



Maastricht 2.0 - Proposed reform of EU sovereign debt rules

The European Union's regulations governing sovereign debt are based on the principle of equal treatment of all member states. The recommendations we make here concerning changes in European Union sovereign-debt reduction rules take account of national particularities, but are by no means arbitrary in nature. According to the calculations we present here, such reformed regulations would do far more to promote economic growth than would be the case under the Fiscal Compact's European debt brake. By 2030, real gains in growth will amount to more than 450 billion euros more than the outcome that would presumably be obtained under the European debt brake.

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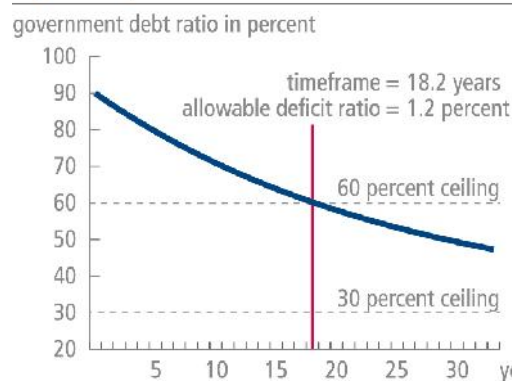
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Focus

Debt reduction trajectory (government debt ratio: 90 percent; nominal economic growth: 4 percent)



Source: Prognos AG.

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For a hypothetical member state whose sovereign debt is currently 90 percent of nominal GDP and with projected GDP growth of 4 percent a year, our proposed debt rule would allow for a mean annual deficit ratio of 1.2 percent. Hence such a member state could achieve a government-debt ratio of 60 percent of nominal GDP within around 18 years.

1. Current EU sovereign debt regulations

The maximum levels to which sovereign debt should be allowed to rise has long been a subject of intense debate among both economists and political leaders, who have yet to reach a consensus view on the matter. However, there is general agreement that a total ban on sovereign debt would be as economically absurd as prohibiting companies and individuals from taking out loans (see SVR 2007, p. 1). Likewise there is consensus that excessive sovereign debt is undesirable, for sooner or later it is bound to seriously restrict government economic policy leeway and could eventually lead to sovereign default. Moreover, empirical studies have shown that sovereign debt exceeding 80 to 90 percent of nominal GDP is a drag on economic growth, and thus of course on employment (see for example Reinhart and Rogoff, 2010).

The Maastricht Treaty stipulates that total annual government deficits are not to exceed 3 percent of nominal GDP, and that total sovereign debt is not to exceed 60 percent of GDP. There is no particular economic justification for this rule, for as one study put it: "From the get-go it is by no means clear, for example, whether a government-debt ratio of 30 percent is 'better' or 'worse' than a 70 percent government-debt ratio" (SVR 2007, p. 29). However, as the box below shows, there are definitional correlations between a member state's government-debt ratio, deficit ratio, and GDP growth rate (see text box).

A government's deficit ratio will unavoidably be subject to a ceiling insofar as the government (a) promulgates a specific maximum government-debt ratio; and (b) bases its economic policies on a projected long-term GDP growth rate. The 60 percent limit on sovereign debt stipulated by the Maastricht Treaty back in 1992 was

Computation procedure for the three-percent deficit rule: The government-debt ratio (v) for a given year is defined as the ratio between total sovereign debt (V) and GDP for such year: [$v = \frac{V}{GDP}$]. Sovereign debt as at end of any given year is composed of the total sovereign debt for the prior year (V) and the current deficit (D). The effort to achieve a constant government-debt ratio is thus characterized by the following equation: [$\frac{V}{GDP} = \frac{V + D}{(1 + g) \cdot GDP} = v = \text{constant}$], where: g = the GDP growth rate; or put another way: [$(1 + g) \cdot \frac{V}{GDP} = \frac{V + D}{GDP} = \frac{V}{GDP} + \frac{D}{GDP}$]. It thus follows that [$(1 + g) v = v + d$], whereby the deficit ratio is [$d = \frac{D}{GDP}$].

When multiplied out the following result is obtained [$v + g \cdot v = v + d$] and [$g \cdot v = d$] and [$v = \frac{d}{g}$].

