

In Search of the Ideational Foundations of EU Fiscal

Governance: Standard Ideas, Imperfect Rules

Abstract

This article investigates the ideational foundations of the European Union fiscal governance by perusing economic theories and models and determining which would recommend the provisions we observe. Sustainability apart, these rules are designed to prevent negative cross-country externalities arising from expansionary fiscal policies adopted by authorities with short-term incentives to boost output at the expense of inflation. I argue that this reasoning is based on standard macroeconomic theories while, in addition to misreading these rules, Blyth (2013)'s claims that they have been influenced by theories based on rational expectations, including even the Ricardian equivalence proposition, are unconvincing. These theoretical variants suggest a *diminished* effectiveness of expansionary fiscal policies and would recommend *looser* oversight. Supporting these rules means that one must doubt expansionary fiscal consolidation – the key idea behind austerity. I conclude highlighting the uncertainties and unavoidable arbitrariness of these rather imperfect commitment devices to maintain sustainable public finances.

Introduction

Are the fiscal rules of the European Union (EU) austerity incarnate? Do they make 'fiscal policy quasi-illegal' (Matthijs and Blyth 2018: 119) and commit countries to permanent austerity (Moschella 2017)? Are they the regulatory counterparts of expansionary fiscal consolidation (Blyth 2013: 140-1)? A centerpiece of the economic and monetary union, these rules are now subject to heated debates beyond the confined borders of academia. Indeed, they even became campaign issues at the European elections. In 2014, the Five Star Movement in Italy, Syriza in Greece and Podemos in Spain have criticized them harshly, while several national parties associated with the European People's Party have defended them staunchly. And spats over compliance with these rules, especially in Italy, made up part of the background of the 2019 elections.

This article investigates the economic ideas and models which may have provided the theoretical foundations to these rules. It explains how the cross-country distributive effects on the composition of output, caused by expansionary fiscal policies, offer the rationale for these rules, as suggested by the application of three standard macroeconomic models to a monetary union. It also demonstrates how claims that these provisions have been inspired by presumably influential variants of macroeconomic theory, based on rational expectations and the Ricardian equivalence proposition, are unconvincing (Blyth 2013). Had these ideas gained influence, we should see *looser* rather than *tighter* rules over time.

In the next section, I discuss my use of economic ideas and models, which differs somewhat from other ideational approaches. Next, I provide an overview of these fiscal

rules, consisting of two reference values and a medium-term objective. I illustrate how reforms have progressively refined and tightened them by operationalizing the criteria for determining compliance and the adjustment path towards their attainment. In the following section, I move to the ideational foundations of the policy. I evaluate which models and ideas about the workings of the economy would recommend such rules. I argue that standard theories work better than recent variants. The concluding section highlights the uncertainties and unavoidable arbitrariness of these rather imperfect commitment devices to maintain sustainable public finances.

Economic ideas and models

Economists have been employing mathematical models to operationalize their ideas on how the economy operates since at least Jevons (1871)'s marginal revolution. Correspondingly, scholars from the ideational tradition frequently trace back the origin of such ideas to some formal models. Blyth (2013: 167-8) for instance sees expansionary fiscal consolidation originating from models on public spending published in the late 1980s and early 1990s. However, my procedure differs somewhat from most ideational approaches (length constraints prevent me from properly reviewing this rich and multifarious tradition). Most ideational endeavors attempt at investigating how ideas make their ways into policy paradigms, political discourses and eventually policy decisions (e.g. Heipertz and Verdun 2010, 85–109). One such **examples** could be the letter on fiscal multipliers Olli Rehn (2013), the commissioner for economic and monetary affairs, addressed to the

economic and finance ministers in February 2013. This document can be construed as embracing expansionary fiscal contraction *and* tighter fiscal rules.¹

In this article, I limit the attention to the EU fiscal provisions, leaving aside other documents and policy makers' positions, and I peruse economic models applied to monetary unions that put into practice different economic ideas in order to determine which would recommend the fiscal rules we observe. Would models based on the ideas that underpin expansionary fiscal consolidation advocate such provisions? Blyth (2013) appears to take this for granted. I will show that this is not the case.

Fiscal governance rules of the European Union

Initial design

The linchpin of EU fiscal governance rules is the protocol on the excessive deficit procedure (EDP) of the Treaty on European Union,² according to which the ratio of the planned or actual government deficit to the gross domestic product (GDP) should not exceed 3 percent and the ratio of government debt to GDP should not exceed 60 percent.

¹ See also Princen and van Esch (2016: 370)'s analysis of the European Commission communication leading up to the six-pack reform, Matthijs and Blyth (2018)'s study on the consequences of the 2005 reform, and Jabko (2019)'s work on ideational repertoires in the Eurozone crisis.

² The key provisions of these rules are listed in the Online Appendix.

The former threshold appears to have been chosen because it was the average ratio of public investment to GDP for the 1974–91 period, while the latter threshold represented the average ratio for 1991 (Buiter et al. 1993, 62–63).

The measures adopted in July 1997 altered this set-up in two ways. On the one hand, the preventive regulation of the Stability and Growth Pact required member states to submit annual stability or convergence programmes with the medium-term objective (MTO) of a close-to-balance or surplus budget.³ On the other hand, the corrective regulation of the pact established that a deficit would not be considered excessive if a country experienced an annual decline in real GDP of at least 2 percent.⁴

2005 reform

Heipertz and Verdun (2010, 113–73) narrate the initial implementation of these measures in detail (see, also, Larch, Van den Noord, and Jonung 2010). Suffice it to say here that

³ This so-called structural budget balance excludes the impact of the economic cycle and one-off fiscal measures. These programmes must be conducive to price stability, strong sustainable growth and employment creation.

