangement. With the FPC having power to set public deficits independently, we have a radical version of the second type of legislated procedures within the state-contingent rule, where a mutual agreement between government and another political body is no more required. As only *decision* is delegated, but not the actual conduct of fiscal policy that remains in the realm of government, the position of the FPC in the fiscal policy does not correspond fully to the position of an independent central bank in the monetary policy. However, we may use some of the argumentation regarding independence of central banks and credibility of macroeconomic policies.

Why should be an independent FPC better constitutional provision than say the consent of the second chamber of the parliament, provided that both are equally enforceable? First, even if the party in opposition might rule the second chamber, all elected bodies are suspected to have political loss function in form of (1). Thus, political incentives may lead both political bodies to an unofficial agreement and political trades, for example via logrolling activities. This incentive is weakened if one of the bodies does not aim at maximizing immediate political support because its members are appointed. Second, an independent agency with clearly defined objectives can accumulate knowledge, devoting all of its effort to one issue, i.e. that of estimating impact of shocks on the economy and discussing optimal fiscal policy response. Third, an independent institution may want to build up reputation for what it is doing, in sense of a repeated game discussed in (Barro, Gordon, 1983a). Thus, its horizon might be much longer than that of an elected body, taking into account all adverse effects of expansionary fiscal policy that may come with time.

Indeed, citizens choosing the appropriate fiscal constitution should consider all three features to be incorporated in the institutional framework of the FPC to ensure its credibility. This implies appropriate appointment procedures, budget independence of the FPC and its long-term focus. As Moser (2000) states, the credibility of an independent central bank depends on costs of withdrawing the independence. Thus, if the FPC arrangement should be credible, it must be difficult to government to override – both formally or informally – the FPC's decision. There should be as well no easy way for government to influence the functioning of the FPC, either by executing pressure on the daily business, submitting biased information, or by appointment procedures. Besides budget independence, i.e. no government's influence on setting the FPC's budget, the responsibility of the appointment of FPC's members should be shared by more political bodies, none of them being the government or the chamber ruled by the government's party. Furthermore, overlapping and rather long-term contracts for FPC's members should be warranted to ensure the FPC's long-term focus and the impossibility to replace them all at once.

Of course, as with central banks, political pressure can never be totally eliminated, but it can be limited by using smart strategies. As Posen (1993) argues, credibility of a central bank is enhanced if different political pressures – for example the one of the government and the one of the interest groups such as the financial industry – work in opposite directions and eliminate each other. The same applies to the FPC, with pressure groups opposing the government consisting of financial sector participants or resident and non-resident bondholders. In any case, the issue of institutional framework of such an agency is much more complex and would require detailed discussion of partial incentives the representatives of the institution would face, and several more real-world issues. Nevertheless, such a discussion is out of the scope of this paper.

## 9. Conclusion

In this paper, a simplified dynamic inconsistency model of fiscal policy was used to discuss from the political economy perspective three reform proposals that would eliminate the deficit bias of governments: the ever-balanced-budget rule, a state-contingent rule, and establishment of an independent Fiscal Policy Committee. All proposals were discussed as to the de-

sirability from the point of view of citizens, concentrating on their working properties and welfare implications. At the same time, “constitutional parameters” of all proposals were discussed: who bears the responsibility to decide about deficit, at what level the rule is legislated, how the credibility is ensured and to what extent is the rule enforceable.

The ever-balanced-budget rule was found to be relatively easy to introduce, but with strong welfare implications in case of large shocks hitting the economy and possible unstable equilibrium. The state-contingent rule allows for using the fiscal policy for mitigating the impact of shocks, but it is much more difficult to legislate: as a result, strong checks and balances must be introduced to raise credibility of such a flexible arrangement. The establishment of a Fiscal Policy Committee is discussed within the concept of state-contingent rule, representing a kind of important check and balance rather than a totally new institutional device. As with central banks, other checks and balances must in turn warrant the independence of such an institution.

Overall, the idea of a Fiscal Policy Committee having the power to set public deficit is promising, provided that its credibility is ensured. This is not an easy task, as fiscal policy will always be much more political than monetary policy. Nevertheless, from the constitutional point of view, if we keep on searching for appropriate checks and balances that mitigate the political pressure, we may succeed in having flexible, but credible fiscal policy that would serve well to all citizens of the community.