The latter two expressions characterize the relationship that is established by definition between long term government-debt ratios (v), long term growth of nominal GDP (g), and the allowable long term deficit ratio (d). With 5 percent growth in nominal GDP ($g = 0.05$) and a target government-debt ratio of 60 percent ($v = 0.6$), the maximum allowable deficit ratio is 3 percent, whereby [$d = g \cdot v = 0.05 \cdot 0.6 = 0.03$]. But if nominal GDP increases by only 2 percent, the allowable long term deficit ratio is only 1.2 percent [$0.02 \cdot 0.6 = 0.012$].

arrived at by tallying the sovereign debt of the then EU member states and the respective nominal GDP values. This calculation yielded a government-debt ratio figure of roughly 60 percent. In combination with a GDP growth rate at the time of around 5 percent, a 3 percent figure for the allowable deficit ratio was arrived at. This three-percent criterion was the sole basis for determining whether a given member state had violated the European Union's sovereign debt rules.

2. Sovereign debt trends in the European Union

Sovereign debt had risen dramatically in the vast majority of European Union states even before the worldwide financial and economic crisis struck in 2008, largely owing to member states' failure to stick to the Maastricht Treaty's three percent annual government deficit ceiling. But even if every European Union member state had adhered to the three percent limit, the sovereign debt of many of these countries would have exceeded 60 percent of GDP anyway. This is attributable to the fact that the low economic growth in these states in recent years would have been insufficient to stabilize their ratio of sovereign debt to GDP, even if they had adhered to the deficit ceiling. For example, Germany's deficit ratio was supposed to have averaged less than 2 percent of GDP between 1993 and 2012.

The European Union is attempting to bring the mushrooming sovereign debt of EU member states under control via a new instrument, the Fiscal Compact (formally, the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union) of 2 March 2012, which calls for all signatory states to impose a cap on

national debt comprising a maximum structural deficit of 0.5 percent of GDP. The treaty defines the structural deficit as a given state's sovereign debt, after adjusting for cyclical fluctuations and temporary measures. In cases where a member state's sovereign debt is significantly below 60 percent of GDP, the maximum allowable structural deficit is 1 percent of GDP (see CEP 2012, p. 1). Thus, this restriction on sovereign debt makes no allowance whatsoever for the economic particularities of a given member state.

3. Recommended reform of the European Union's sovereign debt rules

The reform we recommend here – which would promote long term stabilization of the finances of European Union member states, while taking account of the economic particularities of each such state – would involve the following: The maximum sovereign debt amounting to 60 percent of GDP promulgated by the Maastricht Treaty would remain in place. For despite the absence of an economic rationale for this figure, it has become a cornerstone of the public debate on sovereign debt and is thus easier to implement. Also, the 60 percent criterion serves as a firewall for sovereign debt amounting to 80 to 90 percent of GDP – a rate that is a drag on economic growth. As long as any member state's sovereign debt is less than 60 percent of GDP, the 3 percent mark for its annual deficit can be adhered to. Moreover, insofar as a 60 percent ratio of sovereign debt to GDP is deemed sustainable, there is no reason to impose more stringent sovereign debt rules on member states whose debt level is lower than this ratio.

But in cases where sovereign debt exceeds the 60 percent mark, a rule requiring that the government-debt ratio be reduced should kick in that allows for the differences in economic conditions from one member state to another. Under our proposed reform, in addition to determining maximum allowable annual deficit ratios, the amount of time it would presumably take for a member state to reach a government-debt ratio of 60 percent of GDP would also be factored into the equation. This timeline would in turn be ascertained by determining allowable deficit ratios, so as to ultimately achieve member state government-debt ratio convergence to 30 percent of GDP.

Far from being a target, the sole purpose of this 30 percent parameter is to determine at which juncture a given member state reaches the targeted 60 percent government-debt ratio. The 30 percent figure was selected because our simulations show that a putative 30 percent government-debt ratio convergence constitutes a reasonable compromise between the goal of reducing sovereign debt with all due speed while at the same allowing reasonable consolidation needs to be met. The so called structural deficit (determined by positing that the government-debt ratio will be 30 percent and that nominal GDP will increase over the long term) indicates the maximum allowable deficit ratio that would be necessary to achieve a putative sovereign debt amounting to 30 percent of GDP. Our proposed reform rests on the assumption that long term GDP growth will be on a par with average economic growth over the prior five years. But during economic crises, economic growth over the previous five years is a highly unreliable basis for such projections. Hence in determining structural deficit ratios, we estimated the long term nominal growth rates for the calculations described below and – contrary to one of the basic princi-