⁴ A contraction of less than 2 percent required *further supporting evidence* for exempting a state from the EDP. A resolution adopted at the Amsterdam European summit further narrowed the possibility to exempt noncompliant countries to cases when the reduction was more than 0.75 percent.

compliance has been patchy because of well-known decision-making dynamics associated with Council-centred policies. Ministers reluctantly sanction one another's actions and, when push comes to shove, large countries have a greater capacity to form coalitions which support their views, since their vote carries more weight. Indeed, the Portuguese and Dutch governments reined in their excessive deficits in 2002 and 2004, but the German and French ones managed to form a coalition that blocked the procedure and pushed instead for reform when they found themselves in a similar position in 2003. After a legal challenge that upheld the Council's prerogative to hold the procedure in abeyance, new measures were adopted in June 2005.

Substantively, the crux of the matter was the excessive rigidity of these rules (e.g. Buti, Eijffinger, and Franco 2003). Thus, the new preventive regulation granted greater flexibility to member states. The regulation established *revisable country-specific* MTOs that could diverge by no more than 1 percent of GDP from a balance or surplus position, allowing however for room of budgetary maneuver particularly for *public investment*. If the structural balance was lower than the MTO, it had to increase by 0.5 percent of GDP per year as a baseline.⁵ The new corrective regulation loosened the definition of 'severe economic downturn'. Countries could be exempted from an EDP even in case of a

⁵ Taking into consideration periods of *high or low economic growth* and *major structural reforms*, such as on pensions.

protracted period of very low growth, with due consideration to the *business cycle, debt sustainability, public investment and major reforms*. Those with excessive deficit however had to improve the budget balance by at least 0.5 percent of GDP a year, but decisions could be revised to account for unexpected events.

Six-pact and fiscal compact

The rules were overhauled in the midst of the sovereign-debt crisis that engulfed the Eurozone countries in late 2009. The proximate trigger events were the misreporting of fiscal data by the Greek authorities. Under the surface of an implementation record on a par with Germany⁶ were Eurostat's repeated reservations on the quality of Greek public accounts. The alarming revisions of the 2009 deficit from 7 percent to, ultimately, almost 16 percent of GDP triggered a downgrade to junk status of Greece's credit rating, a pan-European capital flight to safety, bailout measures and a major reform beginning in July 2010 with a new EDP regulation and ending in January 2013 with the entry into force of the fiscal compact.

Rules were tightened. The new preventive regulation established an expenditure benchmark: the annual growth rate of real government expenditure should not exceed the

⁶ After both countries' deficits were deemed excessive in 2003-4, they were the only two states which, in 2005-6, were subject of a Council notice for failing to act - the last step before imposing sanctions. Both countries were then deemed compliant by 2007.

medium-term potential economic growth, if the structural balance is at the MTO. If it is not, it must be lower. Improvement of the structural balance in this circumstance may exceed 0.5 percent of GDP for countries with high debt or severe risk of debt sustainability.⁷ Later on, the fiscal compact narrowed further the room-of-maneuver for countries with high debt or risk of fiscal sustainability: their MTOs could diverge by no more than 0.5 percent of GDP from a balance or surplus position. The corrective regulation added an adjustment benchmark for countries with a debt-GDP ratio exceeding 60 percent: the differential with respect to this reference value should decrease at a rate of one twentieth per year.

In conclusion, reforms have progressively refined these rules. The focus initially was on the deficit and the criteria for determining it excessive. In 2005, attention moved to the path to comply with MTOs and the minimum improvement of the structural balance to correct an excessive deficit. The latest reform added new provisions and benchmarks to comply with MTOs and the debt criteria, differentiating between highly and lowly indebted states. However, what are the ideational bases for these rules? Which ideas and theories about the workings of the economy would recommend them? I move on to these questions in the next section.

⁷ A significant deviation from the MTO or the adjustment path of at least 0.5 percent (or 0.25 percent for two years) of GDP may lead to sanctions.

Economics of fiscal governance in a monetary union

Standard macroeconomic theories and the need for fiscal governance

The economics of fiscal governance in a monetary union can be analyzed applying standard macroeconomic theories which are based on the relation between output, the interest rate and the exchange rate in the short run; output and the level of prices in the medium run; and capital, labour and technology in the long run.⁸ Consider a set of countries with their own fiscal authority and a single monetary authority. Assume that output and employment are at their natural medium-run levels. What happens if one fiscal authority decides to increase spending unexpectedly and permanently? Let us first take a union-wide perspective. In the short run, more spending increases output (and income) directly and the higher disposable income leads to higher consumption, which further increases output. Increased spending may also lead to more investment (and, again, higher output) if investment responds more to higher sales than to higher interest

⁸ That is, Keynesianism for the short run, monetarism or the classic approach for the medium run and Solow's growth model for the long run. Heipertz and Verdun (2010: 71-4) appear to take the influence of these theories for granted since they discuss them when analyzing the neofunctional logic, rather than the ideational logic, behind these rules.

rates (for a given money supply, higher income increases the demand for money, leading to a higher interest rate).⁹

Higher economic activity lowers unemployment, putting upward pressure on the nominal wage and the level of prices. Output is now above its natural level and the price level exceeds expectations. Wage setters will therefore revise their expectations upwards, leading to an upward pressure on prices. For a given money supply, higher prices decrease the real money stock, leading to higher interest rates and lower output, until the natural level is reached again. In sum, the increase in spending raises the level of prices and changes the composition, but not the level, of output in the medium run, as investment is crowded out through higher interest rates. In the longer run, lower investment leads to lower capital stock and output.

