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Article

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Intereconomics

Suggested Citation: Larch, Martin; Malzubris, Janis; Santacroce, Stefano (2023) : Numerical Compliance with EU Fiscal Rules: Facts and Figures from a New Database, Intereconomics, ISSN 1613-964X, Sciendo, Warsaw, Vol. 58, Iss. 1, pp. 32-42, <https://doi.org/10.2478/ie-2023-0008>

This Version is available at:

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Martin Larch, Janis Malzubris and Stefano Santacroce*

Numerical Compliance with EU Fiscal Rules: Facts and Figures from a New Database

EU fiscal rules are meant to keep public finances on a sustainable path. This paper presents a new database that tracks numerical compliance with the four main rules of the Stability and Growth Pact starting in 1998. Our assessment of numerical compliance abstracts from the many exceptions and elements of discretion allowed by the letter and the spirit of EU law. It focuses on the main course of action implied by the rules. Overall, our database points to a very mixed compliance record. On average – across countries, years and rules – budgetary policies of the EU member states are compliant in just over half of the cases with stark and persistent differences across countries. We also detect a distinct cyclical pattern of compliance, which sends false signals of safety in good times.

Compliance with the rules of the EU Stability and Growth Pact (SGP) is not an end in itself. It is meant to safeguard the smooth functioning of the Economic and Monetary Union (EMU) and to contribute to the overall stability of the euro area. The economic governance of the EMU combines two opposite models of macroeconomic policymaking. Monetary policy is delegated to a central institution, the European Central Bank (ECB), while fiscal policy remains in the hands of EU member states. To avert cross-border spillovers from national budgets as well as impediments to monetary policymaking by the ECB, governments agreed to a set of fiscal rules. The agreement

is rooted in the understanding that with an advanced degree of economic integration like the one achieved in the EU, national governments cannot ignore the cross-border impact of their budgetary decisions, lest they jeopardise the functioning of the EMU.

Over the past several years, the Secretariat of the European Fiscal Board has collected information on whether and how EU member states have complied with or deviated from the rules of the SGP. This paper offers a methodical introduction to the database; it explains relevant concepts and discusses a number of key facts and trends.¹ The database focuses on numerical as opposed to legal compliance. Abstracting from legal interpretations or margins of discretion allowed by the letter or spirit of the law, it assesses whether in pure quantitative terms the relevant fiscal aggregates – the budget balance, the debt-to-GDP ratio or government expenditure – evolved within or outside the perimeters defined by the fiscal rules.

When the SGP entered into force in the late 1990s, its implementation de facto revolved around one simple rule, the so-called deficit rule. If the budget balance of a country exceeds 3% of GDP, it can be asked to implement budgetary corrections under the Excessive Deficit Procedure (EDP). The SGP also requires member states to keep gross government debt below 60% of GDP or to diminish the excess over the 60% of GDP reference value at a satisfactory pace. In practice, however, the debt rule

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Open Access funding provided by ZBW – Leibniz Information Centre for Economics.

* The views expressed in this paper do not necessarily reflect the position of the European Commission or the European Fiscal Board. We would like to express our gratitude to colleagues in the European Commission, especially Carlos de la Calleja LLado and Laurent Jacques Corveleyn, for helping us with developing a user-friendly web tool to access our database of numerical compliance.

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¹ The database can be accessed via a dedicated web tool at: https://ec.europa.eu/info/business-economy-euro/economic-and-fiscal-policy-coordination/european-fiscal-board-efb/efb-compliance-tracker_en.

did not play much of a role in the early days because average rates of nominal GDP growth of around 5% per year meant that countries complying with the deficit rule would also be in line with the debt rule.

Successive reforms of the SGP added new rules and clarified existing ones. The first reform entered into force in 2005, introducing the cyclically adjusted budget balance as the key reference for defining the course of budgetary policies in the EU member states. The reform was triggered by events in November 2003, when the Council refused to follow the proposal of the Commission to step up the EDP for Germany and France. The stand-off reflected changing views on the relative importance of sustainability versus stabilisation in fiscal policymaking in the EMU. By formulating the deficit rule in nominal terms, the SGP mark I gave priority to the sustainability of public finances. It had turned a blind eye on the fact that during economic downturns, such as those triggered by the burst of the ICT bubble at the beginning of the 2000s, government budget balances would deteriorate even without discretionary interventions on the part of governments. Hence, abiding by the deficit rules in a cyclical downturn could lead to procyclical tightening. Shifting focus to the cyclically adjusted budget balance, and later on to the structural budget balance, was meant to address the problem.²

The number of EU fiscal rules increased further in 2011 with the so-called six-pack reform. The post-2007 global economic and financial crisis had painfully revealed that compliance with the deficit rule, be it in nominal or structural terms, had not prevented a build-up of dangerous imbalances, which in the 2008-09 downturn gave rise to dramatic increases in government debt. With a view to overcoming the objective difficulties of assessing the cyclical position of an economy, most importantly in boom periods, the six-pack reform added the expenditure benchmark to the SGP. The benchmark essentially imposes a speed limit on government expenditure by using an estimate of the medium-term rate of potential output growth as an anchor, an estimate that is considered to be much more stable than the potential output gap estimate of a given year underpinning the structural budget balance.³

The six-pack reform also introduced an operational definition of the satisfactory pace of debt reduction of the

2 The cyclically adjusted budget balance is the headline balance corrected for the influence of the economic cycle on government revenues and expenditure. The structural budget balance is the cyclically adjusted budget balance net of one-off and other temporary measures.

3 See Larch and Turrini (2010) for a detailed discussion of the structural budget balance.

debt rule. A more detailed definition turned out to be necessary as, after decades of progressive decline, average rates of nominal GDP growth had reached levels at which holding the deficit below 3% of GDP was no longer sufficient to keep the government debt-to-GDP ratio on a downward path.

Overall, more than two decades after inception, the SGP encompasses four distinct numerical rules: the deficit rule, the structural budget balance rule, the expenditure rule and the debt rule. While they all aim at keeping public finances on a sustainable path in the medium and long term, the rules can entail a different fiscal performance in the short term depending on the macro-financial context. Understanding patterns of compliance across rules and time in the EU member states can shed light on their effectiveness and possible challenges.

