

Excessive Deficits and Debts

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**With author's note on p. 7, dated 8 October 2010, updating data in table on
Public Debt in High-Debt Countries (as a percentage of GDP)**

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Abstract

There is an urgent need to clarify the meaning of the Maastricht criterion for participation in EMU concerning public debt. In some member countries, it is widely assumed that the reference value of 60% of GDP is an absolute threshold. In other countries, the debt criterion is seldom mentioned, and it is implicitly assumed that it is sufficient to reach a deficit of 3% of GDP because the ratio of debt to GDP would then be "*sufficiently diminishing and approaching the reference value at a satisfactory pace*" as foreseen in Article 104c of the Treaty. A number of countries would thus come to the examination in 1998 (to determine who qualifies for membership in the initial core of EMU) with the expectation that they should be admitted because their deficit is below 3% and their debt ratio has been declining a bit. The position of Germany and others, however, might be that they have failed to meet the membership criterion.

This ambiguity surrounding the debt criterion might create extremely serious controversies. It is advisable therefore that the ECOFIN Council should reach a consensus on precisely what improvement in the debt ratio is required in order for a country to participate in EMU. There is no need to formally amend the Treaty. A gentleman's agreement would serve.

This paper proposes a numerical rule that would be consistent with the Treaty and could be used to eliminate all the uncertainty surrounding the debt criterion. The rule is that each year the debt ratio should decline by more than 5% of the difference between the starting value of the debt ratio and the 60% reference. According to this rule, the minimum reduction in the debt/GDP ratio to be achieved by 1998, would be 11% of GDP for Belgium (from 134 to 123), which has the highest debt ratio in the EU, about 10% for Italy (from 125 to 115) but only 3-4% of GDP for the Netherlands from (78 to 75) which is already much closer to the 60% reference value. This rule should also be applied after EMU has started to ensure that debt levels continue to decline.

1) Introduction

It is sometimes claimed that the fiscal criteria imply that a country that wants to qualify for EMU has to have a deficit below 3 % of GDP and a public debt to GDP ratio of below 60 %. However, this is not entirely¹ correct.

How could this misperception arise? What are the conditions under which a country has an excessive deficit? The second paragraph of Article 104c is key in this respect:

Article 104c (2):

"The Commission shall monitor the development of the budgetary situation and of the stock of government debt in the Member States with a view to identifying gross errors. In particular it shall examine compliance with the budgetary discipline on the basis of the following two criteria:

- (a) whether the ratio of the planned or actual government deficit to gross domestic product exceeds a reference value, unless*
 - either the ratio has declined substantially and continuously and reached a level that comes close to the reference value;*
 - or, alternatively, the excess over the reference value is only exceptional and temporary and the ratio remains close to the reference value;*

- (b) whether the ratio of government debt to gross domestic product exceeds a reference value, unless the ratio is sufficiently diminishing and approaching the reference value at a satisfactory pace.*

The reference values are specified in the Protocol on the excessive deficit procedure annexed to this Treaty.

The Protocol referred to (in the last sentence above) says that the reference value for the deficit is 3 % (the deficit of general government as a proportion of GDP) and 60 % (the gross debt of general government as a proportion of GDP). These are indeed the numbers that dominate the public discussion, but the Treaty contains important qualifications that are often overlooked.

¹ One might also ask why it arose. It is difficult to avoid the impression that some times the general aversion against EMU has been a factor behind statements to the effect that a debt ratio above 60% is not compatible with EMU.

On the deficit the Treaty could be interpreted as saying that only small overruns are admissible and that they have to be temporary. A valid reason for a temporary deficit is often assumed to be a downswing in the business cycle; but there might also be unforeseen expenditure due to a court ruling. (In 1994/5 a ruling of the High Court forced the Italian government to pay back pensions that had been reduced or not paid for several years.)

It will always remain debatable what 'close to the reference value' means in practice: is a deficit of 3.2, or even 3.5 % of GDP still close? However, these are questions of detail compared to the ones that arise concerning the debt level, which in some countries is double the reference value.