This dynamics changes if we consider a monetary authority with an inflation target at potential output.¹⁰ Assume that both current inflation and the nominal interest rate are on

⁹ In other words, the size of these effects depends on the fiscal policy multiplier. Higher spending may have a particularly strong effect on output in the short run if the propensity to consume and the sensitivity of investment to sales and of money demand to interest rate are high, and, additionally, if the propensity to import, the sensitivity of investment to interest rate and of money demand to income are low.

target, prior to the spending initiative. Once the programme is announced, the central bank expects lower unemployment and above-target inflation. It will therefore increase the interest rate, which lowers economic activity and prevents excessive upward pressure on wages and prices until inflation is back on target and output is again at its natural level. In other words, the interest rate rises more rapidly, decelerating both economic expansion and price increases.

Spending also has important implications for trade. First, the programme may build-up trade imbalances within the union. Depending on the trade links and the propensity to import, it may increase imports in the spending country and, consequently, increase exports in the non-spending countries. Second, a higher interest rate will lead to an appreciation of the single currency and a union-wide decrease in net exports. This further changes the composition of output.

Let us now take the perspective of the countries participating in the union. Despite the long-run consequences on output and a non-accommodating central bank, the incentives for spending are there. All it takes is a government that is ready to forsake higher inflation

¹⁰ Such as the Taylor rule, whereby the central bank sets the nominal interest rate at time t as a function of the target nominal interest rate, the weighted differences between the rate at time t and the target rate of inflation, and between output at time t and potential output at medium run.

for higher growth and lower unemployment in the short run. The resulting combination of a contractionary monetary policy and an expansionary fiscal policy has cross-country distributive implications because the composition of output can change in important ways.

For non-spending countries, the specific consequences depend on a host of factors, such as the propensity to import (in the spending country), the sensitivity of net exports to currency appreciations and the sensitivity of investment to sales and the interest rate (in the non-spending countries). The trade balance may improve if the increase in exports to the spending country is higher than the decrease in net exports outside the union following the currency appreciation. Assuming higher net exports, even investment could increase if it responds more to sales than the interest rate. More importantly, things can turn out bad for non-spending countries. The trade balance could worsen and the higher interest rate could lead to lower investment, lower capital accumulation and lower output in the long run. The profligacy of one fiscal authority could produce a recession and lower long-run growth in a fiscally responsible member country.¹¹

¹¹ One could read standard macroeconomic theory as an argument for small government. Indeed, a cut in public spending increases investment in the medium run, and output in the long run. Aside from whether all private investment is indeed beneficial to long run growth, note that spending on infrastructure, education or active labor market policies

Short-run games of fiscal-monetary interactions in a monetary union

These cross-country externalities are at the core of a few studies on the strategic interactions between a monetary authority and the fiscal authorities in a monetary union.

Dixit and Lambertini (2001, 2003; see, also, Dixit 2001) propose a model where the output of each country in a monetary union is also a (positive or negative) function of the fiscal policies of other countries. As discussed above, these fiscal policy spillovers operate directly through demand or crowding-out effects, as well as indirectly through real effects of unexpected inflation. Actors' utility is a weighted function of ideal levels of inflation and output, where the monetary authority is at least as conservative as fiscal authorities.

Dixit and Lambertini (2001) assume that fiscal authorities desire a higher than natural level of output and they investigate the implications for inflation and output under different regimes; that is, when fiscal and monetary authorities simultaneously decide,

builds up physical and human capital and may as well lead to higher output in the long run without increasing prices. The theory is a cautionary tale about managing the business cycle rather than public spending *per se* (aside from the distortionary effects of taxation). It has policy implications for the composition, rather than the size, of spending. Long run growth would actually be better served if the return from public investment exceeds that from private investment and if public investment increases productivity of the private sector.

and when either fiscal or monetary authorities act first (i.e. monetary or fiscal leadership). They limit the analysis to a situation where a country's expansionary fiscal policy increases both other countries' output and union-wide inflation. They show that the Nash equilibrium of a simultaneous game produces higher output and lower inflation than the ideal levels, with consequences for debt accumulation and higher interest rates. This expansionary fiscal policy and contractionary monetary policy mix worsens as the ideal positions of the authorities diverge.¹² Importantly, the commitment to a monetary policy rule is ineffective if the fiscal authorities are not subject to any constraint. Therefore, rules imposed on the fiscal authorities can preserve the credibility of commitment to a monetary rule that would be negated in the case of fiscal discretion (Dixit and Lambertini 2001). In conclusion, this model demonstrates that even fiscal authorities who *unanimously* prefer higher output and inflation than the central bank have incentives to establish fiscal rules if they desire to preserve the credibility of commitment to a monetary rule.¹³

¹² Outcomes are somewhat improved upon under different regimes of either fiscal or monetary leadership.

¹³ Fiscal rules would be unnecessary, or even counter-productive, only if monetary and fiscal authorities were to share the same ideal levels of output and inflation. In these circumstances, a credible monetary commitment or a conservative central bank would not be needed as well (Dixit and Lambertini 2003).

Rational expectations, Ricardian equivalence and the lesser need for fiscal governance

According to Blyth (2013: 140-1), standard macroeconomic theories do not offer the ideational foundations to EU fiscal governance rules. He traces their origin to ordoliberalism, a school of economic thought originating in 1930s Germany that emphasized the regulatory role of the state. The primary objective was to ensure competitive markets and stable prices through politically independent authorities, rather than public spending. He writes

‘Germany’s focus on rules, obligations, a strong monetary authority, a weak parliament, and no spending to compensate for busts [is] the basic design of the EU From the Maastricht convergence criteria to the Stability and Growth Pact to the proposed new fiscal treaty—it’s all about the economic constitution—the rules, the ordo... the most recent German innovation of a constitutional debt brake (*Schuldenbremse*) for all EU countries regardless of their business cycles or structural positions, coupled with a new rules-based fiscal treaty as the solution to the crisis, is simply an ever-tighter ordo by another name’. (Blyth 2013:141)

In a subsequent analysis, Matthijs and Blyth (2018: 119) reach the point of asserting that the last reform makes ‘fiscal policy quasi-illegal’. These are dubious claims. As we outlined earlier, since 2005 these rules accommodate business cycle fluctuations, major structural reforms and public investments. According to Claeys, Darvas, and Leandro

(2016: 4), they allow for an automatic stabilization of up to 2.5 percent of GDP in the rare case of a 3.6 percent negative output gap (and further spending would be probably granted in such an exceptional circumstance).