The remainder of this paper is organised as follows. The article begins by describing the basic numerical constraints imposed by the EU fiscal rules and detailing the definitions of numerical compliance used for the purpose of our database. It then presents a number of key facts and trends of compliance across member states and time. Next, it contrasts our compliance data with a number of key fiscal and macroeconomic variables so as to highlight some noteworthy correlations and relationships. Finally, it presents some basic regressions before concluding.

Numerical compliance: The constraints imposed by the EU fiscal rules

Our database provides comparable information on the EU member states fiscal performance vis-à-vis the main constraints defined by the four rules outlined above. The emphasis is very much on main constraints. SGP legislation and implementing documents define an intricate set of contingency provisions giving the Commission and the Council a considerable degree of discretion when formulating fiscal guidance and assessing outturns.⁴ These provisions make the formal assessment of compliance an exceedingly challenging endeavour. As a result, the focus of our database is on what we call numerical compliance, that is, an assessment of fiscal performance compared to a characterisation that captures the essence of the rules. Of note, our assessment is backward looking, based on actual data. We do not assess compliance in the planning process.

4 For a complete description of existing rules and practices, see the latest edition of the Commission's vade mecum of the SGP: https://ec.europa.eu/info/publications/vade-mecum-stability-and-growth-pact-2019-edition_en.

The definitions of numerical compliance underpinning our database are as follows:

Deficit rule: A country is considered compliant if (i) the budget balance of the general government is equal or above -3% of GDP or, (ii) in case the -3% of GDP threshold is breached, the deviation remains small (maximum 0.5% of GDP) and limited to one year.

Debt rule: A country is considered compliant if the debt-to-GDP ratio is below 60% of GDP or if the excess above 60% of GDP has been declining by 1/20 on average over the past three years.

Structural balance rule: A country is considered compliant if the structural budget balance of the general government is at or above the medium-term objective (MTO). In case the MTO has not been reached yet, a country is considered compliant if the annual improvement of the structural budget balance is equal or higher than 0.5% of GDP, or the remaining distance to the MTO is smaller than 0.5%.

Expenditure rule: A country is considered compliant if the annual rate of growth of primary government expenditure (net of discretionary revenue measures and one-offs) is at or below the ten-year average of the nominal rate of potential output growth minus the convergence margin necessary to ensure an adjustment of the structural budget deficit of the general government in line with the structural balance rule.

These definitions do not have an official, let alone legal status. They nevertheless represent an accurate description of the main features that the EU fiscal rules set out in primary and secondary EU law. We use the definitions to compute two complementary indicators of compliance for each rule: a qualitative and a numerical one. The qualitative indicator is a simple binary variable, which takes the value 1 to signal compliance; that is, the actual fiscal performance of a given country in a given year is in line with our definition of the rule. It takes the value 0 to signal non-compliance.

The numerical indicator measures the deviation from our definition of compliance in percent of GDP. A positive value indicates an overachievement of the target or reference value of the rule, and a negative value indicates a shortfall:

For the *deficit rule*, a positive (negative) sign means the headline budget balance is above (below) -3% of GDP.

For the *debt rule*, for countries with a debt-to-GDP ratio above 60%, a positive (negative) sign means the actual debt-to-GDP ratio is below (above) the one required by

the 1/20 debt-reduction rule. For countries with debt-to-GDP below 60% of GDP, the sign is positive and measures the distance to the 60% reference value.

For the *structural balance rule*, a positive (negative) sign means that the country is above (below) its MTO or its structural fiscal effort is higher (lower) than the benchmark requirement of 0.5% of GDP.

For the *expenditure rule*, a positive (negative) sign means that the annual rate of growth of net government expenditure is below (above) the medium-term potential output growth minus the convergence margin.

We calculate the qualitative and numerical indicators of compliance for all EU countries starting in 1998, the year after the two main regulations of the SGP entered into force: Regulation (EC) 1466/97 and Regulation (EC) 1467/97. The database is updated every year, as soon as the latest annual assessment cycle of EU fiscal surveillance is completed, normally in June. It currently covers 24 years, i.e. up to and including 2021.

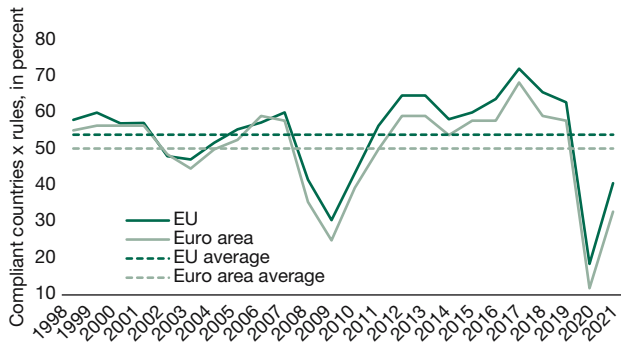
For countries that joined the EU after the SGP entered into force and for rules introduced after 1997, parts of our compliance scores are hypothetical but still of interest. They tell us how fiscal performance compared to the requirements of the SGP, and more importantly, whether compliance changed significantly after a country joined the EU or after a rule was introduced. The United Kingdom left the EU on 31 January 2020. Our database includes data for the UK until 2019. All aggregate values refer to the current 27 EU member states.

Main facts and trends

This section presents the main facts and trends of numerical compliance. The analysis uses average rates across countries, time and rules. Averages are calculated by summing up cases or degrees of compliance across the different dimensions, divided by the total number of cases.

Since the entry into force of the SGP, the overall compliance record was slightly above 50% (Figure 1). This means that on average (i) only every other country complied with all rules every year; or (ii) all countries complied with all rules every second year; or (iii) all countries complied with half of the rules every year. Our finding is broadly in line with the literature, which shows that compliance with national and supranational fiscal rules in the EU has been mixed at best. Reuter (2019) finds that average compliance with all rules – national and supranational – was around 50% in 1995-2014 and

Figure 1
Average compliance with fiscal rules, 1998-2021



Source: European Commission, own calculations.

