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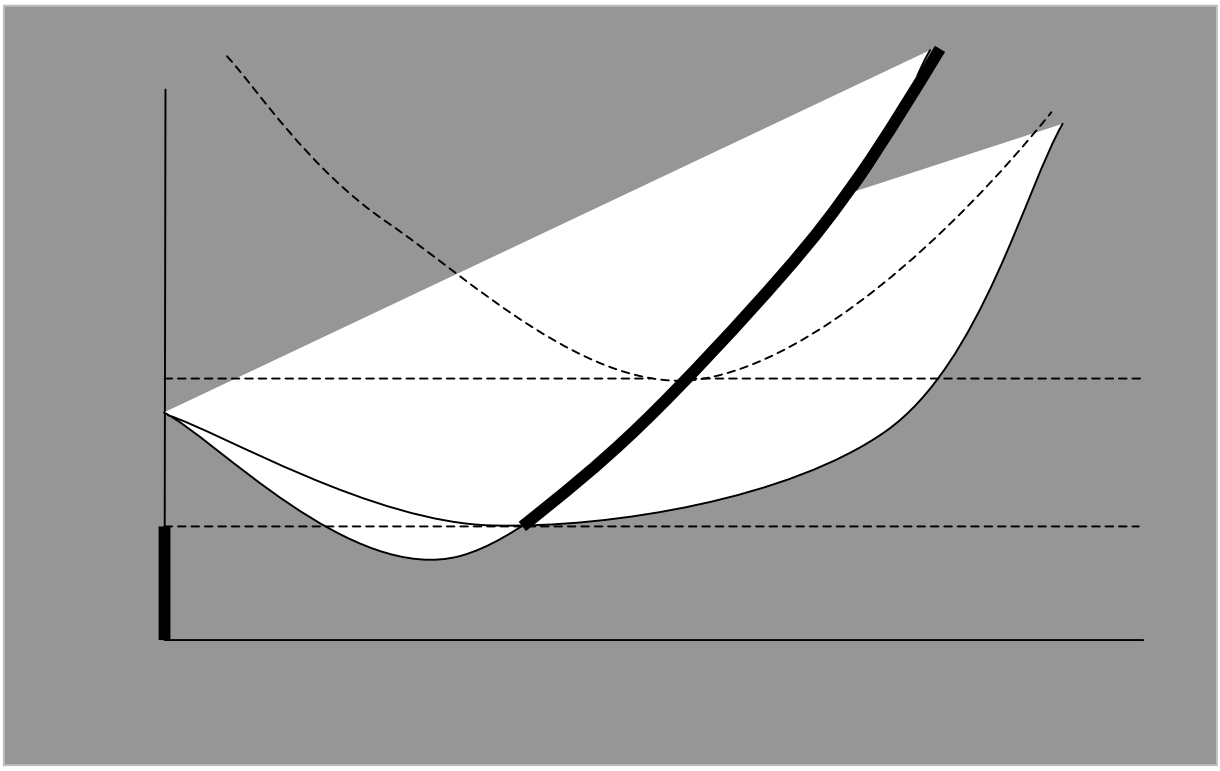
Petr Hedbávný, Ondřej Schneider, Jan Zápal: Does the Enlarged European Union Need a Better Fiscal Pact?



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In this paper, we set out to examine an efficient fiscal policy framework for a monetary union. We find that a monetary union can survive with diverging fiscal policies and that the financial markets are efficient enough to separate between “good” and “bad” fiscal policies and punish the latter with higher costs of borrowing. Therefore, there is only limited spill over effect of “bad” fiscal policy within a monetary union if financial markets work efficiently. We argue, consequently, that fiscal rules in a monetary union are still important as they allow to overcome incentive incompatibility of national fiscal rules and as they may guide financial markets in assessing sustainability of national fiscal policies. Finally, we argue for adoption of an institutional rule, Fiscal Sustainability Council for enlarged European Union. The Council would periodically assess fiscal policies and set guidelines for annual deficits. We argue that in order to make the FSC relevant, governments would be obliged to deposit with the Council a substantial amount of bonds that would be regularly rolled over by the Council. By doing so, the Council would connect fiscal policy sustainability principle with financial markets and would guide financial markets evaluation of national fiscal policies.

Keywords
fiscal policy, European Union, sustainability

1. Introduction

Fiscal policy remains the most intriguing economic policy issue in the early 21st century. While the 1990's oversaw a considerable consolidation of fiscal positions in most countries, the new century is marked by rapidly deteriorating fiscal position in most developed countries. This development is accompanied by re-emerged desire of European governments to be freed from bothersome international fiscal rules, namely from the Stability and Growth Pact as enacted in 1997 by the European Union.

Two aspects of fiscal policy are most discussed. First, fiscal policies in many countries seem to be on an unsustainable path. A radical overhaul of fiscal policy seems unavoidable as populations age very fast in developed countries, claiming ever-higher public spending on health care, pension and other age-related programs. Second, fiscal policy gains a central role in monetary unions where governments lose their monetary policies. An increased need for fiscal policy's flexibility is, however, constrained by apparent necessity to somewhat coordinate fiscal policies in such a union.

In this paper we analyze the role financial markets may play in maintaining long term sustainability of fiscal policy in the European context. We start from scratch discussing theoretical arguments in favor of presence of spending and deficit bias. Then we deal with the argument often cited by advocates of institutional-rules-based approach that misbehaving governments might not be disciplined by financial markets, i.e. we take a closer look at the market discipline hypothesis and we explore some further channel through which fiscal externalities might be transferred.

Having discussed those issues we argue that an institutional change is required whereby a new, independent Fiscal Sustainability Council (FSC) would be established in the European Union. The FSC would have the authority to prescribe annual deficits (or surpluses) to individual countries and to report to the European Parliament, and perhaps more importantly, to inform and "guide" financial markets as to which fiscal policies are sustainable and which are not. It would, thus, be in a regular contact with financial markets and should be able to communicate to them its assessment of national fiscal policies.

We believe that our suggestion would allow a beneficial separation of distributive (political) and stabilization (technocratic) roles of fiscal policy. It would also cultivate financial markets and their comprehension of fiscal policies' sustainability. By doing so, the FSC would better facilitate European Union's common currency and would also prevent future fiscal crisis.