Nevertheless, Blyth (2013) fast forwards fifty years of history of economic thought and sees these ideas further developed in formal works on the impact of government alternations on budget deficits (Alesina and Tabellini 1990; Persson and Svensson 1989) and in empirical analyses of fiscal contractions during recessions (Alesina and Perotti 1995; Alesina, Ardagna, and Galí 1998; Giavazzi and Pagano 1990; Hellwig et al. 1987). Following Lucas (1972), the central theme is the role of rational expectations in shaping macroeconomic dynamics. This important innovation to macroeconomic theory appears to have provided the theoretical basis for the limited fiscal response to the early 1990s recession in the United States. Hence, it is not far-fetched to say that it may have influenced European policy cycles during the negotiations of the Maastricht Treaty and in the following period. However, is fiscal governance more or less needed in a world of rational expectations?

Take the case discussed above of a fiscal authority in a monetary union deciding to increase spending. What if consumers and firms fully anticipate the long-run consequences of this measure; that is, they anticipate lower output, a higher price level and a higher interest rate in the future? How would macroeconomic aggregates be affected? The short-run increase in output expected by the standard theory would be offset by two dynamics. Rational expectations have an impact on consumption through a wealth

effect. After the announcement of the programme, consumers expect lower after-tax labour income in the future. If current consumption is affected by the present value of these income streams, a negative wealth effect kicks in and the growth of consumption is attenuated.¹⁴ Similarly, firms revise their expectations of future sales (and profits) downwards, lowering present values and, consequently, the growth in investment. Higher expected real interest rates would lower current investment as well. These countervailing effects suggest a lower sensitivity of current output to an increase in spending – a *diminished* effectiveness of an expansionary fiscal policy - and therefore weaker incentives for governments to entertain this policy.

One important caveat is that a government may be tempted to front-load a multi-annual spending programme to maximise the positive effect of current consumption and investment on current output, and thereby minimise the negative effect of expectations. Ricardian equivalence would suggest, however, that front-loading is not going to work. If consumers internalise the government's budget constraint, higher debt-financed current spending will result in higher taxes in the future and the increase in current disposable income will be equivalent to the decrease in the present value of after-tax labour income in the future. The net wealth effect will be zero and the timing of a spending programme will

¹⁴ Current consumption can also be influenced by other wealth effects. Lower expected future dividends may lower financial wealth for instance.

not affect consumption. Note that the current increase in private savings (i.e. consumers do not spend more as a result of higher current disposable income) offsets the current decrease in public saving, leaving investment, capital accumulation and long-run growth unchanged.

Now, the key question is: Would the full consideration of rational expectations, even up to the Ricardian equivalence proposition, call for tighter fiscal governance rules? First, we must distinguish between fiscal governance and fiscal policies. Blyth (2013) argues that recent European fiscal policies have been (mis)guided by a modern rational-expectations version of austerity thinking - the so-called expansionary fiscal contraction (or consolidation) hypothesis - where a reduction in spending during an economic contraction can increase consumption and output through changes in future expectations about taxes and government spending (Giavazzi and Pagano 1990).¹⁵ European fiscal policies operate, of course, within EU fiscal governance rules, but an evaluation of these policies is beyond the scope of this article. More relevant to our purposes, Blyth (2013, 332) argues that these same ideas have also shaped the design and development of EU fiscal governance towards an 'ever-tighter *ordo*'. The problem is, if these ideas have actually gained currency in European policy circles, we should see the opposite - a *loosening* of rules. The full

¹⁵ Note however that even austerity proponents prefer fiscal consolidations to take place during economic expansions (Alesina, Favero, and Giavazzi, 2019: 6).

consideration of rational expectations offers an even more cautionary tale about managing the business cycle. Spending has a much more attenuated effect on output, the interest rate and the exchange rate in full rational-expectation models than in standard macroeconomic theories – a *diminished* expansionary fiscal policy, indeed. This means that the incentives to spend are weaker and, for any amount of additional spending, the potential negative implications for non-spending countries are smaller. The need for fiscal governance is *lessened* and the rules should be *laxer* in a world of rational expectations. Contra Blyth (2013), we should have seen a relaxation of the rules if these ideas had gained any traction over the years. For the most part, we have not. Therefore, the development of fiscal governance rules cannot be squared with a presumed ascendancy of full-blown rational-expectation macroeconomic theories.

The causes of austerity measures should therefore be searched elsewhere since they are not embedded into these fiscal governance provisions.¹⁶ And the fact that policy-makers,

¹⁶ For De Grauwe and Ji (2013a, 2013b), the measures introduced during 2011 represent a panic-driven reaction to a self-fulfilling liquidity crisis where market sentiments were disconnected from economic fundamentals, given nontrivial flaws in the monetary union design. These measures had such a negative impact on output that the situation almost morphed into a solvency crisis. However, interest rates did subside following austerity

such as the commissioner Rehn, instrumentally embraced tighter fiscal surveillance and expansionary fiscal contraction does not make the former a prescription of the latter (Rehn 2013; see also Mabbett and Schelkle 2016). Ironically, if the economy worked according to the full-blown rational-expectation framework, these rules would not have been necessary in the first place. In other words, Rehn supported provisions whose existence refuted the assumptions behind this understanding of the economy and the consequences of the fiscal measures he recommended.