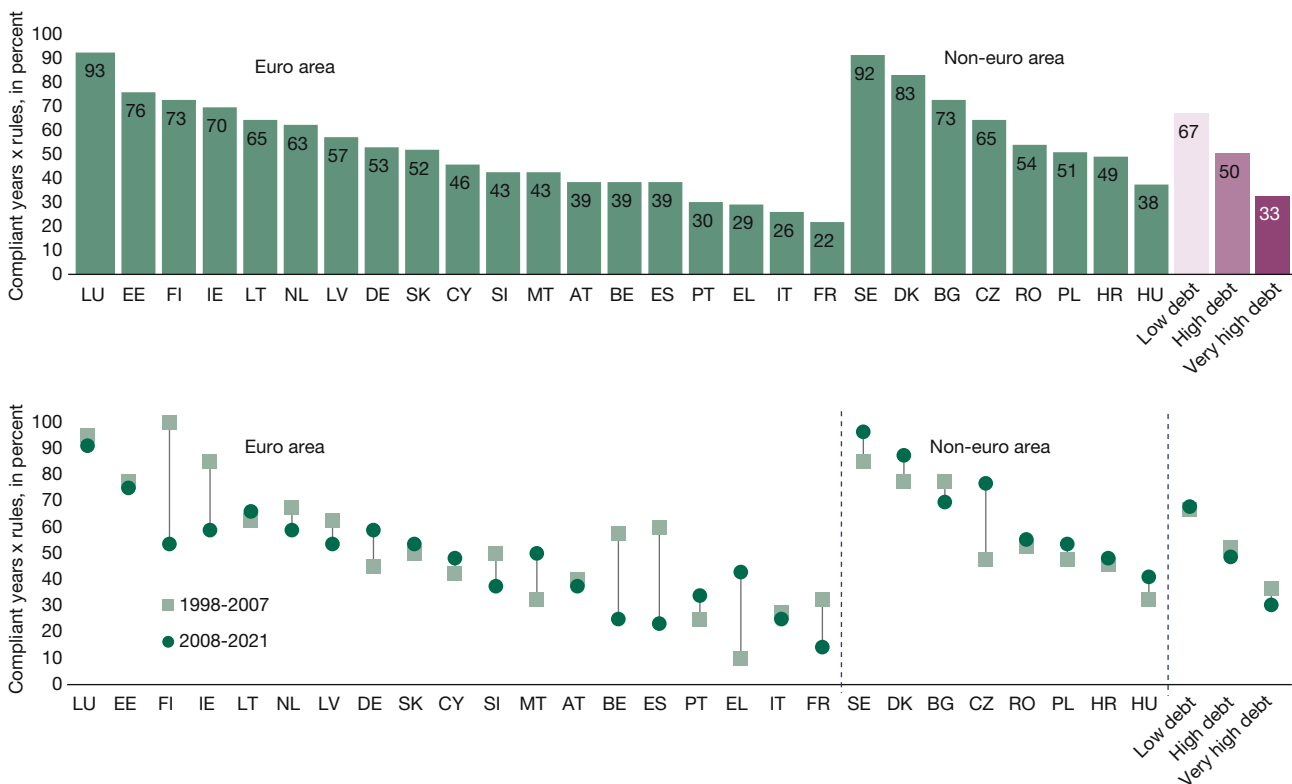
slightly higher for the EU rules – around 58%. Using somewhat different definitions of EU fiscal rules and a narrower definition of compliance, Eyraud et al. (2017) and Gaspar and Amoglbeli (2019) conclude that non-

compliance has been the rule rather than the exception in the EU.

The overall compliance score in our database masks stark cross-country differences (Figure 2). It ranges from two-thirds or more in mostly northern countries such as Sweden, Denmark, Estonia, Finland and Ireland, to one-third or less in Portugal, Greece, Italy and France. The difference between euro and non-euro area countries is limited, but statistically significant: euro area countries have a slightly lower compliance score.

Lower compliance tends to go along with higher levels of government debt-to-GDP ratios (see Figure 2). The differences are striking: countries with very high debt levels exhibit an average compliance score of 33% as opposed to 67% of low-debt countries. This result is not surprising: systematic shortfalls from the course of action implied by the deficit, structural balance or expenditure rule will accumulate over time and inevitably translate into higher government debt.

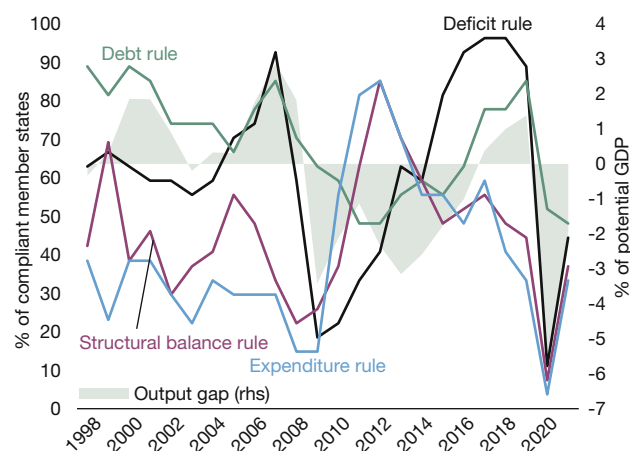
Figure 2
Average compliance with fiscal rules across countries, 1998-2021



Note: Countries are grouped by their average debt-to-GDP ratio over 2011-19: Very high debt countries: above 90% of GDP (Belgium, Greece, Spain, France, Italy, Cyprus, Portugal); High debt countries: between 60% and 90% of GDP (Germany, Ireland, Croatia, Hungary, the Netherlands, Austria, Slovenia); Low-debt countries: below 60% (Bulgaria, Czechia, Denmark, Estonia, Latvia, Lithuania, Luxembourg, Malta, Poland, Romania, Slovakia, Finland, Sweden).

Source: European Commission, own calculations.