In contrast to the provisions concerning the deficit the one concerning debt do not specify that the level of debt has to stay close to the reference value. The reason for this is quite clear: when the Treaty was negotiated several countries already had debt/GDP ratios in excess of 100 %. From this starting point it was clearly impossible to get close to the reference value in any foreseeable future because the debt level is a stock that cannot be changed quickly. A deficit, which is a flow concept, can be adjusted rather quickly, but it takes time for this to have an impact on the debt level. The Treaty just says that the debt/GDP ratio must be moving into the right direction at a certain minimum speed. The decisive formulation concerning the excessive deficit issue will thus be for the foreseeable future this short sentence in article 104c:

..... 'unless the ratio is sufficiently diminishing and approaching the reference value at a satisfactory pace.'

The crucial question is: what constitutes a sufficiently diminishing debt ratio? This vague formulation needs to be made more precise, otherwise there will be too much room for disagreement. The case of Ireland, which was exempted from the excessive deficit procedure in 1994 and 1995 although its debt/GDP ratio was still around 90 %, is in one country used as an indication that the Maastricht criteria have been softened. This criticism could arise only because the debt criterion is so vague.

2) **A concrete proposal**

It is not widely appreciated that most of the freedom of interpretation on what means 'approaching at a satisfactory pace' could actually be resolved on the basis of the numbers contained in the Treaty, combined with some simple arithmetic as shown in more detail in Box 1.

It is shown there that a country that observes the 3 % deficit limit should under ordinary circumstances see its debt to GDP ratio declining automatically towards the 60 % target. If the deficit is equal to 3 % of GDP the speed of this convergence towards the target would be slow as only 5 % of the difference between the actual debt/GDP ratio and the 60 % target would be eliminated each year. But this rule would at least ensure a minimum of convergence and a country that starts with a higher debt level would automatically achieve larger reductions in the debt/GDP ratio. A country that starts with debt equal to 140 % of GDP and has a deficit of 3 % would 'automatically' achieve a reduction in the debt ratio of 4 percentage points, a country that starts with a debt burden of 90 % of GDP would get only 1.5 percentage points.

In order to ensure that the improvement is not transitory it would be necessary to check whether this criterion has been met over a number of years before the examination. We therefore propose the following rule:

The debt to GDP ratio is considered 'approaching the reference value at a satisfactory pace' if, over the previous three years, it has been declining continuously and, on average, one twentieth of the difference between the initial debt ratio and the reference value has been eliminated each year.

This rule should be applied each year when the public finances of member countries are examined for the excessive deficit procedure and should continue to be valid once EMU has started. In practice it would be relevant for those member countries that have a debt/GDP ratio that is clearly above the 60 % reference value.

The main reason why even such a slow (at least at first sight) speed of adjustment should be acceptable is that the danger for price stability that derives from a large debt level is much reduced once financial markets see that the debt/GDP is clearly on a durable downwards path.

Table 1 below shows the evolution of the debt/GDP ratio until 1995 for those 8 member countries that are clearly above 60 %. It is apparent that, except for Ireland, there has been no improvement since 1993. The reduction in the Irish debt ratio, 12 percentage points in just two years would be more than sufficient under the rule proposed here.

Table 1: Public debt in high debt countries.
(Percentage of GDP)

Public debt as % of GDP	1993	1994	1995	required in 1998
Belgium	137	136	134	123
Denmark	80	76	76	74
Greece	98.281 115	96.3277 114	97.0082 115	107
Ireland	97	90	85	81
Italy	119	125	125	115
Netherlands	81	78	78	75
Portugal	67	70	70	69
Sweden	76	79	85	81

Source: Own calculations based on data from the CEC.

Author's note, dated 8 October 2010. The above table was based on the data available in 1995. Below you can find a similar table, but with the data as it is recorded today. It is clear that there have been very significant revisions in the data.

Based on today's data, two countries (Greece and Italy) would not have passed the test to enter EMU.

Data as of today:

	Actual 1995	Actual 1998	Required according to rule in 1998	Passed?
Belgium	129.9	117.4	> 119	Yes
Germany	55.6	60.3	> 60	Very close
Ireland	82.1	53.5	> 60	Yes
Greece	97.0	94.5	> 91.5	No
Spain	63.3	64.1	> 62	Close
France	55.5	59.4	> 60	Yes
Italy	121.5	114.9	> 112.3	No

Source: European Commission, AMECO (of 2010).

table

shows what would be required if the above mentioned rule were to be used in the excessive deficit procedure in 1998. Belgium could then be admitted only if the ratio had declined from about 134 to 123 % of GDP. However, this would require a considerable effort since the ratio has essentially been constant over the last years. For Ireland, it would be quite sufficient to keep the rate of decline since 1993 (12 percentage points of GDP until 1995) to continue to be exempt from the excessive deficit procedure. For the countries with a debt ratio around 70 % the required adjustment would be minor.