The paper is organized as follows. First, we review arguments and empirical support for the hypothesis of the deficit bias in government policies. Then we analyze available financial markets data in order to find out whether these markets are able to separate between "good" and "bad" fiscal policies. Third, we illustrate worsening fiscal position of most European countries and we argue that the current fiscal policy framework, namely the Stability and Growth Pact is unable to restrict too loose fiscal policies even if the markets are able to punish high-borrowing countries. Finally, we propose a modified fiscal institution framework for the European Union, relying on an independent authority – Fiscal Sustainability Council – that sets appropriate deficit limits for individual EU countries using forward looking parameters and aiming at a sustainable level of explicit and implicit governments' debt. We discuss benefits and possible pitfalls of our proposal.

2. Do governments run excessive deficits?

The idea that logic of fiscal policy put into the democratic process might be associated with persistently increasing government spending and growing public sector has been proposed by Buchanan and Wagner (1977). The *fiscal illusion* stems from the fact that politicians during the budget process do not fully internalize cost associated with rising revenues needed to finance public activities. Therefore they constantly overestimate the benefits associated with public activities along with persistent undervaluation of cost associated with increasing taxes. This, possibly nonintentional, aspect might be exacerbated by deliberate use of public funds for private benefits, by effort of Becker's (1983) interest groups or by Niskanen's (1968) budget-maximizing effort of public bureaucrats.

Deficit bias stemming from increased public funds needs of spending biased government is due to two factors. One is that current voters-citizens evaluate costs associated with increased taxes differently from costs associated with higher government deficits. While increased taxes directly lower taxpayer's disposable income, high government deficits are associated with such a costs as higher inflation or higher public debt risk premium, in other words, while costs of higher taxes are real, higher deficit costs are only notional for a while and materialize only later, when the government is no longer in office..

Second factor is that during budget process, interests of future taxpayers are not properly represented. In fact, future unborn generation cannot possibly raise voice when it comes to the decision of how to finance current spending, whether through increased taxes now or in future. Therefore, politicians postpone unpopular decisions into the future, which creates deficit bias.

This story is clearly consistent with the rising public sector, rising debt levels and rising deficits of most developed countries during the second half of the last century. While public sector grew steadily along with its financial needs, as Wyplosz (2002) notes, taxes lagged behind which can mean only one thing, rising deficits and public debts. Indeed, as our analysis in the fourth chapter shows, the European governments have returned to the aggressive deficits immediately after they qualified for the euro zone membership. This development illustrates importance of an external anchor for national fiscal policies.

3. Do financial markets punish unsustainable fiscal policy?

In a monetary union, irresponsible fiscal policy might pose extra costs on other countries of the same monetary union. High public debt level in one country might raise monetary union wide interest rates, either through crowding-out or risk premium effect, presenting the externality on other members of the monetary union. If this in fact happens, then there might be a need for common rules or special institutional setup, which would ensure that all the member states behave decently in fiscal manners.

As Goldstein and Woglom (1992) and Bayoumi, Goldstein and Woglom (1995) note, there are generally three approaches to fiscal discipline within monetary unions. First, stressed in Delors' Report calls for strict fiscal rules to constrain the national governments. Second approach, explained in European Commission (1990a and 1990b) calls for external fiscal rules in form of multilateral surveillance and peer pressure of other countries within monetary union. Third approach, termed as market-based fiscal discipline, is based on the idea that financial markets are able, willing and informed enough to be able to credit constrain irresponsible governments.

3.1. Survey of literature

Before we went on into the econometric investigation, we had conducted a survey of empirical findings concerning the test of market based discipline hypothesis to see whether data gathering effort would possibly yield any results.

Our main concern was whether or not relevant empirical literature confirms market based discipline hypothesis or not and to what extent we can rely on financial markets. Notice that there is a wide gap between linearly rising interest rates on government debt and debt level and more than proportionally (we refer to this case as non-linear relationship) rising interest rate. In the first case, fiscal responsibility rests on assumption that rising costs of additional debt discourage credit-demanding politicians. In the case of non-linear relationship, credit-demanding politicians might be eventually denied the access to additional credit.

Moreover, we are concerned with the ability of financial markets to differentiate among states within monetary union, because it is the "relevant" feature of financial markets when it comes to the fiscal responsibility within monetary union.

Basic findings of recent empirical literature on market based financial discipline hypothesis are described in the following table. Second column gives details about countries or states as well as about time period under consideration. Third and fourth columns describe the findings of "preferred" specification concerning linear and non-linear relationship between interest on government debt and relevant GDP/GSP ratio. Fifth column describes whether study under consideration estimated the impact of fiscal rules (when applicable, impact of appropriate fiscal rules has been in general found to decrease borrowing costs of governments). Sixth column simply states whether study was concerned with market-based discipline within a monetary union or federation[1].

We think that some evidence of market-based fiscal discipline has been identified by empirical literature we surveyed. Nevertheless, the answer to the question whether financial markets are able to induce enough discipline that would be required is by our opinion not decided yet, if not negative. There seems to be evidence that financial markets require higher default premium for countries or states (even within federations and monetary unions) with high debt to GDP/GSP ratio. On the other hand, evidence that governments might eventually get credit constrained is rather mixed. Therefore, fiscal discipline than rests on the assumption that politicians, facing increasing borrowing costs, pursue different policies in order to avoid further borrowing. We doubt this assumption is relevant and to construct on it the argument for no need of fiscal rules within monetary union would be, by our opinion, rather naïve.

[1] Our opinion is that federal states are very close approximation of monetary unions and therefore that findings concerned with behavior of relevant variables within federal countries should offer a clue for answering questions about the nature and behavior of relevant variables within monetary unions.