Figure 3
Average compliance with each fiscal rule and output gap developments



Source: European Commission, own calculations.

Figure 3 illustrates the evolution of average compliance for each of the four rules over time and highlights a number of findings. First, compliance with the deficit and the debt rule tends to be higher but exhibits a clear procyclical pattern. Headline budgets, and in turn debt-to-GDP ratios, automatically improve during upturns and worsen in downturns. The only time when compliance with the deficit rule improved despite bad economic conditions was in 2011-13, when most EU member states were in EDP or under an economic adjustment programme and market pressure had increased significantly.

Second, in the early years of our sample, the expenditure rule exhibited the lowest compliance rate: only a small share of member states ran fiscal policies consistent with the constraint that anchors net expenditure growth to a prudent rate of medium-term potential output growth. The compliance gap narrowed after the rule was introduced in 2011 with the six-pack reform of the SGP. Since then, the structural balance and the expenditure rule follow a very similar pattern.

Third, and linked to the previous two points, compliance with the structural balance and especially the expenditure rule is on average significantly lower than with the two other rules targeting nominal variables. It was particularly poor before 2008 and 2019. This result confirms a by now well-known insight: in the run-up to the global financial crisis, many EU countries did not make use of the economic good times to build up fiscal buffers. Low headline balances and declining debt-to-GDP ratios offered a false sense of safety and were interpreted as

evidence of healthy public finances. Signals from other gauges were ignored. In 2007, the last year before the global financial crisis hit Europe, more than 80% of the EU member states complied with the deficit and the debt rule. Compliance with the structural budget balance rule was much lower, and in only a few countries did net expenditure growth align with the underlying rate of economic growth. A very similar pattern can be observed in the years leading up to the COVID-19 pandemic: compliance with rules that exhibit a cyclical pattern improved, while compliance with rules designed to cut through cyclical swings deteriorated.

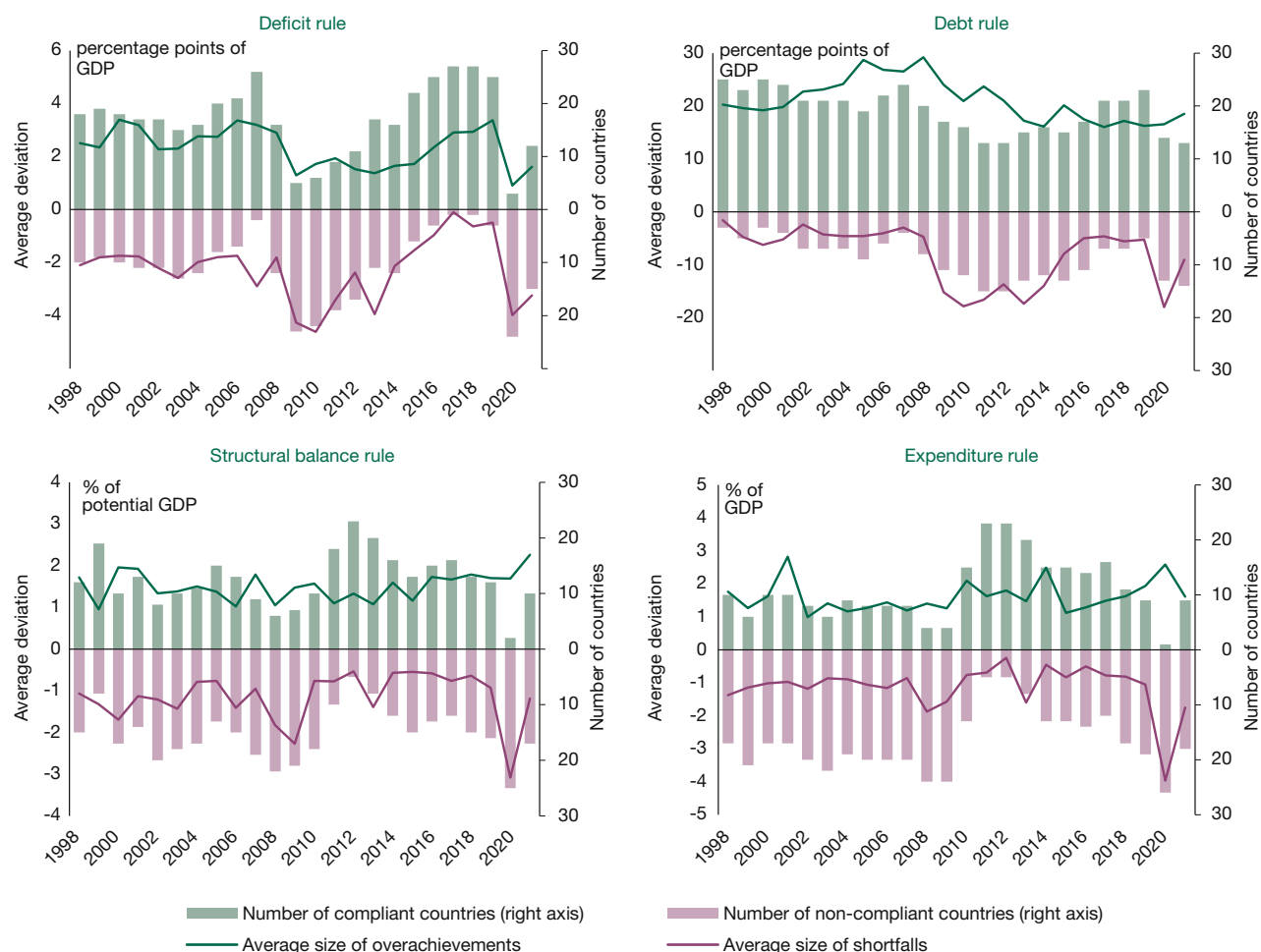
This finding exemplifies the important and very consequential difference between numerical compliance as measured by our compliance tracker and the formal assessment of compliance carried out by the Commission and the Council in the context of the EU's fiscal surveillance framework. The clear drop in numerical compliance with the structural balance and the expenditure rule during economic recoveries should have set off alarm bells. However, as the formal assessment of compliance involves a very high degree of discretion, favourable headline balances and debt ratios offered a pretext for forbearance, paving the way for procyclical fiscal policies.