Games of fiscal-monetary interactions with budget constraints in a monetary union

Indeed, games of fiscal-monetary interactions that explicitly take into account the intertemporal implications of government budget constraints do not unequivocally support the need for fiscal rules, at least as they are codified in EU law. Beetsma and Bovenberg (1998; see, also, Beetsma and Bovenberg 1997a) propose a model where fiscal authorities set the tax rates, subject to a budget constraint, and act as Stackelberg leaders against the monetary authority with an inflation target at potential output. The utility of fiscal authorities is a weighted function of ideal levels of inflation, output and government spending, while the utility of the monetary authority is only a weighted function of ideal levels of inflation and output. The central bank is conservative if it attaches a larger weight

and nonconventional monetary measures, for an analysis of when austerity may work, see Alesina, Favero, and Giavazzi (2019).

to price stability than do fiscal authorities and society at large. The model demonstrates that fiscal authorities have an incentive to strategically raise taxes and induce the monetary authority to raise inflation to protect employment (note that, initially, the incentives are for a fiscal contraction – monetary expansion policy mix). They do so because higher inflation relaxes the budget constraint by generating seigniorage revenues and lowering the real servicing costs of government debt. Higher taxes then lead to a spending bias and lower output. These incentives increase as fiscal authorities attach less importance to inflation than does the monetary authority and they diminish if the tax of a single authority has a lower impact on union-wide employment (e.g. in a larger union or for smaller countries) or the monetary authority assigns more importance to price stability than employment. Beetsma and Bovenberg (1998; see, also, van Aarle, Bovenberg and Raith 1997) argue *against* coordination because, if fiscal authorities can coordinate tax policy, then they are even more likely to prompt a reaction by the monetary authority.

The EU fiscal rules do not seem to be motivated by the short-run policy mix produced by this model. These scholars also focus on only one externality: that is, the role of *common* actual and expected inflation in relaxing the budget constraint for *each* fiscal authority. Other externalities in terms of the level and composition of output are ignored.¹⁷

¹⁷ The fiscal authorities which are more likely to engage in strategic tax setting are those that benefit more from lower servicing costs, attach less importance to inflation, and have

In a related model, Beetsma and Bovenberg (1999; see, also, Beetsma and Bovenberg 1997b; Beetsma and Uhlig 1999) analyse the impact of a monetary union on public debt. If the monetary authority is not conservative, the fiscal authorities are likely to *reduce* the debt, especially in a union with few members. Again, this results in a fiscal contraction – monetary expansion policy mix.¹⁸ On the other hand, debt accumulation occurs when the monetary authority becomes more conservative, the fiscal authorities assign greater importance to the short than the long term (i.e. they are myopic) and the size of the union increases. This bias originates from the failure of each government to internalise the union-wide inflationary consequences of debt (Beetsma and Uhlig 1999). Therefore, Beetsma and Bovenberg (1999) and Beetsma and Uhlig (1999) argue that the combination of a conservative central bank and myopic fiscal authorities explains the establishment of debt

a larger impact on union-wide employment (therefore inducing a reply from the monetary authority). This sets the ground for conflict between large, high-debt and inflation-accommodating countries and small, low-debt and inflation-averse countries – a scenario that is not unrealistic in Europe.

¹⁸ Van Aarle, Bovenberg, and Raith (1997) reach a similar conclusion. If policy makers cannot commit to their announced strategies and fiscal authorities do not cooperate, a monetary union leads to lower inflation and deficit and quicker debt stabilization. Fiscal cooperation leads to higher inflation and deficit and slower debt stabilization.

ceilings and sanctions for exceeding the deficit-output threshold.¹⁹ Without these rules, debt and inflation would be suboptimally high for each government of the union.

Consider, finally, the fiscal theory of the price level (e.g. Canzoneri, Cumby and Diba 2001; Canzoneri and Diba 2001), to which Heipertz and Verdun (2010: 75) assign an important influence over EU fiscal rules. According to this theory, the price level is determined by the interaction of monetary and fiscal policies, with actors that are subject to intertemporal budget constraints. If fiscal authorities dominate the monetary authority in a union, Bergin (2000) demonstrates that the price level is jointly determined by the budget constraints of governments. Hence, an increase in a member country debt which is not backed by future tax increases leads to higher prices across the union via the augmented inflation expectations of Ricardian households. Therefore, governments with large debts have strong incentives to pursue this policy because the inflation tax on bond-holders could be

¹⁹ Levine and Brociner (1994) reach a similar conclusion, although through a different channel. Given a conservative central bank, governments have the incentive to improve their terms of trade inefficiently if they do not cooperate. Chari and Kehoe (2007) have instead shown that it is the inability of the monetary authority to commit to an inflation rate that lead to excessive debt and inflation in a monetary union. This implies that EU fiscal rules would be necessary if one believes that the European Central Bank cannot credibly commit to an inflation rate.

large, even if seigniorage revenues are not. Note that solvency rules for countries would be sufficient, even though they are not necessary,²⁰ to maintain price stability. This condition 'is much less restrictive than the debt ceilings imposed in practice' (Bergin 2000, 48).

These models do not provide a solid theoretical background for the adoption of fiscal rules in a monetary union and certainly not in the form adopted by the EU. Some models produce a policy mix that is not even addressed by these rules. Other models advise either against or for less fiscal policy cooperation. Still, other models, along the lines of Dixit and Lambertini (2001), are more convincing. They show, for instance, how a conservative central bank interacting with fiscal authorities with short time horizons could indeed produce a combination of exceedingly high debt and inflation. In conclusion, however, these works do not provide a theoretical basis to argue that fiscal governance should be tighter than that recommended by theories and models analyzed earlier.