Box. 1. How to interpret the debt criterion

The numbers specified as reference values in the Maastricht Treaty are arbitrary. However, the two values, 3 % deficit and 60 % debt to GDP ratio are at least coherent with each other if one assumes that nominal GDP grows at 5 % per year. This seems a reasonable assumption since it corresponds to the growth rate a relatively good performer in terms of price stability, like Germany experienced during the 1980s. (During the 60s and 70s nominal GDP actually grew at over 8% in Germany.) If growth in the EU stays at 3 % (i.e. just a bit above growth in potential output) a 5% nominal growth rate would be compatible with inflation of 2 % (less than the German average over the last 40 years).

Given this assumption the two reference values are consistent with each other in the sense that at a 60 % debt/GDP ratio and a 3 % deficit will leave the debt ratio unchanged. This can be seen by considering the government budget constraint in terms of ratios of GDP, which implies that the change in the debt ratio, denoted by $b_t - b_{t-1}$, is approximately equal to the deficit (the overall deficit not the primary deficit used above), d_t minus an adjustment factor for GDP growth:

$$(1) \quad b_t - b_{t-1} = d_t - b_t * \text{growth of nominal GDP}$$

If nominal GDP growth at 5 % this equation implies that the 3 % deficit limit will lead to debt to GDP ratio automatically to 60 % since if def_t equals 0.03 equation (1) can be rewritten as:

$$(2) \quad b_t - b_{t-1} = -0.05 * (b_t - 0.6)$$

If the debt ratio is initially above 60 % it will decline, and vice versa if it starts out below 60 %. It will be constant only if $b_t = 0.6$ (i.e. 60 %). This result depends, of course, on the assumption of a residual inflation rate of about 2 %. With absolute price stability GDP would grow only at 3 %, in this case a deficit of only 1.8 % of GDP would be required to keep the debt ratio constant. Vice versa, a balanced budget would imply that the debt ratio declines faster, but in this case it would go towards zero, not 0.6. For example, starting from a value of 1.2 a nominal growth rate of 5 % would lead, initially to a reduction of 6 percentage points each year.

Another interesting implication of equation (2) is that it implies that each year one twentieth (0.05) of the discrepancy between the actual debt ratio and the Maastricht target would be eliminated automatically if the deficit is 3 % of GDP.

This suggests that the expression in article 104c 2b that a debt/GDP ratio above 60 % constitutes an excessive deficit 'unless the ratio is sufficient diminishing and approaching the reference value at a satisfactory pace' could be interpreted more precisely as saying that the debt ratio should be declining at least by enough to reduce the distance between the 60 % reference value and the starting point by at least by 5 % p.a.. If this rule is accepted any government that has a deficit below 3 % of GDP (and that keeps honest accounts) would automatically also satisfy the debt criterion.

End of box

3) The link between deficits and debts

It is noteworthy that neither the Maastricht treaty nor other official documents use the accounting identity that the increase in government debt over any given year should be equal to the deficit incurred during that year so that the deficit and the debt criteria are linked. The simple reason might be that in reality one observes large discrepancies between the actual increase in debt and the one that should result from the deficit. Small deviations from this accounting equality would not matter. But the discrepancies that are contained in the official figures (from the Commission's services) for the recent past are so large that they make the interpretation of the convergence criteria very complicated.

The prize for the largest 'stock flow adjustment' in more recent times goes to Greece where it exceeded 20 percentage points of GDP in one year alone (1993)! In cases like this, the deficit numbers are meaningless and the formulation in Article 104c 2 that 'The Commission shall monitor the budgetary situation and the stock of government debt in member countries with a view to identifying gross errors.' acquires a real meaning. Reconciling deficit and debt figures should be worth a major effort by the services of the Commission.

It is surprising that there has been no official explanation of these inconsistencies and no official comment on them in terms of the interpretation of the fiscal convergence criteria. They must clearly be taken into account during the excessive deficit procedure. An increase of debt ratio could in some cases be cause for concern. Two examples from the recent past can illustrate this: In 1993 the stock flow adjustment for Ireland was about 7 % of GDP (i.e. the debt/GDP ratio increased from 94 to 97 % of GDP whereas it should have declined by about 4 points on the basis of the recorded deficit and the actual growth of nominal GDP). Most of this was due to the devaluation which increased the domestic currency value of the part of debt denominated in foreign currencies by over 10 %. This event thus did not signal a deterioration of the underlying fiscal position but presumably a once and for all adjustment.