On top of recording the rate of compliance, our database also looks at the degree by which a rule is over- or underachieved, i.e. deviations from the rules. Figure 4 shows the average deviation for each of the four fiscal rules of the SGP since 1998. The green line is the average deviation across compliant countries; the red line is the average deviation across non-compliant countries.

During the first ten years of the SGP, shortfalls with respect to the deficit, structural balance and the expenditure rule were sizeable. A more granular examination reveals that this result was largely determined by countries with high or very high debt (see the note in Figure 2 for the classification of countries by debt levels). Conversely, deviations from the debt rule were limited in the early years thanks to the comparatively still low levels of debt and high rates of nominal GDP growth.

In 2013-16, when most of the EU member states were in an excessive deficit procedure or under an economic adjustment programme, shortfalls with respect to the rules were considerably reduced. However, a closer look also reveals a convergence of negative deviations towards 0.5% of GDP, for both the structural budget balance and the expenditure rule. Since the six-pack reform of 2011, there is a margin of tolerance in the as-

Figure 4
Average deviations from each fiscal rule (compliant vs non-compliant cases)



Source: European Commission, own calculations.

assessment of compliance with the structural budget balance and expenditure rule: A country is considered broadly compliant if the observed adjustment deviates by up to 0.5% of GDP in one year or in cumulative terms over two successive years. The fact that in 2011-2019 deviations converge to 0.5% of GDP suggests that the margin of broad compliance produced a “magnet” effect in the sense that member states tended to systematically exploit it.

Figure 5 shows a very clear positive correlation between the rate of compliance and the average deviation for each of the four fiscal rules. In other words, countries with a better compliance record tend on average to deviate less from the rules or overachieve more. By contrast, countries with a lower compliance score exhibit larger average deviations. While this may seem obvious, one could equally imagine a situation in which non-compliance happens by small margins;

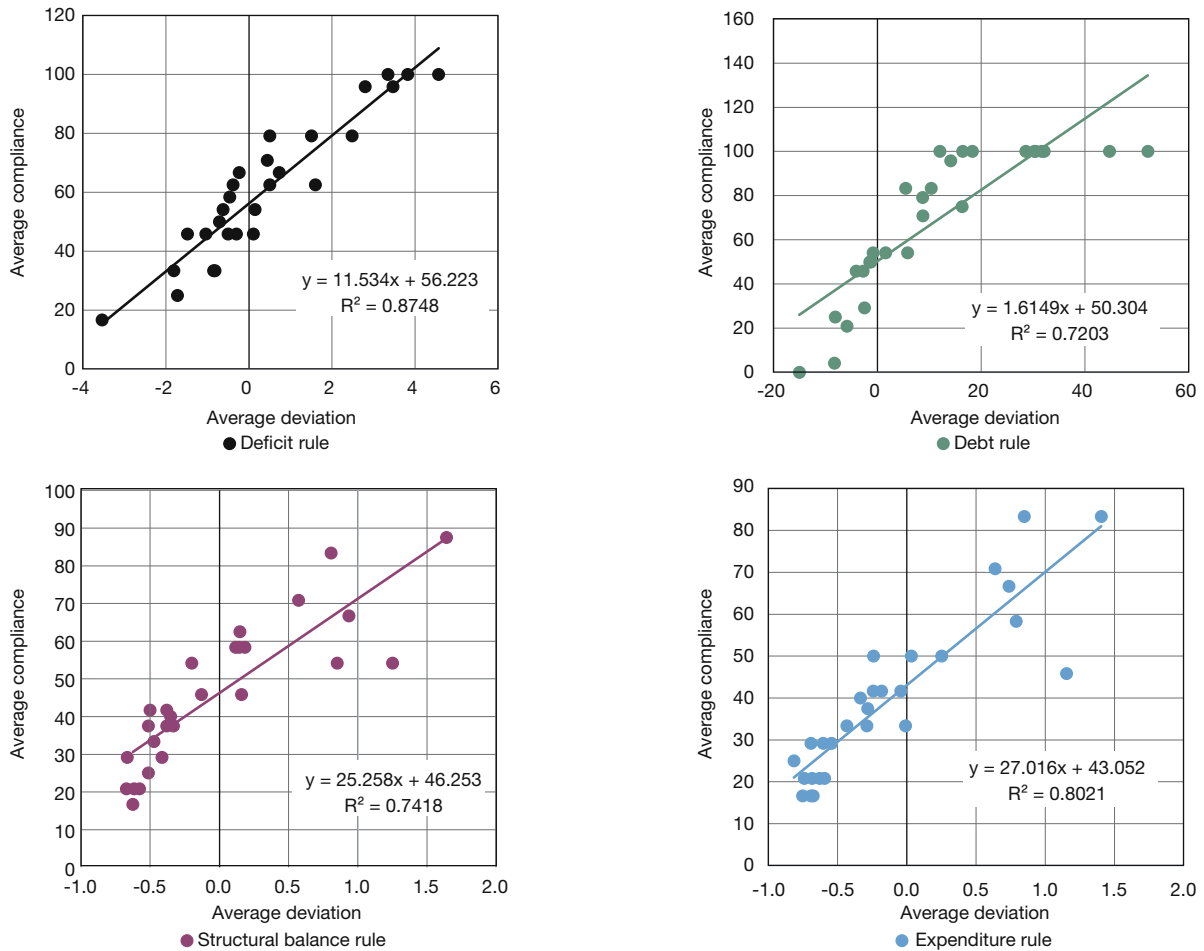
however, our numerical indicators do not support this possibility.

Some relationships with macroeconomic and institutional variables

There are a number of noteworthy links between numerical compliance on the one hand and a set of macroeconomic and institutional variables on the other. To start with, Figure 6 plots the cumulative change in the debt-to-GDP ratio in 1998-2021 against the number of years each member state was in compliance with the rules, and the cumulative deviation from the rule for each rule targeting budgetary aggregates (the deficit, structural balance and expenditure rule).⁵ In line with the qualitative indications provided in the previous section, compliance turns out to be a good predictor of government debt dynamics. Coun-

⁵ The charts exclude Greece.