ples of our proposed sovereign debt regulation reform – based on the growth rates of the past ten years and the long term projections in Prognos-Weltreport. Thus for example, a member state with a long term 4 percent GDP growth rate is deemed to have attained the requisite structural deficit ratio of 1.2 percent ($d = v \cdot g = 0.3 \cdot 0.04 = 0.012$). The time it takes for a given member state to reach a government-debt ratio of 60 percent will be determined by the state's baseline sovereign debt. For example, it would take a member state – with sovereign debt amounting to 90 percent of GDP and with a nominal economic growth rate of 4 percent – around 18 years to reach a 60 percent government-debt ratio (see graph on p. 1). Under our reform, this consolidation phase would constitute a legally binding set period during which the allowable deficit ratio would be adjusted if the GDP growth rate deviates from the projected rate. However, instead of being determined on the basis of the structural deficit alone, the maximum allowable government deficit would be higher during economic downturns; and this in turn would have to be offset by lower allowable deficits during economic upturns. The attendant “cyclical deficit ratio” would be determined on the basis of the cyclical component, as follows: cyclical component = (potential output – projected GDP) · budget sensitivity, which indicates the extent to which a national budget is determined by GDP; it is determined at regular intervals by the European Commission in accordance with OECD requirements (also see Girouard and André 2005). The projected GDP is based on the European Commission's current economic forecasts.

The economic crisis that struck in 2008 has demonstrated in no uncertain terms that both public and private indebtedness can induce sweeping economic upheavals. However, the problem with private-sector

debt is that it is completely uncontrollable as it is the outcome of countless individual decisions. Our proposed reform takes account of both government and current-account deficits, in order to be able to counteract macroeconomic imbalances. To this end, current-account deficits would be limited to 4 percent of GDP.

The VIEW model is a macroeconomic model that is used to make projections and simulate economic scenarios. The simulations in our study encompassed the world's 42 states that account for more than 90 percent of the world economy and were based on the following parameters: supply and demand; labour markets; government finances; as well as exports, imports, currency rates and so on. Thus, the model also factors in the interrelationships between the various states as regards these parameters.

4. How our proposed reform would stimulate economic growth

Cutbacks in government expenditures on goods and services reduce overall demand and provoke sales losses. And when companies are then forced to pare down production and lay off workers, this in turn impacts on government finances, reduces tax and social security revenue, and forces the government to spend more on unemployment benefits.

Hence it is essential that government-revenue losses be taken into account in devising policies aimed at reducing sovereign debt; for a sudden drop in government expenditures on goods and services can be counter-productive

and can increase sovereign debt even further. In the interest of estimating the impact of our proposed sovereign debt reforms on the various member states' economies and the world economy as a whole, we conducted a simulation using Prognos's macroeconomic VIEW model (see text box).

We devised a sovereign debt reduction solution based on the 2010 data for European Union member states whose government-debt ratio exceeds 60 percent of nominal GDP. In other words, we determined the maximum allowable structural deficit ratio and the number of years it would take for a given country to bring

Table 1: Timeframe and allowable structural deficit ratio

Country	Timeframe*	Allowable structural deficit ratio 2011
Belgium	25	1.03 %
Germany	19	0.96 %
France	21	0.90 %
Greece	43	1.00 %
Ireland	34	0.74 %
Italy	44	0.79 %
Netherlands	3	1.04 %
Austria	12	0.97 %
Portugal	26	0.94 %
Spain**	16	1.01 %
Great Britain	19	0.93 %
Hungary	9	2.22 %

* Duration (in years; rounded to the next whole number). ** Consolidation from 2013 onwards.

Source: Prognos AG.

their government-debt ratio down to 60 percent of nominal GDP. As table 1 shows, our proposed reform would allow these member states an altogether higher deficit ratio than the European Union's 0.5 percent debt reduction figure, and would afford them more economic policy leeway. The differences in the maximum allowable structural deficit ratios in our plan are attributable to differences in projected nominal economic growth for the national economies.

Table 2 displays the differences in economic development that would result from the Fiscal Compact's European debt brake versus our proposed reform. These figures were arrived at by simulating what would happen if, in the run-up to 2030, all European Union member states adopted fiscal

policies that were consistent with our proposed reform. We then compared the results of this simulation with those of a simulation of the putative outcome if all European Union member states adhered to the stipulations of the Fiscal Compact between 2011 and 2030. This comparison shows that by 2030, cumulative real growth would outpace by more than 450 billion euros the outcome that would be obtained under the current European debt brake. These 450 billion euros would, for example, enable the European Union to finance 65 percent of the capital for the European Stability Mechanism (ESM), or underwrite Greece's entire sovereign debt as at December 2011 amounting to around 355 billion euros – and with enough left over to finance 55 percent of Portugal's sovereign debt as at this same date.