Table 1: Empirical findings of recent literature on market-based discipline hypothesis					
Paper	Time period and countries	Positive relation between interest rate on government debt and debt to GDP/GSP ratio (linear)	Relation between interest rate on government debt and debt to GDP/GSP squared ratio (non-linear)	Impact of fiscal rules	Study concerned with financial market differentiation among states in federations or among countries in monetary union
Goldstein and Woglom (1992)	37 American states, 1982-1990	Yes	Negative, Insignificant	Yes	Yes
Alesina, De Broeck, Prati and Tabellini (1992)	12 OECD countries, 1974-1989	Yes, only for highly indebted countries or countries with quickly growing debt to GDP ratio	n.a.	n.a.	No
Bayoumi, Goldstein and Woglom (1995)	38 American states, 1981-1990	Yes	Positive	Yes	Yes
Mattina and Delorne (1997)	3 Canadian provinces, 1975-1996	Yes	Positive	n.a.	Yes
Alexander and Anker (1997)	8 EU countries, 1979-1995	Yes	n.a.	n.a.	No
Poterba and Rueben (1999)	40 American states, 1973-1995	Yes	n.a.	Yes	Yes
Lemmen (1999)	States/Provinces within following countries: Austria, 1990-1996 Canada, 1992-1997 Germany, 1994-1996	Yes for all countries	Negative for all countries	n.a. for Austria and Germany Yes for Canada	Yes
Lemmen and Goodhart (1999)	13 EU countries, 1987-1996	Yes	n.a.	n.a.	No
Copeland and Jones (2001)	5 EU countries, 1997-1999	Yes for Italy	n.a.	n.a.	No
Codogno, Favero and Missale (2003)	11 EMU countries, 1995-2002	Yes in some countries No evidence of EMU break	n.a.	n.a.	Yes
Ardagna (2004)	16 OECD countries, 1960-2002	Yes	n.a.	n.a.	No
Bernoth, von Hagen and Schuknecht (2004)	13 EU countries, 1991-2002	Yes, lower for post-EMU period	Negative, pre-EMU Positive, post-EMU	n.a.	Yes

3.2. Empirical investigation of market based discipline hypothesis

Beside the survey of already published work, we tested the market based fiscal discipline hypothesis ourselves. We were looking for an existing monetary union that has been around for a quite a long time, which is working in a "normal" way and for which, relevant and accurate data are available. Therefore, we investigate market discipline hypothesis on data about states of the U.S. federation.

Few other facts must be added which account for differences between United States on which our empirical analysis is based and European Union with respect to market based discipline hypothesis. First, United States are fiscal federation in which federal budget ensures income variations smoothing. Despite the fact that original estimates of extent of smoothing that federal budget provides in United States of Sala-i-Martin and Sachs (1992) and of Bayoumi and Masson (1995) were revised by Fatás (1998), it seems reasonable to expect that European Union is less federalized that United States. Therefore, European economies might be less synchronized than US states which offers some rationale for imposition of fiscal rules in the EU.

Second, the number of European states involved in the EMU is much lower than the number of American states. Therefore, financial markets might expect any individual state to have a greater power while deciding about important issues within the union, i.e. financial markets might count on higher probability of bail-out to happen in EMU than in United States which renders market-based discipline ineffective and might offer additional rationale for imposition of some form of fiscal rule.

Third, another consequence of federal government within the United States is that there is a certain degree of automatic fiscal smoothing even in the case that individual American states do not do anything in this course. On the other hand, there is no international fiscal redistribution within the European Union, so differences in business cycle within the EU have bigger impact on public budget balance than they would in the US. Thus, European countries may find useful a fiscal rule that forces individual countries' fiscal policies to coordinate their stances at least partially.

3.3. Results

Our hypothesis is that risk premium required by financial markets is positively correlated with level of public debt in individual U.S. states. We, thus, investigate the hypothesis that financial markets are rewarding fiscally responsible U.S. states by increased access to financial resources at lower costs.

However, we would like to isolate the effect of rising public debt levels on risk premium required by financial markets from other sources of variations just as economic cycle, variations in yields of other investment instruments or special provisions and limitations of individual American states with respect to their spending and taxing powers.

We estimate coefficients in the equation for two different dependent variables. Our first dependent variable, $INT(1)_{i,t}$, would in the ideal case be interest rate governments of individual American states have to pay on their debt. However, as Bayoumi, Goldstein and Woglom (1995) and Poterba and Rueben (1999) note, those data are not easily obtainable for several reasons. First, there is limited trading in most state bond issues. Second, state bonds differ widely in their call provisions and in other detailed provisions. Third, many state bonds are sold in bundles making it difficult to estimate the yield to maturity on a single issue.

We deal with this problem in rather simple way. Having the data about expenditures of individual states on interest payments and the overall debt in each state, we calculated the ratio of those two. This ratio roughly measures the cost each state (denoted by subscript i) has to pay on each dollar of its debt in given year (denoted by subscript t).

Our second dependent variable, $INT(2)_{i,t}$, comes from the Chubb Relative Value Study[2]. The Chubb corporation, an insurance company, has conducted since 1973 semi-annual survey among municipal bond traders who are asked to give the yield on five-, ten- and twenty-year maturity general obligation bonds for 39 American states relative to New Jersey. Data from this survey help to overcome the problem of direct comparability of yields on general obligation bonds of different states since they refer to a hypothetical bond and therefore differences in yields should reflect different position and credit-worthiness of individual American states, not the special provisions concerning their bonds. Since the survey is conducted semi-annually, we average the data for each year to comply with the rest of our data set, which is on annual basis.

Some important differences between our two dependent variables are worth noticing. Interest payments over debt ratio, our first dependent variable, respond to past development, it is rather a measure of past decisions, past development of borrowing and reflects the fact that government revenues fall behind its expenditures. Data from Chubb Relative Value Survey on the other hand capture the credit-worthiness of each particular government as a borrower, market valuation of its willingness and ability to raise revenues in order to be able to repay its debt and market valuation of government's ability to solve unexpected.

We estimate the following model that captures major factors that influence the borrowing costs of the U.S. states.

$$INT_{i,t} = \alpha_i + \beta_1 \cdot INF_t + \beta_2 \cdot GSP_{i,t} + \beta_3 \cdot UN_{i,t} + \beta_4 \cdot DEBT_{i,t} +$$
$$+ \beta_5 \cdot TRANFS_{i,t} + \beta_6 \cdot SPE_{i,t} + \beta_7 \cdot REV_{i,t} + \beta_8 \cdot SUP_{i,t} + \beta_9 \cdot FED_t + \varepsilon_{i,t}$$

Our set of independent variables includes state specific intercept, α_i; nation wide change of consumer price index (to capture notion of expectations formed on past experience, inflation is lagged one year in our specification), INF_t; percentage growth of product of given state in a given year, $GSP_{i,t}$; unemployment rate in a given state and year, $UN_{i,t}$, public debt expressed as a percentage of GSP in given state and year, $DEBT_{i,t}$; amount of transfers from federal government to the given state expressed as a percentage of its expenditure in a given year, $TRANSF_{i,t}$; three dummy variables which take on value of 1 if a given state in a given year had a special provision limiting its government to raise its expenditures, $SPE_{i,t}$, revenues, $REV_{i,t}$, or enact new taxes, $SUP_{i,t}$; and yield on federal ten-year constant maturity security in a given year, FED_t.

