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Debt Crisis in the EU Member States and Fiscal Rules

The financial turmoil in September 2008 provoked an economic downturn with a sharp slump in production, followed by slow growth resulting in persistent high unemployment in many EU member states. Bank bailouts, stabilising measures, high spending on transfers and lower revenues increased sovereign debt in all EU member states. With the exception of Bulgaria and Malta, the increase in the debt ratio in all other member states is also due to the sharp decline in their GDP in 2009. In some countries, GDP continued to decrease in the following years, with additional negative effects on the debt ratio, especially in Cyprus, Greece, Italy, Portugal, Spain, Croatia and the Czech Republic. Cyprus, Estonia, Latvia, Lithuania, Slovenia, Spain, Bulgaria, Croatia and Romania experienced an increase in the debt ratio of over 100% since 2008 and most of the member states are still beyond the Maastricht debt ratio criterion of 60% of GDP (see Table 1).

The significant negative effects on public finances triggered the introduction of additional fiscal rules at the national level in addition to those pre-existing at the supranational level, that were created to ensure financial stability for EU member states like the pre-crisis Stability and Growth Pact, as well as the Maastricht Treaty and the post-crisis European Stability Mechanism. But whether fiscal rules are followed largely depends on their design and how they are institutionally integrated into the budgetary process. To assess whether a fiscal rule is likely to be followed, the DG ECFIN has constructed a Fiscal Rule Index considering

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Table 1

General Government Consolidated Gross Debt-to-GDP Ratio in EU Member States 2008–2016, in Percent

Excessive deficit procedure (based on ESA 2010) and former definitions (linked series)

Country	2008	2009	2010	2011	2012	2013	2014	2015	2016	Change 2008/2016
Austria	68.4	79.6	82.4	82.2	81.7	81.0	83.8	84.3	83.6	22.2
Belgium	92.5	99.5	99.7	102.6	104.3	105.5	106.8	106.0	105.7	14.3
Cyprus	45.1	53.8	56.3	65.7	79.7	102.6	107.5	107.5	107.1	137.5
Estonia	4.5	7.0	6.6	6.1	9.7	10.2	10.7	10.0	9.4	108.9
Finland	32.7	41.7	47.1	48.5	53.9	56.5	60.2	63.6	63.1	93.0
France	68.0	78.9	81.6	85.2	89.6	92.4	95.0	95.8	96.5	41.9
Germany	65.1	72.6	80.9	78.6	79.8	77.4	74.6	70.9	68.1	4.6
Greece	109.4	126.7	146.2	172.1	159.6	177.4	179.0	176.8	180.8	65.3
Ireland	42.4	61.5	86.1	110.3	119.6	119.4	104.5	76.9	72.8	71.7
Italy	102.4	112.5	115.4	116.5	123.4	129.0	131.8	131.5	132.0	28.9
Latvia	18.2	35.8	46.8	42.7	41.2	39.0	40.9	36.9	40.6	123.1
Lithuania	14.6	28.0	36.2	37.2	39.8	38.8	40.5	42.6	40.1	174.7
Luxembourg	14.9	15.7	19.8	18.7	22.0	23.7	22.7	22.0	20.8	39.6
Malta	62.6	67.6	67.5	70.1	67.8	68.4	63.8	60.3	57.6	-8.0
Netherlands	54.7	56.8	59.3	61.6	66.3	67.8	68.0	64.6	61.8	13.0
Portugal	71.7	83.6	96.2	111.4	126.2	129.0	130.6	128.8	130.1	81.5
Slovak Rep.	28.5	36.3	41.2	43.7	52.2	54.7	53.5	52.3	51.8	81.8
Slovenia	21.8	34.6	38.4	46.6	53.8	70.4	80.3	82.6	78.5	260.1
Spain	39.5	52.8	60.1	69.5	85.7	95.5	100.4	99.4	99.0	150.6
EA-19*	**68.6**	**78.4**	**84.1**	**86.0**	**91.4**	**93.7**	**94.2**	**92.1**	**91.1**	**32.8**
Bulgaria	13.0	3.7	15.3	15.2	16.7	17.0	27.0	26.0	29.0	123.1
Croatia	39.6	49.0	58.3	65.2	70.7	81.7	85.8	85.4	82.9	109.3
Czech Rep.	28.3	33.6	37.4	39.8	44.5	44.9	42.2	40.0	36.8	30.0
Denmark	33.3	40.2	42.6	46.1	44.9	44.0	44.0	39.5	37.7	13.2
Hungary	71.0	77.2	79.7	79.9	77.6	76.0	75.2	74.7	73.9	4.1
Poland	46.3	49.4	53.1	54.1	53.7	55.7	50.2	51.1	54.1	16.8
Romania	13.2	23.2	29.9	34.2	37.3	37.8	39.4	37.9	37.6	184.8
Sweden	37.8	41.4	38.6	37.9	38.1	40.8	45.5	44.2	42.2	11.6
United Kingdom	49.9	64.1	75.6	81.3	84.5	85.6	87.4	88.2	88.3	77.0
EU-28**	**60.7**	**72.7**	**78.5**	**81.6**	**85.2**	**87.3**	**88.2**	**86.1**	**84.8**	**39.7**