Conclusion: imperfect commitment, uncertainties and arbitrariness

EU fiscal governance rules have been criticized for being the regulatory operationalization of modern austerity thinking. That these rules appear instead aligned with the recommendations of more orthodox macroeconomic theories is perhaps reassuring. It

²⁰ Fiscal solvency is not necessary for each fiscal authority if responsible fiscal authorities bail out profligate ones (Bergin 2000, 48–50).

would not be prudent to design a policy relying heavily on rational expectation theories, which are built upon the heroic assumption that every economic actor shares the exact same beliefs about the workings of the economy. On the other hand, these standard theories made a poor job at predicting the great recession of 2007-9 and they may not have alerted policy-makers of the limited credibility of the no bailout commitment, now effectively reneged. Such early neglect of financial stability (Buitter 1999) can similarly be traced back to the inadequate incorporation of financial market behavior into traditional macroeconomic theories (Wolf 2014). If Lucas did not pay a visit to Brussels, neither did Minsky.

Earlier critiques of these rules appear to echo a rational expectation approach. In a well-known contribution, Buitter, Corsetti and Roubini (1993) argued that the negative externalities highlighted by the standard theory were too small and the uncertainty of their direction was too large to warrant fiscal rules. Moreover, fiscal authorities would be discouraged to entertain these policies if they faced a credible inflation-averse central bank; and, anyway, international financial markets could deter unsustainable policies by demanding higher sovereign risk premiums (see, also, Buitter 2006; Eichengreen and Wyplosz 1998; cf. Buti, Eijffinger and Franco 2003). Even if these markets turned out to be poor at assessing sovereign risk, a default is primarily a distributional issue that does not need supranational intervention or rules monitoring public deficits on a yearly basis. As

long as a core set of provisions are credible,²¹ they are sufficient to prevent both fiscal and monetized bailouts of profligate governments (Buitter et al. 1993; Eichengreen and Wyplosz 1998). Possible contagion effects could be prevented by limiting the exposure of systemically relevant financial institutions to sovereign risk (Buitter 2006, 695).

These criticisms underestimate the uncertainties facing policy-makers. At the time of adoption of these rules, it was far from certain that interest rate spillovers would be small (see Bean's and Gerlach's comments to Eichengreen and Wyplosz 1998) and the extent to which consequences would be purely distributive crucially depended on an untested European Central Bank. After analyzing the bank's appointment and voting procedures, Alesina and Grilli (1994) concluded that its board might not display a conservative bias, despite its mandate and formal independence.²² With the prospect of countries with a

²¹ Specifically, no bailout, independence of the central bank, objective of price stability, prohibition to set up overdrafts and credit facilities for governments as well as direct purchases of treasury bonds.

²² In case of uncertainty about a central bank's commitment to price stability, Chari and Kehoe (2007) show how uncontrolled fiscal authorities may not internalize the union-wide costs on increased inflation, leading to higher debt and inflation. They state that 'the larger the debt the monetary authority inherits, the higher it wants to set the inflation rate and, without some mechanism to prevent that, the higher it sets the inflation rate. Thus,

history of fiscal profligacy joining the monetary union on the one side and untested commitments to stable prices and no bailout on the other, prudence would have advised tightening up the rules.

Policy-makers probably opted for numerical reference values because of their transparency and easiness to monitor and enforce, even though there are clearly no magic numbers that guarantee fiscal sustainability. Any value is ultimately arbitrary, but it has non-trivial distributive consequences because it implies country-specific adjustments between current and future public expenditures, and between public and private debt (Pasinetti 1998). For Buitier, Corsetti and Roubini (1993), the reference values were excessively tight and inflexible, leading to a contractionary bias and impeding the operation of automatic stabilizers (see, also, Eichengreen and Wyplosz 1998; Pasinetti 1998; cf. Buti, Eijffinger and Franco 2003). They could also perniciously induce pro-cyclical policies, leading governments to cut spending or raise taxes during an economic recession and increase spending or cut taxes during a recovery.

The 2005 reform addressed some of these issues, but the renewed emphasis on structurally balanced budgets has its problems too. A structural budget is an estimated, hence

without monetary policy commitment, when one of the fiscal authorities issues more debt, the others are made worse off.' (Chari and Kehoe 2007, 2400)

unobservable, quantity that in turn depends on other estimated measures.²³ And given its multi-annual horizon, forecasting errors of output growth and inflation add further uncertainty. Claeys, Darvas, and Leandro (2016: 6) observe that ‘the typical yearly revision both in the level and in the change in the structural balance is larger than 0.5 percent of GDP, i.e. larger than the required baseline annual adjustment’.

Given its opaqueness, the objective of a structurally balanced budget may not provide ‘a focal point that enables investors to coordinate on when to punish governments for running excessive deficits’ (Kelemen and Teo 2014, 366). Although this does not seem to be the case, given the market reaction to the 2019 proposed Italian budget, other risks are not averted. One is still pro-cyclicality. Since a structural deficit is positively related to the non-accelerating wage rate of unemployment, episodes of high long-term unemployment could raise this rate, turning a cyclical deficit into a structural one and prompting corrective measures that could further increase unemployment.²⁴ This hysteretic risk may be asymmetrically distributed. Recessionary episodes (i.e. negative output gaps) of greater

²³ Such as the output gap, which is also an unobservable quantity that depends on estimates of, for instance, total factor productivity and (non-accelerating wage) rate of unemployment.