## 10. References

- Balassone F, Franco D (2001): EMU Fiscal Rules: A New Answer to an Old Question? (Banca d'Italia) *Fiscal Rules*.
- Barro RJ, Gordon DB (1983a): Rules, Discretion and Reputation in a Model of Monetary Policy. *Journal of Monetary Economics*, 12(1):101–121.
- Barro RJ, Gordon DB (1983b): A Positive Theory of Monetary Policy in a Natural Rate Model. *Journal of Political Economy*, 91(4):589–610.
- Blanchard O (2003): Comments on Inflation targeting in transition economies; Experience and prospects, by Jiri Jonas and Frederic Mishkin. Mimeo.
- Brennan G, Buchanan JM (1980): *The Power to Tax: Analytical Foundations of the Fiscal Constitution*. Cambridge University Press, Cambridge.
- Buchanan JM (1958): *Public Principles of Public Debt*. Richard D. Irwin, Homewood, Ill.
- Buchanan JM (1967): *Public Finance in Democratic Process: Fiscal Institutions and Individual Choice*. The University of North Carolina Press.
- Buchanan JM (1975): *The Limits of Liberty*. The University of Chicago Press, Chicago and London.
- Buchanan JM (1990): The Domain of Constitutional Economics. *Constitutional Political Economy*, 1(1):1–18.
- Buchanan JM, Tullock G (1962): *The Calculus of Consent: Logical Foundations of Constitutional Democracy*. The University of Michigan Press, Ann Arbor.
- Buchanan JM, Vanberg V (1986): Organization Theory and Fiscal Economics: Society, State, and Public Debt. *Journal of Law, Economics, and Organization*, 2(2):215–227.
- Buti M, Veld J in't, Roeger W (2001): Monetary and Fiscal Policy Interactions Under a Stability Pact. Banca d'Italia, *Fiscal Rules*.
- Calmfors L (2003): Fiscal Policy to Stabilise the Domestic Economy in the EMU: What Can We Learn from Monetary Policy? *CESifo Economic Studies*, 49(3):319–353.
- Canzoneri MB (1985): Monetary Policy Games and the Role of Private Information. *American Economic Review*, 75(5):1056–1070.
- Coats W, Laxton D, Rose D (eds.) (2003): *The Czech National Bank's Forecasting and Policy Analysis System*. Czech National Bank, Prague.
- Coeure B, Pisani-Ferry J (2003): *A Sustainability Pact for the Eurozone*. Presented at HM Treasury Keynes Seminar, January 2003.
- Goodhart Ch (1988): *The Evolution of Central Banks*. MIT Press, Cambridge.
- Hagen J von (2003): *Fiscal Sustainability in EMU: From the Stability and Growth Pact to a Stability Council for EMU*. ZEI, Bonn.
- Hayek FA (1976): *Denationalisation of Money*. The Institute of Economic Affairs, London.
- International Monetary Fund (2004): *World Economic Outlook: Advancing Structural Reforms*. April 2004.
- Kilpatrick A (2001): Transparent Frameworks, Fiscal Rules and Policy-Making under Uncertainty. Banca d'Italia, *Fiscal Rules*.
- Kopits G (2001): Fiscal Rules: Useful Policy Framework or Unnecessary Ornament? Banca d'Italia, *Fiscal Rules*.
- Kydland FE, Prescott EC (1977): Rules Rather than Discretion: The Inconsistency of Optimal Plans. *Journal of Political Economy*, 85(3):473–492.

- Lohmann S (1992): Optimal Commitment in Monetary Policy: Credibility versus Flexibility. *American Economic Review*, 82(1):273–286.
- Mills P, Quinet A (2001): The Case for Spending Rules. Banca d'Italia, *Fiscal Rules*.
- Molander P (2000): Reforming Budgetary Institutions: Swedish Experiences. In: Strauch RR, Hagen J von (eds.) (2000): *Institutions, Politics and Fiscal Policy*. Kluwer Academic Publishers, Boston, 191–214.
- Moser P (2000): *The Political Economy of Democratic Institutions. The Locke Institute*. Edward Elgar, Cheltenham UK.
- Mueller DC (2003): *Public Choice III*. Cambridge University Press, Cambridge.
- Niskanen WA (1992): The Case for a New Fiscal Constitution. *Journal of Economic Perspectives*, 6(2):13–24.
- Nordhaus WD (1975): The Political Business Cycle. *Review of Economic Studies*, 42:169–90.
- Obstfeld M, Rogoff K (1996): *Foundations of International Macroeconomics*. MIT Press, Cambridge.
- Persson T, Tabellini G (2000): *Political Economics: Explaining Economic Policies*. The MIT Press, Cambridge.
- Pesola J (2001): The role of macroeconomic shocks in banking crises. *Bank of Finland Discussion Paper*, no. 6/2001.
- Posen AS (1993): Why Central Bank Independence Does Not Cause Low Inflation: There Is No Institutional Fix For Politics. In: O'Brien R(ed.): *Finance and the International Economy*. Vol. 7. Oxford University Press, Oxford, 40–65.
- Schneider O, Hedbavny P (2003): Fiscal Policy: Too Political? Prague, Charles University (FSV – IES) *Working Paper*, no. 37.
- Strauch RR, Hagen J von (eds): (2000): *Institutions, Politics and Fiscal Policy*. Kluwer Academic Publishers, Boston.
- Vanberg VJ (1994): *Rules and Choice in Economics*. Routledge, London and New York.
- Wagner RE (2001): Politics and the macro economy. In: Shughart II, William F, Razzolini L (eds): *The Elgar Companion to Public Choice*. Edward Elgar, Cheltenham UK.
- Wildavsky A (1980): *How to Limit Government Spending*. University of California Press, Berkeley.
- Wyplosz Ch (2002): *Fiscal Discipline in EMU: Rules or Institutions?* European Commission, Group of Economic Analysis.