Sign and value of β_4 determines whether market discipline hypothesis is valid or not. In case that $\beta_4 = 0$, financial markets are not able to discriminate between fiscally prudent and irresponsible governments. In the opposite, when $\beta_4 > 0$, financial markets do punish those government that borrow too much.

All the data are in a logarithmic form (except for dummy variables) so the estimated coefficients can be interpreted as elasticities. We estimated the relevant coefficients using panel data procedure and report the results in the following table.

[2] The same data use Goldstein and Woglom (1992), Bayoumi, Goldstein and Woglom (1995) and Poterba and Rueben (1999).

Table 2: Test of market discipline hypothesis						
Coefficient	First dependent variable, $INT(1)_{i,t}$			Second dependent variable, $INT(2)_{i,t}$		
β_1 (inflation)	-0.136 (-9.40)	-0.137 (-9.43)	-0.133 (-9.29)	0.029 (1.47)	0.029 (1.48)	-
β_2 (GSP growth)	-0.214 (-1.12)	-0.214 (-1.20)	-	-0.504 (-2.30)	-0.504 (-2.30)	-0.579 (-2.70)
β_3 (unemployment)	0.117 (4.77)	0.116 (4.75)	0.126 (5.52)	0.087 (3.49)	0.087 (3.59)	0.101 (4.78)
β_4 (debt to GSP ratio)	0.076 (2.37)	0.076 (2.36)	0.076 (2.43)	0.080 (2.35)	0.080 (2.34)	0.078 (2.17)
β_5 (transfers from federal)	-0.351 (-6.41)	-0.348 (-6.32)	-0.368 (-7.16)	-0.025 (-0.49)	-0.025 (-0.49)	-
β_6 (dummy for spending limit)	-0.050 (-1.82)	-0.047 (-1.83)	-	-0.030 (-1.61)	-0.030 (-1.62)	-
β_7 (dummy for revenue limit)	0.043 (1.23)	0.047 (1.47)	-	0.001 (0.03)	-	-
β_8 (dummy for new tax limitations)	0.016 (0.45)	-	-	0.041 (1.87)	0.042 (2.13)	-
β_9 (interest on federal securities)	0.179 (5.36)	0.179 (5.37)	0.164 (5.60)	0.047 (1.19)	0.047 (1.19)	0.100 (2.53)
R^2	0.31	0.31	0.30	0.85	0.85	0.85
Number of observations	1100	1100	1100	390	390	390
Notes: Data span from 1978 through 2000 for first dependent variable and from 1991 through 2000 for second dependent variable. Values of heteroskedastic-consistent t-statistics are in parentheses. Both models estimated by fixed effect procedure (unambigously suggested for INT(1) variable by Hausman test and not yielding significantly different results for INT(2) variable).						

Besides the fact that all of the estimated coefficients do have expected sing and are in most cases statistically significant, coefficient of our concern, β_4, is positive which means that we can not reject market discipline hypothesis. The model yields the same magnitude of estimated variable for debt to GSP ratio and basically the same significance level across the specifications. Nevertheless, the coefficient β_4 is relatively low, compared to other coefficients of significant variables.

Notice that for our first dependent variable, estimated coefficient for dummy variable describing the limitation of government to enact new taxes is highly insignificant (therefore in second column of first dependent variable part, we excluded this dummy and in the third column excluded all variables that turned insignificant in basic specification) which is consistent with the positive coefficient for revenue limitations which yield higher debt servicing costs simply by the fact that governments instead of being able to raise relevant revenues resort to debt financing of their activity.

This brings us to another point. Notice that dummy variable for revenue limitations is insignificant in model with market survey yields data. This is consistent with the idea that financial markets are not concerned with governments' overall limitations on revenue but that they are concerned with its ability to raise additional revenue through new taxes. And lastly, notice the difference in significance in coefficient for transfers from federal government. Significant estimates for our first dependent variable reveal the fact that higher federal transfers allow state government to rely less on debt financing, nevertheless, this fact is not taken in account by financial markets, which are concerned primarily with governments' ability to find additional funds for debt repayment.

3.4. Correlation of debt ratio with state ratings

There is another way how to test the hypothesis whether markets are or are not able to distinguish responsible and irresponsible governments. We collected the credit rating of individual American states for period since 1995 through 2002 as conducted by major rating agencies and calculated its correlation with fiscal variable of our concern – debt to GSP ratio of individual states[3].

Table 3: Correlation of state debt (expressed as a % of GSP) with state rating

	1995	1996	1997	1998	1999	2000	2001	2002
Standard & Poor's	0,23	0,31	0,30	0,37	0,39	0,37	0,30	0,17
Moody's	0,39	0,44	0,44	0,45	0,34	0,32	0,24	0,22
Fitch	0,36	0,39	0,39	0,40	0,32	0,31	0,18	0,19

Notes: Average number of rated states was 42 by Standard & Poor's; 40 by Moody's; and 33 by Fitch. Correlation is of rating with one year lagged debt to GSP ratio. Test statistics for the hypothesis of independence ranges depending on number of rated states from 0,29 to 0,38 on 5 % significance level.

Clearly, there is a relation between the rating of individual state and its debt to GSP ratio. This is consistent with the Standard and Poor's (2004) who state that debt to GSP ratio of individual states is among other criteria, which determine the rating or its change for every individual state. Supplemented that credit ratings in many cases serve as the primary source of information many lenders acquire about their perspective investment, it is clear that debt to GSP ratio, through rating agencies, is positively correlated with the borrowing costs any state must face.

But the overall tendency of correlation to decrease over the last years cannot go unmentioned. Although we do not have the explanation for such a development, the result is that financial markets seem to be decreasingly concerned about the debt to GSP ratio of American states. On the one hand, it can be the result of US specific events, which is not relevant for discussion of fiscal rules at the European level. On the other hand, consider it is the result on global changes, say globalization and increasing financial mobility, in that case it would offer another rationale for existence or imposition of fiscal rules.

3.5. Internal and external externality

In this place, it is relevant to distinguish between *external externality* from borrowing and *internal externality* from borrowing.

External externality from borrowing refers to the externality irresponsible government places on other states of monetary union or on federation through its increasing indebtness. The literature and our own findings suggest that financial markets are able to internalize this effect and force governments to behave responsibly.