²⁴ The European Commission routinely revises the methodology to calculate the output gap in order to address this risk.

than 3.6 percent occur every twenty-second year in the ten core EU member states but every sixth year in the five periphery countries²⁵ (Claeys, Darvas, and Leandro 2016: 4).

Indeed, the establishment of an expenditure benchmark in the most recent reform is a step toward more certain and controllable performance indicators (Claeys, Darvas, and Leandro 2016). On the other hand, the renewed emphasis on the debt reference value has rekindled the debate on the impact of public debt on growth and on the political sustainability of debt consolidation (e.g. International Monetary Fund 2012; Eichengreen and Panizza 2014; Moschella 2017; Alesina, Favero, and Giavazzi 2019). If an overestimation of the fiscal and welfare costs of debt has led to public underinvestment, as Blanchard (2019) has recently suggested, this can hardly be imputed to EU fiscal rules which have been reserving special treatment to this expenditure item since 2005 (the expenditure benchmark allows public investment to be averaged over a four-year period). For some countries, debt rollovers may well be sufficient to comply with the adjustment benchmark if the growth rate exceeds the safe interest rate. And even Blanchard (2019: 33-4) acknowledges that ‘an aggressive contingent fiscal rule’ (i.e. a primary surplus) may be a solution when highly indebted countries are trapped in high risk premiums - low growth equilibria.

²⁵ Spain, Portugal, Greece, Ireland and Italy. The core includes the remaining ten EU countries prior to the 2004 enlargement.

In conclusion, one should wonder how a heterodox theory that clearly failed to get much mileage among politicians of its country of origin (i.e. Italy, according to Blyth 2013) could have exerted such an influence at the European level. Well, it did not. Leaving aside implementation and despite the arbitrariness and uncertainties besieging them, these rules are reasonably congruent with standard macroeconomic theories.

References

- Van Aarle, Bas, A. Lans Bovenberg, and Matthias G. Raith. 1997. "Is There a Tragedy of a Common Central Bank? A Dynamic Analysis." *Journal of Economic Dynamics and Control* 21 (2–3): 417–47.
- Alesina, Alberto, Silvia Ardagna, and Jordi Galí. 1998. "Tales of Fiscal Adjustment." *Economic Policy* 13 (27): 489–545.
- Alesina, Alberto, Carlo Favero, and Francesco Giavazzi. 2019. *Austerity: When It Works and When It Doesn't*. Princeton, NJ: Princeton University Press.
- Alesina, Alberto, and Vittorio Grilli. 1994. "The European Central Bank: Reshaping Monetary Politics in Europe." In *Monetary and Fiscal Policy*, edited by Torsten Persson and Guido Tabellini, Volume 1: Credibility:247–77. Cambridge, Mass.: The MIT Press.
- Alesina, Alberto, and Roberto Perotti. 1995. "Fiscal Expansions and Adjustments in OECD Countries." *Economic Policy* 10 (21): 207–48.
- Alesina, Alberto, and Guido Tabellini. 1990. "A Positive Theory of Fiscal Deficits and Government Debt." *The Review of Economic Studies* 57 (3): 403–14.

- Beetsma, Roel M. W. J, and Harald Uhlig. 1999. "An Analysis of the Stability and Growth Pact." *The Economic Journal* 109 (458): 546–71.
- Beetsma, Roel M.W.J., and A. Lans Bovenberg. 1997a. "Designing Fiscal and Monetary Institutions in a Second-Best World." *European Journal of Political Economy* 13 (1): 53–79.
- Beetsma, Roel M.W.J., and A. Lans Bovenberg. 1997b. "Central Bank Independence and Public Debt Policy." *Journal of Economic Dynamics and Control* 21 (4–5): 873–94.
- Beetsma, Roel M.W.J, and A. Lans Bovenberg. 1998. "Monetary Union without Fiscal Coordination May Discipline Policymakers." *Journal of International Economics* 45 (2): 239–58.
- Beetsma, Roel M.W.J., and A.Lans Bovenberg. 1999. "Does Monetary Unification Lead to Excessive Debt Accumulation?" *Journal of Public Economics* 74 (3): 299–325.
- Bergin, Paul R. 2000. "Fiscal Solvency and Price Level Determination in a Monetary Union." *Journal of Monetary Economics* 45 (1): 37–53.
- Blanchard, Olivier. 2019. "AEA Presidential Address: Public Debt and Low Interest Rates." *American Economic Review*, 1–37.
https://www.aeaweb.org/aea/2019conference/program/pdf/14020_paper_etZgfbDr.pdf.
- Blyth, Mark. 2013. *Austerity: The History of a Dangerous Idea*. New York: Oxford University Press.

- Buiter, Willem H. 1999. "Alice in Euroland." *Journal of Common Market Studies* 37 (2): 181–209.
- Buiter, Willem H. 2006. "The 'Sense and Nonsense of Maastricht' Revisited: What Have We Learnt about Stabilization in EMU?" *Journal of Common Market Studies* 44 (4): 687–710.
- Buiter, Willem H., Giancarlo Corsetti, Nouriel Roubini, Rafael Repullo, and Jeffrey Frankel. 1993. "Excessive Deficits: Sense and Nonsense in the Treaty of Maastricht." *Economic Policy* 8 (16): 57.
- Buti, Marco, Sylvester Eijffinger, and Daniele Franco. 2003. "Revisiting the Stability and Growth Pact: Grand Design or Internal Adjustment?" *European Economy Economic Papers* 180.
- Canzoneri, Matthew B., Robert E. Cumby, and Behzad T. Diba. 2001. "Fiscal Discipline and Exchange Rate Systems." *The Economic Journal* 111 (474): 667–90.
- Canzoneri, Matthew B., and Behzad T. Diba. 2001. "The SGP: Delicate Balance or Albatross?" In *The Stability and Growth Pact: The Architecture of Fiscal Policy in EMU*, edited by Anne Brunila, Marco Buti, and Daniele Franco. New York: Palgrave.
- Chari, V. V., and Patrick J. Kehoe. 2007. "On the Need for Fiscal Constraints in a Monetary Union." *Journal of Monetary Economics* 54 (8): 2399–2408.
- Claeys, Grégory, Zsolt Darvas, and Àlvaro Leandro. 2016. *A Proposal to Revive the European Fiscal Framework*. Bruegel Policy Contribution. Brussels: Bruegel.