Figure 5
Average compliance rates vs average deviation, 1998-2021



Source: European Commission, own calculations.

tries with a lower compliance score and higher average deviations are clearly associated with a stronger increase in the debt-to-GDP ratio. Although not surprising, this association is of relevance because higher levels of debt are generally taken as indicators of fiscal space and/or sustainability.

Figure 7 looks at the nexus between the compliance score and the number of procyclical fiscal episodes recorded over the same period. In principle, fiscal policy should be counter-cyclical. In practice, however, procyclicality is pervasive. Following established practice, we consider fiscal policy to be procyclical if an improvement (deterioration) of the output gap is associated with a deterioration (improvement) of the structural primary budget balance.

It turns out that better compliance with the rules targeting budgetary aggregates is on average associated with a lower number of procyclical fiscal episodes. This find-

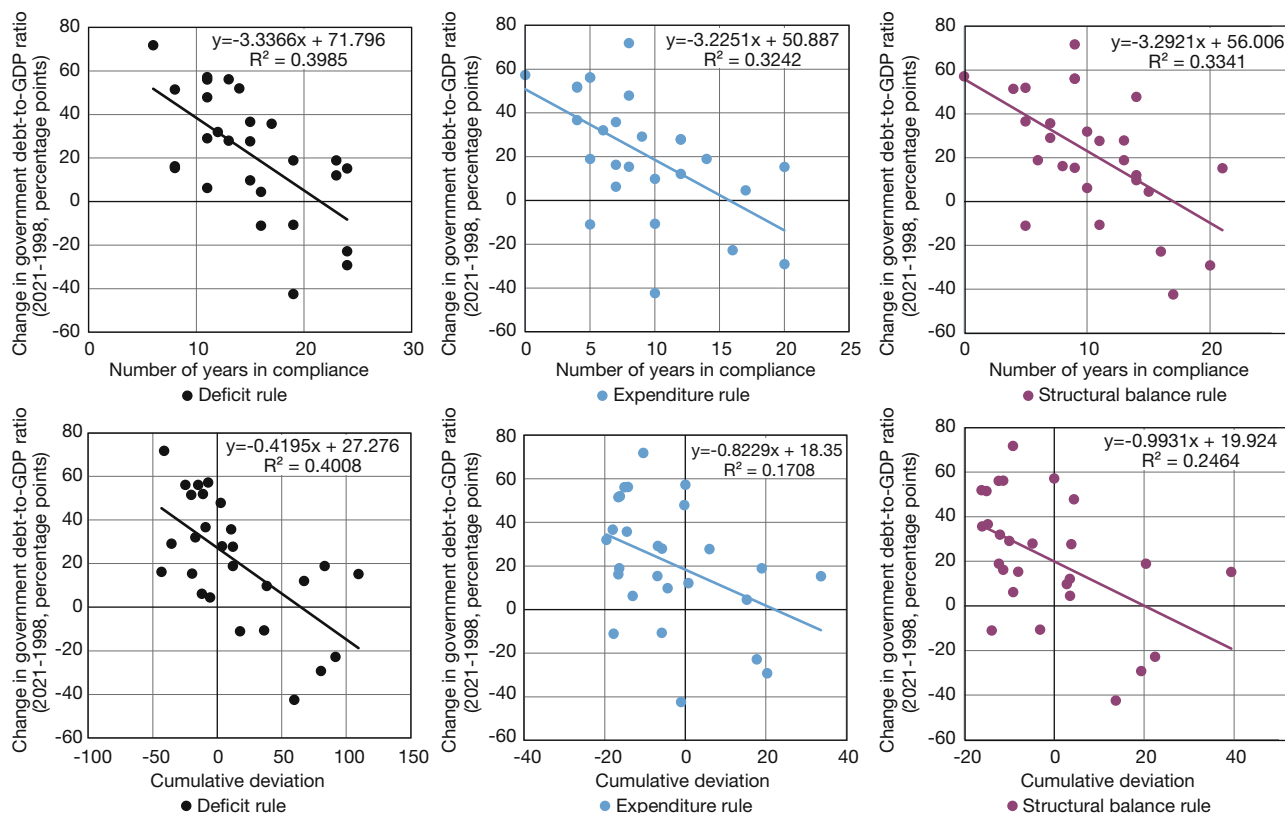
ing should not come as a surprise: better compliance with budgetary rules keeps the government debt ratio under control, which in turn is a rough but still important gauge of fiscal space. Hence, better compliance means more fiscal space to lean against cyclical swings.⁶

Compliance is arguably also a function of the quality of governance. Our analysis shows that a higher compliance score tends to be associated with a longer tradition of independent national fiscal institutions.⁷ Countries

6 For a more detailed econometric analysis of the link between EU fiscal rules and the stabilisation properties of budgetary policies in the EU, see Larch et al. (2020).