Internal externality refers to possible impact the excessive borrowing might pose on future generations in a given country. History of rising debt levels over past several decades, in spite of foregoing globalization of world capital markets and increased financial

[3] Since ratings are reported in letter for, we translated it into numerical values. Higher number means lower rating. We did not perform regression analysis since credit ratings take on seven (nine for Moody's) different values and change discretely.

liberalization gives the picture that this sort of externality is not in fact being internalized by financial markets.

In other words, the external externality may be interpreted as interregional redistribution while internal externality might be considered as intergenerational redistribution. Growing debt levels, i.e. increasing intergenerational redistribution might offer a reasonable rationale for imposition of appropriate fiscal rule that would ensure or force politicians to take in account interests of future generations.

Another rationale for imposition of fiscal rules is the fact that financial markets tend to overreact. Series of financial crises that took place over last two decades is a clear example. Despite the fact that country might be stabilized on macroeconomic level within the horizon of several years, destroyed savings and confidence of citizens in financial markets might take several decades to retain. Therefore, fiscal rules might serve as a prevention that ensures that governments limit further borrowing well before the debt reaches critical heights.

There are two additional channels through which irresponsible behavior of one country might impose extra costs on other countries within monetary union. First channel became to known in an economic literature as crowding-out effect. High debt level of one country might rise, ceteris paribus, interest rates for other countries despite the fact that those interest rates still reflect country specific factors. Most recent findings of Laubach (2003) and findings and survey of relevant literature in Mühleisen and Towe (2004) suggest that some crowding-out in fact takes place. Second channel refers to the fact that default of one country within monetary union or federation might temporarily rise interest rates for which other countries can borrow, i.e. contagion occurs. However, as Eichengreen and Wyplosz (1998) show, contagion effect by itself cannot offer a sufficient rationale for imposition of fiscal rules.

To sum the conclusions of what has been said so far, we claim that (i) financial markets are able to distinguish between fiscally responsible and irresponsible governments; (ii) nevertheless, we doubt financial markets might solve all the problems associated with fiscal policy, especially they seem unable to solve intergenerational redistribution (internal externality) aspect of the problem; (iii) further, financial markets, when it comes to punishment, usually punish fiscal irresponsibility in a harsh way; and (iv) financial markets seem to reward countries with appropriate fiscal rules through lower default premium and therefore another rationale for its imposition is that fiscal rules, ceteris paribus, lower costs associated with government debt.

4. Rationale for fiscal rules

Given the apparent failure of fiscal policy to maintain fiscal stability, an apparent candidate is a rule-based system whereby fiscal policy would be subject to an external limit. While this limit might vary (annual deficit, total debt, cyclically adjusted deficit…) it inevitably limits the freedom of policy-makers and limits the politicians' reign. This makes fiscal rules very controversial and susceptible. What government would like to be subject to an external rule? As the row about Germany's and France's breach of the Stability and Growth Pact illustrates all too vividly, politicians despise any external authority that may impose its preferences over the politicians' tendency to set budget deficits according to their (rather short-term) goals.

And still, were not the governments similarly beleaguered 20 or so years ago when monetary policy was taken from them and vested in independent central banks? As

politicians, especially in Europe, were not trusted to run prudent monetary policy, the power to set interest rates and intervene in currency markets was transferred to non-elected technocratic institution, with some oversight from parliaments. This transfer has proved to be successful, as independent central banks have been able to run monetary policy in a less myopic and more predictable way than politicians.

Why should fiscal policy be any different? Certainly, fiscal decisions lie at the heart of any government policies. Politicians win or lose elections on their promises to increase spending on particular programs or to introduce tax preferences. Inefficient as it often is, this political process should not be eliminated. Government will always have the ultimate authority to set taxes and spend revenues. However, they do not need to do so without any limits. As we show below, it may be perfectly compatible with democracy for governments to accept *overall* limits on spending and set their structure according to its political preferences. Or governments may be told only what a deficit (or surplus) must be and then decide on the amounts to rise through taxes and spend on various expenditure programs. Such a mechanism would let governments redistribute from the rich to the poor as much as they deem fair and would let them finance defense and all other expenditures programs. It would only expose governments to hard budget constraints.

Indeed, even now many countries pursue different fiscal rules.[4] The United States uses nominal caps on discretionary spending while Britain uses the "golden rule". Perhaps most famously, the European Union has adopted the Stability and Growth Pact that limits national budget deficits and can even punish countries that exceed the limit of 3% of GDP.

The main objective of such rules is to reinforce the credibility and predictability of macroeconomic policies. In other words, fiscal rules are usually aimed at mitigating the democratic government's tendency to abandon previous policy commitments. Thus fiscal rules are particularly helpful if the government is not able to persuade economic actors that it will conduct a prudent fiscal policy.

Fiscal rules are sometimes criticized for being redundant, for representing an unnecessary bureaucratic obstacle and also for being conducive to misuse via "creative accounting". However, even as an imperfect tool, fiscal rules can play a positive role. They introduce a long-term horizon to the government's often shortsighted decision making. Fiscal rules also "guide" financial markets, the ultimate source of fiscal discipline for governments, as strict transparency requirements are identified as a common denominator of efficient rules[5]. Without such a guide, financial markets react to a change in fundamentals with a considerable time lag and they impose high costs (sudden capital outflow, high risk premium) on the government that departs from a prudent fiscal policy.

In order to guide fiscal policy successfully, fiscal rules should be forward oriented and should incorporate increasing pension entitlements stemming from aging populations.[6] Fiscal rules should also encompass various quasi-fiscal transfers and programs that are used to mask the true size and effects of fiscal policy. Some authors also argue that fiscal policy rules

[4] In this paper a fiscal policy rule means a permanent constraint on fiscal policy, expressed in terms of an indicator of overall fiscal performance, such as the government budget deficit, borrowing, or debt (i.e. we follow the definition of Kopits and Symansky (1998)). A rule is often expressed as a numerical target for a public budget deficit or debt as a share in GDP.

[5] See Craig and Kopits (1998) on transparency in fiscal policy.

[6] More on the issue of implicit pension debt in Schneider (1999).

should take into account the risk of fiscal revenues and expenditures and use more sophisticated financial methods to estimate the "value at risk" of a fiscal policy.[7]

Taking account of the preceding criticism, an ideal fiscal policy rule should have – according to Kopits and Symansky (1998) – the following properties: it must be (i) well-defined in terms of the indicator to be constrained, institutional coverage and escape clauses, (ii) transparent regarding accounting conventions, forecasts and reporting practices and (iii) simple. Furthermore, it should be (iv) adequate with respect to the ultimate goal and (v) flexible so that in the case of an unexpected macroeconomic shock it does not hinder the achievement of the goal. Finally, the fiscal rule like any rule has to be (vi) enforceable, (vii) internally consistent and in accordance with other policies and, finally, should be (viii) reinforced by structural reforms so that the whole fiscal framework is not seriously endangered by increasing budget liabilities (e.g. implicit pension debt).