- De Grauwe, Paul, and Yuemei Ji. 2013a. "From Panic-Driven Austerity to Symmetric Macroeconomic Policies in the Eurozone." *Journal of Common Market Studies* 51 (S1): 31–41.
- De Grauwe, Paul, and Yuemei Ji. 2013. "Self-Fulfilling Crises in the Eurozone: An Empirical Test." *Journal of International Money and Finance, The European Sovereign Debt Crisis: Background & Perspective*, 34 (April): 15–36.
- Dixit, Avinash. 2001. "Games of Monetary and Fiscal Interactions in the EMU." *European Economic Review* 45 (4–6): 589–613.
- Dixit, Avinash, and Luisa Lambertini. 2001. "Monetary–fiscal Policy Interactions and Commitment versus Discretion in a Monetary Union." *European Economic Review* 45 (4–6): 977–87.
- Dixit, Avinash, and Luisa Lambertini. 2003. "Symbiosis of Monetary and Fiscal Policies in a Monetary Union." *Journal of International Economics* 60 (2): 235–47.
- Eichengreen, Barry, and Ugo Panizza. 2014. "A Surplus of Ambition: Can Europe Rely on Large Primary Surpluses to Solve Its Debt Problem?" Working Paper 20316. National Bureau of Economic Research. <https://doi.org/10.3386/w20316>.
- Eichengreen, Barry, and Charles Wyplosz. 1998. "The Stability Pact: More than a Minor Nuisance?" *Economic Policy* 13 (26): 65–113.
- Giavazzi, Francesco, and Marco Pagano. 1990. "Can Severe Fiscal Contractions Be Expansionary? Tales of Two Small European Countries." In *NBER Macroeconomics*

Annual 1990, Volume 5, edited by Olivier J. Blanchard and Stanley Fischer, 5:75–122.

MIT Press.

Heipertz, Martin, and Amy C Verdun. 2010. *Ruling Europe: The Politics of the Stability and Growth Pact*. Cambridge: Cambridge University Press.

Hellwig, Martin, Manfred J. M. Neumann, Roland Vaubel, and Marcus Miller. 1987. "Economic Policy in Germany: Was There a Turnaround?" *Economic Policy* 2 (5): 105–45.

International Monetary Fund. 2012. "Euro Area Policies: 2012 Article IV Consultation—Selected Issues Paper." Country Report No. 12/182. Washington, D.C.: IMF.

Jabko, Nicolas. 2019. "Contested Governance: The New Repertoire of the Eurozone Crisis." *Governance* 32 (3): 493–509.

Jevons, William Stanley. 1871. *The Theory of Political Economy*. London: Macmillan.

Kelemen, R. Daniel, and Terence K. Teo. 2014. "Law, Focal Points, and Fiscal Discipline in the United States and the European Union." *American Political Science Review* 108 (02): 355–70.

Larch, Martin, Paul Van den Noord, and Lars Jonung. 2010. "The Stability and Growth Pact: Lessons from the Great Recession." *European Economy Economic Papers* 429, December.

Levine, Paul, and Andrew Brociner. 1994. "Fiscal Policy Coordination and EMU: A Dynamic Game Approach." *Journal of Economic Dynamics and Control* 18 (3–4): 699–729.

- Lucas, Robert E. Jr. 1972. "Expectations and the Neutrality of Money." *Journal of Economic Theory* 4 (2): 103–24.
- Mabbett, Deborah, and Waltraud Schelkle. 2016. "Searching Under the Lamppost: The Evolution of Fiscal Surveillance." In *The Political and Economic Dynamics of the Eurozone Crisis*, edited by James A. Caporaso and Martin Rhodes, 122–44. Oxford: Oxford University Press.
- Matthijs, Matthias, and Mark Blyth. 2018. "When Is It Rational to Learn the Wrong Lessons? Technocratic Authority, Social Learning, and Euro Fragility." *Perspectives on Politics* 16 (1): 110–26.
- Moschella, Manuela. 2017. "Italy and the Fiscal Compact: Why Does a Country Commit to Permanent Austerity?" *Italian Political Science Review / Rivista Italiana Di Scienza Politica* 47 (2): 205–25.
- Pasinetti, Luigi L. 1998. "The Myth (or Folly) of the 3% Deficit/GDP Maastricht 'Parameter.'" *Cambridge Journal of Economics* 22 (1): 103–16.
- Persson, Torsten, and Lars E. O. Svensson. 1989. "Why a Stubborn Conservative Would Run a Deficit: Policy with Time- Inconsistent Preferences." *The Quarterly Journal of Economics* 104 (2): 325–45.
- Princen, Sebastiaan, and Femke van Esch. 2016. "Paradigm Formation and Paradigm Change in the EU's Stability and Growth Pact." *European Political Science Review* 8 (03): 355–375.
- Rehn, Olli. 2013. "Letter to ECOFIN Ministers, Ares(2013)185796, Brussels 13 Feb.," 2013.

Wolf, Martin. 2014. *The Shifts and the Shocks: What We've Learned-and Have Still to Learn-from the Financial Crisis*. New York: Penguin Press.