Table 2: Real Gross Domestic Product: difference between recommended reform and European debt brake absolute, in billion Euros, prices as of 2005

Members of European Monetary Union	2015	2020	2025	2030	cumulated 2011-2030
Belgium	0.3	1.0	1.6	2.2	20.3
Germany	-6.3	7.6	18.4	32.8	186.0
Estonia	0.0	0.0	0.1	0.1	0.9
Finland	-0.3	1.5	2.4	1.8	23.9
France	-21.1	-1.1	19.1	37.7	74.9
Greece	-0.2	0.9	1.8	2.5	20.2
Ireland	-1.7	0.2	0.9	1.4	-0.9
Italy	-3.5	-0.9	5.5	13.5	41.2
Netherlands	-0.9	1.7	3.5	3.3	32.2
Austria	-0.4	0.6	1.6	3.4	17.1
Portugal	-2.2	-0.2	0.1	2.1	-7.5
Slovakia	-0.1	0.3	0.5	0.8	5.6
Slovenia	0.1	0.2	0.2	0.3	3.3
Spain	5.0	-7.3	2.2	11.5	-23.5
other EU countries					
Bulgaria	0.1	0.0	0.2	0.4	2.3
Denmark	2.0	1.8	2.2	2.4	36.8
Great Britain	-17.9	-10.0	5.0	21.7	-73.7
Lithuania	0.0	0.0	0.1	0.1	1.1
Latvia	0.1	0.3	0.3	0.4	4.4
Poland	-0.7	2.4	6.0	4.7	54.0
Romania	0.2	-0.2	0.0	0.1	-0.6
Sweden	0.3	0.8	1.9	3.2	25.2
Czech Republic	0.1	0.4	0.8	1.5	10.8
Hungary	0.1	0.3	0.3	0.5	4.9
EU total	-57.0	0.5	74.3	148.3	458.5

While our results revealed unfavourable evolutions in a few member states, they would be of brief duration and in the long run our proposed sovereign debt framework would promote economic growth in all European Union member states (see text box). Germany's economy is closely interlinked with other EU countries' economies. Which is why Germany would stand to benefit most from our proposed sovereign debt regulation framework, as economic growth in our partner countries would increase.

Transitional rules and their possible consequences: The transitional rules of the European debt brake call for incremental government deficit ratio reductions over a six year transitional period, as is being done in Germany. In contrast, our proposed framework calls for proportionally higher structural-deficit reductions at the beginning of a likewise six year period. The rationale for this distinction and the attendant proposed reform is that transitional-rule largess during a set consolidation period would inevitably result in needlessly stringent consolidation requirements – particularly in light of the unusually high deficit ratios that we saw in 2010. Hence in the final analysis our proposed regime is more stringent than that of the Fiscal Compact's European debt brake. And while this would be a drag on economic growth, our framework would at the same time promote economic growth in that it would allow for lower government-debt ratios and deficit ratios that take account of the economic conditions in individual member states.

Conclusion

Adhering to a maximum allowable government-debt ratio of 60 percent of GDP would make it necessary for many European Union member states to reduce their sovereign debt. In contrast, the approach to reducing sovereign debt that we propose here has the virtue of being clear and simple; plus it makes allowances for the economic particularities of individual member states without being arbitrary. Moreover, our proposal will stimulate economic growth far more than will be the case with the inflexible sovereign debt reduction regime imposed by the Fiscal Compact. And finally, rules that allow the European Union member states more time to reduce their sovereign debt and that take account of the particularities of individual economies are also in Germany's interests; for as a major export nation, we do not want the economic growth of our European Union trading partners to be

hampered by unduly large cutbacks in government spending.

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Policy Brief 2012/03: Shaping Sustainable Economies

A society acts sustainably if it ensures the long-term stability and productivity of ecological, sociopolitical and economic systems. In the past, issues of sustainability were typically handled separately, neglecting individual measures' effects on other elements implied by a comprehensive concept of sustainability. The challenge ahead is to develop a holistic strategy for sustainable economic activity that takes into account interdependencies between the various aspects of sustainability, and does not seek to solve problems of sustainability at other aspects' expense.

Policy Brief 2012/04: A Modern Social Market Economy

The new MSME Index defines and measures the features of a Modern Social Market Economy in international comparison. In contrast to other indices that measure economic performance, the MSME Index takes an institutional approach, outlining a system of essential institutions and measurable indicators for the construction and assessment of modern social market economies. Among other insights, the index could guide the European Union toward achieving the "highly competitive social market economy" that it defines in the Lisbon Treaty as its desired economic order.

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