5. Stability and Growth Pact and its Failures

Crucial points of the Stability and Growth Pact (SGP) can be summarized as follows:

- EMU members should aim at a balanced budget or a budget in surplus so that they have enough leeway to deal with cyclical downturns ("medium balance rule"),

- EMU member countries have to submit annual programs specifying medium-term budgetary objectives,

- if an EMU member country runs a budget deficit exceeding 3 per cent GDP, a penalization follows; the country can be freed from the obligation to pay the deposit (which can become a fine) if it suffers from annual GDP decline of more than 0.75 per cent and is freed from the obligation if a cyclical downturn of more than 2 per cent occurs ("deficit rule").

The Pact has been criticized from various angles. In 2003 it was formally suspended after Germany and France convinced other countries not to fine the two for the breach of the Maastricht criteria on budget deficit for three years in a row. Nevertheless, the SGP has been included in the European Union's draft Constitution even as the frantic negotiations how to change it were taking place. We concentrate on three critiques of SGP: (i) SGP rules complicate the free operation of automatic stabilizers, (ii) they do not take into account unfunded liabilities of governmental programs and (iii) they do not force governments to behave in a forward-looking manner.

5.1. SGP rules complicate the free operation of automatic stabilizers

Adherence to the medium balance rule provides with very high probability sufficient room for automatic stabilizers to operate freely (Buti, Franco and Ongena (1997)).[8]

European governments tended to conduct pro-cyclical fiscal policies in the years before EMU membership (Buti, Franco and Ongena, (1997)) and the deficit bias has not disappeared after 1999 as the medium balance rule is not supported by an efficient enforcement mechanism. Consequently, the deficit rule (if enforced) becomes a binding constraint for the operation of automatic stabilizers. As predicted by Eichengreen nad

[7] See Barnhill and Kopits (2003)

[8] Nordic countries with generous welfare benefits have the highest sensitivity of the budget to the cycle among "old" EU countries and thus require the biggest room for their automatic stabilizers.

Wyplosz (1998, p. 69), "the Stability Pact will grow more binding … increasing the volatility of output, further depressing growth, and making the provisions of the pact even more binding than before. Through the operation of this vicious spiral, Europe could be condemned to a low-level equilibrium trap."

Recurrent fiscal tightening in low-growth periods can have adverse effects on long-term growth prospects. It can lead to under-investment in both human capital and physical capital and a failure to maintain it. But the use of automatic stabilizers requires some caution. Automatic stabilizers should be let operate symmetrically over the business cycle rather than being undermined by discretionary expenditures in boom periods (van den Noord (2002)).

5.2. The SGP rules do not take into account unfunded liabilities

Neither SGP rules not their pre-EMU counterpart, the Maastricht criteria, take into account unfunded liabilities of governmental programs. They tackle just explicit deficits and debts. Subsequently, politicians replace budgetary outlays with promises, the costs of which will be born by future taxpayers. Net present value of the implicit debt of publicly-run state pension systems (based on unchanged policies, for details see ABN Amro (2003)) spans from 14 % of GDP for the UK to 698 % of GDP for Greece (ABN Amro (2003)).

Table 4: State pensions debt (percentage of GDP) – net present value of the public pensions debt built up by 2050, based on unchanged policies

Austria	223	Italy	230
Belgium	296	Luxembourg	199
Denmark	264	Netherlands	85
Finland	327	Portugal	327
France	332	Spain	665
Germany	188	Sweden	201
Greece	698	UK	14
Ireland	150	Czech Republic	200-250

Source: ABN AMRO: "Desire to retire: The European Pension Problem" (2003), authors' estimate for the Czech Republic.

Moreover, the EMU rules do not account for off-budget liabilities, which encouraged manipulation with budgetary figures. We believe that the low transparency of governmental policy and the replacement of budgetary outlays with the off-budgetary ones will not support European growth prospects either.

Explicit government debt can be a good approximation of total governmental liabilities/government's rating, but we believe that this correlation need not necessarily hold in the coming years.

Though risk premium on high-debt EMU countries is low (Portes (2003)), a publication of the rating agency Standard and Poor's (2002) clearly shows that implicit pension debt is likely to heavily influence ratings (and subsequently, borrowing costs) of European countries.

Comparable figures about the amount of implicit pension debts are not available, as a couple of definitions exist. Hopefully, a unified approach to the assessment of implicit pension debt and to the treatment of pension schemes in macroeconomic statistics in general, which is being prepared by a working group of actuaries established by the IMF statistics department, spurs research into this field. The first larger and internationally comparable study has been written by Holzmann et al. (2004). They counted the IPD for 35 low- and middle-income countries.

5.3. EMU rules are backward-looking

EMU rules concentrate on short-term and medium-run targets. Thus they divert the attention and effort of politicians from not only much needed reform of the labor market (Wyplosz and Eichengreen (1998)), but also from the pension reform. The situation is further worsened by the non-enforcement of the medium balance rule in the early years of EMU. Beetsma and Debrun (2003) show in a simple model framework that EMU rules discourage the much-needed structural reforms. In their words, EMU rules are "sacrificing future growth for present stability".

The European Commission modified its stance in 2002 in two ways. First, it switched to cyclically-adjusted budget deficits as the key variable used to assess the soundness of fiscal stance of individual countries. This should ease pressure on those EMU member countries that suffer from a prolonged stagnation. Second, the Commission signaled that countries which progress substantially in structural reforms will be treated "softer". While most economists agree with the European Commission's stance, it is very difficult to measure a variable like "effort to conduct structural reform.

During the summer 2004, the European Commission in its communication[9] suggested that the SGP should be maintained, but significantly revised. Namely, it advocated a shift of focus from annual deficits to the "debt sustainability". It tried to return the debt criterion that was a part of the Maastricht criteria but was omitted in the SGP. The Commission suggested that the SGP should clarify the "satisfactory pace" of debt reduction and it even hinted that unfunded pension obligations and contingent liabilities should be taken into account.