*Non-consolidated for inter-governmental loans (year: bn EUR): 2009: 0.9, 2010: 21.2, 2011: 69.3, 2012: 193.4, 2013: 231, 2014: 240.5, 2015: 231.0 and 2016: 231.0.
**Non-consolidated for inter-governmental loans (year: bn EUR): 2009: 0.9, 2010: 21.2, 2011: 69.8, 2012: 196.4 and 2013: 236.3.

Source: European Commission (2017a).

Table 2

Scores per Criterion of the Fiscal Rule Strength Index

Scores	Criterion
	(1) Statutory/legal base of the rule
3	Constitutional base
2	Legal act (e.g. Public finance Act, Fiscal Responsibility Law).
1	Coalition agreement or an agreement reached by different general government tiers (and not enshrined in a legal act).
0	Political commitment by a given authority (central/local government, minister of finance).
	(2) Room for setting or revising objectives: The rule…
3	cannot be changed or temporarily suspended except in well-defined situations, i.e. escape clauses encapsulated in the document underpinning the rule.
2	can only be changed with parliamentary approval.
1	can be changed by the Government, but it is legally obliged to publicly justify its objectives.
0	can be changed by the Government at any time: the statutory base of the rule merely contains broad principles of the obligation for the government or the relevant authority to set targets.
Average of	**(3) Body in charge of monitoring**
	a) respect of the rule
3	Independent authority (i.e. fiscal council type of institution).
2	Court of auditors (if not hosting an independent fiscal council) and/or parliament.
1	Ministry of finance or other government body.
0	No regular public monitoring of the rule (no report systematically assessing compliance).
+1	If there is real time monitoring of compliance with the rule, i.e. if alert mechanisms of risk of non-respect exist.
and	**b) the correction mechanism in case of deviation from the rule**
3	An independent authority (e.g. fiscal council or court of auditors endowed with appropriate mandate).
2	The court of auditors and/or parliament.
	The ministry of finance or other government body.
1	No specific body in charge of monitoring the correction mechanism.
plus	**If there is an independent body providing or endorsing the official macroeconomic**
2	and budgetary forecasts on which the annual budget is prepared.
1	or budgetary forecasts on which the annual budget is prepared.
	(4) Correction mechanisms in case of deviation from the rule is/not triggered automatically (TA) and there are/no pre-determined rules framing its nature/size (PDR) and/or timeline (TL)
4	TA and PDR and TL (automaticity entails the existence of well-defined criteria for determining the occurrence of a deviation and activating corrective measures).
3	TA, but no PDR and/or TL.
2	Not TA, but PDR and/or TL.
1	Not TA, no PDR and/or TL, but the government is obliged to take or present corrective measures before the parliament or the relevant authority.
0	Not TA, no PDR and/or TL, and the government is not obliged to propose or adopt corrective measures.
Sum of	**(5) Resilience to shocks or events outside the control of the government**
1/0	Does the rule contain clearly defined escape clauses which are in line with the SGP?
1/0	Is there a budgetary margin defined in relation to the rule (i.e. the planned spending targets are set at a lower level than the expenditure ceilings) or a safety margin linked to the MTO which is enshrined in national legislation?
1/0	Are targets defined in cyclically-adjusted terms or do they account for the cycle in any way (e.g. targets defined over the cycle)?
1/0	Are there exclusions from the rule in the form of items that fall outside authorities‘ control at least in the short term (e.g. interest payments, unemployment benefits)?