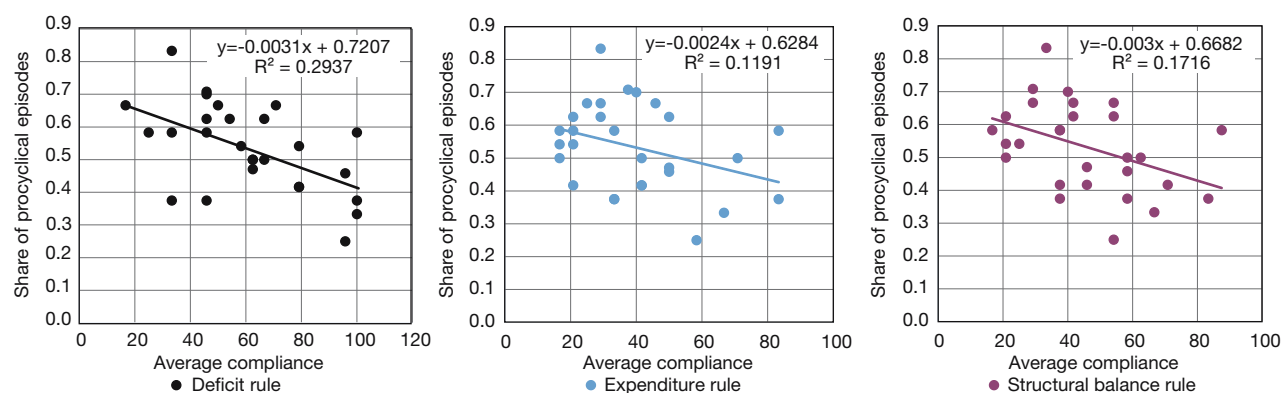
7 We classify countries into two groups based on the number of years since the establishment of a national independent fiscal body: well-established institutions include Belgium, Denmark, Estonia, Lithuania, Luxembourg, the Netherlands, Austria, Sweden; more recently established institutions include Bulgaria, Czechia, Germany, Ireland, Greece, Spain, France, Croatia, Italy, Cyprus, Latvia, Hungary, Malta, Portugal, Romania, Slovenia, Slovakia, Finland, the United Kingdom.

Figure 6
Debt accumulation and compliance with fiscal rules, 1998-2021



Source: European Commission, own calculations.

Figure 7
Compliance score and procyclical fiscal policy, 1998-2021

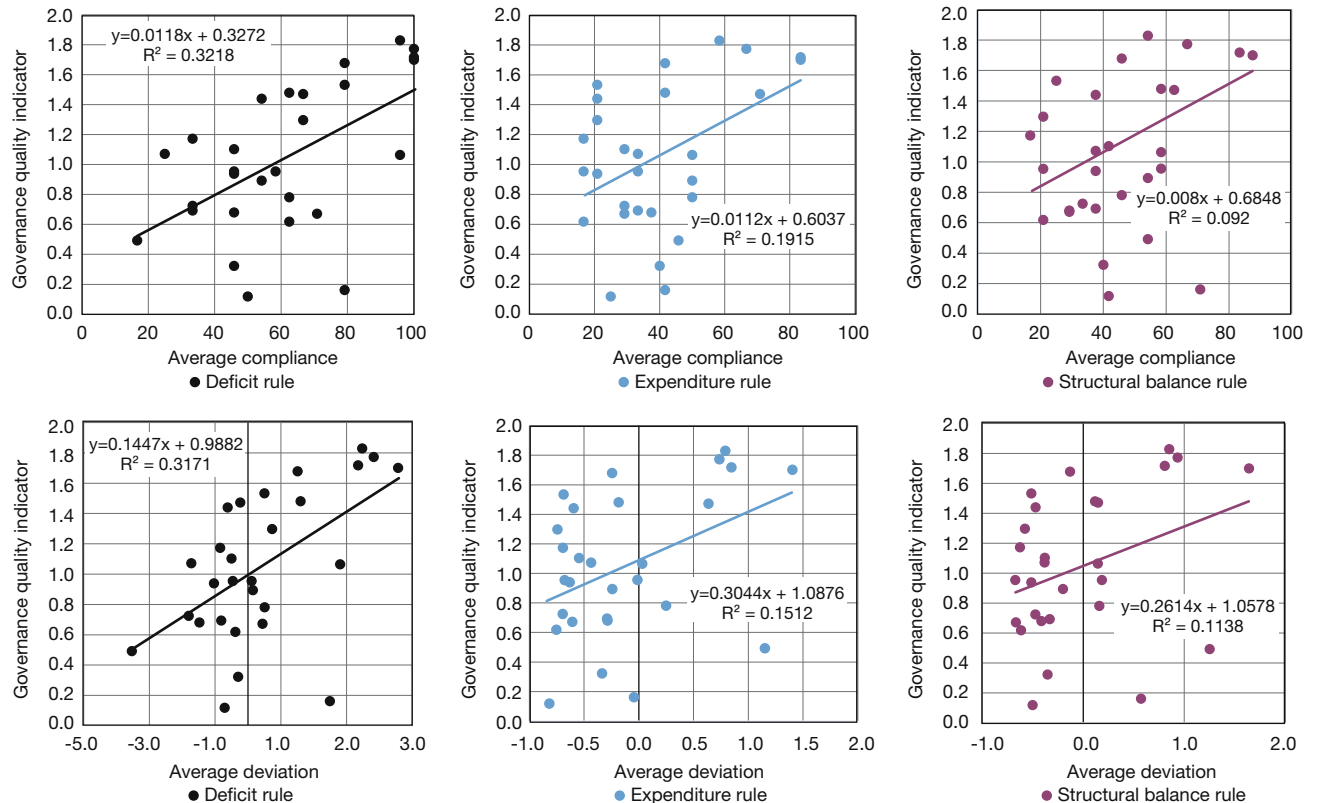


Source: European Commission, own calculations.

where watchdogs were established before 2011, when the six-pack reform of the SGP introduced elements of independent scrutiny in the EU fiscal framework, have a compliance score that is on average 20 percentage points higher than countries where watchdogs were es-

tablished in 2011 or later. While the causality is not entirely clear, the presence of watchdogs is generally seen as a preference for fiscal probity and seems to be associated with a better compliance with rules (see Beetsma et al., 2018).

Figure 8
Quality of governing institutions and compliance with fiscal rules, 1998-2021



Sources: European Commission, World Bank Group (WGI), own calculations.

The more general role of governance for compliance is corroborated by Figure 8. The figures plot the average compliance score of each member state against an indicator taken from the World Bank’s database of governance indicators (WGI). We use a composite indicator, which combines the three WGI indicators most relevant for fiscal outcomes: the control over corruption, government effectiveness and quality of regulations.⁸ Although the fit is fairly loose in the two-dimensional space, Figure 8 points to a clear positive relation between the overall quality of institutions and average compliance with EU fiscal rules.