While the Commission also tried to include more assuring changes to the SGP (as "more country specific circumstances" or catering for "prolonged periods of sluggish growth"), the European financial ministers at their meeting in September 2004 dismissed the Commission proposal.[10] The EcoFin Council instead maintained the 3% deficit and the 60% debt criteria as of "paramount importance". It also pledged to take more into account debt sustainability, including "the future costs of aging".

Thus, while the SGP formally remains in place, the European Union is currently without a binding fiscal rule and its current expansion to 25 members makes the need for "better" fiscal rules even more imminent.

6. Sustainability Council

As discussion above illustrates, it is not easy to define a robust, efficient and incentive-compatible fiscal rule. Indeed, we have just seen how the SGP fails on many tests that a good

[9] European Commission: Communication from the Commission to the Council and the European parliament (2004).

[10] See „Elements for Strengthening, Clarifying and Better Implementation of the SGP". EcoFin Communication, September 2004.

fiscal rule must pass. In this chapter we endeavor to propose a fiscal rule that, according to us, would better suit the European Union's needs and that would be more robust vis-à-vis political pressures.

We suggest creating a Fiscal Sustainability Council that would better cope with the inherited weaknesses of the SGP. Useless to say, we do not suggest that any institution, a SGP or a FSC, would be able to solve the international and national bias to excessive deficit. We, however, do believe that a properly structured institution may increase incentives for politicians to run a more responsible fiscal policy.

6.1. Credibility

As have seen above, one of the main failures of the SGP was its low credibility and its "dual character": a country was either complying with the SGP or it was threatened by the "Excessive debt procedure" even though the difference in fiscal policy in these two cases might have been minimal. This duality made the SGP unlikely to be applied, as it did not provide incentives for "god behavior" and its punishment was too extreme.

At the same time, we showed that an international based fiscal rule is more likely to succeed than purely national ones because fiscal policy has the "internal externality" aspect to it that often leads to excessive deficits. As national politicians find it very difficult to establish a credible and long-standing fiscal rule framework, we believe that an international setup, namely the European Union presents a possibility to cross the inconsistency in a national government's fiscal policy. If a fiscal rule is embedded in legislation of a supranational body, such as the European Union, it becomes less vulnerable vis-à-vis national attacks.[11]

As the sad example of the Stability and Growth Pact clearly illustrates, credibility and institutional factors are far more important than any numerical targets. The SGP failed not because of its "stupidity", but because it relied on the purely political decisions in the EcoFin Council and was not incentive-compatible as finance ministers clearly face a conflict of interest when voting about excessive deficit procedure in case of Germany and France.

Thus, a more fundamental anchoring of fiscal rules, at least in Europe, is needed. We believe that an independent Fiscal Sustainability Council, broadly in line with Wyplosz' proposal (2002) might be the most appropriate candidate. We, however, would complement this in several aspects.

6.2. Independence

The FSC, if it is to work properly, must be independent from regular political cycle considerations, i.e. it must be shielded from national governments. Therefore, an appointment system, similar to the one applied to the ECB governing council may be applied. We would argue that the Fiscal Sustainability Council should be chaired by senior economists selected and appointed by the European Parliament.

Importantly, the Council would not interfere with the national governments' routinely fiscal and tax policy issues. The sole responsibility of the FSC would be to set level of fiscal deficit for any given year with respect to two factors: a) the country's position in the business cycle, b) its total indebtedness (including explicit and implicit debt). The Council would

[11] The 2003' decision of the EcoFin Council to place the SGP in abeyance does indicate, though, that even international pressure might not suffice always.

announce the targeted deficits (or surpluses) for each country well in advance, so the respective governments could draft their budgets in which they can implement any policy [preference they may want. The Council would not define level of revenues or expenditures, so a government may reach the deficit target with very different tax revenues and expenditures. The policy aspect of fiscal policy would be, thus, maintained. There, a parallel with central bank independence is evident.

6.3. Forward looking rule

The long-term fiscal sustainability requires intertemporal budget constraints for the general government to be satisfied:

$$b(t) \leq \int_{t}^{\infty} e^{-\int_{t}^{v}[r(u)-n(u)]du}[\tau(v)-g(v)]dv$$

where *b(t)* is the ratio of government debt to GDP, *r* is interest rate, *n* is the nominal GDP growth, τ is the total government revenues and *g* represents total government expenditures.

However, this seemingly straightforward solution is based on the long-term forecasts and is, thus, susceptible to governments' short-term goals. There is one specific aspect worth mentioning here. Most European governments rely on the pay-as-you-go principle in financing social-security system. However, the PAYG pension systems are generally unfunded (or under-funded) due to fast aging population in Europe, though the debt is thus far "implicit." However, this implicit debt represents an estimate of costs that will be faced by taxpayers in future. It will be either in the form of higher taxes and/or lower pensions, or in the form of debt incurred during a reform.

Any fiscal rule that wants to be forward-looking must thus take into account this implicit debt and must include it in its provisions. We argue that this aspect further reinforces the argument for making the fiscal institutions as independent from a government as possible, as every government would try to manipulate the implicit debt estimates.

6.4. Financial markets

The rules and conditions applied above share one major weakness with other proposed modifications of the SGP, i.e. the weak enforcement mechanism. Generally, it is very difficult to devise a fiscal rule that will be incentive compatible for governments and that will have embedded enforcement mechanism. As have shown, the SGP failed exactly because its failed enforcement mechanism that left the decision on the fiscal policy sustainability in the politicians' hands.

For this reason, our proposal incorporates financial markets as an indispensable part of the enforcing mechanism. Namely, we suggest that any country that becomes a euro-zone candidate vests with the FSC five tranches of its five-year maturity bonds, each tranche equaling 3% of GDP of the respective country.[12] The FSC would then re-issue one of these tranches every year, just to maintain a stable stock of bonds of the respective country.

[12] This echoes a similar proposal that large international banks would issue subordinated debt as a measure of their acceptance and assessment by financial markets. Currently, there are only two countries in the EU that have total debt stock lower than required 15% of their GDP – Luxemburg and Estonia. They could be either

While doing so, the FSC would interact with financial markets and "guide" them as to whether the respective country's fiscal policy is or is not deemed to be sustainable. Thus, a well run country would get a positive report from the FSC and, eventually, would enjoy lower interest rates on its debt. On the other hand, a country with excessive fiscal deficits would be indicated as such by the FSC and financial markets would chare its debt higher interest rates. The FSC may use its tools to get "the message across" and thus "guide" financial markets as to which fiscal policy to award and which punish.