Source: European Commission (2017a).

the following criteria for every fiscal rule in force (European Commission (2017b)).[2] Initially, the Fiscal Rule Strength Index (FRSI) is calculated taking into account five criteria: (1) legal base, (2) binding character, (3) bodies monitoring compliance and the correction mechanism, (4) correction mechanisms, and (5) resilience to shocks. Each fiscal rule is evaluated based on the detailed criteria depicted in Table 2. The scores are standardised to values between 0 and 1, and subsequently aggregated using an equal weighting-scheme. These fiscal rule strength indices, which are available for each fiscal rule in each period of time, are then aggregated to a single comprehensive score per country per year. This Fiscal Rule Index is obtained as follows: firstly, the fiscal rule strength indices are multiplied by the coverage of general government finances by the respective rule. Secondly, the products obtained are summed up. If more rules apply to the same general government sub-sector, then the rule with the higher fiscal rules strength index score is assigned weight one, while the second and third weaker rules obtain weights 1/2 and 1/3 respectively. The assigned weights are mainly determined by the fiscal strength of the rule and its coverage. This weighting is adopted to reflect decreasing marginal benefit of multiple rules applying to the same sub-sector of general government.

The values of the Fiscal Rule Index for the European Union countries displayed in Table 3 reveal the impact of the financial crisis. Since then almost all EU countries have enforced additional fiscal rules at the national level besides the EU wide rules in force. Notable exceptions are the Czech Republic where the Fiscal

[2] In the old methodology the strength of fiscal rules is calculated by summing up the scores from the following five criteria: (1) the statutory base of the rule, (2) room for setting or revising its objectives, (3) the body in charge of monitoring respect and enforcement of the rule, (4) the enforcement mechanisms relating to the rule, and (5) the media visibility of the rule.

Table 3

Fiscal Rule Index, 2008 – 2015

Country	2008	2009	2010	2011	2012	2013	2014	2015
Austria	-0.04	0.26	0.26	0.34	0.51	0.51	0.51	0.49
Belgium	0.04	0.04	0.04	0.04	0.07	0.07	1.54	1.54
Bulgaria	1.34	1.34	1.34	1.75	2.03	2.03	3.87	4.10
Croatia	-0.96	0.12	0.12	1.55	1.55	1.55	1.55	0.47
Cyprus	-0.89	-0.89	-0.89	-0.89	-0.89	0.65	0.95	0.95
Czech Rep.	-0.11	-0.31	-0.31	-0.31	-0.31	-0.31	-0.31	-0.31
Denmark	0.94	0.94	0.94	0.09	-0.58	1.04	1.56	1.56
Estonia	0.74	0.74	0.86	0.86	0.41	0.72	1.26	1.26
Finland	0.27	-0.06	-0.06	0.07	0.04	1.37	1.34	1.34
France	0.35	0.69	0.50	1.17	1.17	3.04	2.90	3.03
Germany	0.33	0.99	0.62	1.06	1.06	2.90	2.90	2.90
Greece	-0.96	-0.96	-0.96	-0.96	0.66	0.66	0.77	0.77
Hungary	0.33	0.10	0.10	0.10	-0.96	-0.23	1.82	1.91
Ireland	-0.76	-0.76	-0.76	-0.76	-0.76	2.08	2.08	1.95
Italy	0.07	0.15	0.19	0.22	0.22	0.26	3.50	3.53
Latvia	-0.38	-0.38	-0.38	-0.38	-0.38	2.03	2.93	2.93
Lithuania	0.51	0.51	0.51	0.51	0.53	0.53	0.53	3.09
Luxembourg	1.17	1.17	0.69	0.69	0.70	1.06	1.82	2.00
Malta	-0.96	-0.96	-0.96	-0.96	-0.96	-0.96	1.92	1.92
Netherlands	0.44	0.44	0.44	0.44	0.51	0.51	2.82	2.76
Poland	0.73	1.09	1.09	1.41	1.38	1.23	1.52	2.13
Portugal	-0.21	-0.21	-0.21	-0.21	-0.07	1.37	1.49	2.43
Romania	-0.48	-0.48	-0.48	-0.48	-0.48	-0.48	2.84	2.84
Sweden	1.28	1.28	1.39	1.39	1.39	1.39	1.39	1.39
Slovenia	-0.96	-0.96	-0.96	-0.96	-0.96	-0.96	-0.96	-0.96
Slovak Rep.	0.00	-0.03	-0.03	-0.03	1.81	1.81	2.52	2.52
Spain	1.13	1.13	1.13	1.94	2.53	2.53	2.87	2.91
United Kingdom	1.38	-0.96	1.13	1.09	1.09	1.09	1.17	0.53

Source: European Commission (2017b).