Some basic regressions

On top of looking at simple two-dimensional correlations, we also carry out a few basic panel regressions to control for several possible drivers of compliance at the same time. The aim of our exercise is not to derive robust findings in terms of causality, but to substantiate the correlations outlined in previous sections.

⁸ See <https://info.worldbank.org/governance/wgi/>.

Table 1 presents our regression results. Compliance scores and deviations from rules are regressed on a set of macroeconomic and institutional variables. We use a logit model for the compliance score and a linear regression model for numerical deviations. The results confirm and nuance the correlations highlighted in the previous sections:

- Compliance with the deficit rule is clearly procyclical and affects compliance with the rules correcting for the cycle. During good times, improvements in headline figures are on average used to relax compliance with more stringent rules.
- Nominal GDP growth facilitates compliance across all rules. It is easier to comply with fiscal rules when inflation and real GDP growth are higher.
- Tensions in financial markets affect compliance.
- Fiscal space matters. Countries with a very high debt-to-GDP ratio are forced to step up efforts to comply with the deficit and debt rule especially when the cycle

Table 1
Determinants of compliance – regression results

	Dependent variables (1998-2021)							
	Compliance dummy				Size of deviation			
	Deficit rule	Debt rule	Structural balance rule	Expenditure rule	Deficit rule	Debt rule	Structural balance rule	Expenditure rule
Market volatility index	-0.130*** (0.019)	0.003 (0.021)	-0.078*** (0.016)	-0.071*** (0.017)	-0.128*** (0.018)	-0.015 (0.066)	-0.094*** (0.012)	-0.086*** (0.013)
Output gap	0.235*** (0.048)	0.036 (0.054)	-0.128*** (0.038)	-0.206*** (0.042)	0.424*** (0.046)	1.500*** (0.167)	-0.059* (0.031)	-0.098*** (0.032)
Output gap * debt > 90% (dummy)	-0.186** (0.077)	0.447** (0.181)	-0.073 (0.063)	-0.105 (0.072)	-0.273*** (0.067)	-0.137 (0.244)	-0.146*** (0.046)	-0.152*** (0.047)
Debt > 90% (dummy)	-0.882*** (0.286)	-3.487*** (0.405)	-0.867*** (0.271)	-0.734** (0.299)	-1.005* (0.533)	-6.230*** (1.958)	-0.071 (0.366)	0.140 (0.378)
Nominal GDP growth	0.034 (0.021)	0.122*** (0.035)	0.018 (0.017)	0.071*** (0.020)	0.051** (0.023)	0.244*** (0.085)	0.010 (0.016)	0.039** (0.016)
Quality of governance	1.142*** (0.203)	-0.300 (0.212)	0.506*** (0.155)	0.860*** (0.167)	-0.327 (0.838)	-11.360*** (3.076)	-0.068 (0.576)	-0.072 (0.595)
National fiscal rule index	0.415*** (0.112)	0.348*** (0.130)	-0.060 (0.090)	0.091 (0.095)	0.212* (0.127)	-1.774*** (0.465)	-0.205** (0.087)	-0.285*** (0.090)
Years of EDP implementation (dummy)	-1.714*** (0.273)	-1.513*** (0.278)	0.380* (0.229)	0.853*** (0.238)	-1.110*** (0.279)	-5.758*** (1.025)	0.540*** (0.192)	1.043*** (0.198)
Number of observations	640	640	639	639	640	640	639	639
Effect specification	Unstructured pool of observations	Unstructured pool of observations	Unstructured pool of observations	Unstructured pool of observations	Country fixed effects	Country fixed effects	Country fixed effects	Country fixed effects
Method	ML – binary logit	ML – binary logit	ML – binary logit	ML – binary logit	Panel Least Squares	Panel Least Squares	Panel Least Squares	Panel Least Squares

Notes: Standard errors are in parentheses. *, ** and *** denote statistical significance at 10%, 5% and 1% respectively. Market volatility refers to the Cboe Volatility Index® (VIX® Index), which measures market expectations of future volatility conveyed by S&P 500 Index option prices. The quality of governance is a composite indicator, which combines, as an average, three WGI indicators: the control over corruption, government effectiveness and quality of regulations. The national fiscal rule index is an indicator of the strength of domestic fiscal rules constructed by the Directorate-General for Economic and Financial Affairs of the European Commission using information on legal base, binding character, monitoring bodies, correction mechanisms and resilience to shocks. Years of EDP implementation represent years under the Excessive Deficit Procedure, except for the first year when it was launched and when no immediate fiscal effort is required in general.

Source: Own calculations.

turns negative. However, their compliance slips during upturns when fiscal buffers should be rebuilt.

- The quality of governance matters. Better governance improves the compliance rate; deviations tend to decline for most rules, but results are statistically insignificant.
- National fiscal rules have a positive impact on compliance especially with the deficit and debt rule.
- EDPs are associated with improvements in the structural budget balance and slower expenditure growth. Compliance with the deficit and debt rule does not improve immediately because EDPs are typically launched during bad economic times when economic growth is weighing on a country's headline budget.

Conclusions

Some 25 years ago, the EU adopted the Stability and Growth Pact, a set of common fiscal rules. Its main objective is to keep national public finances on a sustainable path and to safeguard the effectiveness of centralised monetary policymaking. A new database by the Secretariat of the European Fiscal Board documents the track record of EU member states vis-à-vis the numerical constraints defined by rules and offers the opportunity to better understand its determinants.

Our analysis shows that compliance has been very mixed over time and across rules. On the positive side, better national fiscal rules and national governance are associated with better compliance. Also, the SGP's excessive

deficit procedure goes along with improvements in the underlying budgetary position.

Countries tend to follow mainly the two rules that are best known in the public domain, namely the 3% of GDP reference value for the deficit and the satisfactory pace of adjustment towards the 60% of GDP reference value for government debt. However, compliance with these constraints is highly procyclical. It sends misleading signals about the state of public finances and motivates some governments to increase spending or cut taxes when they should build buffers. As a result, high government debt is not only the consequence of dismal compliance; when the economy goes south, it also weighs on the countries' capacity to follow rules that are meant to cut through the cycle and stabilise output.

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