One advantage of such a solution is that financial market will always be here and credit-demanding governments will always have to play by its rules. As noted by Berndsen (2001), fiscal rules, no matter how much carefully designed usually get eroded over time and loose their effectiveness, bringing back the old problem of irresponsible fiscal behavior. Our proposal does not rely on fiscal rule as such. Our proposal calls for creation of institution that would be able and willing to supply relevant and accountable information about fiscal stance of individual countries to financial markets.

Second, our proposal works gradually and is free of the above mentioned "duality" that hampered the SGP. A government gets awarded (punished) by interest rates on its debt a few basic points lower (higher) and this process takes place regularly, on the annual basis. Thus a good performing country is attracted by financial markets to maintain its good performance and a fiscally profligate government is deterred from further escalation of fiscal deficits by financial markets' regular assessment of its policy.

7. Conclusions

In this paper we have demonstrated that fiscal policy has not yet lost its deficit bias. We argued that time inconsistency, present in all government actions, demonstrates itself in fiscal policy as strongly as it used to in monetary policy. We thus argued that the fiscal policy framework should, and could, be changed in a way emulating the separation of monetary policy from regular government intrusion.

We showed that financial markets are indeed able to separate "good" and "wrong": fiscal policies and punish the latter by higher costs of borrowing. However, other spill-over effects of a fiscal crisis in any member country do justify some pan-European fiscal institutional framework. We argued that the governments' bias toward deficits might be best contained by vesting deficit decisions with an independent Sustainability Council.

We also argued that the Council should take into account "implicit" fiscal debt, not only the explicit one. This would allow to prepare for a fast increase in expenditures as baby-boomers head for their retirement and will draw public pensions and use public health care programs enthusiastically.

Crucially, we argued that the Fiscal Sustainability Council should be given the right to re-issue a constant fraction of a country debt on a regular basis. This would give the FSC power and chance to "guide" financial markets and to communicate to them which fiscal policies the FSC deems sustainable and which are not sustainable and, thus, deserve higher interest rates to justify higher risk of default. This institutional arrangements would link fiscal institution (FSC) with financial markets and would make the fiscal rule less rigid and more market oriented.

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spared the procedure as their debt level is evidently sustainable, or they can be asked to raise the debt anyway and would be free to save the money raised.

Fiscal policy has become, as we argued above, a threat to long-term sustainable macroeconomic stability in most developed countries. The current regimes, where fiscal policy is mostly vested with elected officials, are flawed, as they lead to a deficit biased fiscal policy. It is time to reconsider the proper role for arbitrary annual election-influenced political decision-making and which aspects of fiscal policy should be institutionalized outside the politicians' reign and closer to financial markets.

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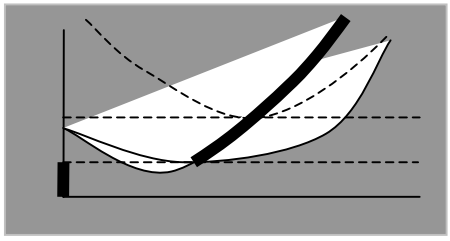
Table 1: General government consolidated gross debt of old EU member states, US, and Japan

Country	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Belgium	130,6	132,2	137,9	135,9	134,0	130,2	124,8	119,6	114,8	109,1	108,1	105,8	100,5	97,4	94,3
Germany	40,4	42,9	46,9	49,3	57,0	59,8	61,0	60,9	61,2	60,2	59,4	60,8	64,2	65,6	66,1
Greece	82,2	87,8	110,1	107,9	108,7	111,3	108,2	105,8	105,2	106,2	106,9	104,7	103,0	102,8	101,7
Spain	44,3	46,8	58,4	61,1	63,9	68,1	66,6	64,6	63,1	61,2	57,5	54,6	50,8	48,0	45,1
France	35,8	39,6	45,3	48,4	54,6	57,1	59,3	59,5	58,5	57,2	56,8	58,6	63,0	64,6	65,6
Ireland	95,6	92,5	95,1	73,5	68,4	63,8	61,3	54,9	48,6	38,4	36,1	32,3	32,0	32,4	32,6
Italy	100,8	108,1	118,7	124,8	124,3	123,1	120,5	116,7	115,5	111,2	110,6	108	106,2	106	106,0
Luxembourg	4,6	5,5	6,8	6,3	6,7	7,2	6,8	6,3	6,0	5,5	5,5	5,7	4,9	4,5	3,8
Netherlands	76,8	77,9	79,3	76,4	77,2	75,2	69,9	66,8	63,1	55,9	52,9	52,6	54,8	56,3	58,6
Austria	57,5	57,2	61,8	64,7	69,2	69,1	64,7	63,7	67,5	67	67,1	66,6	65,0	65,5	65,3
Portugal	60,7	54,4	59,1	62,1	64,3	62,9	59,1	55,0	54,3	53,3	55,6	58,1	59,4	60,7	62,0
Finland	22,6	40,5	55,9	58,0	57,1	57,1	54,1	48,6	47,0	44,6	43,9	42,6	45,3	44,5	44,3
EUR12	58,5	60,4	66,3	68,9	73,5	75,1	74,9	74,2	72,8	70,4	69,4	69,2	70,4	70,9	70,9
Denmark	62,5	66,3	78,0	73,5	69,3	65,1	61,2	56,2	53,0	50,1	47,8	47,2	45,0	42,3	40,0
Sweden	50,1	63,3	71,3	73,9	73,7	73,5	70,6	68,1	62,8	52,8	54,4	52,6	51,9	51,8	50,5
UK	34,4	39,2	45,4	48,5	51,8	52,2	50,8	47,6	45,0	42,1	38,9	38,5	39,9	40,1	40,6
EU15	54,7	57,1	64,0	66,2	70,6	72,5	70,9	68,8	67,8	64,0	63,2	62,5	64,0	64,2	64,2
EU25	:	:	:	:	:	:	:	67,4	66,7	62,9	62,1	61,5	63,1	63,4	63,4
US	72,0	74,4	76,1	75,2	74,8	74,0	71,4	68,3	64,9	59,1	58,9	60,9	63,4	66,1	69,2
Japan	64,7	68,7	74,7	79,6	87,0	94,3	100,3	111,6	125,3	133,6	142,3	149,4	157,3	161,5	166,1

Notes: All averages are unweighted. Based on ESA95 and former definitions. At % of GDP at market prices.
Source: European Commission (2004). For years 2004 and 2005 predicted values are reported.



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