Rule Index decreased from 2008 to 2009 and remained at this low level (2009-2015: -0.31) and Slovenia with the lowest index value within the EU and still stuck at its pre-crisis level (2009-2018: -0.96). Although the Czech Republic did not enact further fiscal rules to ensure fiscal discipline, its debt ratio increase of 30% since the financial crisis is very moderate when compared to other member states, whereas Slovenia with the lowest Fiscal Rule Index saw the highest acceleration in its debt ratio (+260%) amongst all EU member states (cf. Table 1). Nevertheless both countries have still low levels of debt-to-GDP ratios when compared to EU member states like Greece, Portugal and Italy (cf. Table 1).

Schaechter et al. (2012) differentiate fiscal rules according to the type of budgetary aggregate they seek to control and discuss their advantages and weaknesses (see Table 4). As each type of fiscal rule has particular disadvantages, they are often combined to offset them.

Debt rules restrict public debt relative to GDP to an explicit upper limit. Giving a clear-cut orientation to a debt target, they are easy to comprehend. However, compliance with them is not suitable for short-term adjustments. Reason for this is the effect lag, i.e. the time that austerity measures require to exercise their effect on stock variables, like debt levels. Moreover, in the light of mechanical debt developments that potentially arise due to changing interest or exchange rates, compliance with debt rules might not be the best-informed fiscal policy advice. This is even more the case considering the procyclical character of debt rules.

Budget balance rules are designed to directly control those variables that particularly impact the debt ratio, as each spending needs to be compensated by a specific revenue. They are usually under the control of politicians, which ensures a clear link between debts and policy making. In general, budget balance rules can be divided into four categories: Overall balance, structural or cyclically adjusted balance, and balance "over the cycle". Only the latter three incorporate potential effects of economic shocks. Yet, adjustment policies

Table 4

Properties of Fiscal Rules

Type of Rule	Advantages	Weaknesses
Debt rule	• Direct link to debt sustainability • Easy to communicate and monitor	• No clear operational guidance in the short run as policy impact on debt • No economic stabilization feature (can be pro-cyclical) • Rule could be met via temporary measures (e.g., below-the-line transactions) • Debt could be affected by developments outside the control of the government
Budget balance rule	• Clear operational guidance • Close link to debt sustainability • Easy to communicate and monitor	• No economic stabilization feature (can be pro-cyclical) • Headline balance could be affected by developments outside the control of the government(e.g., a major economic downturn)
Structural budget balance rule	• Relatively clear operational guidance • Close link to debt sustainability • Economic stabilisation function (i.e., accounts for economic shocks) • Allows to account for other one-off and temporary factors	• Correction for cycle is complicated, especially for countries undergoing structural changes • Need to pre-define one-off and temporary factors to avoid their discretionary use • Complexity makes it more difficult to communicate and monitor
Expenditure rule	• Clear operational guidance • Allows for economic stabilization • Steers the size of government • Relatively easy to communicate and monitor	• Not directly linked to debt sustainability since no constraint on revenue side • Could lead to unwanted changes in the distribution of spending if, to meet the ceiling, shift to spending categories occurs that are not covered by the rule
Revenue rule	• Steers the size of government • Can improve revenue policy and administration • Can prevent pro-cyclical spending (rules constraining use of windfall revenue)	• Not directly linked to debt sustainability since no constraint on expenditure side (except rules constraining use of windfall revenue) • No economic stabilisation feature (can be pro-cyclical)

Source: Schaechter et al. (2012).

rely on estimations, which are not easy to communicate and monitor.

Expenditure rules constrain total, primary, or current spending in absolute terms or growth rates - sometimes relative to GDP - with a mid-term perspective between three to five years. While debt sustainability comprises both, the revenue and the expenditure side, expenditure rules only account for the latter. However, combined with other fiscal rules as those mentioned above, they may constitute an instrument to achieve sustainable fiscal consolidation.

Revenue rules set explicit limits on revenues and aim to directly affect revenue collection or excessive tax burden. As this does not consider spending related issues, the relation to public debt is rather an indirect one. Difficulties in the application of these instruments arise when revenues vary substantially with the business cycle. Moreover, revenue rules bear the risk of operating procyclically, when for example a certain tax revenue floor is binding in an economic downturn.

Even if fiscal rules are successful in achieving fiscal sustainability, they bear the risk of deepening and prolonging recessions with undesirable effects on national welfare. Cyclical adjustments allow to reduce these negative pro-cyclical effects, but render the implementation of fiscal rules complicated and hence much less effective. A further question arises with respect to the coverage of fiscal rules (van Eden et al. 2013). All fiscal rules implemented to date only consider explicit government debts, and completely disregard the even more important factor of future government debt, which is rising implicitly within ageing societies (Auerbach 2014).

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