Another example was Germany where in 1995 the debt ratio jumped to 58 % of GDP although it should have stayed constant at about 50 % of GDP given the small deficit and robust growth during that year. The reason behind this stock flow adjustment of over 8 % of GDP was that the Federal government took over the debt of the privatization agency 'Treuhandanstalt'. If the deficits of this agency had been incorporated into the federal budget from the beginning (as they should have been) the general government deficit would have been about 2 % points of GDP

higher during the previous four years of operation of the Treuhandanstalt. Hence this stock flow adjustment arose from the fact that the previous practice of keeping the Treuhandanstalt off-budget did conceal partly the seriousness of the fiscal situation in Germany.

Under EMU most of the legitimate reasons for the stock-flow adjustment (e.g. borrowing by the central bank to bolster its reserves, a change in the domestic value of debt denominated in foreign currency due to a devaluation) should disappear. The practice of keeping certain items off-budget should then be scrutinized thoroughly.

All in all these considerations imply that a government that keeps the deficit clearly below 3 %, or even balances the budget should also be able to satisfy also the debt criterion, provided a) that it does not accumulate other debt, and, b) that growth is satisfactory. For a country that satisfies these two conditions the deficit is thus the key variable even if the debt level is far above the target value of 60 %. This might also be ultimately the reason why the Treaty speaks only of an excessive deficit procedure. The debt criterion is needed in addition mostly because the deficit figures can be manipulated much more easily.

Unfortunately, however, a deficit of 3 % of GDP is at present not enough to get the required reduction in the debt ratio for some member countries for two reasons: i) the growth rate of nominal GDP is slightly below 5 %, and, ii) extra budgetary debt accumulation is continuing to the tune of 1 to 2 % of GDP each year. This implies that countries with a debt level far above 60 %, such as Belgium and Sweden should aim at a reduction of the debt level consistent with the rule developed here. It is difficult to say what deficit (as officially measured) this implies, but is certain that it has to be substantially below 3 % of GDP. For these countries 1 - 2 % of GDP might be the only way to attain the minimum reduction in the debt level outlined above.

Politics

The controversy concerning the debt criterion is so serious because a number of remarks by senior political figures in Germany have created the impression that the 60 % debt/GDP reference value is an absolute limit. This is obviously not compatible with the letter and the spirit of the Treaty. But it signals the determination of the German authorities to be as tough as possible on the entry criteria.

However, Germany does not have a veto in this matter. The countries that are at present subject to the excessive deficit procedure (all except Ireland, Luxembourg and Germany) need a

majority of two thirds to be taken out. Germany alone therefore does not have enough votes to block a decision. Hence Germany would need allies to get its point of view adopted. Germany and France would have enough votes if they are backed up by at least one other small country. But without France it would be very difficult to assemble enough votes to block a decision, for example, on Belgium.

There has been considerable public criticism in Germany of the decision taken by ECOFIN in 1994 (confirmed in 1995) that Ireland does not have an excessive deficit because its debt, although high (90 % of GDP in 1994) was falling rapidly towards the reference value (from over 100 % of GDP in the late 1980's). This criticism is not really justified if one looks at the substance, i.e. the Irish debt/GDP ratio which has come down from over 110% to 85% now. Moreover, Germany did not vote formally against this decision nor did it request the Commission to present a formal report on Ireland as it could have done according to article 104d. The judgement of the German constitutional court that called for a 'strict' interpretation of the Maastricht criteria can also not be used to construct a German veto since the Treaty says clearly that the condition for participation in EMU is that the country concerned is not in the excessive deficit procedure. Since it is ECOFIN that decides whether a country should be recognized as having an excessive deficit there is no room for the German constitutional court to undertake another examination, unless the interpretation of the Treaty was 'unreasonable'.

5) **What should be done?**

In order to reduce the uncertainty that still surrounds the debt criterion ECOFIN should discuss the meaning of what constitutes 'sufficient movement towards the reference value'. Ideally it would reach an informal agreement, adopt the rule outlined here. But if it is judged too lax ECOFIN could at least give the countries concerned a clear target, in terms of the debt/GDP ratio, at which to aim. Every country would then know what is needed to get into EMU. At present nobody knows.